

glassmachinery world plants & accessories

BI-MONTHLY INTERNATIONAL MAGAZINE FOR GLASS MANUFACTURING



YEAR 39 • ISSUE NO. 5/2026

www.falornigroup.com

the
complete
glass
technology.



Plant Engineering
& Turnkey Projects

Industrial Furnaces
& Conditioning

Forming Technology
& Machines Overhauling

Artistic & Speciality
Melting Applications

powered by

falornitech famoreng falorniglass

glasstec

HALL 13
STAND A05
Scan & discover more

SPECIAL
glasstec
PREVIEW 2026

Electrical boosting
shapes **HORN's**
glass melting
trendsetter

HEYE: Where
tomorrow's glass
manufacturing
starts today

Production
repeatability
improves with
INTERGLASS
interface control

Building the next
generation
of packaging,
with **VERALLIA**

Special cast irons & alloys for glass moulds



Fonderie Valdelsane S.p.A.

Strada di Gabbrice, 6 - P.O. BOX 30 - 53035 MONTERIGGIONI (Siena) - ITALY

Tel. +39.0577.304730 - Fax. +39.0577.304755 - com@fonderievaldelsane.com

www.fonderievaldelsane.com



One Flow. One Glass.

Enhancing hot end technologies.

Glass is extraordinary. It transforms endlessly and can be shaped into any form, because it exists as part of a single, continuous creation process.



glasstec

20-23 OCT 2026
DÜSSELDORF | GERMANY

VISIT US AT
HALL 13 - BOOTH D43

At BDF Industries, we develop products and processes that ensure a continuous flow, controlled and refined. From raw material to gob, from mold to finished shape, we secure the optimal result at every stage of production. It's the way to run the entire hot end as a single, coordinated system, where One Flow becomes One Glass.

FURNACE | FOREHEARTH | IS MACHINE | HANDLING

bdfindustriesgroup.com



35 YEARS



OF

CONNECTION

Our people and partnerships set us apart.

In every collaboration, Sigma Group builds **trust** through dedicated support and mutual growth, forging enduring success for customers around the globe.

sigmaref.it

MAKING IT MATTER



EIVE

BATCH

SORG

MELT

SKS

SERVICE

For more than 150 years, SORG Group has helped glassmakers improve performance where it matters most.

Through integrated expertise across batch, melting and service, we deliver proven solutions that increase efficiency, improve reliability and create long-term value.

Visit us at Glasstec 2026. Booth 15C44.

SORG
GROUP

THE PERFECT BATCH

STARTS WITH THE RIGHT CHOICE

The specialist – **Zippe** – independent and dedicated entirely to producing the finest batch plants, cullet plants and associated products. Zippe has been on the cutting edge of technology for over 100 years and place its innovative spirit and expertise at your disposal. Right from the start.

**Batch Plants • Cullet Plants • Automation • Engineering •
Modernization • Factory Cullet Recycling • Glass Recycling •
Batch Charging • Preheating • Audits • Maintenance & Service**

right from the start

T: +49 9342 8040
zippe@zippe.de
www.zippe.de



HEYE FUSION

One interface. All components.

Intuitive. Connected. Scalable.
Built for desktop and tablet.



WE ARE GLASS PEOPLE



See what's next

GLASSTEC 2026 · 20-23 OCTOBER · DÜSSELDORF · HALL 13 · BOOTH E69



WALTEC — DRIVEN BY INNOVATION.

**Engineering excellence
in glass machinery.**

**VMA | Electronically Controlled
Air/Gas Ratio Mixer**



MAIN BENEFIT

- Stable air/gas combustion ratio throughout the entire power range
- Reduced energy consumption
- Lower CO₂ emissions
- Improved glass colour stability through enhanced Redox stability at the glass surface



Come visit us at
glasstec
20-23 October 2026
Hall 13 - Booth E13

The Future. Today.

BATCH PLANTS, FURNACES, FOREHEARTHS
COMPLETE SOLUTIONS
FOR GLASS MELTING TECHNOLOGY



www.glassservice.it



[glassserviceitaly](https://www.linkedin.com/company/glassserviceitaly)

KOENIG & BAUER



IMPACTING PRINT BEYOND THE VISIBLE

... where precision becomes presence.

The K15 combines multiple decoration processes in one flexible platform. For precise results across a wide range of container shapes.

kammann.koenig-bauer.com

we're on it.

OCMI will be participating at
GLASSTEC 2026 in
DÜSSELDORF, the world's leading
trade fair for the glass industry.
We can't wait to connect with our
customers, please come meet our
team and discover the latest
innovations at
HALL 13 - STAND B12.



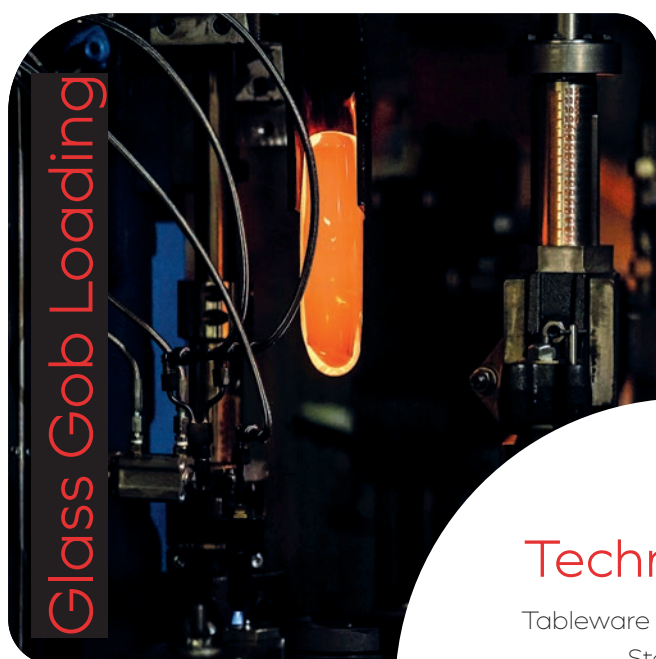
member of FALORNI Gianfranco Srl Group

falorniglass
art glass solutions

falornitech
glass melting technology



Research, innovation, on-going technological development



Technologies

Tableware and kitchenware
Stemware
Lighting ware
High voltage insulators
Glass block
Car headlight lenses
Window washing machines
Thermal tempering



Equipment

Semi-automatic machines
Automatic-machines
Flame Polishing machines
Handling & Conveying System

PUBLISHING DIRECTOR: Arcangelo Altamura

EDITOR-IN-CHIEF: Marco Pinetti

ASSOCIATE EDITOR:

Nicolaas François Fouché | nick.fouche@glassonline.com

CONTRIBUTORS:

Rajeev Jetley, Zoë Elaine Whitten,
Jennifer Pressman, Alexander Roe

ADVERTISING:

ITALY: Alessandro Corboud | alessandro.corboud@glassonline.com

WORLDWIDE: Luciano Molina | luciano.molina@glassonline.com

GRAPHIC DESIGN:

Sonia Previato | sonia.previato@glassonline.com
Cristiano Guenzi

PRINTED BY:

BICIDI ARTI GRAFICHE

Via San Felice N° 37d 16138 Genoa - Italy

BACK COPIES: € 29 air mail included | Italy: € 15

Entire contents © 2026 by A151 S.r.l. All rights reserved. Reproduction even partially in any form is strictly prohibited unless written permission has first been obtained from the Publisher. The magazine is open to collaboration with all, but no manuscripts or photographs will be returned. The editor's office accepts no responsibility for opinions expressed in signed articles. The Court responsible is that of Milan. Publication registered at no. 4 of the Milan Court Records Office on 11.1.1988 - ROC no. 34927 - ISSN 0394-9893

GLASS MACHINERY PLANTS & ACCESSORIES,
N. 224, ANNO 39, 2026, PERIODICO BIMESTRALE.

REGULAR FEATURES

- 14 **ADVERTISERS INDEX
& ALL COMPANIES
MENTIONED**
- 16 **OUR 2024 TRADE FAIR
CALENDAR**
- 18 **NEWS AND PRODUCTS**
- 118 **SUPPLIERS GUIDE
YELLOW PAGES**

www.glassOnline.com

WEB SERVICE



WEB PUBLICATIONS

FALORNITECH

Via della Libertà 177-179 - 50059 Vinci (FI) - ITALY
Tel.: +39-0571-922333
info@falornitech.com - www.falornigroup.com

COVER ADVERTISER

www.falornigroup.com

the complete glass technology.

**Plant Engineering
& Turnkey Projects**

Forming Technology
& Machines Overhauling

**Industrial Furnaces
& Conditioning**

Artistic & Speciality
Melting Applications

powered by

glasstec

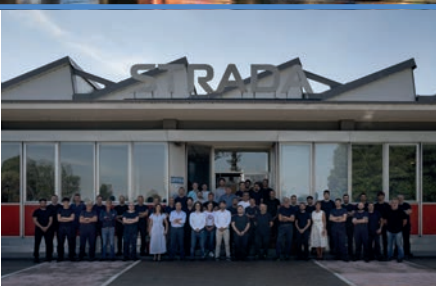
HALL 12
STAND A05

Scan & discover more



ARTICLES

- | | | | |
|----|--|----|---|
| 36 | Lehr temperature stability upgrade with ANTONINI burner evolution | 70 | VETROMECCANICA predictive diagnostics systems |
| 38 | Electrical boosting shapes HORN's glass melting trendsetter | 72 | Production repeatability improves with INTERGLASS interface control |
| 42 | Tuscan furnace sees VERALLIA advance circular glass manufacturing | 76 | Metallic glass finishes gain efficiency through FERMAC innovation |
| 48 | Digital control strengthens OMSO sustainable packaging decoration systems | 82 | Inside glass manufacturing's digital future, with SCHNEIDER ELECTRIC |
| 52 | HEYE : Where tomorrow's glass manufacturing starts today | 88 | Data-driven hot end begins with TME ENGINEERING Blankontrol |
| 60 | Glasstec engagement further extends STARA GLASS decarbonisation dialogue | 92 | Customised mould production defines STRADA manufacturing excellence |
| 64 | CAVART consistency secures furnace-ready cullet quality | 94 | Greenfield projects demonstrate MSK cold-end partnership triumph |



100 Predictive maintenance
with **LUBEN GLASS** mitigates
downtime risks

104 Ardagh Nienburg boosts efficiency thanks to **PNEUMOFRE** systems

106 **RONDOT GROUP:** 90 Years of glass expertise, now shaping a connected Hot End

108 Building the next generation of packaging, with **VERALLIA**

114 PPWR requirements refocus OPTIMIZING GLASS BOTTLE sustainability strategy



THIS ISSUE ALSO CONTAINS



**SPECIAL
GLASSTEC
PREVIEW
2026**

131

BI-MONTHLY MAGAZINE
PUBLISHED BY



Via Antonio Gramsci, 57 - 20032 Cormano (Milan) - Italy
Tel.: +39 - 02 - 66306866 - E-mail: publications@glassonline.com
www.glassonline.com

... in this issue of **GMP&A**. Advertisers are indicated in **bold**

COMPANY NAME	PAGE NO.	COMPANY NAME	PAGE NO.
AFRIGLASS	156	HEYE INTERNATIONAL	5, 52-56
AGR INTERNATIONAL	15, 118-129, 131-155		118-129, 131-155
ALL GLASS	91, 118-129, 131-155	HORN GLASS INDUSTRIES	28, 38-40, 41
Ardagh Group	25		118-129, 131-155
ATIV	117	INTERGLASS	72-74, 75, 118-129, 131-155
ANTONINI	35, 36-37, 118-129, 131-155	IRIS INSPECTION MACHINES	81
BDF INDUSTRIES	First Page		118-129, 131-155
	118-129, 131-155	Julia Vitrum	64-67
BOHEMI CHEMICALS	33, 118-129	KOENIG & BAUER KAMMANN	8, 118-129, 131-155
BOTTERO	17, 118-129, 131-155	KYP ACCESSORIES	9, 118-129, 131-155
BUCHER EMHART GLASS	Back Cover	LAHTI GLASS	46, 118-129, 131-155
	24, 28, 118-129, 131-155	LINCO BAXO INDUSTRIE	79, 118-129, 131-155
CAR-MET	21, 118-129, 131-155	LUBENGLASS	99, 100-101, 118-129, 131-155
CAVART	64-67, 68, 118-129	MARPOSS	25, 118-129, 131-155
DMA MACHINEN-UND ANLAGENBAU	87, 118-129	MODERNE MECANIQUE	9, 118-129, 131-155
Duralex	19	MSK	94-96
EME	3, 118-129, 131-155	NIROX	85, 118-129, 131-155
FALORNI TECH	Front Cover, 118-129, 131-155	NRG Glass Moulds	32
FEVE	32, 33	OCMI GROUP	9, 118-129, 131-155
FAMOR ENGINEERING	10, 118-129, 131-155	O-I Italy	64-67
FERMAC	23, 76-78, 118-129, 131-155	OLIVOTTO GLASS TECHNOLOGIES	29
FIMA OLIMPIA	86, 118-129, 131-155		118-129, 131-155
FLUORITAL	Back Inside Cover, 118-129	OMS GROUP	57, 118-129, 131-155
FONDERIE VALDELSANE	Front Inside Cover	OMSO	48-50, 51, 118-129, 131-155
	118-129, 131-155	Optimizing Glass	114-115
Gerresheimer	38-40	PENNEKAMP	24, 31, 118-129, 131-155
GLASS CONSULTING GROUP	102,	PEREGO Giancarlo	34, 118-129, 131-155
	118-129, 131-155	PNEUMOFOR	26, 103, 104-105, 118-129, 131-155
GLASS INDUSTRY DIRECTORY	130	RAMSEY PRODUCTS	58, 118-129, 131-155
GLASS SERVICE ITALY	7, 118-129, 131-155	REGINA CATENE	97, 118-129, 131-155
Glass Technology Services (GTS)	20	RONDOT GROUP	59, 106-107, 118-129, 131-155

... in this issue of **GMP&A**. Advertisers are indicated in **bold**

COMPANY NAME	PAGE NO.	COMPANY NAME	PAGE NO.
Rubin Glass	26	UZGLASS	116
Saverglass	21	Verallia Italia	30, 42-45, 108-113
Schneider Electric	82-84	VERTECH'	19, 118-129, 131-155
Schott Pharma	22	Vetri Speciali Group	32
SIGMA GROUP	2, 118-129, 131-155	VETROMECCANICA	69, 70-71, 118-129, 131-155
SKS	3, 118-129, 131-155	VIDEO SYSTEMS	80, 118-129, 131-155
SORG Nikolaus	3, 30, 118-129, 131-155	Vidrala	18
STARA GLASS	60-62, 63, 118-129, 131-155	VMA	27, 118-129, 131-155
Stoelzle Glass Group	28	WALTEC	6, 118-129, 131-155
Strada	92-93	XPAR Vision	22
TECO GROUP	47, 118-129, 131-155	Zignago Vetro	64-67
TECSIGLASS	98, 118-129, 131-155	ZIPPE	4, 18, 27, 118-129, 131-155
TME Engineering	88-90		



Partner with Agr to ensure the sustainable production of high quality glass containers

Featuring hands-free dimensional and thickness measurement, the DSG500™ helps identify process trends using predictive maintenance and data analytics – improving productivity in your quality management program.



AutoJob*

Job creation in the matter of seconds



Consistency

Every bottle measure exactly the same



Throughput

Unmatched with up to 100+ bottles per hour

glasstec

INTERNATIONAL TRADE FAIR FOR GLASS

See us at stand 14C40
20-23 October 2026
Düsseldorf, Germany



agrintl.com
+1.724.482.2163

2026 TRADE FAIRS CALENDAR

The magazine will be distributed at the following Events

2026

1

PHARMAPACK EUROPE | 21-22 JANUARY | PARIS - FRANCE

GLASSMAN ITALY | 4-5 FEBRUARY | BOLOGNA - ITALY

AMBIENTE | 6-10 FEBRUARY | FRANKFURT - GERMANY

Editorial files:

19-12-2025

Deadline Adv files:

07-01-2026

2026

2

COSMOPACK | 26-28 MARCH | BOLOGNA - ITALY

CHINA GLASS | 7-10 APRIL | SHANGHAI - CHINA

Editorial files:

20-02-2026

Deadline Adv files:

25-02-2026

2026

3

ICG - ANNUAL MEETING | 13-17 APRIL | LYON - FRANCE

INTERPACK | 7-13 MAY | DÜSSELDORF - GERMANY

Editorial files:

20-03-2026

Deadline Adv files:

25-03-2026

FEATURED CONTENT: FORMING

2026

4

GLASSMAN LATIN AMERICA | 20-21 MAY | MEXICO CITY - MEXICO

CPHI AMERICAS | 2-4 JUNE | PHILADELPHIA (PA) - USA

Editorial files:

20-04-2026

Deadline Adv files:

23-04-2026

2026

Glass Industry
Directory 2026



Editorial files:

11-06-2026

Deadline Adv files:

18-06-2026

2026

5

GLASSTEC | 20-23 OCTOBER | DÜSSELDORF - GERMANY

ALL GLASSTEC EXHIBITORS ADVERTISING IN THIS ISSUE
ALSO RECEIVE A FREE GLASSTEC PREVIEW

Editorial files:

28-09-2026

Deadline Adv files:

02-10-2026

2026

6

ATIV GLASS DAYS | 19-20 NOVEMBER | PARMA - ITALY

ALL4PACK- EMBALLAGE | 24-26 NOVEMBER | PARIS - FRANCE

UZ GLASS | 1-3 DECEMBER | TASHKENT - UZBEKISTAN

Editorial files:

16-10-2026

Deadline Adv files:

28-10-2026

FEATURED CONTENT: ANNEALING & COATING



FROM ONE PRODUCT TO THE NEXT. **IN MINUTES.**

A new generation of intelligent
process control is coming.

www.bottero.com

Stay tuned.

GLASSTEC 2026
Hall 14 - Booth G23/G24



ZIPPE

Launch of new single Vibrotube® batch charger

Demands on modern batch chargers are constantly rising: high melting capacities, optimal batch distribution and maximum energy efficiency.

Zippe introduces an innovative solution for the precise and uniform charging of glass melting furnaces with the new Zippe Vibrotube® Single Charger.



- Fully enclosed system to minimise heat loss
- Low wear and reduced maintenance requirements
- Increased efficiency, lower operating costs and more economical glass production
- Uniform conveying via a vibrating feed tube
- Individually adjustable feed rate and charging frequency
- Optimised batch distribution on the glass surface
- High process stability at melting capacities of up to 250 tonnes per day
- Cost-effective solution for melting capacities up to 250 tonnes per day

The vibrating feed tube transports the batch to the charging point in a controlled manner. By precisely coordinating the feed

rate and charging frequency, batch distribution can be optimally adapted to the specific requirements of the melting furnace.

The Vibrotube® technology ensures controlled material transport and precise charging performance, enabling glass producers to optimise furnace operation, increase plant availability, and achieve more economical melting processes.

The new Zippe Vibrotube® Single Charger combines precise batch charging with maximum cost efficiency, delivering a decisive advantage for modern glass manufacturing.

WWW.ZIPPE.DE

VIDRALA

Smarter apex to lower opex

At Vidrala, decarbonisation is an investment decision: the company builds renewable generation on the same sites where it makes glass, and every Mwp permanently lowers both the emission factor and the exposure to energy markets.

Vidrala's latest photovoltaic plant in Llodio, Spain, adds 7 Mwp of self-consumption capacity. By 2028, the company will triple its on-site generation across its sites.

Vidrala invests in structural decarbonisation to deliver one of the lowest emission factors in the glass industry, turning

sunlight into its own energy to power more of the glass it makes.

WWW.VIDRALA.COM



DURALEX

A trio of potential buyers

Since its receivership at the beginning of June 2026, and the opening of a 6-month observation period, Durablex® SCOP SA's management team has been working on maintaining market share in France and abroad, as well as on the performance of its production start-ups in order to deliver to each of its customers, with the support of all Durablex employees.

As part of the current disposal plan, the deadline for the submission offers has expired at noon on September 11, 2026.

3 potential buyers are confirmed to be in the running to take over and keep Durablex alive:

- Tomé Group
- Carlesimo Groupe



● AA INVESTMENTS (HK)

The next step is a hearing taking place on September 17 at the Orléans court to set the timetable for the examination of the offers by the Court, which should take place in the coming weeks.

All Durablex teams remain mobilised to ensure production and customer satisfaction.

WWW.DURALEX.COM



Years of expertise

SENSORS
SILO
BATCH
CULLET
ELECTRO FILTER
FURNACE
FOREHEARTH
FEEDER
GOBS
LUBRICATION
IS MACHINE
HE TREATMENT
HE STACKER
ANNEALING LEHR
CE TREATMENT
INSPECTION
CE CONVEYORS
PALLETIZER
LABORATORY
COMPRESSORS
VACUUM PUMPS
MOLD SHOP

Thanks to



Everywhere in the glass plant
even where you don't expect it



Join us at our stand 14C31
at Glasstec in Düsseldorf, Germany,
from October 20 to 23, 2026.
See you there!



Vertech'
Drive the future

GLASS TECHNOLOGY SERVICES

Launch of new innovation hub

Glass Technology Services (GTS) has officially launched GTS Innovation, a new dedicated innovation hub in Sheffield, UK, designed to support businesses, entrepreneurs, university spin-outs and researchers working across the materials and advanced manufacturing sectors.

The new facility provides access to flexible workspace, meeting facilities, specialist equipment, technical expertise and a collaborative network focused on helping organisations accelerate innovation and bring new ideas closer to commercial reality.

Located in the heart of Sheffield's renowned manufacturing and research community, GTS Innovation has been created to provide a practical environment where innovators can develop concepts, overcome technical challenges, and explore opportunities for growth without significant upfront investment.

The hub combines modern office space and collaboration areas with access to the expertise of GTS specialists, enabling users to test ideas, develop prototypes, and gain valuable insights throughout the innovation process.

Gareth Jones, Managing Director at GTS, said, "Innovation is

rarely achieved in isolation. The most successful ideas come from collaboration, technical expertise, and access to the right resources at the right time.

"With GTS Innovation, we've created a space where businesses and innovators can access practical support, specialist knowledge, and a network of people committed to helping ambitious ideas succeed. Whether you're a start-up looking to develop a concept, a university spin-out preparing for commercialisation, or an established manufacturer seeking to solve a technical challenge, we're here to help."

The launch reflects GTS's ongoing commitment to supporting innovation in materials science, processing technologies and manufacturing development. By creating a dedicated environment for collaboration and problem-solving, the organisation aims to strengthen links between industry, academia and emerging businesses while contributing to Sheffield's growing reputation as a centre for advanced manufacturing and research.

As well as providing workspace and facilities, GTS Innovation offers opportunities for organisations to engage directly with technical specialists, explore demonstration technologies, and participate in collaborative workshops designed to accelerate innovation and improve outcomes. The hub is available to innovators at all stages of development, from early-stage concept exploration through to product and process optimisation.

WWW.GLASS-TS.COM



SAVERGLASS

Organic decoration and inks

Saverglass works to reduce its footprint throughout the value chain. For the past 15 years, the company has been committed to using 100 percent recyclable organic inks.

In addition to being 100 percent recyclable, these inks do not require high baking temperatures (unlike traditional screen printing) so they also bring down energy consumption.

Saverglass' Organic Colour Play process replaces screen printing and avoids the use of heavy metals.

By 2024, 90.64 percent (78 percent in 2022) of Saverglass decorations used organic inks.

USING ORGANIC INKS TO REDUCE OUR ENVIRONMENTAL IMPACT

CHOOSE ORGANIC INKS:

- 100% RECYCLABLE
- LIMIT ENERGY CONSUMPTION
- AVOID HEAVY METALS

BY 2024

90,64 %

OF DECORATIONS WERE PRODUCED USING ORGANIC INKS



WWW.SAVERGLASS.COM

CLEAR AND TRASPARENT SINCE 1960



www.carmetspa.it

ANNEALING LEHRS · DECORATING LEHRS · TOUGHENING LEHRS · STACKERS
CROSS CONVEYORS · HOT GLASS SCRAPERS · MOULD PRE-HEATING OVENS

SCHOTT PHARMA

Complex reliably contained biologics

When the limits of biologics get pushed, **SCHOTT Pharma** provides support along the drug journey.

For complex biologics, maintaining product integrity throughout shelf life is critical. Even the most promising therapy depends on one essential factor: reliable container closure integrity.

Here's why container closure integrity is at the core of SCHOTT

Pharma's cartriQ® BioPure glass cartridge system design. For example, residual seal force testing helps maintain strong container closure integrity throughout shelf life, while a reduced airline specification further minimises the risk of leakage.

Together, these elements support reliable drug containment and help safeguard valuable biologics throughout their journey from filling to patient administration.

WWW.SCHOTT-PHARMA.COM

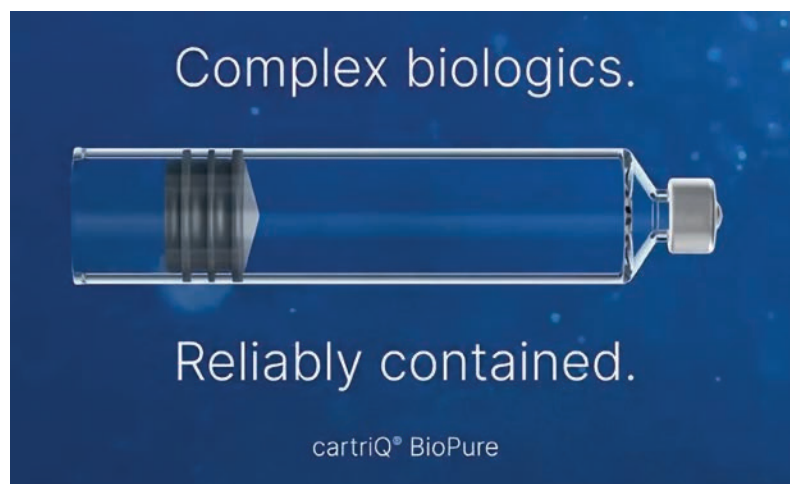
XPAR VISION

Systems maintenance during performance improvement

Older IR-D systems with water-cooled camera housings rely on regular maintenance to ensure consistent cooling performance. Over time, it can impact cooling capacity and increase the risk of overheating.

XPAR Vision's new systems no longer have this problem; examples include the

IR-D Next gen and the upcoming IR-SmartVision system.



The existing installed base (IR-Ds) can be upgraded. This prevents failures, costly damage, downtime and loss of production.

SmartCooling replaces traditional water-cooled solutions with a compact, thermally cooled system. This reduces maintenance and increases the reliability of your installation.

A future-proof powerful solution

With the combination of SmartCooling and upgrades, XPAR Vision offers future-proof solutions for existing installations. This technology allows the improvement of hundreds of systems worldwide.

Combined with IR-SmartVision, this creates a powerful solution:

- Less maintenance and higher reliability
- New Modern UI with Smart Detection Algorithm
- Better detection of critical defects
- A scalable platform for future developments

The result: a more stable process today, with the flexibility to further optimize it tomorrow. Instead of making major investments in entirely new systems, more and more manufacturers are opting for targeted upgrades that deliver immediate results.

WWW.XPARVISION.COM

SEE YOU @
glasstec
20-23 OCT 2026
DÜSSELDORF | GERMANY
HALL 12
BOOTH A31

glasstec.de



Some print
for beer
glass

**We design
for high art**



www.fermac.it

follow us on



PENNEKAMP

Go Hybrid - electrify your gas-fired lehr

Pennekamp can now transform an existing gas-fired lehr into a hybrid system with ConveX E, which combines an electric heating element with a circulation system, allowing existing gas-fired lehrs to operate with:

- Fully electric operation
- Fully gas-fired operation
- Or a flexible combination of both

The system can be retrofitted to existing lehrs equipped with circulation fans - including Pennekamp lehrs as well as those from other manufacturers.

Easy retrofit: Remove the existing circulation fan, insert ConveX E and connect it to the control cabinet. No mechanical modifications required.

Up to 85 kW connected load, with the maximum heating output adjustable according to the available electrical capacity and the heat requirements of the lehr.

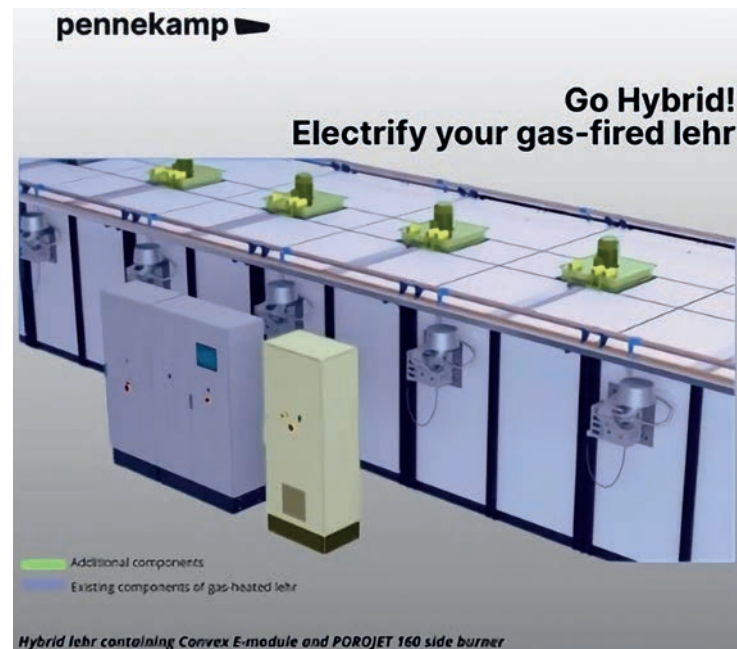
When operating electrically, ConveX E enables CO₂-emission-free operation, supporting the transition toward green manufacturing, with a 100 percent reduction of

CO₂, NO_x, CO and NO.

With self-generated solar energy, the lehr can run entirely on solar power during the day. If sufficient solar power is not available, the lehr can automatically switch to gas heating.

One lehr. Two energy sources. Maximum flexibility.

WWW.PENNEKAMP.DE



BUCHER EMHART GLASS

Master Track, intelligent space for inspection

Conventional inspection machines work independently, rejecting glass containers at the first sign of a defect, losing valuable insight and data.

With **Bucher Emhart Glass'** Master Track, defects are detected immediately, however each container undergoes a thorough quality assessment before, if necessary, being discarded from the production line.



The comprehensive, space-saving solution connects all inspection points into one intelligent, data-driven system.

All the results for each container are efficiently and automatically captured and correlated with the mould number or data matrix for analysis.

Tracking containers all the way through the system minimises the risk of overlooking compound issues that could be addressed simultaneously.

WWW.EMHARTGLASS.COM

ARDAGH GLASS PACKAGING-EUROPE

Chris Thornton appointed COO

Ardagh Group recently announced the appointment of Chris Thornton as Chief Operating Officer of Ardagh Glass Packaging-Europe, effective 1 October, 2026.

A respected leader with more than three decades of experience in the glass industry, Chris has been with Ardagh for 23 years and has held a number of leadership roles, most recently as Chief Operations Officer for AGP-North America. His appointment reflects the depth of experience and talent across the organisation as the company continues to develop the leaders who will help shape the future.

As Chris prepares to assume his new role, Ardagh thanks his predecessor, Henrik Bonné, for 19 years of outstanding contribution and commitment to Ardagh. Henrik's leadership has helped shape AGP-Europe, and he leaves a lasting legacy across the business.



WWW.ARDAGHGROUP.COM



MARPOSS

LEADING THE WAY IN QUALITY AND PROCESS CONTROL



EXTERNAL
DIMENSION



INSIDE DIAMETER
AND PROFILE



WALL
THICKNESS



SINKS AND
BULGES



PUSH-UP



WEIGHT



BRIMFUL &
FILL-POINT
CAPACITY



PRESSURE
TEST

Marposs products portfolio includes the most flexible, technically advanced, automated systems for measurement, inspection and testing of any glass container.

strong metrology expertise

short pay back

excellent after-sales service

Elevate your production standards. Partner with the experts.



PNEUMOFORE

Fifteen vacuum pumps for Rubin Glass sustainable production

The vacuum installation at **Rubin Glass** has grown to a total of 15 **Pneumofore** units, reflecting more than a decade of continuous cooperation and long-term operating experience

Three Pneumofore UV24 VS30 Rotary Vane vacuum pumps equipped with Variable Speed Drive, installed at Rubin Glass in Bulgaria in 2024

During a recent technical visit to the Rubin Glass production site in Pleven, Bulgaria, a Pneumofore representative reviewed several vacuum pumps operating across the plant. The inspection provided further evidence of the remarkable long-term reliability of the installation. Since the commissioning of the first UV16 Vacuum Pump in 2010, the system has progressively expanded in line with Rubin Glass's production growth and now comprises 15 Pneumofore units.

Installed across different production areas, the pumps support the IS and AIS moulding machines associated with the site's three glass furnaces. These production lines provide a total production capacity of approximately 750 tonnes per day. Rubin Glass manufactures green, brown and flint glass containers for a broad range of applications.



Rubin Glass is one of the most advanced and well-established glass producers in the Balkan region. With more than 60 years of experience in glass container manufacturing, the company has established a strong international presence and supplies customers across Europe and beyond. Its extensive product portfolio includes bottles ranging from 100 to 3.750 millilitre and jars from 80 to 1.750 millilitre, covering applications for food, edible oils, soft drinks, spirits, beers and wine.

The company's ability to develop customised glass containers distinguishes Rubin Glass from competitors focused on standardised production. This combination of production flexibility, quality and continuous technological modernisation, supported by advanced quality management systems and integrated

ERP business processes, further supports Rubin Glass' established market position.

In glass manufacturing, vacuum is essential for stable and continuous operation of IS machines. Over the years, Rubin Glass has experienced the trouble-free operation of Pneumofore UV16 Vacuum Pumps, followed by the progressive expansion of the installed system. All these vacuum pumps are equipped with Variable Speed Drives that enable each pump to precisely adapt the delivered capacity to the actual production demand, supporting operational flexibility and energy efficiency.

The picture shows the most recent units, delivered in 2024: air-cooled UV Vacuum Pumps installed with adequate ventilation and properly dimensioned piping connections to minimise energy losses caused by pressure or capacity drops.

As demonstrated in hundreds of glassworks worldwide, Pneumofore UV Vacuum Pumps operate at low rotational speed with direct coupling, allowing stable performance over time and minimising mechanical wear. Pneumofore systems typically operate continuously for more than 20 years without overhauls. This extended operating life contributes to lower Life Cycle Costs, reduced maintenance requirements and sustainable industrial production.

WWW.PNEUMOFORE.COM - WWW.RUBIN-GLASS.EU



ZIPPE

Automation system arrives on site

After careful packing and transport to its destination on the other side of the globe, another innovative

Zippe control system has safely arrived and will soon be ready for operation.

For many years, Zippe has been one of the leading suppliers of batch and cullet plants, playing a key role in shaping important developments within the glass industry. With more than 680 batch plants realised worldwide, the company understands that automation and control technology are essential for efficient, reliable and reproducible plant performance.

Here's why automation is a core competence at Zippe. More than 45 automation specialists develop and implement the latest generation of software and hardware systems, providing customised solutions and fast, effective 24/7 support for our clients around the globe.

Zippe looks forward to supporting yet another customer with innovative automation technology and ensuring reliable plant operation from day one.

WWW.ZIPPE.DE

VMA

Visuelle Messtechnik
und Automatisierung

OUR BUSINESS AREAS



Container Glass
Wall thickness & Ovality



Flat Glass
Thickness & Stress



Tubing Glass
Thickness & Diameter

VISIT US AT
glasstec

HALL 14 • STAND C03

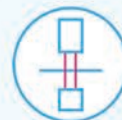
OUR INNOVATIONS



NEW

FLX UNO

Single-sensor for flexible
thickness measurement



NEW

Stress Sensor

In-house developed stress
sensor for float glass

OPTICAL MEASURING SYSTEMS FOR THE GLASS INDUSTRY

DESIGNED & MANUFACTURED BY VMA

HORN & STOALZLE

Planned modernisation of Stoelzle Hermanova Hut glass melting furnace

Stoelzle Glass Group is investing in the future of European pharmaceutical glass manufacturing and is modernising its production facility in Hermanova Hut, Czech Republic. The site is one of the most important European production facilities for amber glass packaging and supplies customers primarily in the pharmaceutical and healthcare industries, as well as selected applications in the food, beverage and spirits sectors.

As part of this extensive project, **Horn** is responsible for the engineering and execution of the complete furnace rebuild.



The construction work for this project began on August 5, 2026, with the glass drain. The cold repair of the furnace is planned over a period of 65 days, with production expected to resume in October 2026.

The modernisation includes a complete rebuild of the glass melting furnace, including forehearths and regenerators. The new end-fired furnace features an increased melting area and doubled electrical boosting capacity. These improvements will enhance both production capacity and energy efficiency while reducing specific CO2 emissions per tonne of glass melted.

WWW.STOELZLE.COM - WWW.HORNGLOSS.COM

VCD TONG HEAD
Upgrade

Your next
small step
could be a big one



BUCHER EMHART GLASS

Variable Center Distance Tong Head

As glassmakers continue to scale up production with Triple Gob (TG) and Quad Gob (QG) maximising throughput is no longer enough. Every stage of the manufacturing process must work smarter to keep pace.

Dual-row take-out systems can create challenges, from complex firing sequences and increased ware handling to limitations further

downstream.

Bucher Emhart Glass' Variable Center Distance (VCD) Tong Head is an innovative solution engineered to bring greater flexibility, efficiency, and control to high-speed production environments.

Dynamically adjusts bottle spacing to match article size

Reduces belt advance for higher pack rates and smoother flow

Improves precision during push-out and transfer

Modular, durable design for easy maintenance and lower operating costs

Fully compatible with Emhart Glass' FlexPusher fingers, Servo Electric Take-Out (SETO) and Servo Electric Invert (SEI) mechanisms, the VCD Tong Head delivers optimised handling without compromise.

WWW.EMHARTGLASS.COM

OGT

OLIVOTTO
GLASS
TECHNOLOGIES

MACHINERY • SYSTEMS • SOLUTIONS



OF EXCELLENCE

MASTERS OF GLASS FORMING *since 1946*

TIME IS OUR MOST VALUABLE TECHNOLOGY
Expertise. Reliability. Innovation.
80 years shaping the future of glass.

 **olivotto.it**



DISCOVER OUR
TECHNOLOGIES

MEET US
at **glasstec**

DÜSSELDORF, OCT. 20-23
HALL 13, STAND A43

Olivotto Glass Technologies S.p.A.
Viale Gandhi, 22 - 10051 Avigliana (TO), Italy info@olivotto.it - www.olivotto.it



ISO 9001
ISO 14001
Certified Company

VERALLIA

Studies show glass colour link to enhanced product preservation

What if the colour of a bottle could help preserve what matters most? Not just the product, but its quality, its integrity and the consumer experience.

Recent research conducted by the Università degli Studi di Perugia, in collaboration with the Carapelli Nutritional Institute, has shown that blue glass offers the best protection against oxidation for extra virgin olive oil.



With Project BLU by Carapelli, this insight becomes a concrete solution: a bottle designed to protect the sensory and nutritional properties of EVO over time.

Verallia contributed to this innovation by developing and producing the blue glass solution, bringing together material expertise, industrial capabilities and sustainability.

The result is:

- effective protection under real storage conditions
- consistent and scalable industrial production
- over 65 percent recycled content

Because glass is more than packaging. It protects, preserves and enhances.

A strong example of collaboration between science, brand vision and industrial expertise.

WWW.VERALLIA.COM

SORG

Shanghai Sediver Glass furnace successfully commissioned

Back in 2015, **Sorg** designed and built for the Shanghai plant of Sediver Glass a regenerative endport furnace with two forehearth for high-quality glass, for the production of high-voltage insulators.

The furnace was now due for reconstruction. In view of the performance of the furnace and the glass conditioning process, the installation was rebuilt and partially optimised, particularly the size of regenerators was designed new with increased capacity.

The pull of the furnace, originally planned at 110 tonnes per day, was increased to 130 tonnes per day and a third

production line was added. The forehearth for this line was designed and supplied by Sorg and is of the Sorg 240S+®. As part of the furnace reconstruction, Sorg designed and supplied the necessary equipment components, such as the reversal system and electrode holders. For glass conditioning, Sorg supplied air/gas stations, gas supply station and combustion air fans.

The SCADA system was adapted to the modified plant configuration.

The furnace reconstruction took 70 days from glass to glass and was carried out under Sorg's supervision.

WWW.SORG.DE

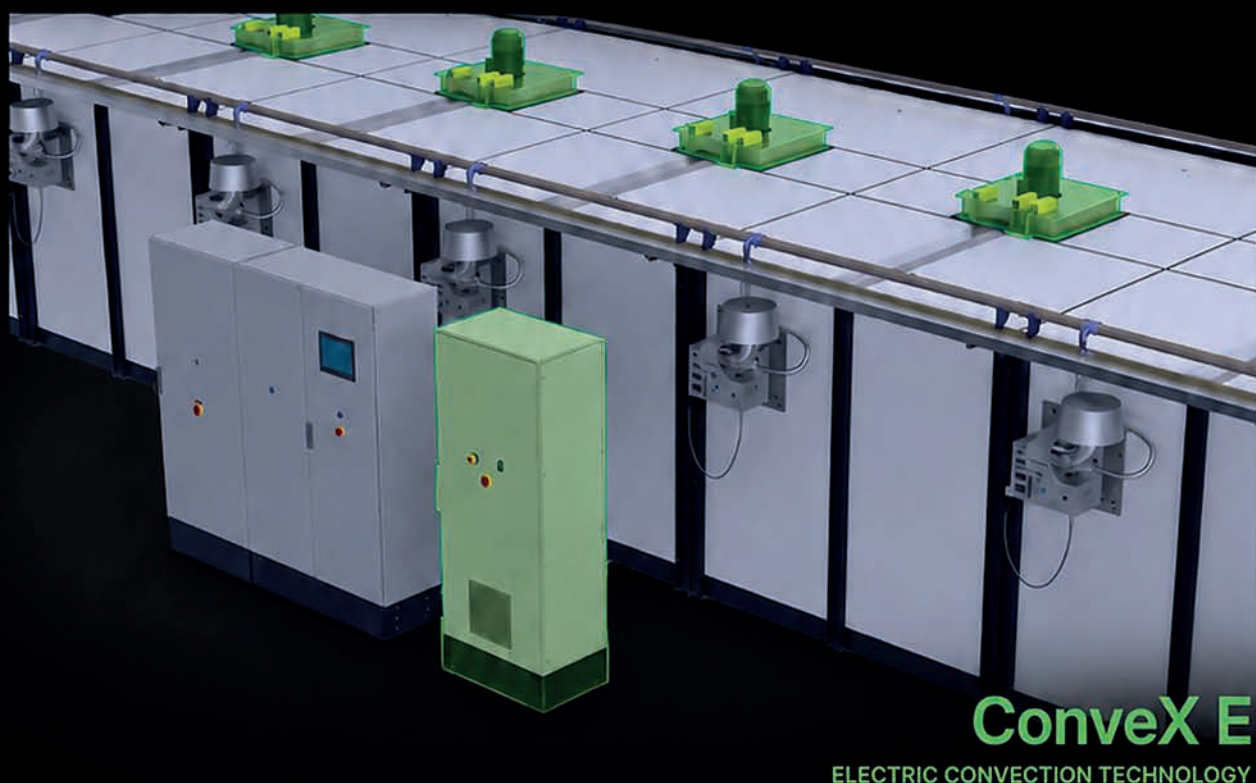


A GLASS-INDUSTRY FIRST FOR ANNEALING & DECORATING LEHRS*

GO HYBRID

Gas when you need it. Electric when it makes sense.

Switch intelligently between gas and electricity - according to heat demand and your energy strategy.



ConveX E

ELECTRIC CONVECTION TECHNOLOGY

TWO WAYS TO GO HYBRID

NEW

HYBRID LEHR

- We supply complete new annealing or decorating lehrs with a **full hybrid system**.

RETROFIT

EXISTING LEHR

- Convert an existing gas-fired lehr to a **hybrid version with ConveX E**.
- Convert an existing electric-heated lehr to a **hybrid version with ConveX G**.

CONTACT US FOR MORE INFORMATION

Let us discuss your new hybrid lehr or retrofit project.

sales@pennekamp.de | www.pennekamp.de

+49 (0) 23 33 605-0



SCAN TO VISIT

FEVE

Annual report: 2025 industry update

FEVER's annual report for the year 2025 is now out. Among the industry updates reported for 2025, the European container glass industry registered growth, with both production and sales increasing. In particular, the Food and Beverage (F&B) production grew by 2 percent both in tonnage and units, reaching 20.3 million tonnes and 73.3 billion units.

The sector continued to demonstrate its significant economic and strategic importance within the European Union (EU), supplying packaging to some of the EU's most competitive export industries, food and beverages, pharmaceuticals, and perfumery and cosmetics, while maintaining its leadership in sustainable packaging through reusability, recyclability and ongoing decarbonisation efforts.

More specifically, the sector, including glass-packaged goods, contributed over EUR 140 billion in value added to the EU economy, equivalent to around 0.8 percent of the EU gross domestic product (GDP). It also sustained more than 850 000 jobs across the EU, most of them in downstream sectors with a very significant presence of small and medium-sized enterprises (SMEs).



In terms of sustainability, glass remained the only packaging material with a significant return rate for refilling, with around 40 percent of glass beverage containers returnable in 2025 and a recycling rate of over 80 percent across the EU. Moreover, light-weighting continued to advance in 2025, with the average container weight in production falling to 277 grams and the standard still wine bottle reaching a new low of 443 grams in sales.

A full overview of the industry's economic contribution, trade performance, sustainability leadership and market dynamics is available here.

WWW.FEVE.ORG

NRG GLASS MOULDS

New company headquarters

NRG Glass Moulds is the Vetri Speciali Group company dedicated to the design and production of special moulds for hollow glass: a company with refined technical know-how, which deserved a space worthy of its ambition.



NRG Glass Moulds' new headquarters represents an important step in the growth of the company. Above all, it tells the story of a project built over time.

From design to construction, every phase of the project was guided by the desire to create a space that would best support the work, foster collaboration and accompany the company's future development.

WWW.NRGMOULD.IT - WWW.ETRISPECIALI.COM

FEVE

Alliance of Energy Intensive Industries' call to get EU ETS reform right

In a letter to the European Parliament and Member States on September 24, FEVE joined the Alliance of Energy-Intensive Industries (AEII) to make two requests:

- Take the time necessary to conduct a considered and robust revision of the current legislative proposal
- Ensure that unconditional free allocation of allowances remains a protection from carbon leakage risk strengthening the business case to invest in Europe.

In the statement, the Alliance of Energy-Intensive Industries said, "Europe cannot afford to get this review wrong. Our industries are under severe pressure from high energy costs, unfair trade practices, geopolitical uncertainty, weak demand and a difficult investment environment. The quality of the reform cannot be sacrificed to the speed of its adoption. The timetable currently envisaged is far too short for a proper assessment of a file that will affect the cost structure, investment decisions and employment plans of hundreds of thousands of European companies for years to come. "Unconditional free allocation exists to protect European production against carbon leakage for as long as our competitors do not face comparable carbon costs. There is no logic nor economic link between the free allowances a company receives and how much it needs to invest over the same period. Tying protection to arbitrary investment obligations weakens the very companies expected to deliver the transition. We remain committed to climate neutrality. What we need is a workable and predictable ETS that allows companies to invest, decarbonise and continue producing in Europe."

WWW.FEVE.ORG



since 1998

BOHEMI CHEMICALS

CHEMICALS FOR GLASS COATING

Solving quality problems in your glass since 1998

Since 1998 Bohemi Chemicals supply Hot and Cold End coatings for glass bottles with a main focus on quality.

If you encounter problems in the quality of your glass such as scratches, white spots or blocked spraying system's filters we can solve them as done in many manufactories all over the world.

HOT END COATING



STARTIN S

Monobutyl trichloride
Longer expiration date due to double stabilization. Capable of closing the microfractures present in the glass.

COLD END COATING (High Quality)



BOHEMI P4218 D

Polyethylene emulsion.
Recommended for beer and wine bottles.
Avoids the formation of residues in filters, pipes and solenoids.

COLD END COATING (Very High Quality)



BOHEMI P1500

Copolymer and Waxes emulsion.
Suitable for precious bottles as liquor, champagne or returnable containers to be sterilized.

We offer free trials of every products to permit en exhaustive test campaign.

CONTACT US TO REQUIRE YOUR SHIPMENT

bohemi@bohemicchemicals.com

www.bohemicchemicals.com



GIANCARLO PEREGO SPA
MOUDLS FOR GLASS INDUSTRIES



ŠPILJAK D.O.O.



**BEFORE A BOTTLE BECOMES ICONIC,
IT TAKES SHAPE IN OUR HANDS.**

Visit Perego Group www.gperego.it

PURITY THROUGH INNOVATION



ANNEALING LEHRS, DECORATING LEHRS, TEMPERING LEHRS, LEHRS FOR GLASS BLOCKS,
LEHRS FOR HV INSULATORS, MOULD PREHEATING KILNS, COLD END SPRAY SYSTEMS, SCRAPERS,
UPGRADING AND OVERHAULING.

VISIT US AT GLASSTEC DÜSSELDORF 2026 HALL 13 BOOTH E04

ANTONINI S.r.l Italy Tel +39 0571 93221 com@antoninisrl.com www.antoninisrl.com

Lehr temperature stability upgrade with **ANTONINI** burner evolution

E VOLUTION OF AN ICON: THE NEW ANTONINI MULTI STEP BURNER

At Antonini, innovation begins with listening. Every day, we work closely with our customers, observe how their plants operate, and gather feedback, requirements, and new challenges. It is through this continuous dialogue that the idea for the new Antonini Multi Step Burner was born - an evolution of our long-established burner technology, which over the years has become a benchmark for simplicity, reliability, and efficiency.

PROCESS CONTROL

Our goal was not to reinvent a product that had already proven its value, but to refine it. We wanted to provide even more precise control of the thermal process while preserving the ease of operation and robustness that have always distinguished our solutions. The new system rapidly reaches the target setpoint temperature and continuously monitors it. Whenever a deviation is detected, the burner automatically adjusts by switching the flame stages on or off to restore the desired process conditions. This continuous control enables a significantly more stable temperature throughout the entire produc-



tion cycle. The key innovation lies in the introduction of four power levels, replacing the two-stage configuration of the previous generation. This advancement allows for smoother combustion modulation, reducing temperature fluctuations and improving the uniformity of heat distribution throughout the

Lehr. The result is a more stable, controlled, and repeatable process, with a more consistent temperature profile along the entire length of the tunnel.

TECHNOLOGY UPGRADE

The new Multi Step Burner has been designed not only for

In the following op-ed, ANTONINI CEO & Technical Director Francesca Antonini presents the company's Multi Step Burner, a four-level evolution of established burner technology designed for stable Lehr temperature control, retrofit upgrades, real-world testing, customer collaboration, process reliability and operational simplicity in tunnel applications.

new installations but also with existing Antonini customers in mind. It can be retrofitted to existing plants by replacing the previous Antonini burner, providing a straightforward technology upgrade without the need to invest in a new Lehr. This enables customers to maximize the value of their existing equipment while benefiting from the latest technological improvements. Before introducing the new burner to the market, we wanted to validate its performance under real operating conditions. For this reason, the Multi Step Burner was installed at one of our partner customers' facilities, where it underwent an extensive testing and continuous monitoring programme.

MEASURED DEVELOPMENT

The results have been highly encouraging. We have recorded a significant improvement in temperature stability and overall process performance. At the same time, we are continuing to collect data on energy consumption. Initial findings are positive, and we will continue monitoring performance over time to fully validate these results. To me, this project reflects Antonini's approach to innovation: not pursuing novelty for its own sake, but developing solutions built on experience, close customer collaboration, and a deep understanding of industrial processes. Every improvement must translate into tangible benefits for our customers - in terms of process

control, reliability, and operational simplicity. The new Multi Step Burner is not a revolution; it is an evolution. And it is precisely this evolution -developed together with our customers and validated through real-world testing- that represents the way we look to the future. ■

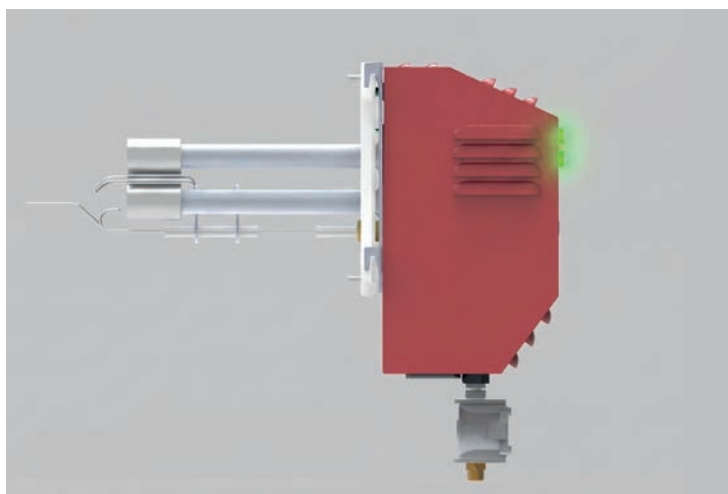


ANTONINI S.R.L.

Via Medaglie d'Oro della Resistenza, 2
50053 Empoli (Loc. Ponte a Elsa) FI -
ITALY

Tel.: +39-0571-93221
com@antoninisrl.com

www.antoninisrl.com



Electrical boosting shapes HORN's glass melting trendsetter

INTEGRATING ELECTRICAL ENERGY INTO CONVENTIONAL MELTING PROCESSES

The glass industry is facing increasing pressure from volatile energy prices, stricter CO₂ reduction targets and the continuing electrification of industrial processes. Because glass melting is highly energy-intensive, these developments require fundamental changes in furnace design and operation.

ELECTRIFICATION

To face these critical questions, several technological pathways are being explored. Green substitute fuels such as hydrogen or biofuels offer potential emission reductions, but also bring challenges linked to combustion behaviour, infrastructure and cost. Fully electric melters eliminate direct combustion emissions and provide high efficiency, yet their use remains limited by power availability, investment costs and process constraints. In this context, hybrid melting furnaces offer a practical and flexible route. By combining conventional combustion heating with electrical boosting, they enable a gradual transition toward electrification while maintaining process stability and preserving the established horizontal

melting principle. Hybrid systems can therefore be seen as an intermediate step between conventional and fully electric furnace technologies. Although the term “hybrid glass melting furnace” is widely used in the industry, there is no universally accepted definition. In practice, classification is generally based on the relative contribution of different energy sources and their influence on the melting process. Within HORN, a furnace is defined as hybrid when both combustion-based heating and electrical boosting provide significant, process-relevant energy inputs. Quantitatively, this corresponds to a minimum electrical share of 20 percent of total energy input. Below this threshold, electrical boosting is generally considered state of the art rather than the defining characteristic of hybrid operation. As electrical input increases, its effect on furnace behaviour becomes more pronounced. Higher electrical input significantly influences temperature distribution, convection patterns and overall process stability, requiring appropriate electrode design and configuration. Concepts with more than 50 percent electrical energy input are classified within HORN as ‘superhybrid’, reflecting their different operational

characteristics and higher degree of innovation. The feasible range of electrical boosting depends on furnace type, with a theoretical maximum of 80 percent electricity for oxyfuel hybrid furnaces. End-port-fired furnaces, by contrast, typically require a combustion share of no less than 60 percent to ensure adequate control of the temperature profile, restricting the electrical share to a maximum of 40 percent.

DESIGN

Hybrid concepts can be applied to all commonly used furnace types, each with specific advantages and limitations. The end-fired furnace is a well-established design in container glass production. Its hybrid variant benefits from extensive operational experience and compatibility with existing plant layouts, although its flexibility remains comparatively limited. Hybrid oxyfuel furnaces allow precise control of combustion energy input, eliminate the need for regenerators or recuperators and produce minimal NO_x emissions, but they involve high oxygen supply costs. Hybrid recuperative furnaces also provide precise control of fossil energy input without requiring oxygen production, but generally have lower combustion efficiency. The recuperator must

Hybrid furnace concepts from HORN combine combustion-based heating with electrical boosting to support electrification, process stability and lower specific energy consumption – all through an approach that includes hybrid and superhybrid classifications, electrode design, adapted refractories, operational flexibility and a Gerresheimer Lohr example which operates with up to 50 percent electricity.

ventional furnaces, enabling distinct and controllable convection zones. Additional strong barrier boosting further stabilises these structures and enhances process consistency. Bottom melting and barrier boosting directly affect important process parameters. The temperature profile can be adjusted more precisely, thermal homogeneity is improved through enhanced mixing and the fining process benefits from more stable and targeted convection patterns. As a result, hybrid furnaces offer greater control over melt quality than purely combustion-based systems. Elevated temperatures in the melting tank, together with changes in convection behaviour, support the melting process and help achieve high glass quality. These conditions, however, require adaptations in the refractory concept. Increased thermal loads in the melt zone and comparatively lower temperatures in the superstructure call for a differentiated refractory design. Refractory wear can be mitigated through geometrical adaptations, cooling strategies and tailored material selection, especially in critical structures such as the furnace crown or glass contact material. To address increased corrosivity, an initial protective plating can be installed behind the tank block to accommodate the relocation of the primary corrosion zone

also be designed to accommodate the full operating range, limiting overall system flexibility.

The technical design of hybrid furnaces is strongly shaped by the integration of electrical heating into the conventional melting system.

A key component is the use of bottom-installed electrodes in the melting zone, whose positioning has a decisive influence on both energy input and melt flow behaviour. Extensive bottom boosting fundamentally changes the convection pattern compared with con-

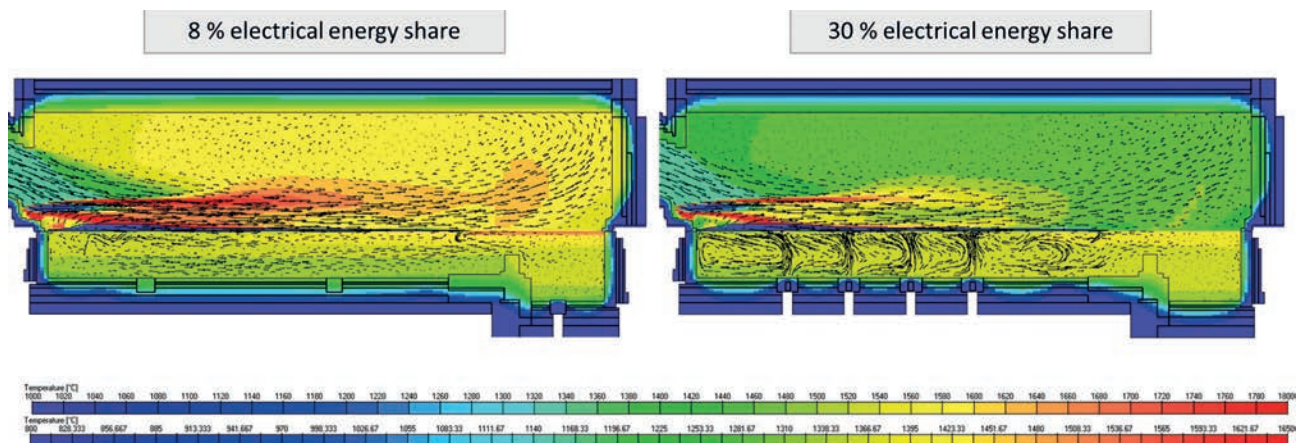


Fig. 1: Temperature and convection comparison between a conventional end-fired furnace (left) and a hybrid end-fired furnace with 30 percent electric share (right)

FURNACES

from the flux line toward the centre of the block, with provision for additional layers if necessary. In the furnace bottom, reduced insulation combined with double layers of fused-cast material can be applied to withstand higher thermal loads while maintaining adequate lifetime. Despite these structural adaptations, the high efficiency of electrical heating ensures that overall specific energy consumption remains low.

OPERATION

Further challenges arise in the optimisation of hybrid furnace operation. The furnace design must establish an appropriate temperature profile while maintaining overall thermal stability. In oxyfuel-based systems in particular, foam formation is a critical issue and

must be controlled through suitable burner configuration and operating conditions.

The large number of electrodes also makes a well-engineered electrical infrastructure beneath the furnace essential. Structured cable management is required to minimise heat dissipation, and the effectiveness of such designs has been validated through thermal imaging analyses under real operating conditions. Another important maintenance aspect is that instructed personnel can inspect the otherwise gated area below the furnace during operation.

A successful example of superhybrid furnace technology is implemented at the Gerresheimer facility in Lohr, where it has been in stable operation for over one year. The furnace has a higher capacity

and was designed to operate with up to 50 percent electricity. Hybrid glass furnaces show favourable operational performance through enhanced melting and fining behaviour. The combined use of combustion and electric boosting enables more homogeneous heat distribution and improved bubble removal. Their flexibility allows operators to adjust the energy input mix dynamically in response to changing production demands, raw material variations or energy costs. The integration of electrical and fossil-based heating also contributes to improved process control and thermal stability, resulting in more consistent glass quality and reduced operational fluctuations. Hybrid glass melting furnaces therefore represent a significant advancement in furnace technology by combining the strengths of combustion and electric heating. Compared with fully electric furnaces, they offer a logical intermediate solution by maintaining classic horizontal melting. With fewer structural changes, this furnace type achieves a high specific load with low specific energy consumption. Hybrid furnaces offer improved efficiency, flexibility and environmental performance, making them a viable solution for modern glass manufacturing. Continued development in materials, control systems and energy integration will further enhance their industrial relevance. ■

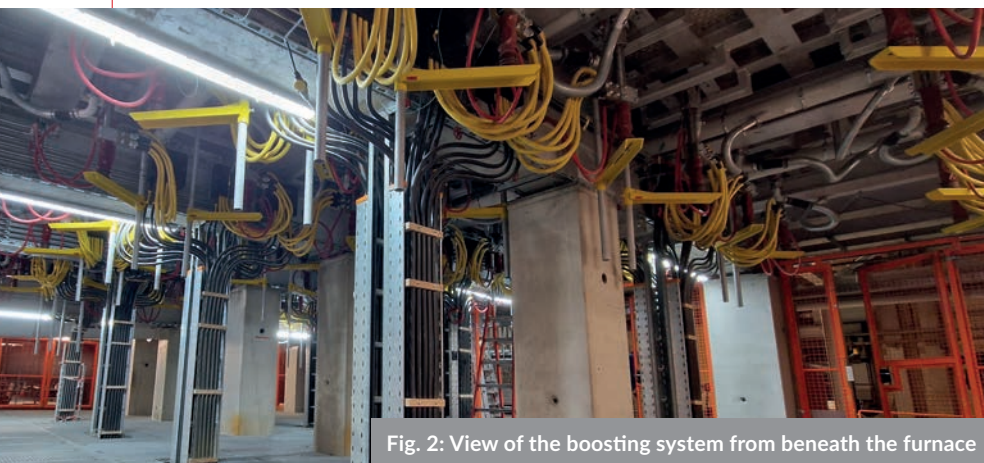


Fig. 2: View of the boosting system from beneath the furnace



Fig. 3: Interior of an oxy-fuel hybrid furnace showing electrode blocks

HORN
GLASS INDUSTRIES

**HORN GLASS
INDUSTRIES AG**

Bergstraße 2
95703 Plößberg
GERMANY
Tel.: +49-0-9636-9204-52
info@hornglas.de

www.hornglass.com

ADVANCED LEVEL OF ELECTRIC BOOSTING

As an innovative technological leader in the global glass industry, we have a crucial responsibility towards the future of our planet. Therefore an environmentally friendly platform for electric boosting is available: E-Fusion - HORN Power Boosting.

HORN's answer to the future way of glass melting focuses on our environment by creating a new boosting world which takes electric boosting to a whole new level. HORN has bundled its forces to use sustainable energy in order to reach less CO₂ emissions. Our specialists and comprehensive service package ensure a highly efficient performance of the plant over the entire life cycle.

MEET US AT
GLASSTEC 2026
HALL 13 | BOOTH C32

e-Fusion
HORN POWER BOOSTING

Tuscan furnace sees VERALLIA advance circular glass manufacturing

Marking a EUR 110 million industrial upgrade and adding around 100 jobs, a new VERALLIA Italia oxy-fuel furnace in Pescia has involved local suppliers – cutting emissions through HeatOx™ technology whilst strengthening lower-impact flint glass production for Italy's food and beverage exporters and local circular economy ambitions in Tuscany.

Verallia Italia has inaugurated its new oxy-fuel furnace at Pescia, in the province of Pistoia, marking a major step in the industrial modernisation of a Tuscan site

that has been in operation since 1976. The project, backed by an investment of approximately EUR 110M, strengthens one of the Group's most advanced plants and brings together industrial innovation, environmental

performance and local economic development. Verallia is the European leader and the world's third-largest producer of glass packaging for beverages and food products.

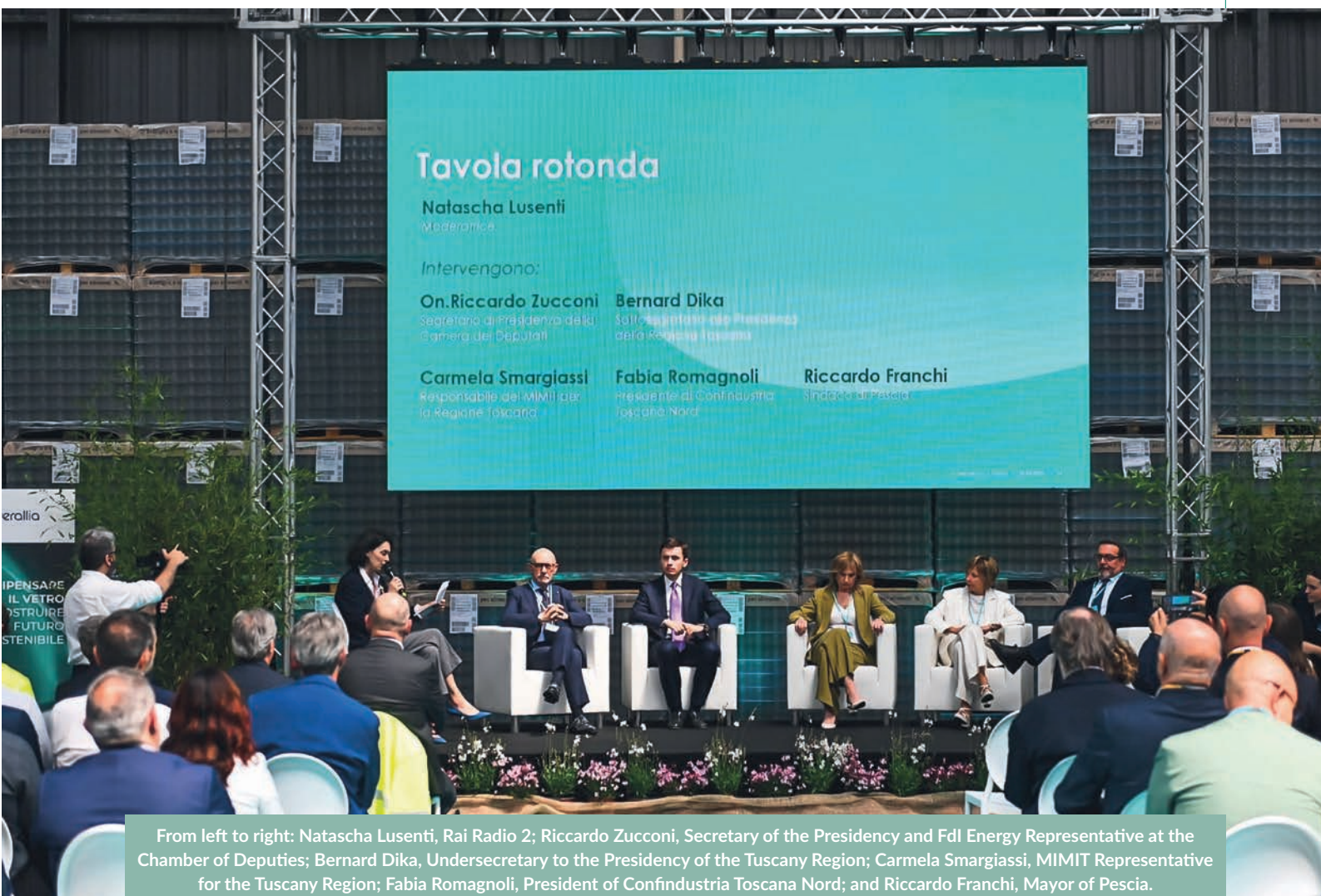
The inauguration was attended by Verallia Group CEO Patrice Lucas, Verallia Italia CEO Marco Ravasi, Verallia Italia Industrial Director Andrea Maffei and Pescia plant director Mattia Papini. The event also included an institutional round table moderated by journalist Natascha Lusenti, with participants including Riccardo Zucconi, Secretary of the Presidency and Fdi Energy Spokesperson at the Chamber of Deputies; Bernard Dika, Undersecretary to the Presidency of the Tuscany Region; Carmela Smargiassi, MIMIT representative for Tuscany; Fabia Romagnoli, President of Confindustria Toscana Nord; and Riccardo Franchi, Mayor of Pescia.

Their presence underlined the strategic relevance of the investment for the local area, the com-



petitiveness of Made in Italy and the Italian glass supply chain. The new furnace has already had a substantial impact upon employment, enabling the recruitment of around 100 people and contributing to jobs, inclusion and social cohesion in the area. Women account for 20 percent of staff at the plant, in line with Verallia Italia's progress towards gender parity - certified under UNI/PdR 125:2022 since 2023.

For Riccardo Zucconi, the plant represents more than a production facility. It is, he said, an opportunity for growth in Pescia and an important step towards a more sustainable glass supply chain, able to add value to material collected locally by turning it into a resource. He noted that the furnace will cre-



From left to right: Natascha Lusenti, Rai Radio 2; Riccardo Zucconi, Secretary of the Presidency and FdI Energy Representative at the Chamber of Deputies; Bernard Dika, Undersecretary to the Presidency of the Tuscany Region; Carmela Smargiassi, MIMIT Representative for the Tuscany Region; Fabia Romagnoli, President of Confindustria Toscana Nord; and Riccardo Franchi, Mayor of Pescia.



Verallia Italia team

ate direct jobs, from technicians to plant operators, while also stimulating demand for local services and supplies. In his view, it can become a driver of innovation by attracting investment and encouraging partnerships with technical and research bodies focused upon low-impact processes. The investment has also involved more than 100 local suppliers working as partners of Verallia Italia.

Bernard Dika described Verallia Italia as an example of how a major industrial group can put down roots in a region and become part of it. He emphasised the value of investing, hiring, training and creating the conditions for people to grow, adding that young people remain in places where they find technology, skills and a working environment

that values them. For Dika, the Pescia plant shows that modern manufacturing can be attractive to the next generation.

Riccardo Franchi, Mayor of Pescia, said Verallia Italia is part of the town and that the inauguration confirms a bond going well beyond production. He pointed to the 100 new hires, the scale of the investment and the company's attention to the environment and people as concrete factors that strengthen Pescia's industrial identity.

HEATOX™ TECHNOLOGY: A GENERATIONAL LEAP IN GLASS MELTING

With the new furnace, Verallia Italia has adopted HeatOx™ technology from Air Liquide, an

optimised oxy-fuel combustion solution that replaces the air fed into the furnace with oxygen. The system improves melting efficiency and reduces pollutant emissions, while residual heat is recovered to warm industrial spaces, eliminating the need for natural-gas boilers. The technology contributes to the Group's Net Zero pathway, which commits Verallia to a 90 percent reduction in scope 1 and 2 emissions by 2040. The target has been validated by SBTi and is aligned with the Paris Agreement. At Pescia, the new system is expected to reduce fossil fuel use by 12 percent and cut CO₂ emissions by 7.8 kilotonnes per year.

Verallia Italia uses an average of 63.9 percent recycled glass, accord-

ing to 2025 Verallia Italia data on external cullet. Tuscany is described as a national benchmark, with a 96.5 percent glass recycling rate, compared with Italy's 80.3 percent - already above the European target of 70 percent by 2030.

Fabia Romagnoli, President of Confindustria Toscana Nord, said the investment takes Verallia Italia further along the path of introducing advanced technologies that reduce the environmental impact of production processes. She also highlighted the company's engagement with the wider community and its efforts to explain the effects of the investment. According to Romagnoli, the modernisation of plants such as Pescia requires specialist staff whose strength lies in technical expertise - helping to render gender barriers obsolete.

VERALLIA ITALIA FOR MADE IN ITALY: SERVING THE F&B INDUSTRY

The new Pescia furnace is dedicated to flint glass production, allowing a single plant to serve a broad range of markets, including wine, oil, preserves, spirits and soft drinks, across varying shapes and formats. For food and beverage customers, this means greater

product availability, continuity of supply and guaranteed quality in containers produced with lower-impact technologies.

Carmela Smargiassi, MIMIT representative for Tuscany, described the Italian agri-food supply chain as a pillar of Made in Italy, recognised worldwide for its quality, innovation and local roots. She noted that the sector brings together agricultural production, processing, logistics and distribution while valuing biodiversity and local traditions. In this context, she said, packaging plays a strategic role for food and beverage, with companies such as Verallia Italia contributing to innovation and the circular economy.

The investment reinforces Verallia Italia's role as a strategic partner for Italian food and beverage producers exporting Made in Italy products around the world. Glass is presented not simply as packaging, but as part of the product and its identity: it protects, enhances and communicates quality.

Against a backdrop in which Italian agri-food exports reached EUR 60.9 billion in 2025, up 4.5 percent on 2024 according to the SACE Report, Focus ON-Food, the expansion of pro-

duction capacity and the adoption of lower-impact technology are positioned as direct support for the competitiveness of the Italian supply chain.

Marco Ravasi, CEO of Verallia Italia, said the company's strategy is centred upon developing the market for its customers and championing Made in Italy. He described the new furnace as an investment designed to bring Verallia Italia closer to customers and to support the growth of the Italian food and beverage sector. The project, he added, is both an industrial milestone and a moment of development for the Tuscan community - strengthening a more sustainable production model and the role of glass in the circular economy. ■



Verallia Italia SpA

Via Del Lavoro, 1
36045 Lonigo (VI) - ITALY
Tel.: +39-01955701
info.italia@verallia.com
www.it.verallia.com

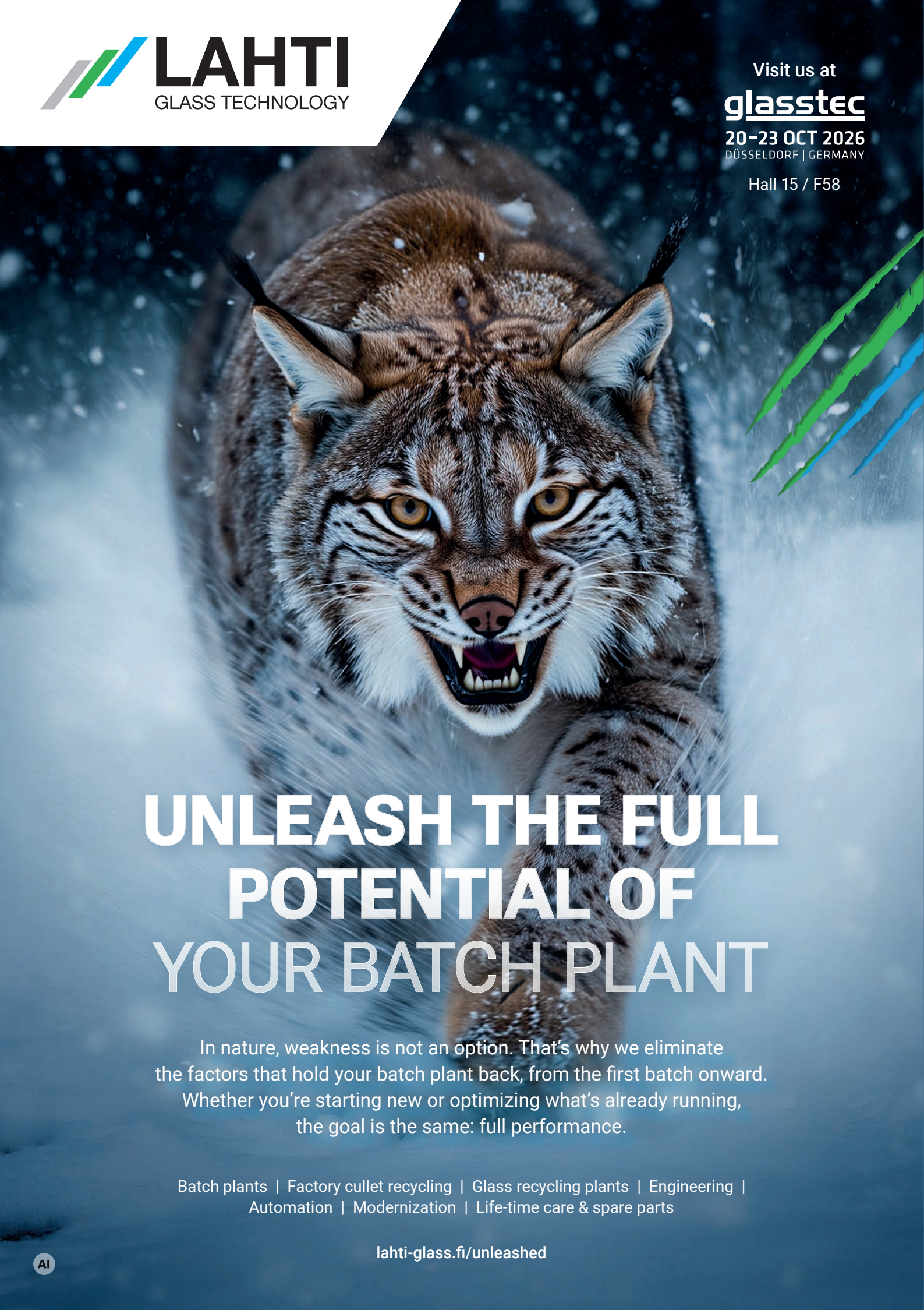
ABOUT VERALLIA

Verallia identifies its purpose as that of reimagining glass with a view to building a sustainable future. The company aims to redefine the way glass is produced, reused and recycled, making it the world's most sustainable packaging material. Verallia works alongside its customers, suppliers and other partners across the entire value chain to develop new, useful and sustainable solutions that benefit everyone.

With nearly 11,000 employees and 35 production plants in 12 countries, Verallia is the European leader and the world's third-largest producer of glass packaging for beverages and food products. The company offers innovative, tailored and eco-friendly solutions to more than 11,000 companies worldwide. In 2025, Verallia produced nearly 18 billion glass bottles and jars and recorded revenues of EUR 3.3 billion.

Verallia's CSR strategy has been recognised with the Ecovadis Platinum medal, placing the Group in the top 1 percent of companies assessed by Ecovadis. In September 2025, SBTi officially validated Verallia's Net Zero 2040 target under its Net-Zero Standard. By 2040, Verallia has committed to reduce its scope 1 and 2 CO₂ emissions by 90 percent and to offset the remaining 10 percent against the 2019 base year. This target is aligned with the 1.5°C climate trajectory set by the Paris Agreement.

Verallia is listed in compartment A of the Euronext Paris regulated market under the ticker VRLA and ISIN FR0013447729. It forms part of the CAC SBT 1.5°, SBF 120, CAC Mid 60, CAC Mid & Small and CAC All-Tradable indices.



UNLEASH THE FULL POTENTIAL OF YOUR BATCH PLANT

In nature, weakness is not an option. That's why we eliminate the factors that hold your batch plant back, from the first batch onward. Whether you're starting new or optimizing what's already running, the goal is the same: full performance.

Batch plants | Factory cullet recycling | Glass recycling plants | Engineering |
Automation | Modernization | Life-time care & spare parts

lahti-glass.fi/unleashed

SEE US AT
GLASSTEC
Hall 13
Stand B56

OUR FURNACE. YOUR GLASS.

Quality glass produced
sustainably on some of
the world's most efficient
furnaces and forehearths

**INNOVATION
AS STANDARD**

TECO[®]
www.teco.com

TOLEDO ENGINEERING / TECOGLAS / ZEDTEC / KTG ENGINEERING / KTG SYSTEMS

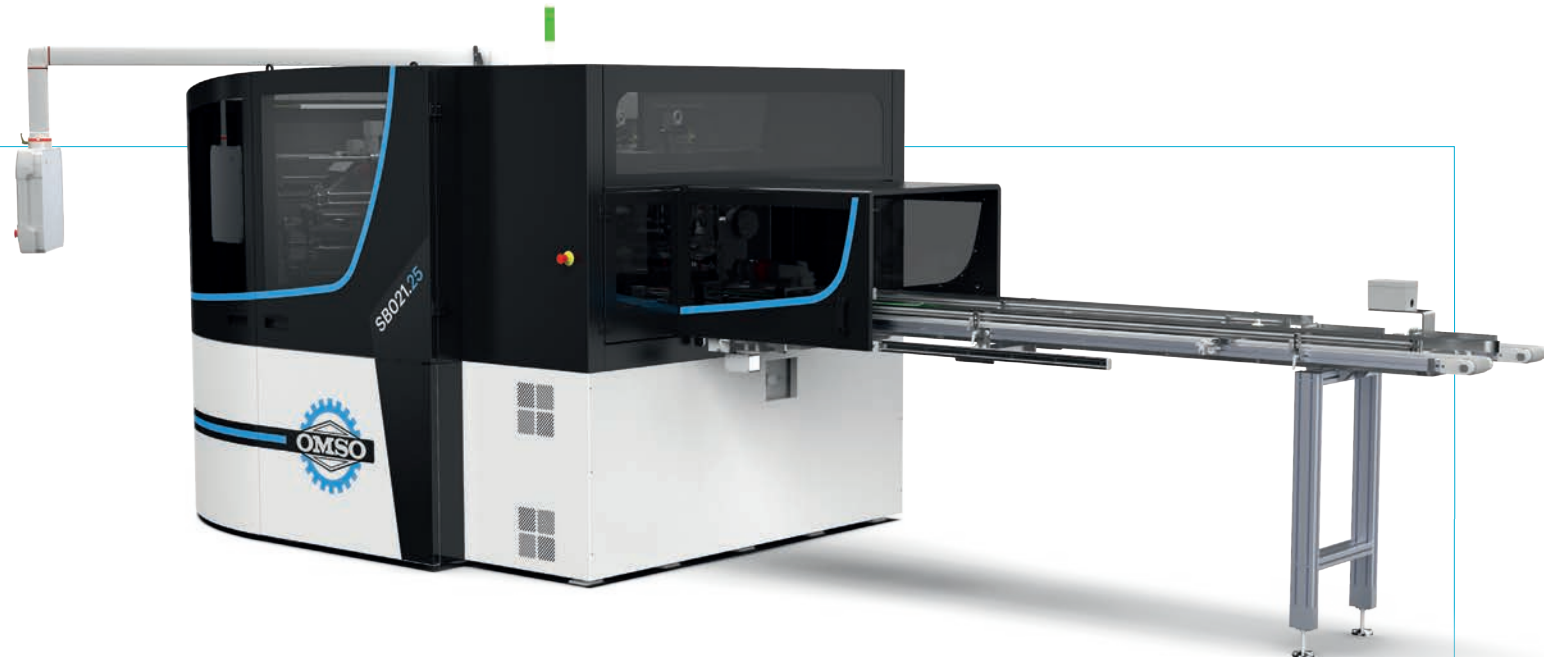
Digital control strengthens OMSO sustainable packaging decoration systems

In advancing glass decoration with servo-assisted machinery, UV LED curing, integrated hot stamping, digital software and remote assistance, OMSO's Servobottle and SB021.25 platforms address energy consumption, emissions, maintenance, quality control and production efficiency as manufacturers face sustainability demands, energy volatility and regulatory change.

The future of glass decoration is increasingly being shaped by two converging pressures: the need to reduce energy consumption and the need to make production more intelligent. For glass manufacturers and primary packaging decorators, particularly in the glass and cosmetics sectors, sustainability is no longer only an environmental objective. It is now a factor in competitiveness, driven by rising energy costs, closer scrutiny of product carbon footprints and the demand for more efficient production processes.

EFFICIENCY

In this changing context, technological innovation must do more than raise output. It must also contribute tangibly to lowering energy use, emissions and waste across the production cycle. OMSO's Servobottle screen printing machine has been developed with this objective in mind, bringing fully servo-assisted technology and advanced UV LED curing systems to the direct decoration of glass, plastic and metal



containers. Compared with traditional mercury-vapour UV systems, UV LED technology can reduce electricity consumption by as much as 50–70 percent, depending on machine configuration and production type. Its advantage also extends to service life. UV LED lamps typically exceed 20,000 hours of operation, compared with approximately 1,000–2,000 hours for conventional mercury vapour lamps, delivering a lifespan up to 20 times longer. In practical production terms, this means reduced maintenance, lower replacement costs and less machine downtime. The environmental benefits are equally direct. By reducing energy consumption, UV LED technology helps lower indirect CO₂ emissions. It also eliminates ozone production associated with traditional UV sources and removes the need for mercury, a highly polluting element. In this way, the shift to UV LED curing addresses both operating efficiency and environmental impact.

OWNERSHIP

The economic case for UV LED technology is not limited to the light source itself. Traditional mercury-vapour systems can generate indirect costs that are often overlooked when calculating the total cost of operating a decoration line. A single mercury-vapour UV lamp can produce up to 500 cubic meters of ozone-containing air per hour. On a line with three lamps, around 1,500

cubic meters of air must be extracted from the facility every hour of operation, while the same volume must be brought in from outside and conditioned for the production environment. For a plant working two shifts over approximately 4,480 hours per year, this represents more than 6.7 million cubic meters of air moved annually. Based on average industrial air treatment costs, the exhaust system alone can generate energy costs exceeding 7,700 euros per year per machine. Over the useful life of the plant, this can amount to tens of thousands of euros in indirect costs that may not be included in the original investment assessment. It is in these areas that the wider value of UV LED technology becomes clearer. Its contribution is not only lower power consumption and the elimination of mercury, but

also the removal of ancillary operating costs that affect the system's Total Cost of Ownership.

When comparing UV LED and mercury lamps, the real savings aren't just in the lamp itself, but in everything the lamp requires to operate:

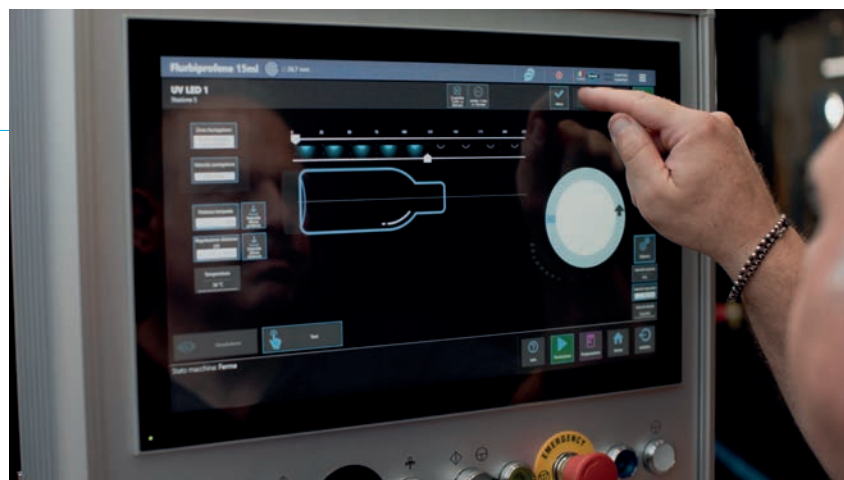
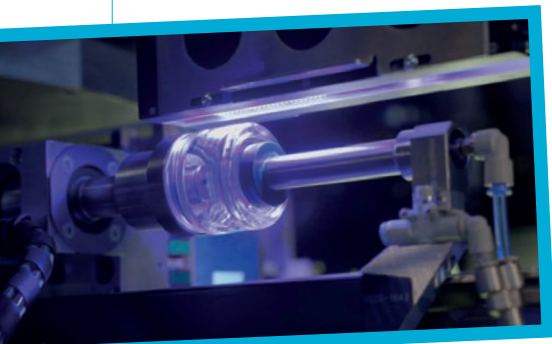
This technological shift is also supported by the European regulatory framework. Regulation (EU) 2023/2049, within the revision of the RoHS Directive, has introduced a phased phase-out of certain mercury-containing fluorescent lamps, with various exemptions expiring from December 31, 2025. For companies investing in new equipment, UV LED-based solutions therefore offer efficiency, sustainability, regulatory alignment and long-term investment protection.

Parameter	Mercury-Vapour UV	UV LED
Source lifespan	1.000-2.000 h	>20.000 h
Replacements in 20,000 h	10-20	1
Ozone production	Si	None
Air extracted (3 lamps)	1.500 m ³ /h	0
Annual air volume (4,480 h)	6.720.000 m ³	0
Annual air handling cost	≈ 7.700 €	0 €
Air handling cost over 10 years	≈ 77.000 €	0 €
Presence of mercury	Si	No
Compliance with future EU regulations	To be monitored	Already aligned
System TCO	Higher	Significantly reduced

EFFICIENCY

FINISHING

Sustainability is also linked to the value of the finished product. In cosmetics packaging, where the container plays a central role in brand identity, OMSO has developed a Servobottle configuration that integrates screen printing and hot stamping in a single process. This makes it possible to apply metallic effects and high-end finishes directly to the container, expanding creative options and helping manufacturers differentiate packaging without compromising production efficiency or reliability. Alongside Servobottle, the evolution of the SB021.25 platform marks another step toward more sustainable production focused on total quality. Its new layout concentrates loading and unloading in a single station, optimising both footprint and ergonomics. The platform enables configurations of up to three colors integrated with automatic quality control systems, supporting zero-defect production while maintaining high quality standards and without sacrificing a printing station for quality checks. Energy reduction was also a key design criterion for the SB021.25.



In today's market, high-efficiency machinery is not only a technical asset. It helps lower total operating costs, increases resilience against volatile energy prices and supports the sustainability objectives increasingly required by supply chains and major international brands.

DIGITALISATION

Hardware developments are being matched by the growing importance of management software. As decoration lines become more complex, operators need digital tools that simplify daily work and turn production data into useful information for continuous improvement. OMSO has therefore developed a proprietary software platform combining intuitive operation, ease of use and advanced connectivity. The interface is designed to guide the operator through every stage of work, from initial learning to everyday production management. Guided workflows and contextual explanations make procedures quick and easy to learn, while the system collects and stores process data. This enables integration with corporate management systems and supports

monitoring and optimisation strategies typical of modern digital factories. This digital ecosystem is completed by an advanced remote assistance system. OMSO technicians can access the machine directly and support the operator in real time. With onboard cameras and remote assistance tools, rapid diagnostics and targeted interventions become possible, reducing downtime and giving customers practical support wherever the machine is installed. The future of industrial finishing lies in this integration of sustainability, automation and digitalisation. Reducing energy consumption, cutting CO₂ emissions, eliminating the environmental impact of outdated technologies and, at the same time, ensuring quality, flexibility and ease of use now define the challenge for machine builders and packaging manufacturers. For OMSO, the response is a technological path in which sustainability is not an additional cost, but a driver of more efficient, resilient and competitive industrial growth. ■



OMSO S.P.A.

Via Adige, 11/E
42124 Reggio Emilia - ITALY
Tel.: +39 0522 382696
info@omso.it
www.omso.it



DECORATION IN MOTION



glasstec | SEE
20-23 OCT 2026 YOU!
DÜSSELDORF | GERMANY
Hall 12 | Stand 12D15



SERVOBOTTLE



SB021.25

GLASS DECORATING MACHINES

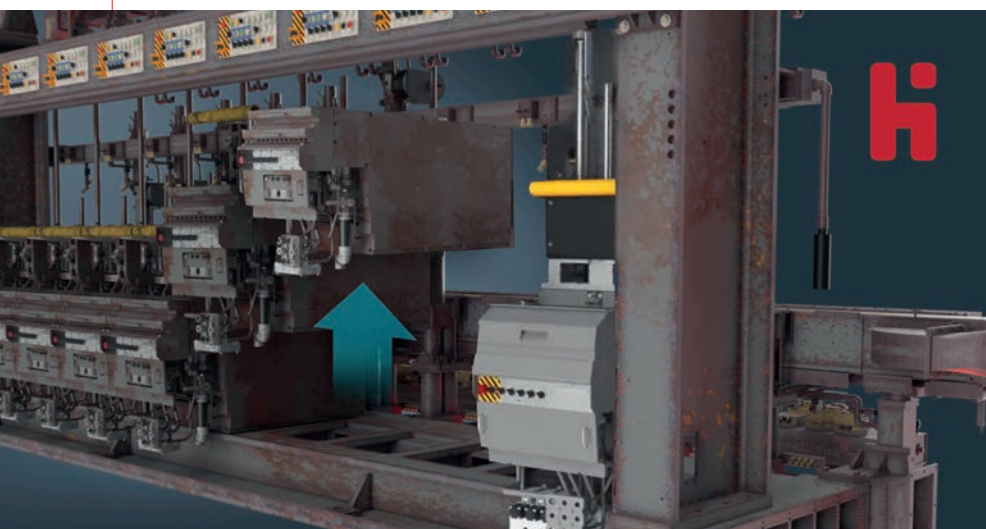
- Screen printing up to 8 colours
- UV LED drying
- Reduced consumptions
- Co2 savings
- Fine adjusting among colours
- Flexibility configuration
- Integrated linear color vision system
- Integrated Hot stamping



www.omso.it

HEYE: Where tomorrow's glass manufacturing starts today

As Glasstec approaches, HEYE gives us the heads up on what to expect for 2026. This includes its Heye Fusion, SIMATIC motion control, Dual Motor Shears, SmartLink, hot end rejection, BlankSideRobot swabbing, AI inspection, retrofit upgrades and technical assistance – all of which link automation, data, safety, inspection and training worldwide across hot end and cold end glass manufacturing operations today.



TOMORROW'S GLASS MANUFACTURING STARTS TODAY

Glasstec is one of the most anticipated events in the glass industry, bringing together glassmakers, technology providers and experts from around the world. From innovative new developments to continuous improvements of established solutions, Heye International will showcase its latest advancements at the show in Düsseldorf.

HEYE FUSION: EVERYTHING IN ONE PLACE

Heye Fusion is Heye's new all-



in-one user interface and a new generation of machine interaction for glass manufacturing. True to its name, Heye Fusion brings together machine controls and process information in one intuitive user environment. By fusing essential production insights into a single platform, Heye Fusion creates greater transparency, simplifies daily operations and enables faster, more informed decision-making. The result is a seamless user experience that helps operators stay connected to every aspect of the production process.

SIMATIC® MOTION CONTROL: READY FOR THE NEXT GENERATION

Heye is introducing its latest Siemens-based motion control platform, demonstrated live on a take-out and invert mechanism. Built on SIMATIC® technology, the solution combines proven motion performance with a future-ready automation architecture. As Siemens' strategic platform for future motion control solutions, SIMATIC® brings control, drives, safety and diagnostics together in one integrated engineering environment. The result is greater flexibility, easier service and a solid foundation for the connected production environments of tomorrow.

PRECISION STARTS AT THE FEEDER

A further highlight at Heye's exhibition stand will be the next evolution of the Dual Motor Shears, featuring enhanced adjustment capabilities, improved process control and new closed loops.

REDESIGNED SHEAR ARM

A key enhancement is the redesigned shear arm concept with an innovative gob guide, providing greater precision in gob positioning during gob cutting. The gob guides can now be adjusted electrically via a dedicated operator panel instead of manual adjustment handles. This gives operators a safer and more convenient solution by eliminating the need for manual adjustments directly at the shears.

CLOSED-LOOP OPTION

In combination with Heye GobMaster, the Dual Motor Shears enable automatic closed-loop control of the gob form. GobMaster continuously monitors the gob form, calculates the required corrections and directly transmits the target positions of the gob guides to the control panel. This ensures

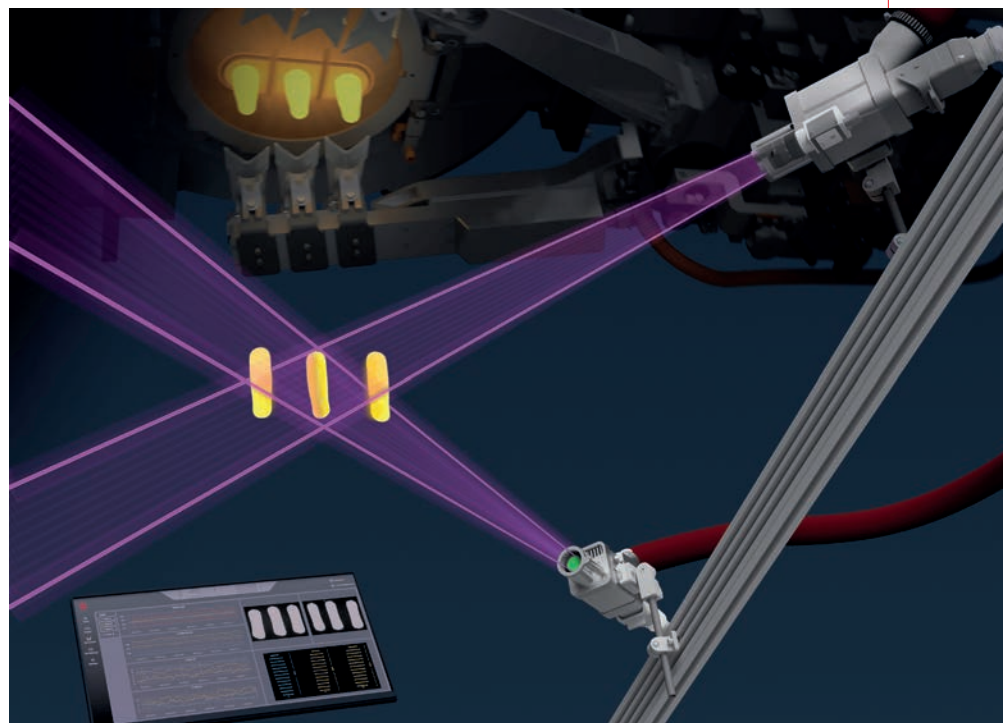
stable gob positioning and form, contributing to improved container quality and greater stability throughout the forming process. Electrically actuated adjustment and automated angle correction further reduce the need for manual intervention on the working platform, contributing to safer operation and improved process stability.

HEYE SMARTLINK - DATA AND CLOSED LOOPS

Connecting sensors and managing large data volumes is becoming standard for the smart glass plant of the future. This was the motivation for Heye to develop the Heye SmartLink concept, consisting of different innovative sensors compatible beyond Heye. External sensors such as cameras can be connected to the Heye infrastructure, while the SmartLink datastream module acts as a data gateway, enabling rapid and secure transfer of data from the forming process.

VERSATILE APPLICATIONS

As an open interface concept, SmartLink enables the integration of a wide range of camera-based applications. Examples include a





fire camera solution supporting plant safety and Heye VisionLoop, a camera solution positioned directly behind the IS machine to provide early insights into container defects and production deviations.

FLEXIBLE HOT END REJECTION FOR RETROFIT

This technology is designed to improve line stability and prevent disruptions before they impact production performance. One of the key capabilities of the system is the reliable detection and removal of fallen containers. Containers that have tipped over on the conveyor can quickly lead to jams, production interruptions and increased waste. By automatically identifying and removing these containers, the Hot End Rejector helps maintain a smooth and uninterrupted production flow.

MONITORING WARE SPACING

Another innovative feature is minimum ware spacing monitor-

ing. Containers that are standing too closely together can create handling challenges and increase the risk of them sticking together. The system continuously monitors container spacing and automatically rejects containers when predefined minimum distances are not maintained, helping ensure stable transport conditions throughout the line.

RETROFIT OPTION FOR ANY IS MACHINE

The system has been developed with maximum flexibility in mind and can be integrated into any IS machine configuration, including as a retrofit option.

UNLOCKING CLOSED BLANK MOULD SWABBING

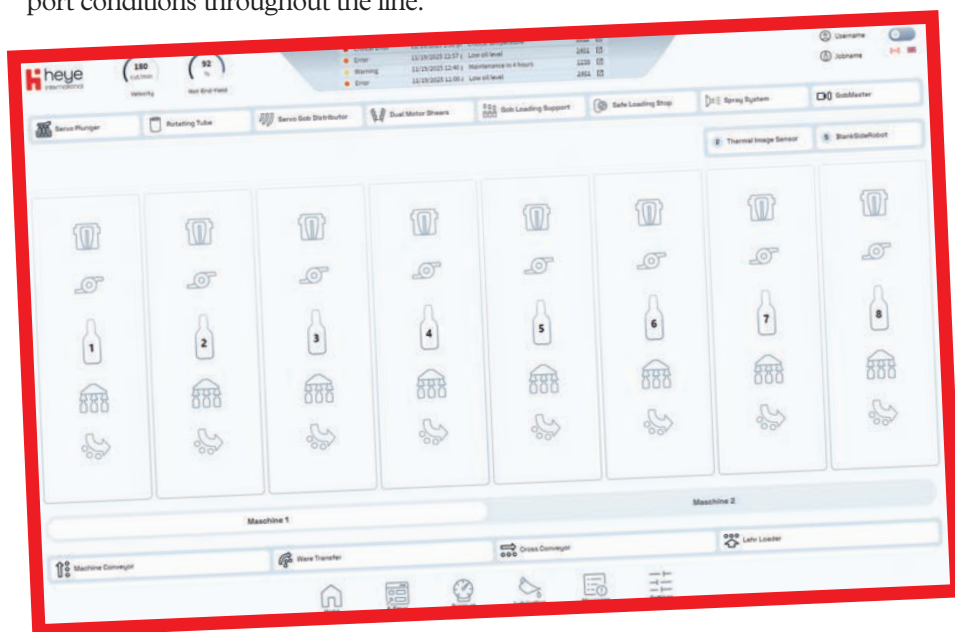
At glasstec 2026, Heye will also highlight the latest development in automated blank mould lubrication: the new spray tool for swabbing in closed blank moulds (*licensed by Verallia France*) for the **Heye BlankSideRobot**. The new spray tool will be presented alongside the established spray tool for open blank mould swabbing.

NEW SPRAY TOOL

The new spray tool provides an even more consistent spray pattern. It is equipped with extended spray nozzles, covering the vast majority of the article range and ensuring effective lubricant distribution even in deeper mould geometries. It retains the proven non-destructive magnetic coupling system of the open mould spray tool.

NECK RING SWABBING

In addition, the new spray tool



WE ARE GLASS PEOPLE

offers neck ring swabbing functionality, identical to the existing solution for open blank mould swabbing, providing a comprehensive approach to automated mould lubrication.

NEW SAFETY FEATURE

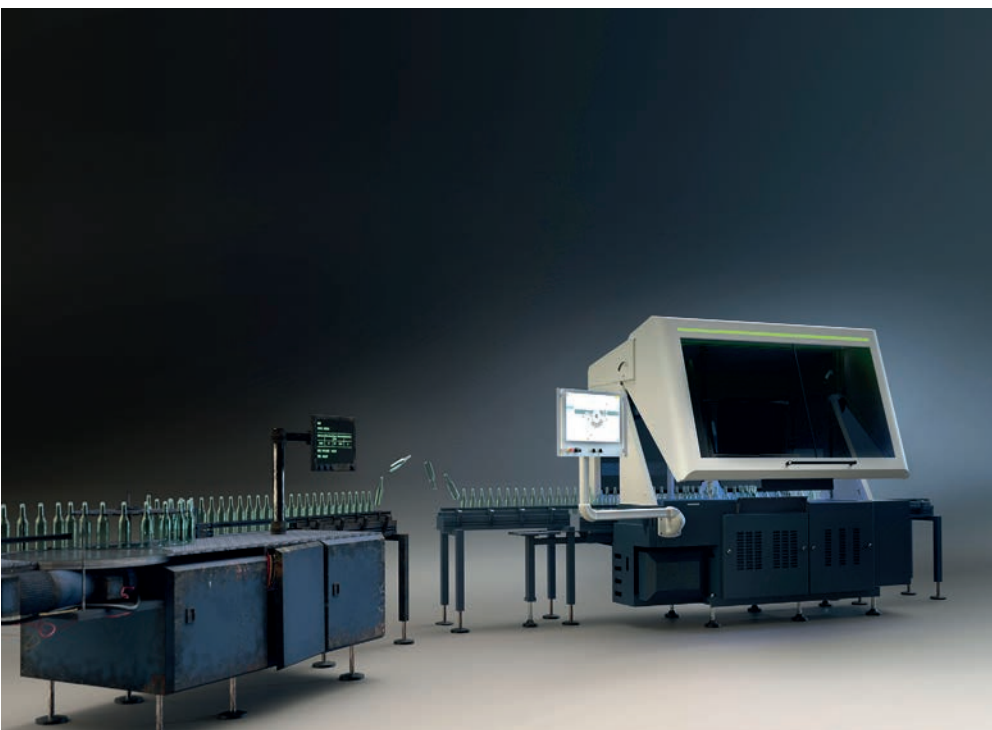
The design has been further optimised to match all movement profiles. The breakaway magnetic system ensures that, in the event of unintended contact between the invert and the swabbing tool, the front section of the spray tool safely disconnects. A safety tether prevents uncontrolled dropping into the machine, significantly reducing the risk of tool damage and robot downtime. Further optimisation of the internal piping design results in

a cleaner and more compact layout with fewer connection points. This reduces the risk of sediment accumulation, simplifies maintenance and reduces connection complexity. With this development, the Heye BlankSideRobot can now perform both swabbing methods, in open or closed moulds, offering greater flexibility to meet individual customer production requirements.



AND WHAT HAS HAPPENED IN INSPECTION SO FAR?

Visitors to the Heye booth will experience how the latest advances in artificial intelligence are transforming container glass inspection. Heye will present several new developments for the first time, demonstrating how AI can solve long-standing production challenges in smarter, faster and more reliable ways. From accurate container identification and the interpretation of complex codes to intelligent defect detection and performance optimisation of existing equipment, these innovations open new possibilities for quality assurance and production efficiency. By continuously learning from real production data, they enable more consistent inspection results, faster decision-making and greater process transparency. One of the key benefits is the ability to reduce the effort and complexity associated with job changes and product changeovers. By automating tasks that previously required manual intervention and adjustment, manufacturers can shorten changeover times, minimise the risk of human error and achieve stable inspection performance more quickly after a product switch. What sets these solutions



ARTIFICIAL INTELLIGENCE

ABOUT HEYE INTERNATIONAL

Based at Obernkirchen, Germany, Heye International GmbH presents itself as one of the container glass industry's foremost suppliers of production and inspection technology, high performance equipment and production expertise. Indeed the company's mechanical engineering has set industry standards for more than six decades - significantly contributing to its customers' success. Heye describes its vision as that of ensuring highly cost-effective, sustainable and safe operation of glassworks worldwide to further strengthen the position of glass as the packaging material of the future. Here the company considers glass as the purest and most natural packaging on the planet. Heye explains its actions as driven by experience, courage and passion - all with a view to making a positive impact upon the environment and health to foster a sustainable future. Today. Tomorrow. Together.

apart is their practical focus. They have been developed in close alignment with the needs of glass manufacturers and are designed to deliver tangible benefits on the production floor. The result is improved product quality, higher equipment availability, reduced manual intervention and greater operational efficiency.

RETROFIT: EXTENDING PERFORMANCE, PROTECTING INVESTMENT

From hot end to cold end, Heye's retrofit solutions help manufacturers modernise existing equipment

without the need for a complete replacement. At the hot end, the Section Box Exchange upgrades IS machines with the latest technology to improve efficiency, productivity and operational reliability. Additional assessments of feeder and ware handling equipment can uncover further opportunities for automation and quality improvements. When it comes to inspection, Heye's retrofit programmes offer a cost-effective alternative to buying an entire new machine. This enables manufacturers to bring existing inspection equipment up to modern standards while protecting previous

investments. With upgraded control systems, enhanced safety features and certification-focused modernisation packages, retrofit solutions improve inspection performance, support HACCP compliance and help extend the service life of valuable equipment. Customers benefit from increased reliability, improved operational safety and reduced life-cycle costs without the need for a complete machine replacement. To meet growing market demand, Heye has recently expanded its retrofit portfolio to include CO and M1 machines. These upgrades provide access to the latest inspection technologies, improved fault detection capabilities and enhanced safety standards, allowing operators to achieve higher performance from equipment already in production.

PEOPLE MAKE THE DIFFERENCE

Technology alone does not create results. People do. Through Technical Assistance, Heye experts work side by side with customers to improve processes, enhance performance and unlock production potential. At the same time, the HiSKILLS Campus provides practical training programmes for hot end and cold end applications, ensuring that operators, technicians and engineers have the knowledge needed to turn innovation into lasting success. Heye will be exhibiting at glasstec 2026 in booth 14E03. ■



h heye
international

**HEYE
INTERNATIONAL
GmbH**

Lohplatz 1
31683 Obernkirchen - GERMANY
Tel.: +49-5724-26-452
marketing@heye-international.com
www.heye-international.com



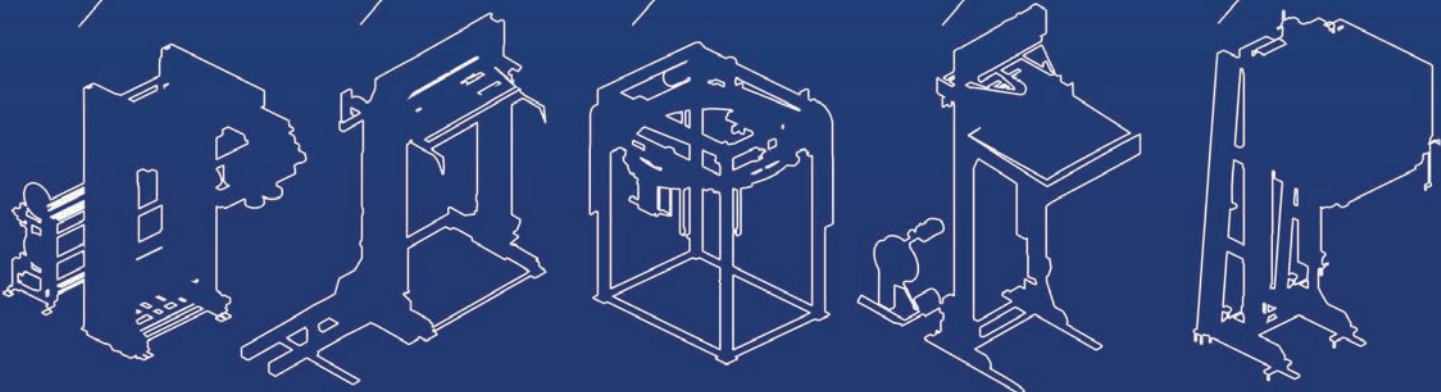
AT55
THERMOSHINKING HOODING MACHINE

PM-GLS
VERTICAL STRAPPING MACHINE + PRESS

AVR1000
WRAPPING MACHINE

06CL
HORIZONTAL STRAPPING MACHINE

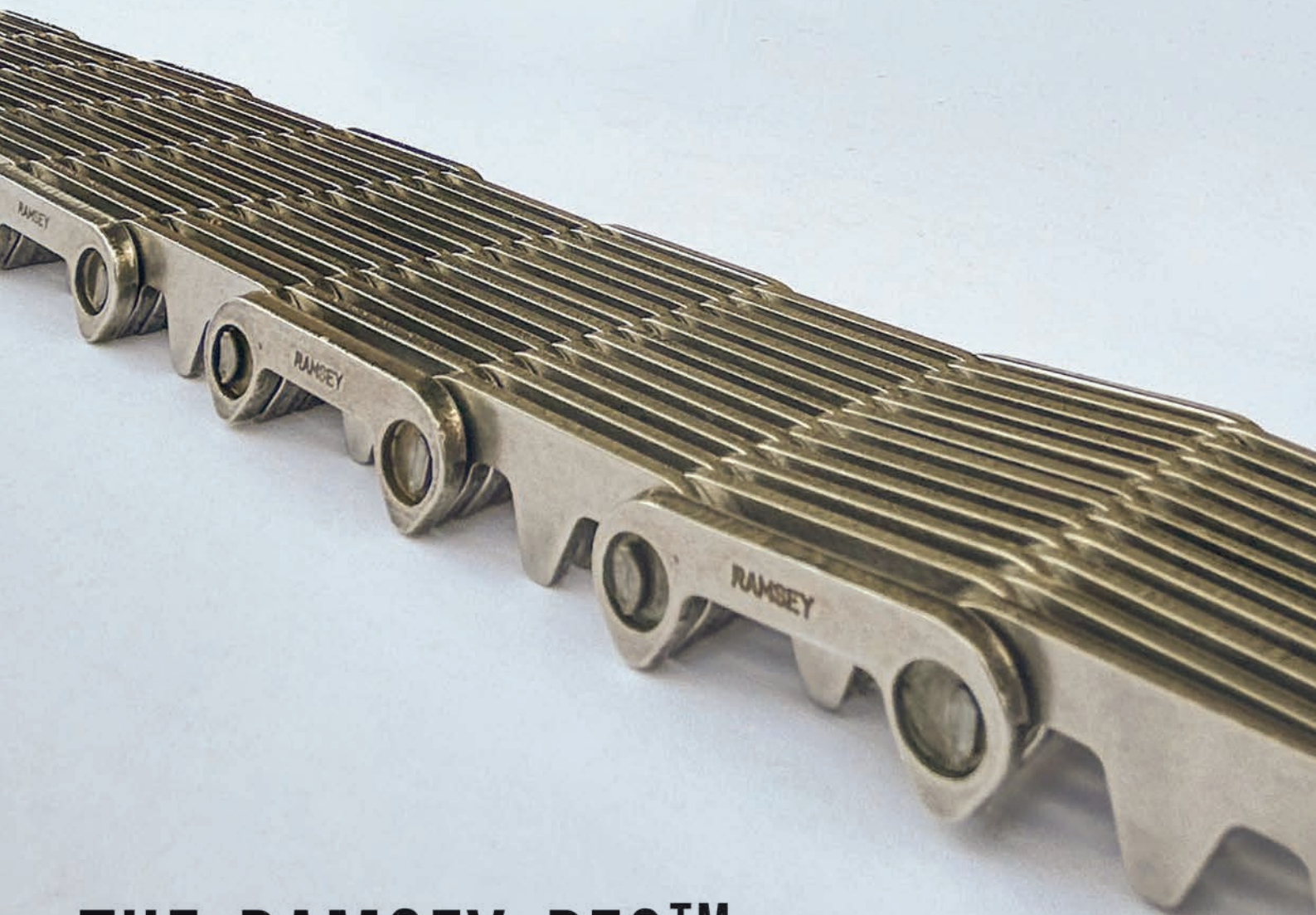
FT55e
100% ELECTRIC THERMOSHINKING MACHINE



As global leader, **OMS Group** specializes in the design and production of **end-of-line packaging solutions** and **complete packaging lines**.

Established in Italy, **OMS Group** currently operates **12 branches worldwide** and provides cutting-edge technologies for every stage of the end-of-line process, including **strapping heads, strapping machines, hooding machines, thermoshrinking and wrapping machines**.

PACKAGING SOLUTIONS. SINCE 1949
Via Borgomanero 44 - Paruzzaro 28040 (Novara) Italy
Email: info@oms-group.com
www.oms-group.com



THE RAMSEY RZ3™ EXTENDED PITCH CONVEYING CHAIN

**THE RAMSEY RZ3™ FEATURES A THIRD CENTRAL SUPPORT TOOTH
WHICH ENHANCES STABILITY, DURABILITY, AND PERFORMANCE**

Innovative third tooth, centrally positioned within the extended pitch conveying chain provides extra support and increased points of contact.

- Flattened Link-Bottom Tips: minimize wear and maximize durability.
- Thicker Links: Greater strength and superior durability.

www.ramseychain.com, sales@ramseychain.com, (704) 394-0322



The Future is Just Beginning in the Hot End

Visit us at glasstec 2026 Hall 13. Stand C43.

Rondot Group is a trusted partner to the world's leading container glass brands. Built on specialised solutions and deep industry expertise.

Glass has been our passion since 1936 and today we're applying that expertise to shape a more sustainable future with our industry leading knowledge and technology.

rondot-group.com



9 EXPERT BRANDS

1 CONNECTED GROUP

100% FOCUSED ON THE HOT END

1 SHARED VISION: YOUR SUCCESS

Glasstec engagement further extends **STARA GLASS** decarbonisation dialogue

Within COREu, STARA GLASS leads the Glass ERA, connecting glass manufacturers, technology providers, research bodies and infrastructure operators – all to discuss CCUS, decarbonisation barriers, stakeholder priorities and future collaboration, and with further engagement planned around this years' Glasstec, as well as workshops, webinars and industry feedback activities.

THE GLASS ERA: FROM DIALOGUE TO ACTION FOR GLASS DECARBONISATION

The decarbonisation of the glass industry requires a combination of different technologies and strategies. Energy efficiency, heat recovery, electrification, hydrogen, alternative fuels and Carbon Capture, Utilisation and Storage can all contribute to reducing emissions. Their role and feasibility, however, will vary according to furnace configuration, plant characteristics, local energy availability, infrastructure and economic conditions. The challenge is to move from identifying possible solutions to understanding how they can realistically be implemented, which barriers are slowing down deployment and where industry efforts should be focused. In this context, Stara Glass, an Italian engineering company specialised in the design of glass furnaces,



combustion systems and technologies for improving energy efficiency and reducing emissions in glass production, is contributing to the COREu – CO₂ Routes across Europe project.

COREu AND THE GLASS ERA

COREu is a European innovation project focused on supporting the development of an open, transnational Carbon Capture and Storage value chain, connecting industrial CO₂ emitters with transport infrastructure and suitable storage sites across Europe. The project brings together more than 40 partners from 13 countries, including industrial emitters, technology providers, transport and storage operators, research institutes and universities. Within COREu, Emission Reduction Alliances have been created to bring together stakeholders from

different energy-intensive sectors and provide a direct link between industry and the wider CCUS ecosystem. At project level, the ERA framework is coordinated by Glass Futures, while individual industrial alliances are led by sector partners. Stara Glass leads the Glass ERA, bringing its experience in glass furnace engineering and industrial processes to the initiative. The Glass ERA brings together glass manufacturers, technology providers, research organisations, infrastructure operators and other stakeholders interested in the decarbonisation

of the glass sector. It provides a space to exchange knowledge, discuss common technological and economic barriers and explore opportunities for collaboration. Participation is free of charge, open and non-binding, with no mandatory workload or financial commitment. Organisations can therefore choose their level of involvement, from simply receiving updates and invitations to future activities to contributing more actively to technical discussions, workshops and collaborative projects.





FROM THE FIRST WORKSHOP TO THE NEXT STEP

The Glass ERA was first presented to the international glass community during the GlassTrend Autumn Meeting on Smart & Sustainable Glass Manufacturing, hosted by Stara Glass in Genoa in November 2025. The initiative moved a step further in March 2026 with the first dedicated Glass ERA workshop, “The Glass ERA: Carbon Capture Opportunities for the Decarbonisation of the Glass Industry”. The online event brought together more than 50 participants from the glass industry and the wider CCS value chain. Glass Futures introduced the COREu project and the development of European CO₂ transport and storage infrastructure, while Stara Glass presented the specific challenges that carbon capture may face within the glass industry. Contributions from CERTH and SNAM provided additional perspectives on the development and scale-up of capture technologies and on the infrastructure required for transporting and storing captured CO₂. After this first exchange, the next step is to involve stakeholders more directly and use their feedback to help shape future Glass ERA activities.

GLASSTEC 2026

Glasstec will provide an important opportunity to continue the dialogue with the glass industry and involve stakeholders more directly in the activities of the Glass ERA. Stara Glass will be present at Glasstec in Düsseldorf from 20 to 23 October, at Hall 13, Stand E87, within the Group LTT booth. As a recent member of Group LTT, Stara Glass adds its expertise in glass furnace engineering, combustion systems, energy efficiency and decarbonisation technologies to the complementary know-how already present within the group. During the exhibition, visitors will be able to learn more about the Glass ERA, discuss current decarbonisation challenges and contribute to a series of interactive stakeholder engagement activities designed to collect views on the main technological pathways, barriers and priorities for the glass industry. The feedback collected will help identify topics of interest for future Glass ERA webinars, workshops and collaborative activities. Ahead of Glasstec, the concept is also being considered for testing during upcoming COREu activities, including the Accelerating CCUS Deployment event and the COREu Annual Meeting 2026 in Trieste, allowing the

format to be refined before the exhibition.

Join the Glass ERA and help shape future activities. Companies and organisations interested in the initiative do not need to wait until Glasstec to get involved. The Glass ERA can be joined at any time, free of charge and without binding commitments. Registered participants can remain updated on future activities and receive invitations to upcoming webinars, workshops and stakeholder discussions. Further webinars, thematic workshops and stakeholder activities are already being considered. Their content will be shaped progressively by the interests and priorities expressed by participating organisations and by the feedback collected through initiatives such as the Glass Decarbonisation Challenge. The aim is simple: to create a useful platform where the glass industry can exchange experience, identify common needs and develop new opportunities for collaboration. Decarbonising glass production will not depend on one technology alone. It will require different solutions, different timelines and stronger cooperation across the value chain. The Glass ERA is intended to provide a practical space for that discussion to happen. ■



PART OF GROUPLTT

STARA GLASS S.P.A.

Piazza Rossetti 3A/1
16129 Genoa (GE) - ITALY
Tel.: +39 010 576391
staraglass@hydragroup.it
www.staraglass.it



The glass the world wants

Efficient, reliable, sustainable
glass melting furnaces.

We design and deliver cutting-edge glass furnace solutions tailor-made to the evolving needs of our clients, while minimizing environmental impact. We adopt the EPC (Engineering, Procurement and Construction) model to ensure efficiency and full project control.

DESIGN AND IMPLEMENTATION

Melting Furnaces | Forehearths | Equipment | Energy Recovery System | DeNOx Technologies

DIAGNOSTIC SERVICES

Heat Balance | Thermography
Endoscopy

DEDICATED SERVICES

Refractories Warehouse | Customer Support
Hot and Cold Repairs

CAVART

consistency secures furnace-ready cullet quality



The glass industry asks recyclers for cleaner and more consistent cullet every year, and a waste glass treatment plant can no longer be designed from a standard catalogue solution. Cavart follows each client from the analysis of the incoming material to plant start-up, using BIM design and

twenty years of experience with waste glass. The Julia Vitrum project shows the method and the results it can deliver.

A MARKET THAT HAS RAISED THE LEVEL OF COMPETITION

Container glass consumption is under pressure, while brand owners

and fillers ask for higher recycled content in order to reduce their Scope 3 emissions and meet their sustainability targets. Glassworks pass this demand on to their cullet suppliers as stricter specifications: lower ceramic, porcelain and stone (CSP) content, tight colour control, better management of the fine frac-

In the following op-ed, CAVART Head of Process Engineering Federico Marchesi, explains how waste glass treatment plants can be designed around real material data, client specifications, BIM integration and field experience. Here he uses the Julia Vitrum project to show how consistent cullet quality is supporting higher recycled content in glassmaking over time.

tions, lower metal values and zero tolerance for glass-ceramic. At the same time, volatile energy costs and furnace electrification programmes push glassworks to maximise the cullet share in the batch, because cullet lowers the specific energy demand of melting, a benefit that holds only if cullet quality stays constant. For the recycler, there is less room to manoeuvre. Competition is no longer based on price per tonne alone, but on the ability to deliver a constant output that meets these specifications. A single off-spec load can compromise a production campaign and damage the reputation of the glassworks, so suppliers are now selected far more carefully.

THE LIMIT OF THE STANDARD PLANT

Waste glass treatment plants designed in previous decades were built for quality requirements that are not comparable with the stand-

ards the recycled glass market imposes today. The available technologies, screening, metal separation and optical sorting, are mature: the difference is not made by the single machine, but by the way that

machine is integrated, sized and set up for the waste glass the plant will actually treat. Waste glass is a waste material. Its characteristics change with the eating habits of the area that generates it, with the season, with the collection system, with the nature of the contamination and with the incoming particle size distribution. Knowing the real material therefore does not mean measuring it at a single moment, but knowing the range within which those characteristics can move over the service life of the plant, and designing for the worst conditions that can reasonably be expected. A plant able to treat waste glass at its worst expected quality is, by definition, also able to treat cleaner material, whereas a plant sized on average characteristics works well only while the incoming material stays close to those values, and then starts chasing a performance it can no longer guarantee.

NOT A STANDARD PLANT, BUT A METHOD

The approach Cavart applies to a new project is organised in three phases.

The first phase is technical listening. Before any plant hypothesis,



the real data on the waste glass is collected: incoming sampling campaigns, assessment of seasonal variability, analysis of the typical contaminants. In parallel, the output targets are defined together with the client, which glassworks the plant will supply, which CSP, colour and purity specifications it has to guarantee, which annual throughput and working hours apply. This phase comes before design and sets its fundamental parameters. The second phase is process definition through applied experience. Twenty years in glass recycling translate into direct knowledge of how components behave in real operation: how a screen reacts after hours of service with abrasive waste glass, how the yield of an optical sorter changes as contamination changes. Design choices therefore rest on field data instead of theoretical values, and the process is tested through simulations with different input qualities, to verify that the agreed specifications remain achievable in every case. The third phase is integrated BIM design. Process, mechanical, electrical, safety and maintainability are developed together and not in sequence, so that problems which would otherwise appear on site, or during operation, are anticipated at design stage. Particular attention goes to the people who will run the plant: maintenance access, ergonomics of the operating stations and intervention spaces are verified before detailed engineering is frozen. A technologically advanced plant only has value if it stays in operation over time, and that depends on the people who use it every day.

THE JULIA VITRUM PROJECT

Julia Vitrum was founded in 2019 by two container glass producers, Zignago Vetro and O-I Italy, each holding 40 percent of the capital, together with Friulia, the financial company of the Friuli Venezia Giulia Region, holding the remaining 20 percent in support

of local circular economy projects. The objective was to close the glass loop where the glass is collected, with a treatment and recovery plant located a very short distance from the shareholders' own production sites. With an investment of EUR 30M, the plant was built with an initial capacity of 300,000 t/year, expandable to 400,000 t/year. Against a regional collection of about 600,000 t/year, Julia Vitrum can today treat half of the waste glass collected in its territory. In 2021 Julia Vitrum asked Cavart to develop the process and to carry out the complete design of the production site, with a clear objective: cullet at a quality level that was not available on the market at that time. The challenge came both from the output specifications and from the particularly unfavourable characteristics of the incoming material. The characterisation was carried out on several sampling campaigns of real incoming waste glass, representative of the variability of the regional collection streams, and deliberately included the worst conditions. The average CSP content in the fraction above 8 mm is 1.40 percent by weight, with peaks of 1.57 percent, that is 14,000 to 15,700 grams per tonne, against the 10 to 20 g/t required in the treated cullet depending on the product: between inlet and outlet the plant has to reduce the CSP content by a factor of about one thousand. Ferrous metals reach 5.4 percent and oversize contaminants 22 percent of the incoming weight.

More than the average values, it was the distribution inside each

particle size class that shaped the design choices. CSP stays below 1 percent in the 8 to 22.4 mm class and becomes five times higher in the classes between 22.4 and 40 mm. Above 40 mm the material is no longer waste glass in any practical sense: oversize contaminants exceed 50 percent and ferrous metals exceed 16 percent. Variability in composition is combined with variability in particle size. The grading envelope built from the sampling campaigns reaches a width of 40 percentage points of cumulative passing at the 22.4 mm screen, and the fraction below 8 mm, the most difficult to recover as furnace-ready cullet, ranges between 10 percent and 27 percent by weight.

This double reading, by contaminant and by particle size, explains the logic of the process. Removing the oversize contaminants before any other treatment brings the material into a size window where optical sorting works at real efficiency. A second condition is equally necessary: every mechanical step carries the risk of breaking the glass and generating unwanted fines, which no optical machine can read and which remove recoverable glass from the process. Machines and treatment methods must therefore be selected so that this accidental breakage is minimised along the whole line.

The process was structured in four sequential stages, each with a well defined role:

- Pre-sorting, to extract the oversize contaminants, the foreign bodies larger than the glass fragments that would cause blockages

Contaminant	CSP		Ferrous Metals		Non-Ferrous Metals		Oversize Waste	
	Avg.	Max.	Avg.	Max.	Avg.	Max.	Avg.	Max.
> 40 mm	1.69%	2.09%	16.03%	17.32%	2.14%	2.18%	51.44%	58.20%
22.4 ÷ 40 mm	3.46%	5.47%	1.03%	1.49%	0.35%	0.67%	4.69%	8.26%
8 ÷ 22.4 mm	0.71%	0.95%	0.42%	0.59%	0.08%	0.15%	4.02%	5.42%

Table 1. Contaminants in the incoming waste glass (% by weight)

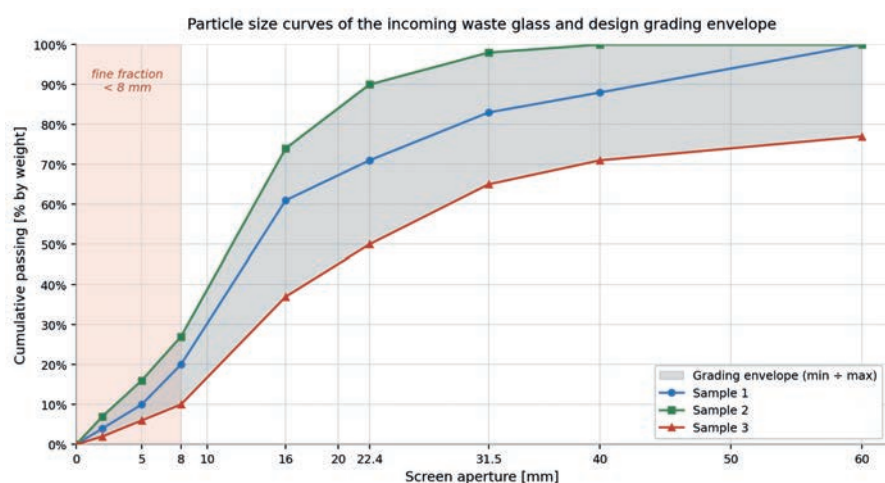


Figure. Particle size curves of the incoming waste glass and design grading envelope

and stoppages in the downstream machines;

- Cleaning, to reduce metals and the organic fraction;
- Optical sorting, to extract the residual contaminants and to separate the glass by colour, maximising flint recovery;
- Glass sand plant, to recover the glass rejected below 5 mm as a low-LOI sand, with a low content of the fraction below 200 µm and

a maximum particle size within 800 µm.

The most characteristic step of the process is optical sorting, designed on the principle of positive extraction: the glass fractions, both flint and coloured, are the ones actively ejected, while the contaminants pass through the machine. This is particularly effective with irregularly shaped contaminants, which are the hardest to isolate

by negative sorting. The result is not only a high quality finished product, but a quality that stays constant over time. Variability sits in the contaminants, which change in shape and quantity from load to load, while glass fragments remain similar to each other in their optical behaviour, whatever the origin of the material. Basing the ejection decision on this more constant element makes machine operation more stable, easier to calibrate and consistent in performance.

THE VALUE OF CONSISTENT CULLET

The Julia Vitrum results document a principle that guides all Cavart activity in glass recycling: the output quality of a treatment plant is not measured by peak performance, but by how constant the parameters stay over time. For the receiving glassworks, a cullet that meets the specification day after day is worth more than a cullet that meets it only occasionally, even at the same average quality. This consistency, together with a steadily higher quality level, is what allows glassworks to increase the cullet share in the furnace batch without compromising the stability of the melting process. It is the technical precondition that makes the transition of the glass industry towards higher recycled content possible, a transition that is redefining, upstream and downstream, the way plants are designed. ■

Cullet Type	Contaminant	Limit
Coloured (>2 mm)	CSP	< 15 g/t
	Ferrous Metal	< 2 g/t
	Non-Ferrous Metals	< 3 g/t
Half Flint (>2 mm)	CSP	< 15 g/t
	Ferrous Metal	< 2 g/t
	Non-Ferrous Metals	< 3 g/t
	Lead Oxide	< 40 g/t
	Colour Purity	> 99 %
Flint (>5 mm)	CSP	< 10 g/t
	Ferrous Metal	< 2 g/t
	Non-Ferrous Metals	< 3 g/t
	Lead Oxide	< 40 g/t
	Colour Purity	> 99,6 %

Table 2. Required quality parameters



TAILORED PLANTS AND MACHINES

CAVART S.P.A.

Via Pascoli, 10/A
24020 Gorle (BG) - ITALY
Tel.: +39-035-66-83-70
info@cavart.it
www.cavart.it

IMPROVING CULLET QUALITY

Compliant and consistent cullet over time.



Technical listening

Understanding
customer needs.



**20 years of
applied experience**
Sharing knowledge.



Design in BIM

Preventing
problems.

**CONSISTENTLY
HIGH-QUALITY CULLET,
CYCLE AFTER CYCLE**

cavart.it
info@cavart.it — +39 035 66 83 70

Analyse. Predict. Perform.



VETROMECCANICA

predictive diagnostics systems



Vetromeccanica will once again be among the key exhibitors at Glasstec, the world's leading international trade fair for the glass production and processing industry, taking place at the Düsseldorf Exhibition Centre from October 20 to 23, 2026. The event represents a meeting point for leading players in the glass technology and industrial sectors, serving as a showcase for the future of automa-

tion, digitalisation and production efficiency.

A NEW STANDARD FOR CONTAINER GLASS HANDLING

To address the challenges of a market increasingly focused on energy efficiency and production continuity, Vetromeccanica is presenting in Düsseldorf an advanced vision of container glass handling driven by

innovation and digitalisation. The highlight of this edition will be the official unveiling of Vetromeccanica's new Predictive Maintenance systems, integrated into its glass container handling lines. Alongside predictive diagnostics, Vetromeccanica's offer includes advanced anti-collision safety solutions and intelligent energy management through Power and Energy Solutions, or PE-S, by SEW-EURODRIVE, a company special-

This year at Glasstec, VETROMECCANICA will showcase advanced container glass handling technologies designed to enhance predictive maintenance, anti-collision safety and intelligent energy management. The solutions integrate systems developed in collaboration with SEW-EURODRIVE to minimize unplanned downtime, continuously monitor operational data, maximize plant availability and ensure greater production continuity.

ised in industrial automation technologies. PE-S is a customised power supply and energy management system designed for Smart Factory applications. By combining application converters with supercapacitors, it reduces peak power demand on the electrical grid in automation systems, enhancing both energy efficiency and plant availability.

PREDICTIVE MAINTENANCE: ELIMINATING UNPLANNED DOWNTIME

In the hollow glass and container industry, an unexpected production line stoppage can result in significant financial losses and considerable operational challenges. The new technological application developed by Vetromeccanica in collaboration with SEW-EURODRIVE addresses this issue through

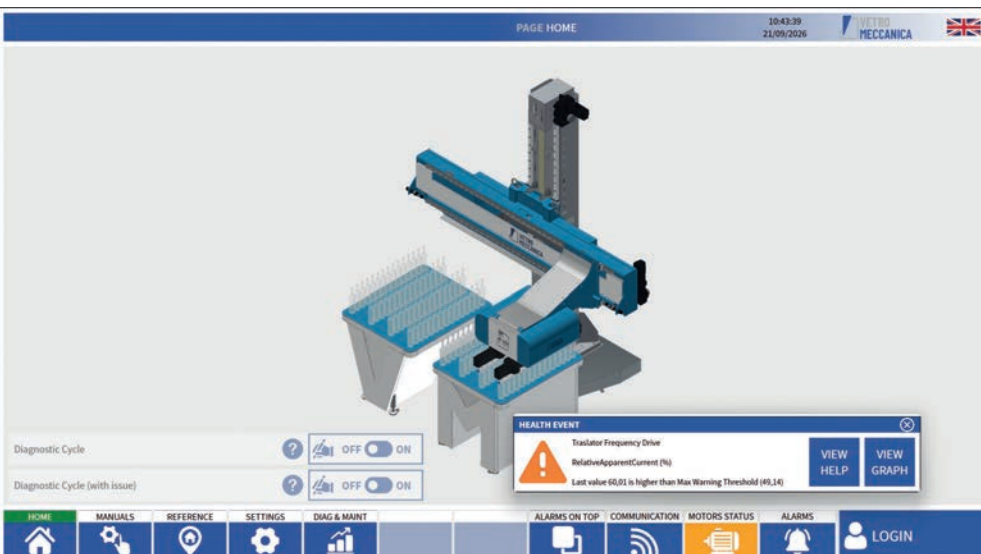
- Continuous Operational Data Monitoring: the solution continu-

ously tracks key parameters and operational performance of handling systems in real time.

- Failure Prevention: thanks to predictive analytics, the system can identify anomalies and abnormal wear conditions before they develop into critical failures.
- Production Continuity: unplanned machine downtime is drastically reduced, ensuring maximum production efficiency while extending

the service life of the equipment.

The Vetromeccanica team will welcome customers, partners and industry professionals at Messe Düsseldorf, Hall 13, Stand F30, to demonstrate how its handling solutions and new predictive diagnostics tools can transform the management of production facilities - all at Glasstec 2026, where the company will be presenting all technology positioned around efficiency, reliability and continuous control in container glass handling. ■



**VETRO
MECCANICA** SMART
MOVING
SOLUTIONS
VETROMECCANICA

Strada Isolanda 26
43024 Neviano degli Arduini
Parma - ITALY
Tel.: +39-0521-343011
sales@vetromeccanica.it

www.vetromeccanica.it

Production repeatability improves with INTERGLASS interface control



Continuous production can create an impression of stability. A line may run without interruption while small variations accumulate inside the process. Their effect tends to appear later: repeatability starts to move, wear develops unevenly, and interventions become more frequent. Stability therefore has to be engineered and maintained.

INTERFACE CONTROL

In glass forming, machine design, temperature regimes and production speed establish the operating conditions. Their effect converges at a physical interface: the point where hot glass meets the forming equipment. Mould, metal, coating, application and operating conditions come together there. That contact has a direct influence

on how consistently the process behaves from cycle to cycle. The direction of the industry makes this interface increasingly important. Higher throughput and longer production runs leave less room to absorb deviation. Conditions that could once be corrected during operation can begin to affect continuity much earlier. As operating windows tighten, the quality of contact becomes part of the stability of the line. Friction is inherent to that contact. Managing it as an operating variable gives the process another point of control, alongside temperature, timing and application. This requires consistency and observation. A variable that is not measured is not controlled. When friction changes across cycles, the effects can travel through the process long before they appear as an obvious failure.

OPERATING SIGNALS

At the interface, relatively small changes can matter. Application frequency, distribution across the surface, the

In the following op-ed, INTERLUB GROUP Chief International Growth Officer Joaquin Morodo explains how process stability in glass forming begins at the point of contact, where friction, lubrication, mould condition and operating parameters all influence repeatability, wear, intervention frequency, traceability and long-term control across successive production cycles.

condition of the mould and the behaviour of the lubricating film influence how contact develops over successive cycles. None of these conditions remains isolated. Changes in one can alter the response of the others, which is why stability depends on understanding the interaction rather than observing a single parameter. The first signs are often familiar on the production floor. Repeatability declines. Defect



patterns shift. Intervention frequency rises. An adjustment that previously held for days begins to hold for hours. Each signal may seem minor in isolation. Read together, they show that the process is consuming operating margin. The point of contact therefore becomes a useful source of information about the condition of the system. This changes the role of lubrication in glass forming. Lubrication becomes one of the mechanisms through which contact is governed over time. Its performance can be read through the stability it helps sustain across repeated cycles: predictable surface interaction, consistent application conditions and longer intervals between corrective actions.



CONTAINERS



PROCESS MEMORY

That perspective also changes the questions worth asking on the line. Immediate effect still matters, although it tells only part of the story. The stronger measure is what happens after hundreds or thousands of cycles. Does the interface behave consistently? Do operating conditions remain within the expected window? Can changes in wear, application or friction be identified early enough

to act before they propagate through production? Once contact is treated this way, repeatability and traceability become more useful. Variation can be connected to operating conditions instead of disappearing into the general complexity of the process. Over time, this also creates a more useful operational record. Patterns can be compared between runs, changes can be related to specific conditions, and interventions can be assessed against what hap-

pened afterwards. Production knowledge becomes easier to retain and apply. Glass forming will continue to demand more continuity and efficiency from the same physical interactions. That places greater pressure on the interfaces where the process is actually carried out. Governing those interfaces with greater consistency will become increasingly important as operating margins narrow. Stability is a managed condition. In glass forming, every finished container carries the history of the contact conditions that shaped it. ■



interlub[®]
group

THE
UNCOMMON
LUBRICANT
COMPANY

INTERGLASS

Lateral Sur Periférico Norte 559
Parque Industrial Belenes Norte
C.P. 45150 Zapopan, Jalisco - MÉXICO
Tel.: +52 33 3793 8800
sales@interlub.com

www.interglass.global





Hot Glass. Cool Flow.

Vision depends on lubrication.

© interglass | interlub
group

Metallic glass finishes gain efficiency through FERMAC innovation

BRIDGING THE GAP IN GLASS DECORATION: HYBRID DIGITAL PRINTING FLEXIBILITY AND IN-LINE METALLIC INNOVATIONS

In today's competitive cosmetic packaging and tableware markets, glass decorators face a dual challenge: demand for shorter, highly customised production runs and the continuous push for high-end, premium aesthetic finishes that preserve and extend the recycling ecosystem of packaging. Meeting these

demands without compromising speed or efficiency requires moving beyond traditional manufacturing boundaries. FERMAC rethinks machine architecture to widen possibilities in screen printing and digital printing processes. The contradictory duality of glass, its fragile property on one hand and its durability on the other, ultimately testifies to creation itself, where order and shape are born from chaos, just as sand is transformed into a hard substance through high heat and moulding. The moment a glass

shape is born, a creative hand writes the possibilities of the glass material. Transparency was once key among sixteenth-century Venetian glassmakers; today, decorative craft and engineering progress have gone beyond material improvements. Glass is never identical. Unlike plastic, aluminium or other substrates, glass is an organic, shifting material which, during the container manufacturing process, expands, shrinks and incurs micro-variations from mould to mould. No two glass bottles or jars are ever 100 percent physically identical. To achieve multi-colour registration, fine-detailed graphics or a direct metallic effect on an unpredictable surface such as glass, FERMAC machines require active motion-controlled systems to address these core technical challenges. Optical registration systems are built to handle heavy, uneven glass items at high speed. Camera registration algorithms align graphics on distorted glass to ensure flawless multi-layer artwork alignment on variable substrates. FERMAC multiple-axis servo machines are synchronised to run on the printing machine while following the physi-



For cosmetic packaging and tableware markets, FERMAC combines hybrid digital printing, optical registration, servo motion control and onboard hot stamping to address shorter customised runs, premium metallic finishes, complex glass geometries, remote support and efficient decoration workflows – all ahead of Glasstec 2026 in Düsseldorf.

cal contour of the container, whether cylindrical, oval or squared, and to adapt to the substrate.

HYBRID DIGITAL FLEXIBILITY

The market and global manufacturing industry demand mini and travel-size, ready-to-refill and ready-to-recycle packaging. Such recycle- and travel-friendly formats require glassware industry players to extend the ecosystem of the decoration and packaging process. FERMAC aims to offer effortless printing for effortless use of products that stand out and stay true to their purpose. FERMAC Hybrid Digital Printing Technology offers decora-

tors a dialogue between short-run, sampling or limited-edition decoration and mass production. The same machine offers the possibility to lock down the exact printing setup parameters from small and extra-small batches to large production volumes. A major benefit is the real-time reproducibility of approved sampling, ready to cover industrial production, together with flexibility in decoration and a shortcut in tooling preparation, achieving both manual and automatic printing modes at the same time. The Hybrid Digital Printing Machine offers complete in-house control over quality, timelines and production schedules, allowing unique seri-

al numbers, barcodes or individualised graphics to be printed without slowing down production. It also defines an easy pattern to prepare a special sample kit for worldwide distributors and send directly tailored messages to the global network. As with regular FERMAC inkjet technology, it handles complex geometrical shapes, concave or convex surfaces and drastically elevates sensory 3D-effect embossing printing by cutting moulding costs.

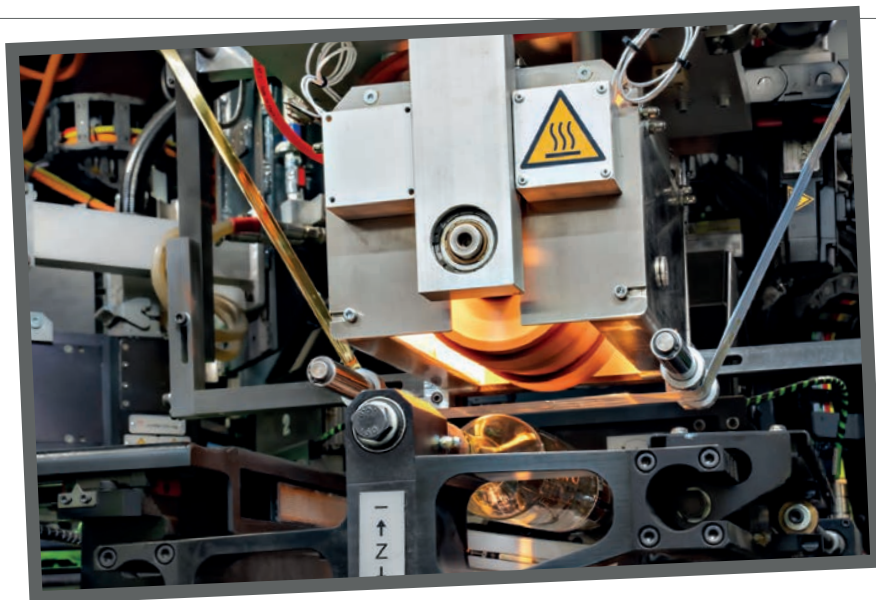
ON-BOARD HOT STAMPING MODULE

Metallic foil application directly restores the age-old alchemy of glass embellishment. Gold or silver



DECORATION

accents act as a reflective mirror embedded into the glass to capture light and transform bottles into objects of desire. For luxury brands, metallic embellishments, especially gold or platinum, represent timeless shelf appeal. To deliver this efficiently, FERMAC has integrated an advanced hot-stamping module directly onboard the printing machines. Traditional inline configurations are still in place. However, they require packaging to travel between separate physical machines. The onboard hot-stamping module is a servo-driven foil-management system operating harmoniously under one roof. A single operator can manage multiple high-end decoration processes without stepping away from the machine. Adhesion is secured by printing a primer, partially polymerised under the UV light source, before the foil is applied. This process ensures precision with zero workflow interruptions.



SHAPING THE FUTURE DECORATION SCENARIO

As packaging demands lean towards high customisation, reduced lead times and premium sensory appeal, the versatility of decorators' equipment becomes the primary focus for a profitable production plant. Smart automation and integrated storage setup are among the tools FERMAC provides glass decorators to deliver impact on every decorated bottle or container while nurturing a balanced and sustained daily work environment. Many mechanical alignment tasks are electronically stored and may be recalled automatically on the machines, vastly reducing changeover times and manual errors. Today's decoration plants have seen supervisory roles taken over by machine operators in order to eliminate manual operations that might evoke risks. In highly demanded decoration shifts, it is mandatory to ensure continuous production. Modern machinery must therefore be intelligent and adaptive, able to communicate and allow remote access in case of unexpected downtime. Many FERMAC automation and root-cause diagnoses are fully remotely solved, introducing a highly efficient era of plant management. The machines transmit operational error-list queues securely. As a

result, the vast majority of troubleshooting, parameter adjustments and maintenance setups can be executed completely remotely with FERMAC's global technical support team.

GLASSTEC 2026

From October 20 to 23, 2026, FERMAC will attend the Glasstec Exhibition in Düsseldorf, Hall 12, Booth A31, to bring Italian engineering closer to the decoration world. When meeting high-end packaging design requirements, FERMAC machines and accessories combine technical accuracy with inherited Italian craftsmanship that runs through generational experience in the family-owned factory based in Parma. While glass becomes unified with the ink, Italian engineering remains deeply rooted and ahead of demands. ■



FERMAC

Via La Spezia 162/A
43126 Parma - ITALY
Tel.: +39-0521-989056
sales@fermac.it
www.fermac.it



A WIDE RANGE OF REFRACTORIES



ALUMINA, SILLIMANITE
MULLITE, ZIRCON, INSULATING
BRICKS & SHAPES FOR FURNACE

ITEMIZED BLOCKS FOR
WORKING END & FOREHEARTHS

EXPANDABLES FOR
FEEDERS & STIRRERS



since 1949

3 STATE OF THE ART FACTORIES SUPPLY A WORLDWIDE CUSTOMERS BASE

5 INTERNATIONAL BRANDS



linco baxo

refractories expertise,
together

LINCO BAXO INDUSTRIE REFRATTARI SPA

Corporate Headquarters

Via C. Boncompagni 51/8 / I, 20139 Milan, Italy | Tel. +39-02-5520041 | Fax +39-02-5694834
E-mail: info@lincobaxo.com | www.lincobaxo.com



Maref



TEC REF RANGE OF PRODUCTS

THE WORLD IS CHANGING GLASS QUALITY CONTROL TOO.

The new generation of vision technologies and **artificial intelligence** developed by Video Systems **since 2001** takes glass quality control to a new level:

- Hyper personalization
- Minimization of false positives
- Intelligent online self-learning
- Advanced control and traceability
- Reduction of energy consumption
- Predictive condition monitoring
- Servitization for quality





COLLECTIVE
INTELLIGENCE,
**MORE
VALUE.**



glasstec

INTERNATIONAL TRADE FAIR FOR GLASS
PRODUCTION • PROCESSING • PRODUCTS

**STAND
14C20**

www.iris-im.com

IRIS *Inspection machines*

INDUSTRY LEADERS

Inside glass manufacturing's digital future, with **SCHNEIDER ELECTRIC**

**NICOLAAS FOUCHÉ:
LORENZO,
ELECTRIFICATION,
AUTOMATION AND
DIGITALISATION: HOW
DOES SCHNEIDER ELECTRIC
ADDRESS THESE IN VIEW
OF THE DIGITAL GAP?**

Lorenzo Mineo: Well, I have to say that Schneider Electric

started many years ago, around ten in all - setting the new business strategy, putting decarbonisation at the centre of its strategy. From our perspective, we did that in a logical way: electrification - increased electrification, a trend that's evident to all nowadays - plus digital, which for us is the real technology, and automa-

tion. It's a sort of equation that, at the end of the day, gives you decarbonisation. So our hardware and software has all been developed in these key areas. We can also embed third-party products already installed in an existing glass industry, for instance - working on the end-to-end process to provide efficiency: to



Driving
efficiency and
sustainability
for all

In the following interview, GMP&A Associate Editor Nicolaas Fouché speaks to SCHNEIDER ELECTRIC Power System Vice President Lorenzo Mineo about electrification, automation and digitalisation in glass manufacturing as the two discuss how energy efficiency, decarbonisation, electric melting, investment priorities and cutting edge technologies will all be shaping competitiveness over the years ahead.

maximise energy production on one side and to minimise energy consumption on the other.

NF: Can you speak to energy efficiency and cost reduction at Schneider Electric today?

LM: Well, if we consider that overall energy cost represents the second-largest cost for the glass industry we would easily conclude that energy is considered to be a raw material in the end. So we have to work on this pillar: on one side, to make energy available and reliable; on the other, to work on the cost of the energy itself. Again, we believe that it's important to install the hardware so that all the new products are as efficient as possible. It's also true that you have to consider the end-to-end process, from production through to delivery of the energy and then energy usage within the process itself. So the technology you can leverage is software. For this reason, we developed a number of software platforms which perform and increase efficiency. Of course, some platforms are also based on artificial-intelligence algorithms and machine learning, so they 'learn-by-doing' and can thereby optimise the process - essentially learning from their mistakes.



NF: Given that the decarbonisation of heavy industry requires increased automation and electrification, where, in the glass industry specifically, do you see technologies being particularly mature and where do you see them needing further advancement?

LM: Electric melting is already with us. We can say that, for a daily furnace capacity of up to 200 tonnes, you can quite easily find fully electric furnaces now. Scale up from there to bigger furnaces, we have some hybrid situations. So each furnace can rely upon electric melting plus thermal melting. Today, in sync with the energy transition, the trend is that this electrical part is increasing with time. At that point, however, some added issues or characteristics kick in

such that electrical energy, for instance, must be always available and reliable. Then there is a cost effect. Now when you look at Europe, what's clear is that we have a scattered situation. In Italy, unfortunately, we have a rather peculiar situation in which electrical energy is very expensive. Of course this can slightly decelerate transition. Granted, this is the target towards which every industry will move even if we are mindful that some countries can speed this process up while others, like Italy, will lag behind a bit.

NF: Considering energy volatility, CBAM and sustainability pressures, where are you prioritising investments to ensure that glass manufacturing remains competitive in the coming years?

LM: If you want to combat

INDUSTRY LEADERS



energy volatility meaningfully then the energy transition can really help because. Specifically you can move from a thermal process to an electrical process - thereby avoiding importation of raw fossil materials or gas, for instance. In Italy that's a big problem - as it is, indeed, at European level too. Conversely, with the energy transition and electrification you can produce the electrical energy that you need on site - thus increasing renewable energy, for instance, while also investing in BESS, or battery energy storage systems, to give stability. That makes you more independent of other countries. That's one point. It goes without saying, too, that a logical consequence here is that the global infrastructure also requires investment. So utilities, for instance, demand greater investments in assets and soft-

ware. That's something outside the glass industry, which means that when you then move into the glass industry, the investments are of course very much related to hardware - which includes, as we said before, digital and software.

NF: What will guarantee Schneider Electric's manufacturing competitiveness in the next three to five years?

LM: For the time span you mention we believe two things at Schneider Electric. Firstly, this energy transition will certainly keep on going and gaining traction - and, of course, we wish to support that precisely because we want to help our customers on that journey. How shall we do that? Well, you have to know that we already invest something

like five to ten percent of our annual turnover, which exceeds EUR 40 billion today. So we're talking here about circa three billion and more invested in just research and development. That alone underscores that we truly believe in the investment as a means of keeping new products and new solutions always top of mind. Secondly, at Schneider Electric we believe our strength is in an end-to-end, complete solution that we can provide our customers. So we never envisage a separation of hardware and software. Instead we see them always together. All our products are natively connectable while being connected both to the cloud and to our platforms. We have some very vertical platforms dedicated entirely to the glass industry. So that's where we want to go - all to help our customers in the glass industry to keep on improving their performance. ■



Schneider
Electric

**SCHNEIDER
ELECTRIC SPA**

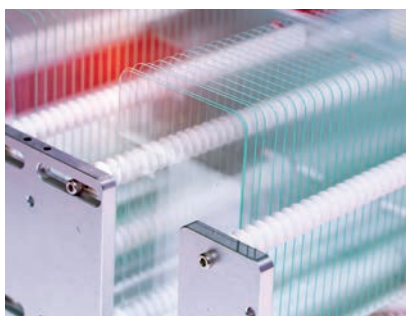
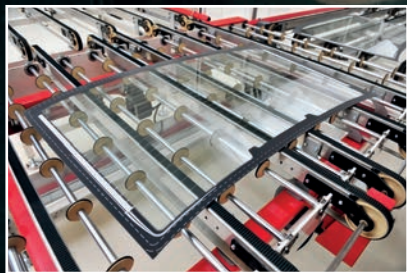
Via Circonvallazione Est, 1
24040 Stezzano (BG) - Italy
Tel.: + 39-035-0920701

www.se.com

“Measurements and quality inspection in the production line, and your glass will be PERFETTO!”

Pharmaceutical, Automotive, Quartz, Telecom, Electronic Glass: with NIROX's optical measurement and inspection instruments quality is always under control!

VISIT www.nirox.it/en - info@nirox.it



“YOU MAKE, WE MEASURE”

Certified
ISO 9001:2015



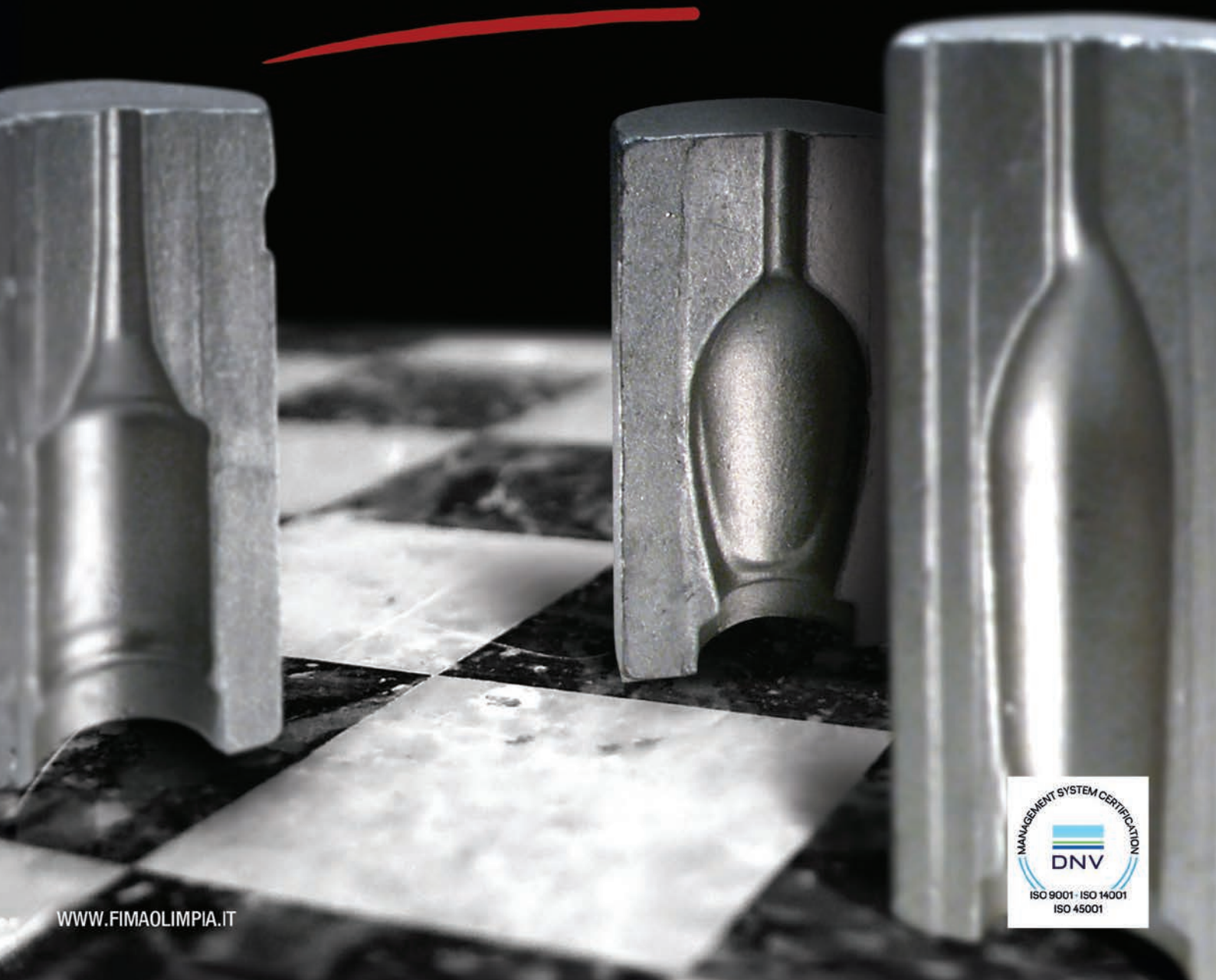
Visit us at Glasstec
HALL 14
STAND A03



Fima-Olimpia

SPECIAL CAST IRON FOR GLASS MOULDS

**the
Right
Move!**



Welcome to DMA Maschinen- und Anlagenbau GmbH & Co. KG – your reliable partner for conveying and process technology!

Since our founding in 1992, we have continually grown into an international machine and plant manufacturer specializing in customized solutions for the container glass industry and the food industry. Our strength lies not only in our many years of experience, but above all in our highly qualified team, which always guarantees first-class quality and outstanding service. Whether you manage a large glassworks or run a small bakery—we understand the diverse requirements of your industry and offer customized solutions that are perfectly suited to your needs. As experts in conveying and process technology, we support you with in-depth technical expertise. We know that every company is unique, and that is why we provide you with competent and reliable advice. Whether it involves the production of container glass, baked goods, cheese, or other food products—we understand the challenges of your production and support you in efficiently expanding your automation, in full alignment with your budget and needs.



Our industries:

Glass containers, baked goods, food products, dairy products, pharmaceuticals



Here's what you can expect from us:

- ✓ Top-notch products: high-quality
- ✓ durable conveyor systems, "Made in Germany"
- ✓ Customized solutions for businesses of all sizes – from small and medium-sized enterprises to industrial conglomerates All-inclusive
- ✓ worry-free service
- ✓ Consulting, planning, direct delivery, and support: everything from a single source
- ✓ Modular system Integration of conveyor technology into your production, optionally piece by piece
- Cost
- ✓ savings: low maintenance requirements, professional repairs, fast spare parts delivery.



Data-driven hot end begins with TME ENGINEERING Blankontrol

Continuous thermal data gives TME ENGINEERING's Blankontrol a route from intermittent operator readings to closed-loop hot end control - using one near-infrared camera per section to measure blank mould temperature, regulate cooling signals and support repeatable process knowledge on today's IS machines in demanding forming environments.

THE CHANGING ROLE OF OPERATORS

Hollow-glass manufacturing still relies heavily on operator expertise. On an IS machine, many parameters are monitored, interpreted and adjusted by peo-

ple with an intimate knowledge of the equipment. However, the industry faces two major challenges. Access to expertise is becoming increasingly difficult. Younger generations are less willing to spend many years working in demanding environ-

ments and on night shifts, and this is a worldwide trend. At the same time, high energy costs are driving the need for greater industrial efficiency, while more demanding processes, such as lightweighting, are increasing process complexity. Can process stability continue to depend primarily on human observation and experience when technology is available to measure and control critical parameters continuously?

FROM PERIODIC MEASUREMENTS TO CONTINUOUS PROCESS DATA

Every glassmaker knows that blank mould temperature is a critical process parameter. It affects machine operation, including the prevention of glass jams, as well as defect formation and glass distribution. The clearest evidence of its importance is that, for many years and in plants around the world, operators have accepted the safety risks involved in taking these measurements with a handheld pyrometer. Yet the information obtained remains limited. The result depends on the operator, particularly on measurement position and timing, and it provides only an iso-

lated sample. An IS machine may complete between 3,000 and 7,000 cycles during an eight-hour shift, while blank-mould temperature may be measured only once or twice. At the same time, the process is inherently dynamic. Variations can result from gob loading, swabbing, section restarts and section stops, which alter the cooling conditions of neighbouring sections. Even when an operator takes an accurate reading, the process may drift again within minutes. The real step forward, therefore, is not simply better measurement, but a complete progression: continuous measurement, continuous information and continuous control.

WHAT WOULD AN AUTONOMOUS THERMAL CONTROL SYSTEM LOOK LIKE?

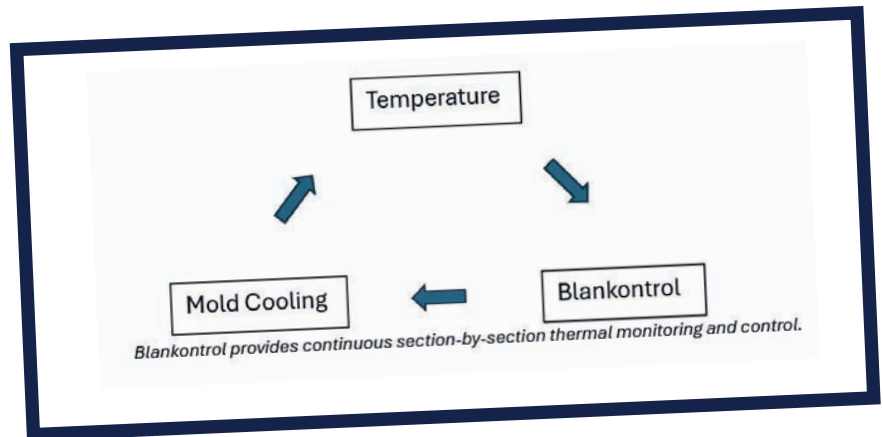
Continuous measurement requires at least one sensor per section. A single sensor for the entire machine would still be an improvement over a manual reading taken every four or eight hours. However, the time

required to move from one section to another would inevitably leave many variations undetected. The quality of the information is equally important: the data must be trusted. The system must report the actual temperature rather than a value that depends on operator interpretation. It should not require frequent recalibration, which is burdensome and can undermine confidence in the measurements. Maintenance requirements must also be minimal. If components or cameras require frequent replacement or attention, operators will understand-

ably prioritise production rather than the systems intended to support it. Finally, the system must be affordable. Even the best technical solution will remain a prototype if its payback period is too long. An autonomous system should do more than collect data or generate alarms. It must complete a closed loop: measure, understand, act and verify. This closed loop turns a measurement tool into a true process-control system.

Blankontrol: closing the loop

At TME Engineering, Blankontrol was developed around these principles. First, one camera is installed per section, providing a live view of the machine. Compared with other types of sensors, cameras make job changes and the selection of measurement points considerably easier. The cameras are positioned in the centre of the machine, on the beam between the blank and blow sides. This is the only position from which the inner surface of the moulds can be viewed as they open radially. Because this location is hot and dusty, the camera housings were specifically engineered for these conditions. The selected near-infrared technology provides an accuracy of $\pm 2^{\circ}\text{C}$ without the need for recalibration. Blankontrol can regulate mould temperature by controlling the cooling signal while remaining independent of the machine control system.



FROM DATA TO REPEATABILITY

The clearest way to demonstrate the benefits of closed-loop control is through a direct comparison. One customer compared two halves of the same machine over an eight-day period: one half operated with temperature regulation, while the other operated without it. The results speak for themselves. Without regulation, the average temperature was 488°C against a target of 470°C. With regulation, the average was 471°C. Even more strikingly, the temperature range fell from 56°C without regulation to 21°C with regulation. This degree of stability can make a substantial difference to production performance.

WHAT DOES AUTONOMOUS CONTROL CHANGE FOR PEOPLE?

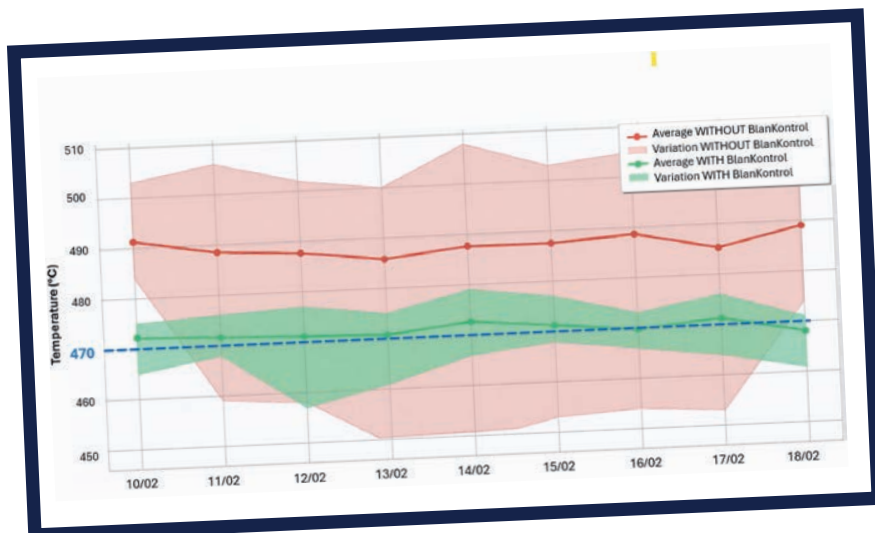
With today's rapid advances in artificial intelligence and humanoid robotics, there is understand-

able concern that machines may replace people. But is that really what glass plants need? Is the glass-forming process already so stable and predictable that it could be operated entirely by robots, without human experience and analysis? Clearly not. We are still a long way from that point. The objective is instead to move the operator's role from

continuous adjustment towards higher-level process supervision. Essential human expertise should be strengthened by objective, continuously available data. By relieving operators of routine, low-level adjustments, plants can enable them to focus on higher-value activities.

FROM EXPERIENCE-DRIVEN TO DATA-DRIVEN HOT END

The next generation of hot-end process control will not eliminate human expertise. It will capture and support that expertise, progressively transforming it into repeatable process knowledge. Blankontrol demonstrates how this transition can already begin on today's IS machines. ■



TME
INNOVATION & PERFORMANCE

TME ENGINEERING

Rue Denis Papin
62510 Arques - FRANCE
Tel.: +33(0)3-9192-0491
tme@tme-engineering.com
www.tme-engineering.com

**Innovation built on
solid foundations**





Customised mould production defines STRADA manufacturing excellence

This year STRADA marks eight decades of uninterrupted activity as Europe's oldest glass mould company – producing moulds for IS glass forming machines through customised multi-axis turning and milling, automated design workflows, robotic engineering, R&D, client collaboration, technical expertise, reliability, quality, and service-oriented project delivery worldwide.

In 2026, Strada is marking eighty years of uninterrupted activity in the glass mould industry. This anniversary stands not only as a measure of longevity but also as evidence of the quality, reliability and technical know-how that the company has proudly built and refined across generations.

EIGHTY YEARS

Founded in 1946, Strada is the oldest European company in the



glass mould industry and an established Italian manufacturer of moulds for IS glass forming machines. Its history is one of mouldmaking, customer trust and precision, developed over eight decades of activity and carried forward into the company's next chapter. With long specialisation in design and production, Strada has become a recognised leader in mould manufacturing for glass containers across a broad range of end markets. These include mineral waters, wines, beers, spirits, soft drinks, food, pharmaceuticals and cosmetics. Serving leading glass producers worldwide, the company combines technical expertise with a direct, service-oriented approach. Its work covers every stage of the project, from the initial design brief through to final delivery.

MANUFACTURING CONTROL

Production is built around fully customised multi-axis turning and milling centres. Automated design workflows, integrated machine communication systems and robotic engineering across all equipment work together to reduce lead times, minimise human error and ensure consistent output quality. This approach supports both the first prototype and series production, linking precision manufacturing with repeatable performance. In a sector where mould quality directly affects glass container production, the ability to maintain consistency across each stage of manufacture remains central to the company's role. Continuous investment in

Research and Development keeps Strada aligned with advances in mould technology. New forming solutions, material improvements and process optimisations are developed in close collaboration with each client.

LONG-PERM PARTNERSHIP

The objective of this development work is to respond to specific operational needs while aiming for measurable gains in efficiency, quality and time-to-market. The company's customer-focused approach is therefore

closely linked to its manufacturing know-how and its culture of precision. After almost a century of industrial experience, Strada's position in the global glass industry rests on technical continuity, customised production and long-term relationships with glass producers. Its eightieth anniversary marks a history built around moulds, but also around the sustained commitment to excellence that continues to define the company's work. For Strada, the partnership with the glass industry is presented as one built to last: today, and for another eighty years to come. ■



S T R A D A

STRADA S.r.l.

Via Ada Negri, 12
20081 Abbiategrasso MI - ITALY
Tel.: +39-02-94-96-69-77
info@stradamoulds.it
www.stradamoulds.it

Greenfield projects demonstrate **MSK** cold-end partnership triumph

This year the MSK Coverttech Group marks fifty years, with its cold-end systems engineered from the lehr onward. That includes modular project configuration, in-house manufacturing, EMSY software, greenfield references, as well as service support, sustainability measures, PCR compatibility and EMSY analytics for continuous process optimisation.

COLD-END SPECIALIST: MSK CELEBRATES ITS GOLDEN JUBILEE

The MSK Coverttech Group is one of the leading suppliers of cold-end systems for the glass industry. Its portfolio begins directly after the lehr. From the cross conveyor onward, MSK engineers every component, manufactures it at its own production facilities, and develops all machine software in-house. For modernisation, capacity expansion and greenfield projects, the company's systems are presented around reliability, advanced engineering and long-term investment security, supported by 50 years of innovation and forward-looking expertise.





Complete Cold End from MSK - all from a single source

FUTURE-PROOF INVESTMENT

Project configuration is central to the company's approach. According to Uwe Jonkmanns, Managing Director Sales & Marketing International at MSK, the modular system allows every project to be configured according to individual customer requirements. This means adapting solutions to performance requirements, glass container shapes and the installation space available at the customer's site, while still building on proven standards. The same approach extends to customised special solutions developed by the engineering team. MSK manufactures and tests all machines and conveyors in-house, enabling the company to respond to specific customer requirements while retaining control over engineering and quality. The company also offers flexible solutions for lines used to decorate glass containers. In MSK systems, palletising, packaging and transport are digitally networked. Jonkmanns identifies interfaces and transfer processes between different systems as a critical success factor within the overall production process. The EMSY software visualises every system in real time, making operation simple and intuitive. At the same time, digital networking across all system components enables fully automated material flow with parameter exchange, seamless interfaces and continuous transfer of relevant data throughout the logistics process.

A RELIABLE PARTNER

The new glass container plant of Şişecam in Kaposvár, Hungary, is one example of a greenfield project. For the complete cold-end equipment of the new facility, Şişecam selected MSK as its system partner. Another project, completed last year, was the installation of the entire cold-end at Park Cam Sanayi Ticaret A.Ş. For the commissioning of Furnace 40 in Bozüyük, Bilecik, MSK developed a high-performance cold-end concept that was integrated into the existing production system, which includes a total of three furnaces. Reliability and structure define the way the company presents its project work. Even

many years after commissioning, customers can rely on spare parts availability and service support, supported by the company's high level of in-house manufacturing.

50 YEARS OF INNOVATION FOR THE GLASS INDUSTRY

Founded in 1975 by Reiner Hannen, the MSK Covertech Group looks back on more than 50 years of development. The family-owned company has around 600 employees and has been led by Managing Partners Christina and Linda Hannen since 2013. As part of the Group's continued growth, Uwe Jonkmanns was appointed Managing Director Sales & Marketing International back in 2024. With more than 7,000 systems installed around the world, MSK has established itself in the international cold-end market through continuous innovation and uncompromising quality. Its product portfolio covers the area from the Lehr to the warehouse from a single source. Christina Hannen links the company's ownership culture to integrity, excellence and continuity through long-term decision-making.



After the Lehr, MSK systems ensure an automated flow of bottles all the way to the pallet warehouse.

AUTOMATION

ing. Linda Hannen describes innovation as a strategic priority for the family-owned company, with a current focus on the integration of software and artificial intelligence. The development direction is toward solutions that provide greater automation, predictive maintenance and flexibility, including systems able to detect errors independently and provide operators with solution-oriented guidance.

FOCUS UPON SUSTAINABILITY

Since its foundation, MSK has placed a strong focus on resource-efficient development, both in its products and across the company. Guided by the philosophy 'savings through technology', the company develops energy-efficient and resource-saving machinery and automation solutions intended to create added value for customers pursuing economic and sustainability objectives. In packaging technology, MSK shrink frame technology was introduced to the market in 1981. Combined with the patented under-shrink process, it has laid the foundation for millions of tons of CO₂ savings. Film thickness has

been reduced from 110 µm in the past to typically 80 µm today, while stackability of glass container layers has increased to pallet heights of up to 2.40 m and more. Reduced film consumption and improved truck capacity utilisation lower the carbon footprint while cutting transportation costs by half. The film is 100 percent recyclable, supporting packaging-material circularity. Films containing post-consumer recycled content can also be used and are well established on MSK systems. Further machine features support lower energy consumption and longer system service life. These include maintenance-free



timing belt technology and the use of counterweights to reduce motor power requirements through load balancing. Water-based powder coatings and the avoidance of hydraulic systems and lubricants also support environmental protection. Because MSK supplies the complete cold-end, all processes can be evaluated holistically and designed according to individual customer requirements. The EMSY software family provides analysis capabilities and supports continuous process optimisation. EMSY analytics, developed specifically for the glass industry, enables centralised analysis of the entire cold-end based on real-time data. It provides transparency on overall cold-end efficiency and identifies opportunities for increased efficiency and optimised resource utilisation. MSK will be at glasstec 2026 in Hall 13, booth C30. ■

Linda Hannen (Managing Partner), Reiner Hannen (President & Founder), Christina Hannen (Managing Partner), Uwe Jonkmanns (Managing Director Sales & Marketing International)



MSK
COVERTECH GROUP

**MSK Verpackungs-
Systeme GmbH**

Benzstraße 3
D-47533 Kleve - GERMANY
Tel.: +49-2821-5060
info@msk.de
www.msk.de



PERFORMANCE IN MOTION

**COLD-END COMPONENTS.
ENGINEERED FOR PERFORMANCE.
BUILT FOR RELIABILITY.**

A constant commitment to innovation, quality and sustainability drives the development of our Cold-End components, combining advanced materials, low-dust solutions and technologies engineered for exceptional long-term wear resistance.

Innovation for today. Reliability for tomorrow.

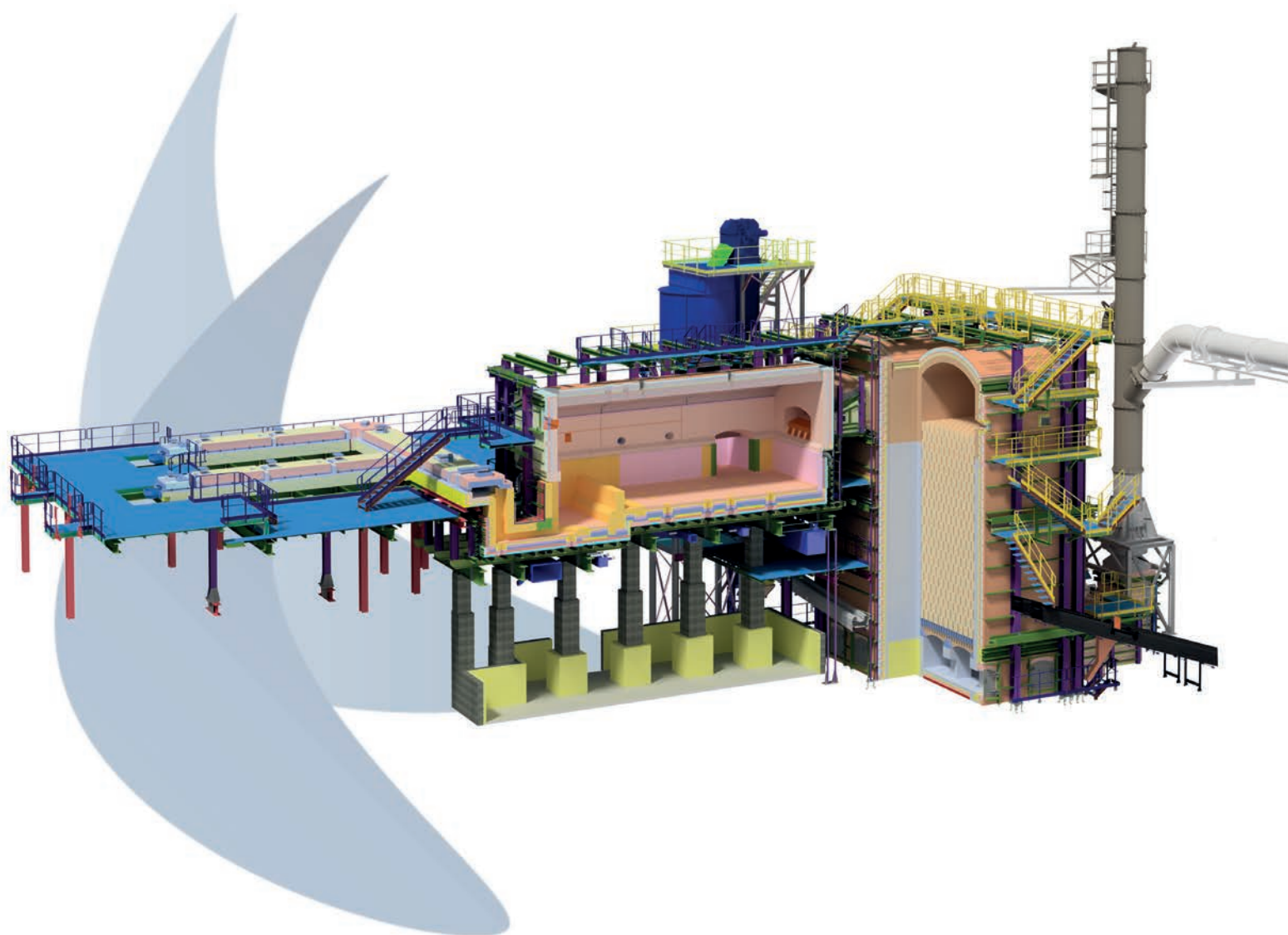
Hall 13 | Booth C78

www.reginachain.net



TECSIGGLASS

TECHNOLOGIES & SYSTEMS FOR THE GLASS INDUSTRY



TECSIGGLASS Srl
Via Dodecaneso 38/1 - Genova - Italy
+39-010-9913351 - www.tecsiglass.com



M31



IC10



CMa



LMC



AGN

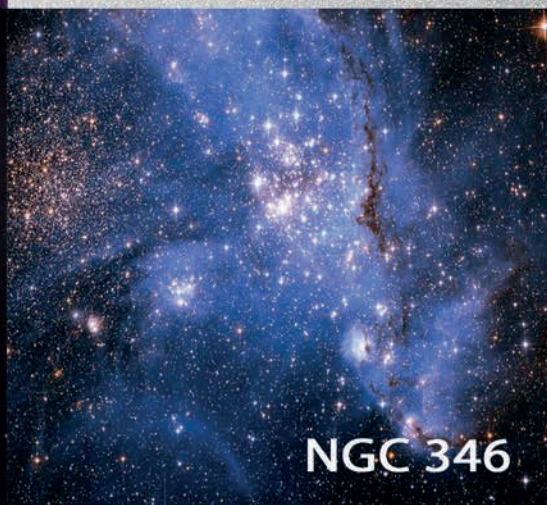
Neck rings and plungers automatic measuring system



NRP AW-1
...a new GALAXY



M 82



NGC 346



BL lac

Predictive maintenance with LUBEN GLASS mitigates downtime risks

Bringing more than 20 years of field-proven experience, LUBEN GLASS presents its ILS: an intelligent lubrication platform for IS machines that combines patented independent line management, pump redundancy, multi-oil capability, smart sensors, AI monitoring, mobile visibility, predictive maintenance support and continuity-focused performance – all for the glass plants of tomorrow.

When Luben Glass first took on the challenge of developing an innovative lubrication system for IS machines, the company could not have imagined the impact the technology would have on glass plants around the world. For more than 20 years its ILS -Intelligent Lubrication System- has undergone continuous development and accumulated thousands of operating hours in production facilities across the globe.

Today, it stands as a benchmark for reliability, efficiency and technological innovation in IS machine lubrication.

PRECISION

At the core of ILS is a patented architecture that allows multiple lubrication lines to be managed independently through a single pumping unit. Lubrication is delivered only where and when it is truly needed, significantly reducing lubricant consumption, energy usage, and maintenance

costs while maximising machine performance. Production continuity is central to the system's design. Automatic pump redundancy keeps a standby pump permanently connected and ready to take over instantly in case of failure, helping guarantee uninterrupted operation and maximum production continuity. ILS is also designed to meet the most demanding requirements of IS machine manufacturers. It can manage multiple lubricant types simultaneously, including both

mineral and synthetic oils, ensuring full compliance with modern lubrication specifications.

ECOSYSTEM

What makes today's ILS unique is its evolution from a lubrication system into a connected and intelligent platform. Building on two decades of field-proven experience, Luben Glass is developing a new generation of digital services and advanced monitoring tools that bring lubrication management into the Industry 4.0 era. Through smart sensors, real-time data acquisition, Artificial Intelligence algo-





ILS-evo

Independent Lubrication System

Una sola regia. Infinite possibilità di lubrificazione.

One intelligent control. Endless possibilities for lubrication.

-  LUBRIFICAZIONE INDIPENDENTE DI OGNI LINEA
INDEPENDENT LUBRICATION OF EVERY LINE
-  BACKUP AUTOMATICO DELLA POMPA
AUTOMATIC PUMP BACKUP
-  GESTIONE FINO A 3 OLI DIFFERENTI
MANAGEMENT OF UP TO 3 DIFFERENT OILS
-  DIAGNOSTICA INTELLIGENTE
SMART DIAGNOSTICS
-  RIDUZIONE DEI CONSUMI DI OLIO ED ENERGIA
REDUCTION OF OIL AND ENERGY CONSUMPTION
-  CONTINUITÀ OPERATIVA GARANTITA
GUARANTEED OPERATIONAL CONTINUITY



-  MACCHINA IS MACHINE
-  FEEDER FEEDER
-  CONVEYOR CONVEYOR
-  CROSS CONVEYOR CROSS CONVEYOR
-  STACKER STACKER
-  WARE TRANSFER WARE TRANSFER
-  DISTRIBUTORE GOCCE GOB DISTRIBUTOR



MAGGIORE SICUREZZA DEL PROCESSO
GREATER PROCESS SAFETY



EFFICIENZA E SOSTENIBILITÀ
EFFICIENCY AND SUSTAINABILITY



MASSIMA FLESSIBILITÀ DI UTILIZZO
MAXIMUM FLEXIBILITY OF USE

rithms, and a dedicated mobile application, operators and maintenance managers can monitor lubricant levels, system performance, consumption trends and operating conditions anytime and anywhere. The platform continuously analyses operational data, identifies anomalies before they become critical issues and supports predictive maintenance strategies that help reduce downtime and improve plant efficiency. In the event of a malfunction, it automatically detects the affected line, isolates it safely, and keeps the remaining lubrication circuits fully operational. The new ILS App provides complete visibility of the lubrication system. Users can monitor lubricant levels in real time, receive instant notifications and alarms, access historical operating data, analyse

consumption trends and performance indicators, support predictive maintenance activities, improve operational efficiency, and reduce downtime. Thanks to lubrication technology proven in glass plants worldwide for over 20 years, combined with cutting-edge digital solutions, ILS is no longer just a lubrication system. It is a complete intelligent platform designed to support the glass industry of tomorrow. ■



LUBEN GLASS SRL

Via Antonio Meucci, 23
26010 Offanengo (CR) - ITALY
Tel.: +39 0373-244396
info@lubenglass.it
www.lubenglass.eu

GLASS COLOURING FRITS

FULL SERVICE

- glass colouring frits
- client assistance in colour developments
- production assistance
- dosing, stirrer, combustion equipments for forehearth

STUDIO GIOVATTI (PR)



GCG
GLASS
CONSULTING
GROUP S.r.l.

Via Monte Bardone 2 • Parma 43100 • Italy
Ph: 0039 0521 24.28.23 Fax: 0039 0521 49.47.47 • www.glassconsultinggroup.it • e-mail: info@glassconsultinggroup.it



UV SERIES
VACUUM PUMPS
A SERIES - K SERIES
AIR AND GAS COMPRESSORS

INSPIRING THE FUTURE SINCE 1923

7 VANES

aluminium-made
non-consumable

NO OVERHAULING

constant efficiency
extended warranty

ONLY 2 BEARINGS

120.000 h of operation
low rotation speed

DIRECT DRIVE

no trasmission loss
service factor = 1

Leading industrial groups have chosen Pneumofore Rotary Vane machines for their crystal clear results: high energy savings, trouble-free operation and the **lowest Total Cost of Ownership**.

- up to 10 year extended warranty on efficiency and functionality
- trouble-free 24/7 operation
- 10 year maintenance plan with clear costs
- constant performance for decades

Pneumofore 

[PNEUMOFORE.COM](https://pneumofore.com)



SINCE
1923

SWISS ENGINEERING
ITALIAN DESIGN
GLOBAL PRESENCE

ISO 9001
ISO 14001
CERTIFIED

HEAT RECOVERY

Ardagh Nienburg boosts efficiency thanks to **PNEUMOFORE** systems

Written by Engineer Daniel Hilfiker, President of Pneumofore, this article examines how PNEUMOFORE vacuum technology at Ardagh Group's Nienburg plant supports heat recovery, process stability, energy efficiency, reduced CO₂ emissions, lower defect rates and lifecycle-oriented reliability in hollow glass container manufacturing.

In the energy-intensive environment of container glass manufacturing, the recovery of waste heat represents one of the most immediate and effective opportunities for improving overall plant efficiency. A notable example is the long-term collaboration between Pneumofore and Ardagh Group.

INSTALLATION

The initial installation dates back to 2016, when two UV50 rotary vane vacuum pumps were commissioned, followed by a third unit in 2017. From the outset, the system



was engineered with careful attention to detail: correctly dimensioned pipelines, an efficient filtration concept including a DVF demister and the integration of a Variable Speed Drive (VSD) on one unit to dynamically adapt capacity to fluctuating production demands in hollow glass manufacturing. Building on the operational success of this first phase, the vacuum system was expanded in 2022 with three additional UV50 units: two fixed speed units and the third unit with VSD, this time equipped with integrated heat recovery (HR) technology.

RECOVERY

This evolution reflects a broader shift in industrial awareness: the recognition that vacuum systems, much like compressed air systems, dissipate a significant share of their input energy in the form of heat. While the installed power of vacuum pumps is typically lower than that of air compressors, the potential for energy recovery remains highly relevant. By capturing and reusing thermal energy, glass manufacturers can reduce both primary energy demand and associated CO₂ emissions. Such measures are increasingly supported by public incentive schemes but equally driven by the industry's own commitment to sustainable production. Importantly, the economic rationale is compelling: heat recovery systems contribute to measurable cost savings over relatively short payback periods. Today, a total of six UV50 vacuum pumps



ABOUT PNEUMOFORE

Founded in 1923, Pneumofore manufactures vacuum pumps and compressors for industrial applications worldwide. Pneumofore compressors and vacuum pumps are found worldwide, whenever customers require extraordinary reliability and constant performance over time. A leader in the Rotary Vane technology, Pneumofore solutions focus on efficiency, durability, minimal Life Cycle Cost, and high environmental respect.

operate at the Nienburg plant, supporting IS machines in the moulding of hollow glass containers. Stable and precisely controlled vacuum levels, ensured through variable speed operation, enable higher production speeds while reducing defect rates and material waste.

RELIABILITY

System design remains critical: properly dimensioned piping minimises pressure losses and ensures rapid compensation of process fluctuations. Another key aspect is long-term reliability. The original units installed in 2016 have each accumulated more than 8.000 operating hours per year under continuous three-shift con-

ditions, maintaining their initial efficiency without requiring an air-end overhaul. This performance is achieved through consistent preventive maintenance using genuine spare parts, underscoring the importance of lifecycle-oriented system management. The case of Nienburg illustrates a fundamental principle for modern glass production: efficiency gains are no longer limited to primary processes. Auxiliary systems, when properly engineered and enhanced with technologies such as heat recovery, become strategic contributors to both sustainability and competitiveness. ■

ABOUT THE AUTHOR

President of Pneumofore, Engineer Daniel Hilfiker, represents the third generation of Swiss engineers managing Pneumofore, the world's oldest rotary vacuum pumps and air compressor manufacturer, celebrating more than 100 years of expertise. Daniel graduated as Mechanical Engineer at the Federal Technical Institute of Zürich, Switzerland, in 1993. He is personally engaged in R&D with strong commitment for lowest environmental impact which corresponds to minimal operational costs. He participates in worldwide conferences on a regular basis, as his pneumatic theory and products are applied in many sectors including container glass production, can making, aerospace, medicine, food, petrochemical and more.



Pneumofore

PNEUMOFOR SPA

Via N. Bruno, 34
10098 Rivoli TO - ITALY
Tel.: +39-011-950-4030
info@pneumofore.com

www.pneumofore.com

RONDOT GROUP: 90 Years of glass expertise, now shaping a connected Hot End

At glasstec 2026, Rondot Group will exhibit their full range of Hot End solutions to showcase how "The Future is Just Beginning in the Hot End."



Raphael Constantin, CEO since 2022

In 1936, Louis Rondot began importing sizing products for the textile and hollow glass industries, founding Franconyx. Today, with Raphael Constantin as CEO since 2022, Rondot Group is a hot-end partner supporting leading container glass manufacturers worldwide.

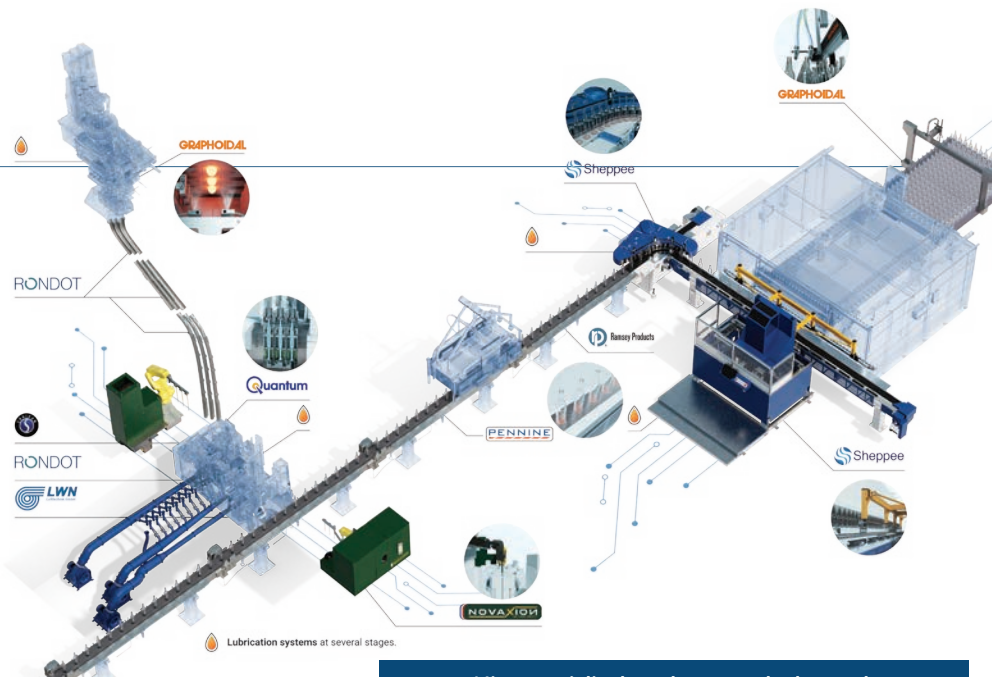
Today, glassmakers face growing pressure around sustainability, safety, efficiency, skills and cost. Rondot Group believes meeting these challenges will increasingly depend on connection: between technologies, expertise and data.

Its 90th anniversary is an opportunity to celebrate its heritage while looking ahead. At glasstec 2026, Rondot Group will exhibit on Stand C43 in Hall 13 under the message: 'The Future is Just Beginning in the Hot End'."

NINE BRANDS, ONE CONNECTED GROUP

Rondot Group has evolved from a single distributor into nine specialist businesses spanning forming, cooling, spraying, swabbing, ware handling, mould maintenance and conveying: Rondot, Graphoidal, Sonicam, Sheppee, Novaxion, Quantum, Ramsey Products, Pennine Industrial and LWN.

Individually, each has deep expertise. Increasingly, the opportunity lies in connecting that knowledge. Rather than treating each stage in isolation, the Group is moving towards an integrated approach in which technology, knowledge and data work together to solve wider manufacturing challenges.



CONNECTED TECHNOLOGY IN PRACTICE

Digitalisation is moving the hot end beyond individual machines towards connected processes, data-led decisions and intelligent control. Real-time monitoring and automation give glassmakers greater visibility, helping improve efficiency, safety and consistency.

The Novaxion Blowside Robot at BA Glass in Spain demonstrates this approach, automating finishing-side swabbing to optimise machine take-out while keeping operators away from hot surfaces and moving machinery.

Looking ahead, one area of innovation being devel-

oped across the Group is the potential connection between Novaxion and LWN technologies. Novaxion's swabbing systems could capture mould-level process data and share it with LWN cooling systems, allowing airflow to be regulated more precisely and moving glassmakers towards a more data-driven cooling strategy.

Elsewhere, Graphoidal has refined its shear spray from wide dispersion to a focused pattern, reducing the spray angle from 18 to 11 degrees for precise cooling and reduced gob contamination. Sheppee co-developed

the Flexstacker 2 Lehr Loader with Bucher Emhart Glass, while Rondot measurement equipment provides live data for monitoring and quality control.

SUSTAINABILITY THROUGH CONTINUOUS PROGRESS

In 2026, Rondot Group achieved an EcoVadis Gold Medal with a score of 85/100, following Bronze at 61/100 in 2024 and Silver at 74/100 in 2025.



EcoVadis Gold Medal, 2026

EcoVadis assesses companies across four key areas: Environment, Labour & Human Rights, Ethics and Sustainable Procurement. Rondot Group improved across all four, with its latest score placing it in the top 3 percent of companies assessed by EcoVadis and the top 1 percent within the industry.

The result reflects a wider commitment to continuous sustainability progress across the Group.

As Rondot Group marks 90 years, its ambition remains focused on a safer, smarter, more efficient and more sustainable hot end.

After 90 years of progress, the future is just beginning in the hot end. ■





RONDOT GROUP

RONDOT GROUP

9 Rue Jean-Elysée Dupuy,
69410 Champagne-au-Mont-d'Or, -
France

www.rondot-group.com

Building the next generation of packaging, with VERALLIA



MARCO PINETTI:
MARCO, IN THIS TIME OF PROFOUND GLOBAL CHANGE AND SIGNIFICANT CHALLENGES, WHAT ARE VERALLIA'S KEY STRATEGIC PRIORITIES AT THE CORPORATE LEVEL?

Marco Ravasi: You correctly point out that we're indeed living through an exceptionally dynamic period: geopolitical tensions, energy price volatility -which

is particularly relevant for us as an energy-intensive manufacturer- the European Union's strong push towards decarbonisation and, perhaps less widely recognised, changing consumer habits in the glass packaging sector. Of course, all these factors are reshaping our industry. That said, our strategic priorities remain unchanged despite these challenges. Here we have a truly long-term vision. We firmly believe that glass is one

of the most sustainable packaging materials available. Yet while glass itself is inherently sustainable, its manufacturing process is energy-intensive. For this reason, we're investing heavily in reducing CO₂ emissions through decarbonisation initiatives and lowering the energy intensity of our production processes. Our ambition is to remain the benchmark in the global glass packaging industry. Alongside sustainability, another major prior-

From lighter bottles and hybrid furnaces to AI-driven production and ambitious decarbonisation targets, VERALLIA General Manager of Verallia Italy Marco Ravasi outlines how the group is reshaping glass packaging. Here, in conversation with GMP&A Editor-in-Chief Marco Pinetti, he discusses investment, innovation, sustainability and growth across Italy and beyond.

ity is supporting our customers. Many of the sectors we serve are currently facing challenging market conditions, partly because of evolving consumer behaviour. Our objective is to remain close to our customers by delivering premium-quality products and outstanding service, helping them grow both domestically and internationally. This is especially important in Italy, where the strength of the Made in Italy brand represents an extraordinary competitive advantage. Products such as Prosecco, various tomato sauces, olive oil and many besides are internationally recognised symbols of Italian excellence. Italy is Europe's lead-

ing wine producer, the second largest producer of bottled water and the second-largest producer of olive oil. With annual glass production of approximately 4.6 million tonnes, Italy is also Europe's largest glass packaging market. We are committed to supporting the global expansion of Italian excellence - a significant share of which is destined for export markets.

MP: Can you speak to any strategic priorities that are specific to Verallia Italy, compared with the broader corporate strategy?

MR: Absolutely. Within the Italian market, the food segment has become one of our key growth

priorities, whilst remaining firmly aligned with the broader Made in Italy strategy. A major milestone in this direction was the acquisition of the Corsico facility, where we are today. has significantly strengthened our They therefore represent strategic growth areas for Verallia Italy. We have invested heavily in these businesses because we see them as fundamental to supporting the continued international success of Italian products.

MP: What strategies is Verallia implementing to improve energy efficiency?

MR: Our energy-efficiency strategy is closely linked to



TRAILBLAZERS

our decarbonisation roadmap. Consuming less natural gas and fewer fossil fuels directly translates into lower CO₂ emissions. I will come back to furnace technologies shortly, as they represent the most significant part of our efforts. In a glass manufacturing plant, approximately 80 percent of total energy consumption is related to the melting process, while the remaining 20 percent comes from non-melting operations. In these other areas, continuous day-to-day operational management plays a crucial role. This includes improving compressor efficiency, optimising cooling fans on our IS machines and implementing numerous operational improvements throughout our plants. For example, we are increasingly adopting direct-drive compressors instead of belt-driven systems because they provide greater energy efficiency. We are also redesigning compressed-air distribution within our IS machines by separating the finishing section from the blank mould section. Since these two areas require different pressure levels, separating them allows us to optimise energy consumption significantly. Returning to furnace technology -the single largest contributor to our energy use- even design choices such as optimising refractory dimensions to reduce the number of joints and minimise thermal losses can have a substantial impact. These improvements may appear relatively small when considered individually, but collectively they make a significant difference. With 32 production sites worldwide, we have extensive benchmarking opportunities, enabling us to compare performance across plants, identify the most effective practices and rapidly share them throughout the Group.

MP: Can you tell us more about the technological developments you're pursuing in furnace technology?



MR: Sure. Furnaces are where the greatest impact can be achieved, as they account for the vast majority of our energy consumption. To put this into perspective, the Italian glass industry alone represents approximately 1.5 percent of the country's total natural gas and electricity consumption. We are, by nature, a highly energy-intensive industry. Here a good example takes us back to 2024, when Verallia commissioned the world's largest fully electric glass-melting furnace in Cognac, France. This technology delivers a CO₂ emissions reduction of around 60 percent and is particularly well-suited to producing clear glass containers for the spirits market. It represents a significant step forward in decarbonising glass manufacturing. Another major development is our hybrid furnace in Zaragoza, Spain. Traditionally, glass furnaces operate using approximately 80 percent natural gas and 20 percent electricity. A hybrid furnace shifts this balance towards electricity-provided it comes from renewable sources- thereby dramatically reducing CO₂ emissions. At the Zaragoza plant, we have achieved a mix of approximately 70 percent renewable electricity and 30 percent natural gas, essentially reversing the traditional energy balance. This translates

into a CO₂ emissions reduction of roughly 50 percent, which is an outstanding achievement. Finally, at the inauguration of our new furnace in Pescia we introduced oxy-fuel combustion technology. Rather than burning fuel with air, combustion takes place using pure oxygen. This significantly reduces the volume of gases circulating within the furnace, improving thermal efficiency and reducing energy consumption by approximately 12 percent, while cutting CO₂ emissions by around 15 percent. It represents another major technological milestone in the evolution of glass-melting furnaces.

MP: How would you say Verallia is approaching decarbonisation, broadly-speaking?

MR: Manufacturing is naturally one of the largest contributors, but decarbonisation extends well beyond the production process itself. One example is lightweighting. Reducing the weight of glass containers brings benefits throughout the entire value chain. From our perspective, lighter bottles mean that more units can be produced and transported per tonne of glass, reducing emissions during manufacturing and logistics. From our customers' perspective - particularly in Italy, where around half of production is exported

overseas-transport costs are largely determined by weight. A lighter bottle therefore means lower CO₂ emissions throughout international shipping, whether the destination is the United States or any other global market. Over the past twenty years, the average weight of glass containers has fallen by approximately 15-20 percent. For our highest-volume products, however, the reductions have been even more substantial. Bottles that once weighed around 450 grams can now weigh as little as 300 grams thanks to our Air range, which was specifically developed for ultra-lightweight wine bottles. This represents a remarkable improvement. Another area I particularly like to underscore is glass recycling in Italy. Unlike Germany, Italy does not separate glass collection by colour. As a result, the cullet-sorting process naturally produces much higher recycled content for dark glass than for flint glass. This means that dark-coloured bottles manufactured in Italy contain significantly higher percentages of recycled glass than clear bottles - making them even more sustainable from an environmental per-

spective. For this reason, we're also exploring new product concepts. We are currently testing green glass jars and, together with a major Italian food producer, have developed amber-coloured glass containers for tomato purée-the same amber colour typically used for beer bottles. These projects reflect our commitment to improving sustainability - not only through manufacturing technologies but also through product design.

MP: How is Verallia embracing the AI revolution?

MR: 'Embracing' is exactly the right word, because artificial intelligence has the potential to transform virtually every area of our business. Outside manufacturing, HR provides a simple example. In the past, recruiters often had to review hundreds of CVs manually. Today, AI can automate much of that initial screening process, quickly identifying candidates who match predefined criteria. The same applies to finance, where recurring reporting activities can increasingly be automated, allowing teams to focus on higher-value tasks. Another

particularly important area is market intelligence. Forecasting demand has become increasingly challenging-not only for us but also for our customers. AI offers powerful tools for analysing market trends, improving demand forecasting and supporting supply chain planning well beyond traditional order management and customer service activities. We are currently testing several advanced AI applications in this area, and the results are extremely promising. Within manufacturing, AI is primarily supporting our forming operations. We continuously monitor our IS machines using intelligent systems capable of detecting anomalies at a very early stage. This provides several advantages. It allows us to identify defects before they escalate, reducing the risk of incidents-including potential fires-while improving both plant safety and operational efficiency. Issues that once had to be monitored around the clock by operators can now be detected automatically by AI, enabling much faster intervention and reducing equipment wear. At the cold end, where product quality



TRAILBLAZERS

is inspected, some of our inspection systems now incorporate self learning capabilities. When a specific defect is detected repeatedly, the system automatically focuses more closely on that particular defect, continuously improving its detection accuracy. Artificial intelligence is opening entirely new possibilities across every function of the company. The challenge is to recognise these opportunities early and seize them-carpe diem, as the saying goes.

MP: What are Verallia's investment priorities in the short to medium term and what are the main areas of focus?

MR: Our main area of focus is sustainability. We are firmly convinced that glass is an unparalleled material when it comes to health, safety and sustainability. Glass is completely inert, meaning there is no interaction between the container and its contents. This is a key advantage compared with other materials that are often described as infinitely recyclable, while glass is not only infinitely recyclable but also infinitely reusable. I believe this

represents a major opportunity for the glass industry, especially thanks to initiatives such as the PPWR -Packaging and Packaging Waste Regulation- which can help further recognise and enhance the value of glass as a packaging material, generating new business opportunities and supporting further development across the sector. We are so convinced of this potential that we are investing heavily in improving both our manufacturing processes and the overall sustainability of our operations. The key point is that the sustainable glass packaging of the future must become the reference solution for a wide range of applications. In Italy, in particular, this is closely connected to the strength of the Made in Italy ecosystem. We have already made significant investments, including EUR 110M for the Pescia furnace launched last year. This represents a substantial commitment to supporting the development of our domestic operations.

MP: Are there any new investments planned in Italy for next

year, particularly regarding production facilities?

MR: We will continue our furnace-renewal programme, replacing existing furnaces with innovative technologies while constantly testing and implementing new solutions. Beyond furnace investments, we will continue to focus on safety, innovation and operational improvements across all our facilities.

MP: Turning to products, what are the latest and upcoming developments in finished products?

MR: Lightweighting is currently one of the main developments requested by our customers. Many of them are working to improve their Scope 3 emissions footprint, and reducing packaging weight is an effective way to contribute to this objective. Another important trend is what we call premiumisation: the development of bespoke products and customised solutions. One of the ways glass differentiates itself from other materials is through its ability to combine functionality with aesthetics. A



glass container is not only packaging; it is also a communication tool and an element of brand identity. If we look at the Italian concept of beauty and design, this becomes even more evident. This is a high-end, innovative bespoke product created through close collaboration between our design team and the customer. There are many other examples demonstrating the value these projects can generate. Ultimately, an attractive bottle represents the best possible expression of the excellent product it contains.

MP: Moving onto turnover and financial performance: How did 2025 go, and what are the expectations for 2026 for Verallia at both corporate and Italian level?

MR: When analysing results during a period characterised by significant energy-cost volatility, I believe figures should always be considered within their broader context. Overall, performance has been positive. The first quarter of 2026 has already been officially reported, and I would say it closed well. It is still too early to comment on the following quarters, but our annual guidance has not been revised. What we are seeing is a return towards greater stability after a period affected by external factors, including inventory adjustments and tariff-related impacts. Today, market dynamics are much easier to understand and manage, and we therefore remain highly confident about the future.

MP: So would it be correct to say you're upbeat about growth in 2026?

MR: There is definitely confidence. The year is still in its early stages, but the outlook is positive and we believe we are moving in the right direction.

MP: What is Verallia's strategy and philosophy regarding diversity,

inclusion and creating an open culture for employees and stakeholders?

MR: For us, people are at the centre of everything we do. Teamwork, empowerment, accountability and, above all, respect for people are fundamental pillars of Verallia's values. I would like to give an example related to safety in our plants. We measure workplace accidents through the TF1 indicator, which represents the number of accidents per one million hours worked. In Italy, our TF1 rate is currently 1.5, while the average figure across the glass industry, according to AssoVetro data, is approximately six to seven times higher. At Verallia, there is a constant and very strong commitment to eliminating workplace accidents and ensuring that every employee returns home safely every day. This is something I personally consider extremely valuable and deeply aligned with our corporate culture. Regarding diversity and inclusion, I can share some important figures. In 2023, Verallia Italy obtained certification for gender equality. Today, 39 percent of our managers in Italy are women. We are not yet at a 50/50 balance, and we recognise that there is still work to do, but we are firmly committed to continuing in this direction. The challenge is greater within our production facilities, where women currently represent around 19 percent of our workforce. This is partly because of the difficulty of attracting more female blue-collar employees to an industry that remains physically demanding and highly industrial. However, this is also an area on which we have a specific focus. For us, people are truly at the centre of the project, and I am proud that these principles are such an important part of Verallia's identity.

MP: Finally, can you add anything to what you said earlier about

the future of glass in packaging?

MR: Of course. I strongly believe that glass is a unique material. Its only 'weakness' is perhaps that it is transparent - but even this can be considered an advantage, because consumers appreciate being able to see the product inside the container. Glass is an inert material and, from a health perspective, I believe its potential is still not fully recognised. There is no interaction between the container and its contents; the packaging remains completely neutral. This is an extraordinary value. Glass is also infinitely recyclable - and already widely recycled-but it can also be reused indefinitely. I often think back to when we were children and milk was traditionally sold in glass bottles. I believe that, driven by necessity and by increasing attention to health and sustainability, some products may return to glass packaging in the future. Baby food is a good example: when we want the highest level of safety and protection for our children, glass remains the preferred choice. For these reasons, I am extremely optimistic about the future of glass. Of course, we still have important challenges ahead. We must continue working towards achieving net zero emissions. It is a highly ambitious target, but we firmly believe that once we reach that point, the future of glass packaging will be stronger than ever. ■



**VERALLIA ITALIA
SpA**

Via Del Lavoro, 1
36045 Lonigo (VI) - ITALY
Tel.: +39-01955701
info.italia@verallia.com
www.it.verallia.com

PPWR requirements refocus **OPTIMIZING GLASS BOTTLE** sustainability strategy

Regulatory change is reshaping glass packaging specification. Shanghai-based **OPTIMIZING GLASS BOTTLE** highlights how PPWR recyclability grading, US EPR rules, cullet use, closure coordination, decoration choices and documentation are all changing buyer requirements, while uneven recycling rates keep package design decisions firmly under scrutiny across major markets.

Glass packaging buyers in 2026 are operating in a regulatory environment markedly different from that of 2019. The EU's Packaging and Packaging Waste Regulation took effect on 12 August 2026, with recyclability-grade obligations scheduled to phase in between 2030 and 2038. In the United States, Extended Producer Responsibility statutes are already active or legislated in California, Oregon, Colorado, Maine, Maryland, Washington and





Minnesota, with California's SB 54 applying by 2027 and Minnesota's requirements by 2032.

REGULATION MEETS UNEVEN RECYCLING PERFORMANCE

Alongside these legislative developments, container-glass recycling rates remain uneven. The EU overall reaches 80 percent, compared with 85.3 percent in Germany, 67 percent in the UK, 71 percent in Japan and 86 percent in Korea. In the United States, the rate for container glass stands at 31-34 percent. These changing conditions are also altering the questions being asked of Chinese glass packaging suppliers. For EU buyers in particular, confirming that the glass itself is recyclable is no longer sufficient. Attention is increasingly directed towards decoration and closures because PPWR assesses recyclability according to the design-for-recycling performance of the complete package rather than the principal glass body alone. Silicone-coated neck finishes, ceramic decals containing heavy-metal pigments and plastic inserts within metal closures can therefore move a package into a lower recy-

clability band. Four operational areas can influence whether a glass package remains within the highest recyclability band. Lightweighting is one of them. Every 10 percent substitution of cullet in a furnace reduces energy consumption by 2.5-3 percent and CO2 emissions by approximately 5 percent, according to the FEVE and EPA figures cited in the source material. Reducing bottle weight also lowers transport emissions per delivered unit.

SPECIFICATION MOVES UPSTREAM

Closure coordination is another consideration. Matching the cap and liner to the same polymer family as the recycling stream in the destination market helps prevent the closure from contaminating the cullet. Decoration choices also have an effect: heavy-metal pigments and certain ceramic enamels can be removed from a design or reserved for markets in which buyers accept a lower recyclability grade. Documentation forms the fourth operational area. A Declaration of Conformity can identify the percentage of recy-

cled content, or cullet, together with the composition of decoration and the relevant destination-market recyclability grade under PPWR. These details increasingly form part of the information required by buyers assessing the package as a complete system. Shanghai-based Optimizing Glass Bottle supplies EU and US buyers and works with audited partner glassworks across China's main glass-producing regions. The company has consolidated the underlying figures into a free-to-cite, footnoted reference page, accessible from its website. The data hub also contains a state-by-state US EPR map and the PPWR recyclability-grade schedule. As PPWR recyclability grading becomes progressively stricter between 2030 and 2038 and additional US states activate EPR requirements, the advantage associated with the glass container increasingly depends on specification choices made upstream. Cullet content, closure coordination and decoration control therefore become central considerations alongside the recyclability of the glass itself. ■

Optimizing Glass Bottle

OPTIMIZING GLASS BOTTLE

Jiuting, Songjiang
Shanghai 201615 - CHINA
Tel. +86 21 15618361943
bella@optimizingpack.com

www.optimizingglassbottle.com



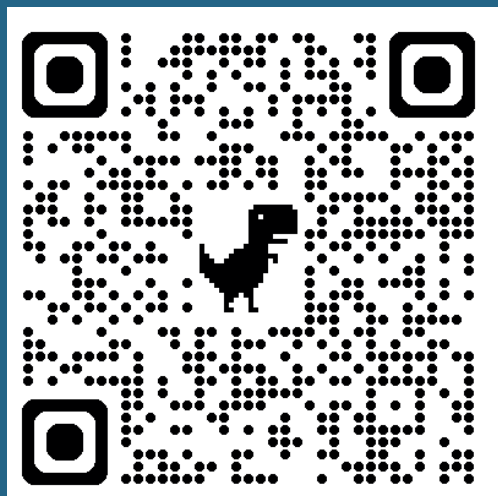
DECEMBER 01-03, 2026

**UZ EXPO CENTRE
TASHKENT, UZBEKISTAN**



**The Only Dedicated
Glass Industry Exhibition
in Central Asia**

BOOK YOUR SPACE



INFORMATION



**Expected
Exhibitors 150+**



**Expected
visitors 2500+**

follow us@ UzGlassExpo



Our Contact:

info@uzglass.com

www.uzglass.com



19-20
NOVEMBER
2026

AUDITORIUM SANTA ELISABETTA
UNIVERSITA' DEGLI STUDI DI PARMA
PARCO AREA DELLE SCIENZE 95,
43124, PARMA

ATIV GLASS DAYS XXXIX CONFERENCE

“Innovations in Furnace Efficiency, Glass Quality & Defects Control”

- Energy Efficiency in Glass Furnaces
- Electric Fusion & Hydrogen in Glass Production
- Improved Circularity & Reduced Use of Primary Raw Materials
- Identification of Glass Defects
- Quality Control Across Production
- Role of Artificial Intelligence in Glass Manufacturing Processes



For enquiries or to express an interest in attending
please contact us at segreteria@ativ.eu



ASSOVETRO

Associazione Nazionale degli Industriali del Vetro

suppliers guide

YELLOW PAGES

Listing in this section
is reserved for advertisers.

Reserved for advertisers | www.glassonline.com | Reserved for advertisers | www.glassonline.com

COMPANY

website

COMPANY

website



AGR INTERNATIONAL
www.agrintl.com



FAMOR ENGINEERING
www.famoreng.com



ALL GLASS S.R.L.
www.allglass.it



FERMAC
www.fermac.it



ANTONINI
www.antoninisrl.com



FIMA-OLIMPIA FONDERIE
www.fimaolimpia.it



BDF INDUSTRIES
www.bdfindustriesgroup.com



FLUORITAL
www.fluorital.com



BOHEMI CHEMICALS
www.bohemichemicals.com



FONDERIE VALDELSANE
www.fonderievaldelsane.com



BOTTERO
www.bottero.com



GCG - GLASS CONSULTING GROUP
www.glassconsultinggroup.it



BUCHER EMHART GLASS
www.emhartglass.com



GLASS SERVICE ITALY
www.glassservice.it



CAR-MET
www.carmetspa.it



HEYE INTERNATIONAL
www.hey-international.com



CAVART S.P.A.
www.cavart.it



HORN
www.hornglass.com



**DMA MASCHINEN
UND ANLAGENBAU**
www.dma.de



INTERGLASS / INTERLUB SA
www.interglass.global



EME
www.eme.de



IRIS INSPECTION MACHINES
www.iris-im.com



FALORNI TECH
www.falornitech.com



KOENIG & BAUER KAMMANN
www.kammann.de

FOR FURTHER INFORMATION PLEASE
CONTACT OUR ADVERTISING DEPARTMENT:
tel: +39 - 02 - 66306866
e-mail: publications@glassonline.com

suppliers guide

YELLOW PAGES

Reserved for advertisers | www.glassonline.com

Reserved for advertisers | www.glassonline.com

COMPANY

website

COMPANY

website



KYP
ACCESORIES

KYP ACCESORIES
www.kypaccesories.com



LAHTI GLASS TECHNOLOGY
www.lahti-glass.fi



LINCO BAXO
www.lincobaxo.com



LUBEN GLASS
www.lubenglass.eu



MARPOSS
www.marposs.com



**MODERNE
MECANIQUE**

MODERNE MECANIQUE
www.ocmigroup.com



NIROX SRL
www.nirox.it



OCMI

OCMI OTG
www.ocmigroup.com



**OLIVOTTO GLASS
TECHNOLOGIES**
www.olivotto.it



OMS
www.omsspa.com



OMSO SPA
www.omso.it

pennekamp

PENNEKAMP
www.pennekamp.de



PEREGO GIANCARLO
www.gperego.it



Pneumofore

PNEUMOFORÉ
www.pneumofore.com



RAMSEY PRODUCTS
www.ramseychain.com



REGINA CATENE CALIBRATE S.P.A.
www.reginachain.net



RONDOT GROUP
www.rondot-group.com



SIGMA GROUP
www.sigmaref.it



SKS - SORG KERAMIK SERVICE
www.sks.net



SORG NIKOLAUS
www.sorg.de



STARA GLASS
www.staraglass.com



TECO GROUP
www.teco.com



TECSIGLASS
www.tecsiglass.com



VERTECH'
www.vertech.eu

suppliers guide

Y E L L O W P A G E S

Reserved for advertisers | www.glassonline.com | Reserved for advertisers | www.glassonline.com

COMPANY

website

COMPANY

website



VETROMECCANICA
www.vetromeccanica.it



VIDEO SYSTEMS
www.videosystems.it



VMA
www.vma-online.de



WALTEC MASCHINEN
www.waltec.de



ZIPPE
www.zippe.de

[glassOnline click here](#)

AGVS/LGV

Tecnoferrari

A.I. NIR FURNACE CAMERAS

GS - Glass Service

AIR COOLING SYSTEMS

KYP Accesories
Luben Glass
Stara Glass
Tecsiglass

AIR COOLING SYSTEMS FOR I.S. MACHINES

Bottero
Rondot Group

AIR COMPRESSORS

Pneumofore

ALLOYS FOR MOULDS

Changshu Jianhua
Mould Technology
Fonderie Valdelsane

AMPOULE AFTER FORMING MACHINES/LINES

KYP Accesories
Moderne Mecanique
OCMI OTG
Pennekamp
Stevanato Group

AMPOULE FORMING MACHINES/LINES

Euromatic
KYP Accesories
Moderne Mecanique
OCMI OTG
Stevanato Group

AMPOULE PACKAGING MACHINES

Euromatic
KYP Accesories
Moderne Mecanique
OCMI OTG
R.Cestaro
Stevanato Group

ARCHITECTURE OF A FURNACE HEAT RECOVERY SYSTEM

Stara Glass

ARTICLE PRODUCTION

Olimerk

ARTIFICIAL INTELLIGENCE

CavArt
Video Systems

AUTOMATIC TUBE LOADERS

Euromatic
KYP Accesories
Moderne Mecanique
OCMI OTG
R.Cestaro
Stevanato Group

AUTOMATION

CavArt
EME
GS - Glass Service
Lahti Glass Technology
Luben Glass
Mimsan Conveyor Systems
R.Cestaro
Rondot Group
Stara Glass
Tecsiglass

Vetromeccanica Video Systems ZIPPE

BAG FILTERING PLANTS

BDF Industries
Stara Glass

BATCH CHARGERS

BDF Industries
Electroglass
EME
Falorni Tech
GCG - Glass Consulting
Glass Service
Horn
Lahti Glass Technology
MT Forni Industriali
Sorg Nikolaus
Stara Glass
TECO Group
ZIPPE

BATCH AND CULLET HANDLING SYSTEMS

CavArt
EME
Falorni Tech
Lahti Glass Technology
ZIPPE

BATCH/CULLET PREHEATERS

EME
GCG - Glass Consulting
Sorg Nikolaus
ZIPPE

BATCH PLANTS

CavArt
EME
Falorni Tech
GCG - Glass Consulting
Glass Service
HFT
Lahti Glass Technology
Stara Glass
TECO Group
Tecsiglass
Vidromecanica
ZIPPE

BLOWING MACHINES

Bucher Emhart Glass
Famor Engineering
Olivotto Glass Technologies
Rondot Group
Waltec Maschinen

BURN-OFF MACHINES

Famor Engineering
Olivotto Glass Technologies
Waltec Maschinen

BURNERS & ACCESSORIES

BDF Industries
Car-Met
Falorni Tech
Famor Engineering
GCG - Glass Consulting
KYP Accesories
Glass Service
Horn
Luben Glass
Moderne Mecanique
MT Forni Industriali
OCMI OTG

Olivotto Glass Technologies
Pennekamp
Sorg Nikolaus
Stara Glass
Tecsiglass
Waltec Maschinen

BURNERS/ LOW NOX

BDF Industries
Falorni Tech
Famor Engineering
GCG - Glass Consulting
Glass Service
Horn
KYP Accesories
Pennekamp
Sorg Nikolaus
Stara Glass

BURNERS/ OXY-FUEL

BDF Industries
Falorni Tech
Glass Service
KYP Accesories
MT Forni Industriali
Olivotto Glass Technologies
Sorg Nikolaus
Stara Glass

CARPOULE AFTER FORMING MACHINES LINES

Moderne Mecanique
OCMI OTG

CARPOULE FORMING MACHINES LINES

Moderne Mecanique
OCMI OTG

CAST IRON FOR MOULDS

Changshu Jianhua
Mould Technology
Fima Olimpia
Fonderie Valdelsane

COATING OF GLASS SYSTEMS & MATERIALS (HOT COLD-END)

Bohemi Chemicals
Fluorital
Graphoidal Developments
Luben Glass
Pennekamp
R.Cestaro
Rondot Group
Tecnosens
Vidromecanica

COGENERATION AND TRIGENERATION THROUGH HEAT RECOVERY SYSTEMS

BDF Industries

COLD-END LINES

ACH - Advanced
Container Handling
All Glass
Bucher Emhart Glass
DMA Maschinen
und Anlagenbau
Heye International
Iris Inspection Machines
KYP Accesories
Mimsan Conveyor Systems
MSK Coverttech
Pennekamp
R.Cestaro
Regina Catene Calibrate
Rondot Group
Tecnosens
Vetromeccanica

COLOURS & ENAMELS

Bohemi Chemicals

GCG - Glass Consulting Fluorital

CONSULTING SERVICES

AGR International Inc
BDF Industries
Bucher Emhart Glass
Falorni Tech
Bucher Automation
Fives
GCG - Glass Consulting
GS - Glass Service
HFT
Horn
Luben Glass
Olivotto Glass Technologies
Rondot Group
Stara Glass
TECO Group
Tecsiglass
Video Systems

CONTROL & AUTOMATION SYSTEMS

BDF Industries
Bottero
Bucher Automation
Bucher Emhart Glass
CavArt
DMA Maschinen
und Anlagenbau
Falorni Tech
GCG - Glass Consulting
Glass Service
GS - Glass Service
Lahti Glass Technology
Luben Glass
Horn
Iris Inspection Machines
Marposs
MSK Coverttech
Nirox
Olivotto Glass Technologies
Rondot Group
Stara Glass
TECO Group
Tecnoferrari
Tecnosens
Tecsiglass
VMA
Video Systems
Waltec Maschinen
ZIPPE

CONVEYING & STOCKING SYSTEMS

All Glass
MSK Coverttech
Olimerk
OMS
Ramsey Products
Regina Catene Calibrate
Rondot Group
Tecnoferrari
Vetromeccanica

CONVEYOR BELTS

Bonaiti Pietro
Bottero
Car-Met
CavArt
DMA Maschinen
und Anlagenbau
Famor Engineering
Luben Glass
Olivotto Glass Technologies
Pennekamp
Pennine
Ramsey Products
Regina Catene Calibrate
Rondot Group
Vetromeccanica
Vidromecanica
Waltec Maschinen
WBT
ZIPPE

CONVEYOR CHAINS & SPROCKETS (HOT-END)

Bonaiti Pietro
Bottero
Luben Glass
Pennine
Ramsey Products
Rondot Group
WBT
ZIPPE

CRACK-OFF MACHINES

Olivotto Glass Technologies
Waltec Maschinen

CROSS CONVEYORS

BDF Industries
Bonaiti Pietro
Bottero
Bucher Emhart Glass
Car-Met
DMA Maschinen
und Anlagenbau
Ergon Meccanica
Famor Engineering
Heye International
Luben Glass
MT Forni Industriali
Olimerk
Pennekamp
Ramsey Products
Rondot Group
Vidromecanica
Waltec Maschinen
WBT

CULLET SEPARATION & TREATMENT SYSTEMS

CavArt
EME
Falorni Tech
GCG - Glass Consulting
Lahti Glass Technology
Vidromecanica
ZIPPE

DATAMATRIX READING DEVICES

TIAMA

DECORATING MACHINES

Fermac
Koenig & Bauer
Kammann
Pennekamp
Omso

DECORATION CUTTING MACHINES

Waltec Maschinen

DECORATIVE ENAMELS

Fluorital
GCG - Glass Consulting

DEDUSTING & FILTERING SYSTEMS

BDF Industries

DIVERTER SYSTEM

DMA Maschinen
und Anlagenbau

DOSING SYSTEMS: COLD-END EMULSIONS

Bottero
GCG - Glass Consulting
Graphoidal Developments
Luben Glass
Pennekamp
R.Cestaro
Rondot Group
Vidromecanica

DOSING SYSTEMS: GOB CUTTING LUBRICATION

Bottero
Graphoidal Developments
Luben Glass
R.Cestaro
Rondot Group

DOUBLE SHELL RECUPERATOR

Stara Glass

DRIVE SYSTEMS / VARIABLE SPEED

BDF Industries
Bottero
Bucher Automation
Fives
Heye International

Olivotto Glass Technologies
Pennekamp
Tecnoferrari

DROPPER AFTER-FORMING MACHINES/LINES

Moderne Mecanique
OCMI OTG

DROPPER FORMING MACHINES/LINES

Moderne Mecanique
OCMI OTG

ELECTRIC BOOSTING SYSTEMS

BDF Industries
Bock Energietechnik
Electroglass
Falorni Tech
Fives
GCG - Glass Consulting
Glass Service
Horn
Sorg Nikolaus
Stara Glass
TECO Group

ELECTRONIC CONTROL SYSTEMS AND IT

BDF Industries
Bock Energietechnik
Bucher Automation
Glass Service
Horn
Olivotto Glass Technologies
Rondot Group
Sorg Nikolaus
Stara Glass
TECO Group
Tecsiglass
Waltec Maschinen
ZIPPE

ELECTRODE HOLDERS

Bock Energietechnik

Electroglass

Fives

GCG - Glass Consulting

Glass Service

Horn

Sorg Nikolaus

Stara Glass

TECO Group

ELECTRODE HOLDERSHOT AND COLD FURNACE INSTALLATION

Horn

TECO Group

EMISSION MONITORING SYSTEMS

BDF Industries

GS - Glass Service

EMULSION DOSING SYSTEMS

Bottero

Graphoidal Developments

Luben Glass

Pennekamp

R.Cestaro

Rondot Group

ENERGY RECOVERING SYSTEMS

BDF Industries

Falorni Tech

Luben Glass

Novaxion

Rondot Group

Stara Glass

Tecsiglass

ZIPPE

ENGINEERING SERVICES

Falorni Tech

TECO Group

ENGINEERING AND MODELLING FOR BOOSTING SYSTEMS

Bock Energietechnik

Horn

ENGRAVING MACHINES

TIAMA

FEEDERS & MECHANISMS

BDF Industries

Bottero

Bucher Emhart Glass

Ergon Meccanica

Famor Engineering

Fives

Glass Service

Heye International

Olivotto Glass Technologies

Waltec Maschinen

FIBREGLASS/ GLASSWOOL PRODUCTION LINES, EQUIPMENT & PRODUCTS

Falorni Tech

Glass Service

HFT

Olivotto Glass Technologies

Stara Glass

TECO Group

Tecsiglass

FINISHING MACHINES

KYP Accesories

FIRE POLISHERS & EQUIPMENT

Bucher Automation

Famor Engineering

Luben Glass

Olivotto Glass Technologies

Vidromecanica

Waltec Maschinen

FOREHEARTHS & SYSTEMS

BDF Industries

Bock Energietechnik

Bottero

Electroglass

Falorni Tech

Fives

GCG - Glass Consulting

Glass Service

HFT

Horn

MT Forni Industriali

Sorg Nikolaus

Stara Glass

TECO Group

Tecsiglass

FORMING MACHINES

Amig - Ocmi - MT Forni

BDF Industries

Bottero

Bucher Emhart Glass

Ergon Meccanica

Famor Engineering

Heye International

KYP Accesories

Novaxion

OCMI OTG

Olivotto Glass Technologies

Stevanato Group

Rondot Group

Waltec Maschinen

FURNACES: BUBBLING SYSTEMS

BDF Industries

Bock Energietechnik

Electroglass

Falorni Tech

GCG - Glass Consulting

Glass Service

Horn

Sorg Nikolaus

Stara Glass

TECO Group

Tecsiglass

FURNACES: CLEANING SYSTEMS

Glass Service

Stara Glass

Tecsiglass

FURNACES: DRAINING SYSTEMS

Bock Energietechnik

Falorni Tech

GCG - Glass Consulting

Glass Service

Horn

Sorg Nikolaus

Stara Glass

Tecsiglass

FURNACES: ELECTRIC

Bock Energietechnik

Electroglass

Falorni Tech

Fives

Glass Service

GS - Glass Service

Horn

KYP Accesories

Sorg Nikolaus

Stara Glass

TECO Group

Tecsiglass

FURNACES: HEAT-UP

BDF Industries

Falorni Tech

Glass Service

Horn

Sorg Nikolaus

Stara Glass

Tecsiglass

FURNACES: HOT CULLET FILLING

Falorni Tech

suppliers guide

Y E L L O W P A G E S

Reserved for advertisers |

www.glassonline.com

Reserved for advertisers |

www.glassonline.com

Stara Glass
Tecsiglass

FURNACES: MELTING

BDF Industries
Bock Energietechnik
Falorni Tech
Fives
Glass Service
Horn
MT Forni Industriali
Sorg Nikolaus
Stara Glass
TECO Group
Tecsiglass

FURNACES: METAL STRUCTURES

BDF Industries
Car-Met
Falorni Tech
Glass Service
HFT
Horn
Stara Glass
Tecsiglass

FURNACES: OXY-FUEL OR RECUPERATIVE

BDF Industries
Falorni Tech
Fives
Glass Service
HFT
Horn
MT Forni Industriali
Sorg Nikolaus
Stara Glass
TECO Group
Tecsiglass

FURNACES: PREHEATING SYSTEMS

Commersald Impianti
Falorni Tech
Glass Service
Horn
Olivotto Glass Technologies
Sorg Nikolaus

Stara Glass
Tecsiglass

FURNACES: REPAIR, MAINTENANCE & REVAMPING

BDF Industries
Bock Energietechnik
Electroglass
Falorni Tech
Glass Service
HFT
Horn
Sorg Nikolaus
Stara Glass
TECO Group
Tecsiglass

GASES

Glass Service

GLASS ANALYSIS AND TESTING SERVICES

AGR International Inc

GLASS BRICK PRODUCTION LINES

Amig - Ocmi - MT Forni
Olivotto Glass Technologies
Stara Glass
Waltec Maschinen

GLASS LEVEL CONTROL DEVICES

BDF Industries
Bock Energietechnik
Electroglass
Falorni Tech
GCG - Glass Consulting
Glass Service
Horn
MT Forni Industriali
Olivotto Glass Technologies
Sorg Nikolaus
Stara Glass
ZIPPE

GLASS METALISATION PROCESS MATERIALS

Fluorital

GLASS RECYCLING PLANTS

CavArt
EME
Falorni Tech
GCG - Glass Consulting
Lahti Glass Technology
Vidromecanica
ZIPPE

GOB WEIGHT CONTROL SYSTEMS

BDF Industries
Bucher Emhart Glass
Heye International
Olivotto Glass Technologies
Waltec Maschinen

HANDLING EQUIPMENT

All Glass
BDF Industries
Bottero
Bucher Emhart Glass
Famor Engineering
Luben Glass
MSK Coverttech
Olivotto Glass Technologies
OMS
Pennekamp
R.Cestaro
Rondot Group
Vetromeccanica
Waltec Maschinen

HEAT RECUPERATORS

BDF Industries
Falorni Tech
Glass Service
Horn
Luben Glass
MT Forni Industriali

Sorg Nikolaus
Stara Glass

HEAT REGENERATION PLANTS

Falorni Tech
Glass Service
Horn
Stara Glass

HEATING SYSTEMS

Bock Energietechnik
Falorni Tech
Glass Service
Horn
Pennekamp
Stara Glass

HIGH TEMPERATURE INSULATION RODUCTS

Rondot Group

HYBRID FURNACE & FOREHEARTH SYSTEM

Stara Glass

HYDROGEN BURNERS

Stara Glass

HOT-END PROCESS MONITORING SOLUTIONS

Falorni Tech
TIAMA

HOT GLASS CONTACT MATERIALS

Bucher Emhart Glass

Olivotto Glass Technologies
Rondot Group

HOT GLASS SCRAPES

Car-Met
Falorni Tech
GCG - Glass Consulting
Stara Glass
Vidromecanica
ZIPPE

INFRARED THERMOMETERS

GCG - Glass Consulting
GS - Glass Service
KYP Accesories
Rondot Group

INFRARED TUBES

Famor Engineering
Heye International
Olivotto Glass Technologies

INSPECTION MACHINES: COLD-END

AGR International Inc
Bucher Emhart Glass
Euromatic
Heye International
KYP Accesories
Iris Inspection Machines
Luben Glass
Marposs
Regina Catene Calibrate
TIAMA
Tecnosens
Video Systems
VMA

INSPECTION MACHINES: HOT-END

BDF Industries
Bucher Emhart Glass
Euromatic
Heye International
KYP Accesories

Marposs
Moderne Mecanique
OCMI OTG
Olivotto Glass Technologies
TIAMA
Tecnosens
Video Systems

INSPECTION MACHINES: VIALS & AMPOULES

Euromatic
Iris Inspection Machines
KYP Accesories
Marposs
Moderne Mecanique
Nirox
OCMI OTG
Stevanato Group
Tecnosens
Video Systems

I.S. MACHINES

BDF Industries
Bottero
Bucher Emhart Glass
Ergon Meccanica
Heye International
Novaxion

I.S. MACHINES LUBRICATION SYSTEMS

BDF Industries
Bottero
Bucher Emhart Glass
Graphoidal Developments
Heye International
Interglass S.D. DE C.V.
Luben Glass
Novaxion
Rondot Group

I.S. MACHINE RECONDITIONING

BDF Industries
Bottero
Bucher Emhart Glass
Ergon Meccanica
Heye International
Luben Glass

Novaxion
Rondot Group

LABORATORY FURNACES POLARISCOPES

MT Forni Industriali

LABORATORY TESTING AND MEASUREMENT EQUIPMENT

AGR International Inc
Marposs

LASER CUTTING MACHINES

Olivotto Glass Technologies
Waltec Maschinen

LEHR DRIVES

Fives
Heye International
Pennekamp

LEHRs: ANNEALING

Antonini
Bonaiti Pietro
Car-Met
Euromatic
Fives
Heye International
KYP Accesories
Moderne Mecanique
MT Forni Industriali
OCMI OTG
Pennekamp
Tecnosens
Vidromecanica

LEHRs: DECORATING

Antonini
Bonaiti Pietro
Car-Met

MT Forni Industriali
Pennekamp

Vidromecanica

LOW NOX BURNERS

Pennekamp
Stara Glass

MAINTENANCE AND REPAIR SERVICES

Bock Energietechnik
Bottero
DMA Maschinen und Anlagenbau
Ergon Meccanica
Fives
Luben Glass
Olimerk
Pennekamp
Rondot Group
SKS - Sorg Keramik Service
Stara Glass
Tecsiglass

MARKING MACHINES

Luben Glass
Sorg Nikolaus

MEASUREMENT & CONTROL SYSTEMS

AGR International Inc
BDF Industries
Bock Energietechnik
Bucher Emhart Glass
Bucher Automation
GS - Glass Service
Horn
KYP Accesories
Luben Glass
Marposs
Nirox
Novaxion
Olivotto Glass Technologies
Stara Glass
Tecnosens
Video Systems
VMA
Waltec Maschinen

suppliers guide

Y E L L O W P A G E S

Reserved for advertisers |

www.glassonline.com |

Reserved for advertisers |

www.glassonline.com

MICRONIZATION

Stm Microtec

MILLING AND GRINDING

Stm Microtec

MIXERS

EME

**GCG - Glass Consulting
KYP Accesories**

Lahti Glass Technology

MT Forni Industriali

R.Cestaro

Stara Glass

Teka

ZIPPE

MOLYBDENUM ELECTRODES

Electroglass

Stara Glass

MOULDS

Changshu Jianhua
Mould Technology

Officine

**Perego Giancarlo
Rondot Group**

MOULDS: CLEANING POLISHING MACHINES

BDF Industries

Ecotecne

Luben Glass

Rondot Group

MOULDS: COMPONENTS & ACCESSORIES

Changshu Jianhua
Mould Technology

Officine

Olimerk

**Perego Giancarlo
Rondot Group**

MOULDS: INSPECTOR SYSTEM

**Luben Glass
Rondot Group**

MOULDS: LUBRICANTS & SPRAY EQUIPMENT

Graphoidal Developments
Interglass S.D. DE C.V.

Luben Glass

Novaxion

R.Cestaro

Rondot Group

MOULDS: MAINTENANCE EQUIPMENT

Ecotecne

**Luben Glass
Rondot Group**

MOULDS: POLISHING MACHINE

**Luben Glass
Rondot Group**

MOULDS: PREHEATING OVENS

**Antonini
Bottero
Car-Met**

Luben Glass

MT Forni Industriali

Olivotto Glass Technologies

Pennekamp

Rondot Group

Vidromecanica

MOULDS: WELDING LINES

Commersald Impianti
Rondot Group

MOULDS & PLUNGERS COATING SYSTEMS & MATERIALS

Commersald Impianti
Rondot Group

MOULDS BY CERAMICS CASTING PROCESS

Rondot Group

NECK RINGS

Changshu Jianhua
Mould Technology

Olimerk

**Perego Giancarlo
Rondot Group**

PALLETIZING/ DEPALLETIZING LINES

ACH - Advance
Container Handling

All Glass

**DMA Maschinen
und Anlagenbau**

Messersì Packaging

Mimsan Conveyor Systems

MSK Covertech

**Olivotto Glass
Technologies**

OMS

R.Cestaro

**Regina Catene Calibrate
Vetromeccanica**

PASTE MOULD MACHINES

Olivotto Glass Technologies

PHARMACEUTICAL LEHRS & HANDLING

Pennekamp

PLANT UTILITIES

**GCG - Glass Consulting
Pneumofore
Tecsiglass**

PLATINUM FEEDER SYSTEMS

**BDF Industries
Glass Service
Olivotto Glass Technologies
Stara Glass**

PLUNGER HONING MACHINES

Bottero

PLUNGERS & MECHANISMS

**BDF Industries
Bottero
Bucher Emhart Glass**

Changshu Jianhua
Mould Technology

Olimerk

Olivotto Glass Technologies

Perego Giancarlo

Rondot Group

Waltec Maschinen

POLISHING/ GRINDING MACHINES

**Luben Glass
Olivotto Glass Technologies**

POWER REGULATION/ TRANSFORMERS

Bock Energietechnik

PREDICTIVE SOLUTIONS

Video Systems

PRESS MACHINES

Bucher Emhart Glass
Famor Engineering
MT Forni Industriali
Olivotto Glass Technologies
OCMI OTG
Waltec Maschinen

PRESS & BLOW MACHINES

Bucher Emhart Glass
Famor Engineering
Heye International
Messersì Packaging
MT Forni Industriali
Novaxion
OCMI OTG
Olivotto Glass Technologies
Waltec Maschinen

PRESS RECONDITIONING

Famor Engineering
Luben Glass
Olivotto Glass Technologies

PRODUCTION ASSISTANCE FOR HOLLOW GLASS

Olimerk

PUSHERS

BDF Industries
Bottero
Car-Met
EME
Famor Engineering
Fives
Heye International
Luben Glass
Olivotto Glass Technologies
Waltec Maschinen

RAW MATERIALS

Bohemi Chemicals

GCG - Glass Consulting
Minerali Industriali

RECYCLING PROCESSES

CavArt
EME
Lahti Glass Technology

RECYCLING SYSTEMS

Bucher Emhart Glass
CavArt
EME
Falorni Tech
GCG - Glass Consulting
Lahti Glass Technology
Linco Baxo
Olivotto Glass Technologies
SIGMA
Waltec Maschinen
ZIPPE

REFRATORIES

Tecsiglass

REFRATORIES INSTALLATION SERVICES

Bucher Emhart Glass
Falorni Tech
HFT
Horn
SKS - Sorg Keramik
Service
Stara Glass
Tecsiglass

REPLACEMENT PARTS

DMA Maschinen
und Anlagenbau
Fives
Olimerk
Olivotto Glass Technologies
Stara Glass

TECO Group
Waltec Maschinen

ROBOTS: BALL GATHERERS

Falorni Tech
Glass Service
Novaxion
Olivotto Glass Technologies
Rondot Group
Waltec Maschinen

ROBOTS: HANDLING & PACKAGING

ACH - Advanced
Container Handling
All Glass
Euromatic
Falorni Tech
Famor Engineering
KYP Accesories
Messersì Packaging
MSK Coverttech
Novaxion
Olivotto Glass Technologies
R.Cestaro
Stevanato Group
Vetromeccanica
Waltec Maschinen

ROLLING MACHINE

Fives

ROTATING TABLES

Messersì Packaging
Olivotto Glass Technologies
OMS
Vetromeccanica
Waltec Maschinen

SANDBLASTING MACHINE

Luben Glass

SAW MACHINES

Olivotto Glass Technologies

SECOND-HAND EQUIPMENT

BDF Industries
Ergon Meccanica
Falorni Tech
Heye International
KYP Accesories
Novaxion
Olivotto Glass Technologies
Pennekamp
Rondot Group
Vidromecanica

SERVICES

AGR International Inc
Bock Energietechnik
DMA Maschinen
und Anlagenbau
EME
Ergon Meccanica
Falorni Tech
Fives
Novaxion
Olimerk
Rondot Group
Stara Glass
TECO Group
Tecsiglass

SERVICES IN HOT-DRILLING AND CHANGE OF ELECTRODE HOLDERS

Bock Energietechnik

SHEAR BLADES

BDF Industries
Famor Engineering
Heye International
Luben Glass
Rondot Group
WBT

SHEAR BLADES LUBRICANTS

Graphoidal Developments

suppliers guide

Y E L L O W P A G E S

Reserved for advertisers |

www.glassonline.com |

Reserved for advertisers |

www.glassonline.com

Interglass S.D. DE C.V.
Luben Glass
Rondot Group

SHEAR SYSTEMS

BDF Industries
Bottero
Famor Engineering
Graphoidal Developments
Heye International
Luben Glass
Olivotto Glass Technologies
Rondot Group
Waltec Maschinen

SHUTTLE CARS

Tecnoferrari

STRETCH & SHRINK FILM WRAP MACHINES

All Glass
Messersì Packaging
MSK Covertex
OMS
Tecnosens
Vetromeccanica

SHRINK OVENS

Messersì Packaging
OMS

SILKSCREEN INKS

Fluorital

SILKSCREEN PRINTING LINES: HOLLOWARE & TABLEWARE

Euromatic
Fermac

SILKSCREEN PRINTING LINES: VIALS & AMPOULES

Moderne Mecanique
OCMI OTG

SOFTWARE

CavArt
BDF Industries
Bottero
Bucher Emhart Glass
Bucher Automation
GS - Glass Service
Heye International
Olivotto Glass Technologies
Rondot Group
Stara Glass
Tecnoferrari
Tecsiglass
TIAMA
Vertech'
Vetromeccanica
Video Systems
Waltec Maschinen

SPINNING MACHINES

Famor Engineering
Olivotto Glass Technologies
Waltec Maschinen

SPOUT ELECTRICAL HEATING ELEMENTS

Bock Energietechnik

STACKERS

All Glass
BDF Industries
Bottero
Bucher Emhart Glass
Car-Met
DMA Maschinen
und Anlagenbau
Famor Engineering
Luben Glass
MT Forni Industriali
Olivotto Glass Technologies

Pennekamp
Regina Catene Calibrate
Rondot Group
Vidromecanica
Waltec Maschinen

STEMWARE PRODUCTION LINES

Falorni Tech
Olivotto Glass Technologies
Vidromecanica
Waltec Maschinen

STEMWARE SEALING MACHINES

Falorni Tech
OCMI OTG
Olivotto Glass Technologies
Waltec Maschinen

STIRRERS

BDF Industries
Bottero
Falorni Tech
Fives
GCG - Glass Consulting
Glass Service

Horn
MT Forni Industriali
Olimerk
Olivotto Glass Technologies
Stara Glass
Vidromecanica

SUCTION GATHERERS

Falorni Tech
Olivotto Glass Technologies

SYRINGE AFTER FORMING MACHINES/LINES

Euromatic

SYRINGE FORMING MACHINES/LINES

Euromatic

SYRINGE FILLING INTO TRAY MACHINES/MODULES

Euromatic

SUPERVISORS MODEL BASED PREDICTIVE CONTROL

GS - Glass Service

TAKE-OUT DEVICES & EQUIPMENT

BDF Industries
Bottero
Bucher Emhart Glass
Falorni Tech
Famor Engineering
Luben Glass
Olimerk
Olivotto Glass Technologies
Ramsey Products
Rondot Group
Vidromecanica
Waltec Maschinen

TEMPERATURE MEASUREMENT & CONTROL

BDF Industries
Bock Energietechnik
Bucher Emhart Glass
Falorni Tech
Graphoidal Developments
GS - Glass Service
Horn
KYP Accesories
Novaxion
Pennekamp
Rondot Group
Stara Glass

TEMPERING LINES

Pennekamp
Vidromecanica
Waltec Maschinen

THERMAL CLEANING SYSTEM FOR FURNACE

Stara Glass
Tecsiglass

THERMAL SHOCK TEST MACHINES

Vidromecanica

THERMOCOUPLES & ASSEMBLIES

Bock Energietechnik
Falorni Tech
Fives
GCG - Glass Consulting
Stara Glass

THERMO SHOCK TEST MACHINES

BDF Industries

TIN OXIDE ELECTRODES & CONNECTORS

Horn
Stara Glass
TECO Group

TRAINING SERVICES

AGR International Inc

TOOLS & EQUIPMENT

Bottero
Fives
Luben Glass
Rondot Group
Stara Glass

TUBING LINES

Falorni Tech

Olivotto Glass Technologies Stara Glass

TURNKEY PLANTS ENGINEERING & CONSTRUCTION

Amig - Ocmi - MT Forni
BDF Industries

CavArt
DMA Maschinen
und Anlagenbau
Falorni Tech

EME
Glass Service
HFT

Horn
Olivotto Glass Technologies
Rondot Group
Stevanato Group
Stara Glass
TECO Group
Waltec Maschinen

UV LAMPS

Graphoidal Developments

VACUUM PLANTS & ACCESSORIES

Pneumofore
Rondot Group

VACUUM PUMPS

Pneumofore
Rondot Group

VIAL AFTER FORMING MACHINES/LINES

Euromatic
Moderne Mecanique
OCMI OTG
Pennekamp
Stevanato Group

VIAL FORMING MACHINES/LINES

Euromatic
Moderne Mecanique
OCMI OTG
Pennekamp
Stevanato Group

VIAL PACKAGING MACHINES

Euromatic
KYP Accesories
Moderne Mecanique
OCMI OTG
R.Cestaro
Stevanato Group

VIBRATING EQUIPMENT

CavArt
EME
Lahti Glass Technology
Vetromeccanica
ZIPPE

WASTE GAS CLEANING SYSTEMS

BDF Industries

WASTE GASES DUCT WORKS AND VALVES CLEANING SYSTEMS

BDF Industries

WATER CLEANING SYSTEMS

BDF Industries

Graphoidal Developments

Luben Glass
Rondot Group
Tecsiglass
ZIPPE

WATER COOLING SYSTEMS

Bock Energietechnik

Listing in this section is reserved for advertisers.

www.glassOnline.com

**FOR FURTHER INFORMATION
PLEASE CONTACT OUR ADVERTISING
DEPARTMENT:**

tel: +39 - 02 - 66306866

e-mail: publications@glassonline.com

Glass Industry



Directory 2026



The glass the world wants

Efficient, reliable
glass

DOWNLOAD THE 2026 EDITION

We design and deliver cutting-edge glass furnace solutions tailor-made to the evolving needs of our clients, while minimizing environmental impact. We adopt the EPC (Engineering, Procurement and Construction) model to ensure efficiency and full project control.

DESIGN AND IMPLEMENTATION

Melting Furnaces | Forehearths | Equipment | Energy Recovery System | DeNOx Technologies

DIAGNOSTIC SERVICES

Heat Balance | Thermography
Endoscopy

DEDICATED SERVICES

Refractories Warehouse | Customer Support
Hot and Cold Repairs

staraglass.com

PART OF GROUPLTT

**Supplier
Profiles**

Yellow Pages

Sales Network

Contacts

Associations

**OVER
1,600
CONTACTS**

PUBLISHED BY



Preview

glasstec

In the following pages, readers will find a highly useful guide regarding advertisers of this issue who are exhibiting at Glasstec 2026

COMPANY	HALL & STAND	COMPANY	HALL & STAND
AGR INTERNATIONAL	14 C40	OCMI-OTG	13 B12
ALL GLASS	13 C41	OLIVOTTO GLASS TECHNOLOGIES	13 A43
ANTONINI	13 E04	OMS - OFFICINA MECCANICA SESTESE	13 C65
BDF INDUSTRIES	13 D43	OMSO	12 D15
BOTTERO	14 G23-24	PENNEKAMP	14 E20
BUCHER EMHART GLASS	13 C31	PEREGO GIANCARLO	13 E66
CAR-MET	13 B79	PNEUMOFORÉ	13 A60
EME	15 C44	RAMSEY PRODUCTS	13 C43
FALORNI TECH	13 A05	REGINA CATENE CALIBRATE	13 C78
FAMOR ENGINEERING	13 A05	RONDOT GROUP	13 C43
FERMAC	12 A31	SIGMA GROUP	13 B41
FIMA OLIMPIA FONDERIE	13 A40	SKS - SORG KERAMIK SERVICE	15 C44
FONDERIE VALDELSANE	13 B05	SORG NIKOLAUS	15 C44
GCG - GLASS CONSULTING GROUP	13 A31	STARA GLASS	13 E87
GLASS SERVICE ITALY	13 E14	TECO GROUP	13 B56
HEYE INTERNATIONAL	14 E03	TECSIGLASS	13 F32
HORN GLASS INDUSTRIES	13 C32	VERTECH'	14 C31
INTERGLASS	13 B75	VETROMECCANICA	13 F30
IRIS INSPECTION MACHINES	14 C20	VIDEO SYSTEMS	14 C23
KOENIG & BAUER KAMMANN	12 C31	VMA	14 C03
LAHTI GLASS TECHNOLOGY	15 F28	WALTEC	13 E69
LINCO BAXO GROUP	13 F34	ZIPPE	13 A31
LUBEN GLASS	13 C05		
MARPOSS	14 F52		
NIROX	14 A03		

Pick up your free copy:
Hall 14 - Stand A37

glassmachinery
world
plants & accessories
BI-MONTHLY INTERNATIONAL MAGAZINE FOR GLASS MANUFACTURING

AGR INTERNATIONAL

HALL 14
STAND C40

PEOPLE TO CONTACT AT OUR STAND

Marco Palma - Director of Sales & Service • Karan Marcellus - Marketing Manager
Marta de la Torre - Sales Director Europa, Brazil, Uruguay & Paraguay

COMPANY PROFILE

AGR INTERNATIONAL TO SHOWCASE PRODUCTIVITY-DRIVEN QUALITY MANAGEMENT AND REMOTE MONITORING SOLUTIONS AT GLASSTEC 2026, STAND 14/C40. Featured at glasstec will be the Gawis4Glass® measurement system that provides operators with the ability to perform multiple measurements, on a wide range of glass containers with unmatched accuracy, repeatability and operational throughput. This all-in-one dimensional measurement system is designed specifically to improve the efficiency and testing throughput of the glass container quality control laboratory. Gawis4Glass automates a number of critical bottle measurements into a single operation and performs a complete dimensional analysis in a matter of seconds. Operators can use AutoJob™ to automatically identify finish measurements, build a job from individually selectable measurement routines or choose from a library of industry standard or customized templates that include a collection of measurements and their associated limits.

Also featured will be the all-new AgrConnect™ remote machine monitoring platform. AgrConnect is a secure web platform designed to provide a realtime view into the status and performance of Agr equipment. By centralizing data and offering easy-to-use analysis tools, AgrConnect helps users to optimize overall production by understanding exactly how their equipment is running. This allows for informed, data-driven decisions to keep production operating efficiently and effectively. This web-based platform offers unified visibility of Agr equipment across production lines and facilities through dashboards and initiative-taking alerts.

Agr staff members will be available to discuss these products and the complete line of Agr quality management solutions and services for the glass container industry. As an industry leader for 100 years, Agr is committed to providing the glass container industry with the most technologically advanced products available for quality control and productivity improvement as well as a complete portfolio of services including analytical testing, training programs, design and testing. Agr products and services are designed to assist container producers and fillers stay competitive while meeting the increased quality demands of today's changing world.



AGR INTERNATIONAL, INC.

Karen Marcellus,
Marketing Manager
Butler, PA, USA 16001
☎ +1 - (724) - 482 - 2163
✉ kmarcellus@agrintl.com

www.agrintl.com

ALL GLASS GROUP

HALL 13
STAND C41

PEOPLE TO CONTACT AT OUR STAND

Marco Ballerini, Corrado Avanzini, Olsi Callekas,
Giosafatto Cuda, Matteo Bevini, Martina Orlandini
Tommaso Riccardi, Maicol Garavaldi, Diana Nagailic,
Massimo De Rossi, Andrea Bertinelli

PRODUCT RANGE

- Palletizing / Depalletizing systems
- Cold-End lines
- LGV and AGV systems
- Automatic Warehouses
- Glass resorting & quality control
- Integrated packaging & logistics (PLUS)

COMPANY PROFILE

ALL GLASS is an Italian industrial group with global presence. Founded in Traversetolo (Parma) in 1998, it designs and manufactures complete handling and palletizing installations for the packaging industry, and is a **worldwide leader in glass**.

Everything is engineered and built in Italy, across 43,000 m² of covered production. Sales reach over 100 countries, with installations and sales agencies on five continents, plus a branch in the USA. Turnkey cold-end lines run from lehrs to palletizers, including cullet conveyors, accumulating tables, bottle inverters and lowerators. The range also covers depalletizers, special devices, pallet transport lines with shuttle cars and LGV, shrink packaging machines and mould pre-heating furnaces. Engineering is developed in-house, and 4- and 6-axis robots are standard on a growing number of pal-depal systems.

The Resorting Division adds reworking and quality control lines for glassworks from three Italian plants, while PLUS, launched in 2025, covers integrated packaging and advanced logistics for food

and beverage industries.

Innovation, flexibility and closeness to the customers are what ALL GLASS builds its leadership on. **Something new is coming: discover it at our stand.**



ALL GLASS S.R.L.

Via Cesare Sarti, 20
43029 Traversetolo (PR) - Italy
☎ +39 - 0521 - 340810
✉ info@allglass.it

www.allglass.it

ANTONINI S.r.l.

HALL 13
STAND E04

PRODUCT RANGE

- Annealing lehrs
- Toughening lehrs
- Decorating lehrs
- Mould preheating ovens
- Annealing lehr
- Decorating lehr
- Tempering Lehrs
- Nis Lehr
- Thermal shock lehr
- Mould preheating kiln
- Cold end spray and dosing unit
- Scraper
- Upgrading and overhauling



ANTONINI
FLORENCE ITALY

ANTONINI S.R.L.

Via Medaglie d'Oro della Resistenza 2
50053 Empoli (FI) - Italy
☎ +39 - 0571 - 93221
✉ com@antoninisrl.com

www.antoninisrl.com

PEOPLE TO CONTACT AT OUR STAND

Barbara Antonini, Francesca Antonini, Giacomo Orselli

BDF INDUSTRIES S.p.A.

HALL 13
STAND D43

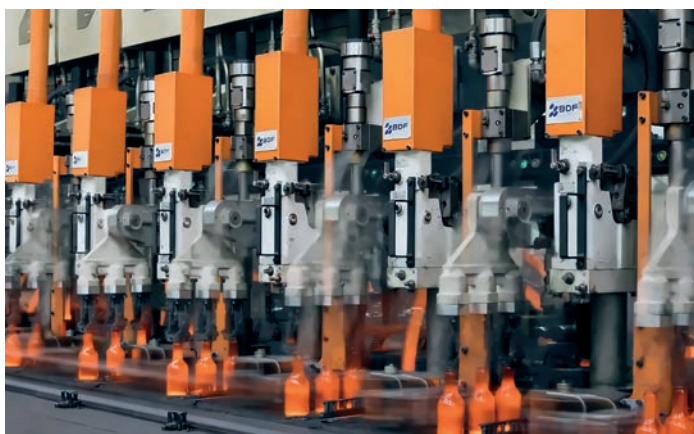
PRODUCT RANGE

MELTING: Engineering and feasibility studies, Furnaces, Working-Ends & Forehearth, Stirrers, Batch Chargers, Glass Level, Control and full range melting equipments.

FORMING: Feeder, IS Machines, Ware Handling, Variable Equipment, Enached Closed loops.

SERVICES: Worldwide assistance, 7 days a week, for installation, overhauling, repairs, training and performance improvement, covering both melting and forming.

ENGINEERING: Turnkey plants and plant co-management.



BDF
industries

BDF INDUSTRIES S.P.A.

Viale dell'Industria, 40
36100 Vicenza - Italy
☎ +39 - 0444 - 286100
✉ bdf@bdf.it
✉ Sales Department:
sales@bdf.it

www.bdfindustriessgroup.com

PEOPLE TO CONTACT AT OUR STAND

Our sales and technical staff will be glad to meet you.

BOTTERO S.P.A.

HALL 14
STAND G23/G24


BOTTERO S.P.A.

Via Genova 82
12100 Cuneo (CN)
☎ +39-0171-310611
✉ bottero@bottero.com

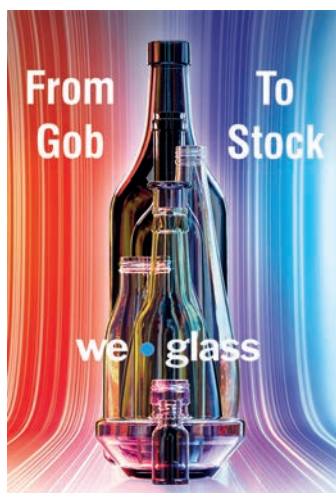
www.bottero.com

PEOPLE TO CONTACT AT OUR STAND

Giovanni Bensa - SALES DIRECTOR Hollow Glass

FROM GOB TO STOCK

The Bottero Group brings together technologies and engineering expertise across glass production and processing. Its activities span flat glass machinery, hollow glass equipment, turnkey solutions for solar glass manufacturing and end-of-line systems. At Glasstec 2026, Bottero's message for container glass is captured in four words:



From gob to stock. It expresses a portfolio that follows the glass container from forming through handling, palletizing and storage. It also reflects a practical view of the factory: each stage affects the performance of the whole production flow.

Within this offering, E2Pack is part of the Bottero Group. Its experience in end-of-line handling, palletizing and storage, together with the Zecchetti, Emmeti, Mectra, Sipac and Logik brands, extends Bottero's presence beyond the hot end of hollow glass production. Together, these capabilities address the journey

of the container; from the gob entering the forming process to finished packs in stock. From gob to stock is more than a description of equipment range: it is a way of looking at production needs across the plant and the contribution of each operation to the final result.

That perspective starts with the process itself. Glassmakers need stable production, consistent container quality and flexibility to respond to changing requirements. Bottero is developing its hollow glass technologies towards intelligent process automation, bringing mechanical engineering, controls and process knowledge closer together. The aim is to help operators understand changing conditions and act with greater precision.

This direction is grounded in Bottero's experience of glass production and the expertise of the people who design, commission and support its equipment. The next generation of process control must work in the glass plant, where glass behavior, machine settings and operator decisions interact continuously. By combining physical understanding with data-driven methods, Bottero is working towards solutions that can guide adjustments, stabilize forming and support consistent performance. Innovation grows from real operating challenges and is measured by its relevance on the production floor.

At Glasstec 2026, visitors can meet Bottero's specialists in Hall 14, Booth G23/G24, to discuss how this experience and the Group's From gob to stock perspective can support the evolving needs of container glass production.

BUCHER EMHART GLASS

HALL 13
STAND C31

BUCHER emhart glass

BUCHER EMHART GLASS

Hinterbergstrasse 22
CH-6312 Steinhausen
Switzerland
☎ +41 - 41 - 7494200
☎ +41 - 41 - 7494271

www.emhartglass.com

PEOPLE TO CONTACT AT OUR STAND

Giovanni Murialdo - VP Sales & Marketing
Lucienne Sproll - Marketing Manager

PRODUCT RANGE

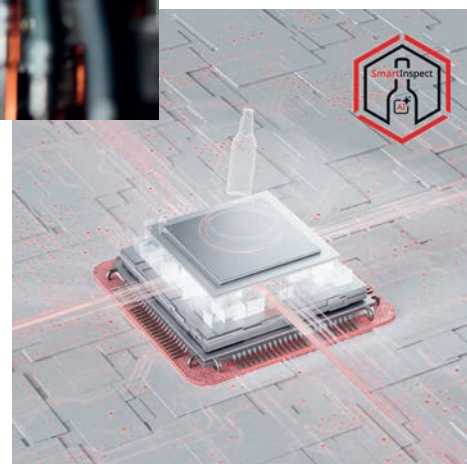
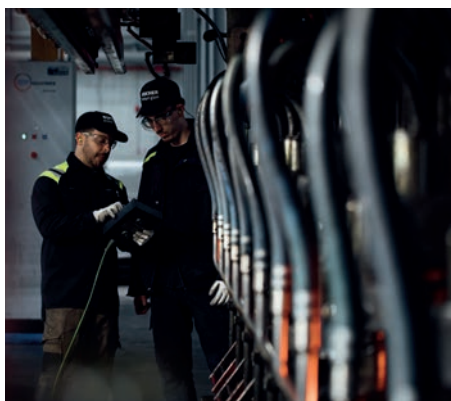
At glasstec 2026, Bucher Emhart Glass will present a range of technologies designed to help glass manufacturers achieve higher levels of productivity, automation, and quality.

Highlights at the booth will include the NIS II demonstrator representing the next step in the evolution of the NIS machine, an AIS section, SMARTFEEDER to automatically adjust the gob forming process and a Quick Change Orifice for gob control.

On the inspection side, visitors can explore the Master Track loop featuring FlexInspect T180 Gen III and FlexInspect C Gen III, together with SmartInspect AI, Bucher Emhart Glass's advanced AI-powered inspection solution designed to enhance accuracy, consistency, and process performance, representing the future of glass inspection.

Additionally, the Lifecycle Solutions team will be available to discuss customers' needs and help them maximize equipment performance. The offer ranges from long-term service agreements, technical support and training to original parts.

For the first time, cm.project.ing will be present at the Bucher Emhart Glass booth. As independent consultant in the glass industry the company supports glass plants from the very beginning of an investment project – covering idea, business plan, and implementation.



CAR-MET Srl

HALL 13
STAND B79

PEOPLE TO CONTACT AT OUR STAND

Mario Zanin - President
Tiziana Poles, Lara Mallardi - Sales Manager
International CAR-MET Agents

PRODUCT RANGE

- Annealing and decorating lehrs
- Tempering lines
- Lehrs for special use
- Mould pre-heating ovens
- Stackers
- Cross conveyors
- Hot glass scrapers

COMPANY PROFILE

CAR-MET has been dedicating its activities to the hollow glass and decorating industry for 53 years. It has developed its own technology aiming to improve the performance of its machines, always assuring lower consumption.

Strategic choices have been made to offer customers the highest technology available on the market.

CAR-MET has complete control of the construction of its machines: design, structure, mechanical components, combustion installation, burners and electrical installation, which are carried out inside the Italian plant. This system enables to control and assure quality standards, enabling to respect delivery terms, to have spare parts always available and to be always in the condition to satisfy customers' requests.



CAR-MET SRL

Via Cavour, 9 - 31010 Cimetta Di
Codogne' (TV) - Italy
☎ +39 - 0438 - 794784
✉ info@carmetspa.it

www.carmetspa.it

EME

HALL 15
STAND C44

PEOPLE TO CONTACT AT OUR STAND

Michael Sorg - Managing Partner
Grant Bailey - Managing Director
Sales Team
Walter Sturm, Andreas Beier, Bernd Baunach,
Jörg Pontzen, David Russek, Livia Ivan, Kevin Amrhein

PRODUCTS BEING PROMOTED

- Cullet handling / Glass Recycling - Systems
- Batch Treatment - Systems
- Cullet Preheating
- Equipment

COMPANY PROFILE

EME has a proven track record in designing and commissioning plants at over 250 glassworks in more than 80 countries. Part of the SORG Group, we access next-generation technology to gain unrivalled knowledge in sustainable conditioning and melting.

We are dedicated to supporting customers wherever in the world they are. Our multi-talented team of designers, engineers and project managers enhance raw material processing with engineered solutions built for endurance. What sets EME apart is our proven capability to upgrade a plant while it is live and operating, with no loss of production. Offering a complete turnkey project, from raw material and perfectly mixed batch delivery to supporting you in engineering design, our tailored approach makes EME the future partner of choice, whatever your needs.



Wherever your facility is located, EME will be with you throughout the entire process and beyond. We strive to be a leader in our field and place sustainability and partnership at the heart of every decision. It is our promise to work honestly and transparently with customers, to provide batch treatment and processing technology that outperforms and outlasts any other.



EME

Wockerather Weg 45
41812 Erkelenz
Germany
☎ +49 (0) 2431 961 80
✉ contact@eme.de

www.eme.de



FALORNI TECH

HALL 13
STAND A05

COMPANY PROFILE

Part of Falornigroup, Falorni Tech is the company deputy to the design, supply and installation of industrial furnaces and glass conditioning systems and as a main contractor is involved in EPC/EPCM projects developments. Falorni Tech undertakes projects in the glass fields from its early definition stage up to post-commissioning and assistance. Design and construction of complete plants for production of any type of glass (hollow glass, fibre glass, float glass, speciality glasses), with a single interlocutor in degree of managing the entire project: engineering, supply, construction and commissioning, post-sales support and services, anywhere in the world. Knowhow and expertise in glass melting technology as well as in the production process of glass are the key advantages of choosing Falorni Tech.

"The complete glass technology!"

PEOPLE TO CONTACT AT OUR STAND

Riccardo Scarselli – General Manager
Simone Scarselli – Deputy General Manager
Moreno Destro – Sales Area Manager
Fabrizio Morrone – Sales Area Manager
Francesco Prosperi – Chief Technology Officer

PRODUCT RANGE

TURNKEY SOLUTIONS:

- EPC • EPCM

ENGINEERING:

- Basic and detailed engineering
- Process engineering
- Utility engineering

BATCH HOUSE

- Engineering
- Automatic & Semi-automatic Systems

MELTING FURNACES:

- Regenerative • Recuperative
- Oxy-fuel • Hybrid oxy-fuel + electric

CONDITIONING SYSTEMS:

- Distributors • Forehearthers
- Colouring forehearthers

ANCILLARY EQUIPMENT:

- Combustion systems
- Furnace automation and control
- Process supervision
- Waste gas managements systems
- Metallic recuperators
- Batch chargers
- Automatic glass level systems
- Bubbling systems
- Electric boosters

PRODUCT RANGE

ON / OFF-SITE SERVICES

- Auditing
- Glass Production Consulting
- Erection & Start-Up
- Post-Sale Services

FURNACE LIFETIME

MANAGEMENT PROGRAM:

- Furnace & Refractories
- Utilities & Process Systems
- Production Equipment
- Technical Support



falornitech
falorniglass

part of falornigroup

FALORNI TECH Glass melting technology

Registered & Commercial office:

Via della Libertà, 177
50059 Vinci (FI) – Italy

Operational headquarter:

Via Cascina Lari, 25
56028 San Miniato (PI) – Italy

☎ +39 0571-922333

✉ E-mail: info@falornitech.com

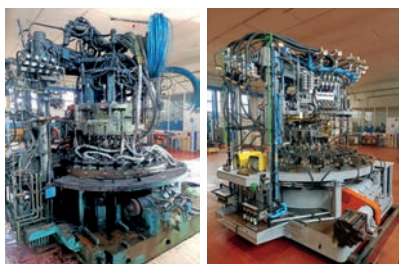
www.falornigroup.com



Scan the QR code to discover
the complete glass technology
of Falorni Group

FAMOR ENG

HALL 13
STAND A05



Before

After

COMPANY PROFILE

Part of Falornigroup, Famor Engineering is the company deputy to the design, supply and installation of forming solution since 1977. Under the corporate slogan "Made in Italy - We know how!", the company combines superior industrial craftsmanship with engineering precision, offering custom designs and turnkey systems tailored for international glassworks. Research, Innovation & Technological Development allow to propose to the market a wide range of solution to produce Tableware and kitchenware, Stemware, Lighting ware, High-voltage insulators, Glass blocks, Car headlight lenses, Window for washing machines, Thermal tempering, Revamping & Upgrade of existing forming Press, IS, P&B or B&B lines, the assessment of the mechanical and electronic conditions allows the modernisation of existing production lines, with better productivity and energy saving with efficiency results. Specialized engineers provide on-site support, managing the assembly, testing, and production start-up to ensure seamless operations, including Hot Line Remote Assistance.

"The complete glass technology!"

PEOPLE TO CONTACT AT OUR STAND

Renato TROTTA
General Manager
Elia RIZZI
Sales Director
Rui Ramos ROLO
Technical Advisor

PRODUCT RANGE

Technology Solutions for Glass Extraction:

- Suction Robot Technology
- Gatherer Robot Technology
- Platinum Feeder Technology
- Gob Feeder Technology

Molding Technology:

- Press&Blow Solutions
- Blowing Solutions
- Pressing Solutions
- Spinning Solutions
- Containers Blowing Solutions

Hot Polishing Technology:

- Flame Polishing Solutions
- Tracking Burners Solutions
- Gas/Oxygen burners Solutions

Handling Technology:

- Handling Robots Solutions
- Tip Over Solutions
- Conveyor Solutions
- Rotary device Solutions

Equipment and Tools:

- Gas/Oxygen Burners
- Glass Tools
- Shear Blades
- Gathering Robot Spheres

Service:

- Revamping & Upgrade of existing forming lines Installation on site
- After Sales Service
- Hot line remote assistance
- Machine Technical audit
- Production assistance

famor eng

part of falornigroup

FAMOR ENG Glass forming technology

Via Avigliana, 3 – 10040 Rivalta di Torino (TO) Italy

☎ +39 - 011 - 952629

✉ info@famorengr.com

www.falornigroup.com



Scan the QR code to discover
the complete glass technology
of Falorni Group

FERMAC S.r.l.

HALL 12
STAND A31



FERMAC S.R.L.

Via La Spezia, 162/A
43126 Parma
Italy
☎ +39 - 0521 - 989056
✉ sales@fermac.it

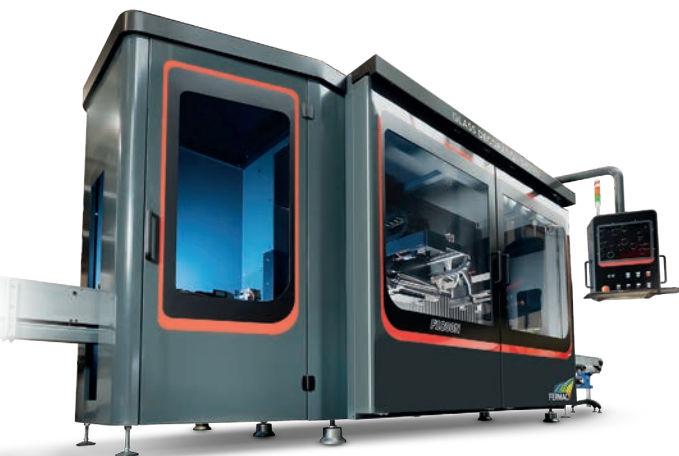
www.fermac.it

PEOPLE TO CONTACT AT OUR STAND

Stefano Painsi - President
Alessandro Ghirardini - Global Sales Manager
Leonardo Pirazzoli - Sales Manager
Annunziata Kovacs - Sales Representative

PRODUCT RANGE

At Glasstec 2026 FERMAC Srl is unveiling two major technological advancements designed to give glass decorators unprecedented flexibility, efficiency and premium finishing options. As market demands shifts toward greater personalization without sacrificing mass-production efficiency, FERMAC's latest innovations bridge the gap between high-volume manufacturing and short-run customization. **Hybrid Digital Printing Technology** eliminates the traditional trade-off between short-run and mass production and allows manufacturers to seamlessly run small batches, extra-small lots and sampling & limited-edition collections while retaining the speed and capacity for large industrial packaging production all on a single platform machine. **On-Board Hot Stamping Module** built entirely in-house integrates directly into FERMAC machines to bring high precision metallic finishing directly into the main production line and elevate luxury glass packaging.



FIMA-OLIMPIA FONDERIE

HALL 13
STAND A40



PEOPLE TO CONTACT AT OUR STAND

Alessandro Fontanelli - President & CEO
Simona Grazioli - Export Sales



FIMA-OLIMPIA FONDERIE

Via Strada di Poneta 17
50028 BARBERINO TAVARNELLE
(FI) - Italy
☎ +39 - 055 - 8073048
✉ info@fimaolimpia.it

www.fimaolimpia.it

PRODUCT RANGE

Special cast iron for glass industry:

- castings for moulds
- neck rings
- baffles
- bottom plates
- engineering castings for glass plants



Special cast iron for glass industry



FONDERIE VALDELSANE S.p.A.

HALL 13
STAND B05

COMPANY PROFILE

The Company is a leader manufacturer of cast irons and alloys for glass moulds, generally considered as a quality reference in the international market.

Their success owes to the glass manufacturers, as well as themselves benefited from the presence of a pioneer company devoted to the production and development of special alloys, to give higher performances to the glass moulds.

Selection of K 250 cast irons and special copper alloys produced by Fonderie Valdelsane is no more than a simple guarantee that moulds will comply with their important job at the best of their possibilities. A guarantee that is internationally acknowledged.



Nowadays, the Company serves its direct customers in 36 Countries across the world and is considered a reliable partner which actively contributes to the constant challenge of better efficiency in glass production. Fast delivery time, quality and repeatability are strictly bound to advanced technologies and automation in each process phase. Fonderie Valdelsane have always been allocating significant resources in this direction, and the multiannual investment plan includes the ambitious goal to constantly reduce the CO2 emissions. Besides ESG Yearly Certification and 1.6MWh Solar Panel installation, the Company is now implementing and actively promoting circular economy in partnership with glass factories and mould shops, collecting scrap and recycling it. A further contribution to assign sustainability value to their castings.

Fonderie Valdelsane. Easy to Choose.



Fonderie Valdelsane S.p.A.

FONDERIE VALDELSANE S.P.A.

Strada di Gabbrice 6 - P. O. Box 30

53035 Monteriggioni (SI) - Italy

☎ +39 - 0577 - 304730

✉ com@fonderievaldelsane.com

www.fonderievaldelsane.com

PEOPLE TO CONTACT AT OUR STAND

Roberto Gerbi
Claudio Anniballi
Stefano Gerbi
Manuel Papi
Vanni Viani

GCG - 40TH ANNIVERSARY 1984-2024 GLASS CONSULTING GROUP SRL

HALL 13
STAND A31

PEOPLE TO CONTACT AT OUR STAND

Raffaele Scaglioni - Managing Director

PRODUCT RANGE

- feeder coloration
- glass frits
- batch plants
- combustion equipment
- furnace forehearth
- thermometry
- thermocouples
- fibroptic

COMPANY PROFILE

The company was created in 1984 by glass technicians highly experienced in the glass sector of containers, tableware, perfumery glass and special glass.

Through continued focus on research and close cooperation with glassmakers, **GLASS CONSULTING GROUP** can quickly develop and supply special colouring frits which are adapted to the glass composition and forehearth processing parameters of each customer.



**GLASS
CONSULTING
GROUP S.r.l.**

**GCG
GLASS CONSULTING GROUP SRL**

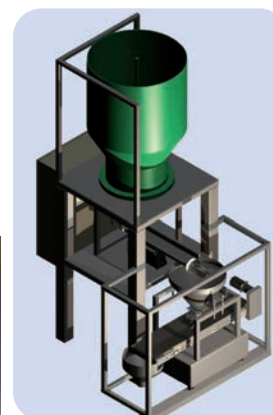
Via Venezia, 50/B

43123 Parma (PR) - Italy

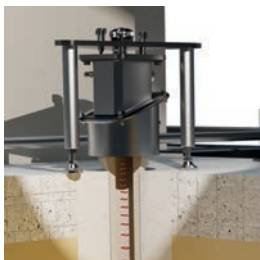
☎ +39 - 0521 - 242823

✉ r.scaglioni@glassconsultinggroup.it

www.glassconsultinggroup.it
www.glassfrits.eu

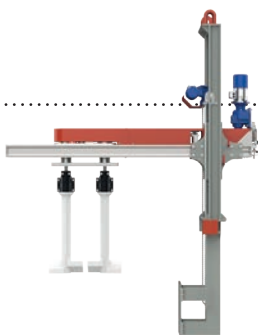


GLASS SERVICE S.r.l.



PRODUCT RANGE

- Melting furnaces
- Distributor & forehearth
- Combustion technology
- Electric booster
- Batch charge
- Cat scratch removal

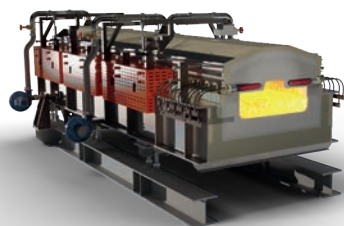
HALL 13
STAND E13
glass
SERVICE

GLASS SERVICE S.r.l.

Via Cascina Lari
56028 San Miniato (PI) - Italy
☎ +39 - 0571 - 4442
✉ glass-service@glassservice.it

www.glassservice.it
PEOPLE TO CONTACT
AT OUR STAND

Fulvio Puccioni - Technical Office
Giulio Isernia - Commercial Director
Emanuele Donati - Sales Manager
Andrea Bassi - Sales Manager
Anne Dorazio, Commercial Manager
Oliver Bellina - Chemical Expert
Emirene Puccioni - Operations Manager



COMPANY PROFILE

Glass Service provides the highest standards of technology applied to the hollow glass industry. The Italian company designs, produces and maintains a wide and complete range of equipment.

GLASS MELTING TECHNOLOGY DIVISION

ENGINEERING Design, calculation and modelling for glass furnaces, equipment and control systems.

FURNACE INSTALLATION Worldwide installation, preheating, commissioning and start-up support for glass furnaces.

FURNACE MAINTENANCE & REPAIR Inspection, maintenance and repair services for existing furnaces and equipment.

FURNACE REVAMPING & MODERNIZATION Targeted upgrades to extend furnace lifetime and improve existing installations.

GENERAL & TECHNICAL SUPPORT Worldwide technical assistance for furnace operation, troubleshooting and process optimization.

GLASS BATCH & ANALYSIS Raw material, cullet and batch analysis for improved glass production.

GLASS DEFECTS ANALYSIS Troubleshooting and root-cause analysis of defects throughout the glass production process.

SPARE PART Spare parts for glass furnaces and equipment, supporting maintenance and production continuity.

CUSTOM COMPONENTS Custom-engineered components designed and manufactured for specific plant and equipment requirements.

PROJECT FINANCING Financing solutions for glass industry projects, tailored to each investment and destination market.

The world's leading glass publications!

SINCE 1988

SINCE 1989

SINCE 1990

SINCE 2013

WEB PUBLICATIONS

Take your copy in Hall 14 / Stand A37

WWW.GLASSONLINE.COM

HEYE INTERNATIONAL GMBH

HALL 14
STAND E03

COMPANY PROFILE

Our smart plant portfolio is based on:

- HiPERFORM - Smart Forming Solutions
- HiSHIELD - Smart Inspection Solutions
- HiTRUST - Passion and Experience

We are Glass People - join us on the road to a smart glass plant!

PRODUCT RANGE

- Heye SpeedLine IS-Machines
- NNPB Lightweight Technology
- Heye Process Control
- Innovative Swabbing Robot
- High performance coolings
- Heye Smart Plant concept
- Smart closed-loop solutions
- SmartLine 2 inspection machines



HEYE INTERNATIONAL GMBH

Lohplatz 1
31683 Obernkirchen - Germany
☎ +49 - 5724 - 26-0
✉ sales@heye-international.com

www.heye-international.com



HORN GLASS INDUSTRIES AG

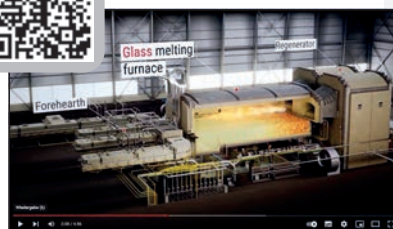
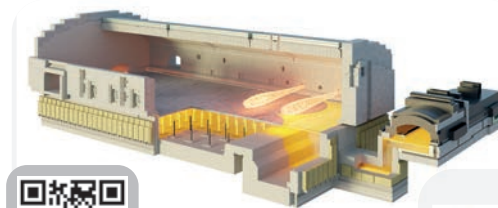
HALL 13
STAND C34

PEOPLE TO CONTACT AT OUR STAND

Stephan Meindl - President CEO
Ekaterina Firsova - Executive Director
Clemens Bröderer - Glass Plant Technology
Business Unit Director Container/Specialty Glass
Matthias Kunz, Sebastian Gallenberger,
Farid Ghafourian, Raimund Hüttner,
Andreas Mattes, Johannes Wittmann,
Ulrich Imhof, Ioan-Alexandru Dreghiciu

PRODUCT RANGE

HORN Glass Industries plans and builds glass melting technology and turnkey plants for the float and container glass industry. The high-performance glass melting furnaces and turnkey plants are delivered to glass manufacturers all over the world and serve the production of beverage bottles, food containers, drinking glasses, glass panes, glass tubes, glass fibers or special glass. With more than 140 years of expertise in the construction of glass melting furnaces HORN is well known as specialist and expert in the glass industry. Over the years, HORN has continued to extend its capabilities and has grown from being a glass melting furnace builder into one of the leaders of the industry in turnkey operations.



HORN GLASS INDUSTRIES

HORN GLASS INDUSTRIES AG

Bergstrasse 2,
D-95703 Plößberg - Germany
☎ +49 - 9636 - 92040
✉ info@hornglas.de

www.hornglas.com

INTERGLASS

HALL 13
STAND B75

PEOPLE TO CONTACT AT OUR STAND

Roberto Iberri - CTO, Interlub Group & CEO, Interglass
Joaquín Morodo - Chief International Growth Officer, Interlub Group
Stefano Chiabrera - Business Development Manager, Interglass

PRODUCT RANGE

- Mould release compounds
- Delivery equipment lubricants
- Shear lubricants
- I.S. machine lubricants

COMPANY PROFILE

Interglass is the glass industry platform of Interlub Group, specialized in high-performance lubrication technologies for glass forming processes. Combining technical development, process knowledge and application expertise, Interglass works with glass manufacturers to manage the conditions that influence friction, repeatability and process stability. Supported by Interlub Group's research and development capabilities, Interglass develops lubrication technologies and technical solutions for demanding glass manufacturing environments.



interlub®
group

THE
UNCOMMON
LUBRICANT
COMPANY

INTERGLASS, S.A. DE C.V.

Lateral Sur Periférico Norte 559
Parque Industrial Belenes Norte
C.P. 45150 Zapopan, Jalisco,
Mexico

☎ +52 33 3793 8800

Sales +52 33 3793 8800 ext. 4304

✉ sales@interlub.com

www.interglass.global

IRIS INSPECTION MACHINES

HALL 14
STAND C20

PEOPLE TO CONTACT AT OUR STAND

Sonia Debets, Hung Han,
Armando Brusamolino, Thomas Petitjean
 Area Sales Managers

COMPANY PROFILE

IRIS Inspection machines has been designing, developing and manufacturing intelligent inspection solutions for glass containers since 2002. With a team of passionate engineers, IRIS masters the entire production of machines from idea to concept, to CPU board production and on-site installation.

The Evolution NEO range is the latest generation of glass container defect detection technology based on artificial intelligence. NEO introduces an innovative approach to defect detection: automatic defect identification, trend analyses and valuable inspection features help glass container producers to save time and increase the productivity during the manufacturing process.

PRODUCTS BEING PROMOTED

EVOLUTION NEO Range: Intelligent Inspection machine

- Evolution NEO 16: Sidewall and Sidewall stress
- Evolution NEO 5: Base, Finish and MNR
- Evolution NEO Ultimate: Perfumes and Cosmetics
- Evolution NEO Dim: Dimension measurements
- Evolution TW-B: Tableware inspection
- Oculus Neo: Camera check inspection



IRIS INSPECTION MACHINES

Parc du Chêne
14 rue du 35ème Régiment
d'Aviation - 69500 BRON - France
☎ +33 - 4 - 72783527
✉ contact@iris-im.fr

www.iris-im.com

KOENIG & BAUER KAMMANN GmbH

HALL 12
STAND C31


COMPANY PROFILE

Headquartered in Löhne, Germany, Koenig & Bauer Kammann GmbH is the Koenig & Bauer group specialist for finishing hollow objects made of glass, plastic, metal and various other substrates - all by way of screen printing, digital printing, hot stamping and labeling. The Koenig & Bauer group is the world's longest established manufacturer of printing systems and has the widest product range in the industry. For over 200 years, the company has provided customers with innovative technology, tailored processes and diversified

PEOPLE TO CONTACT AT OUR STAND

Matthias Graf - Managing Director
Dr Christian Maas - Managing Director
Daniel Gildehaus, Axel Bohlmeier, Andre Tiesmeier,
Nicolas Meyer, Tim Schnelle,
Bilgkin Aptoulach - Area Sales Manager

services. Its portfolio includes solutions for banknotes, cardboard, foil, sheet-metal and glass packaging, as well as for books, displays, labels, decor, magazines, advertising materials and newspapers. Koenig & Bauer is both a proven expert and often the market leader in nearly all printing processes - offset and flexographic printing on sheets and rolls, waterless off-set printing, steel engraving, plus simultaneous, screen and digital inkjet printing. In the 2023 fiscal year its 5,500 highly-skilled employees across the globe generated revenues of EUR 1.300 billion.

Close on the heels of its HS 300 high-speed, screen-printing machine, the K4 DP is now Kammann's latest advancement in digital printing technology. As the company's first ma-

chine that's fully-dedicated to direct-to-shape digital printing, the K4 DP is engineered for maximum flexibility and has the capability of printing on glass, plastic or metal in different shapes and sizes.

Designed with a compact footprint, the K4 DP is built to seamlessly integrate into production environments, handling small to medium batch runs with ease. Its automatic transport solutions further enhance usability - ensuring simple operation while optimizing productivity.

This innovation underscores Kammann's commitment to the advancement of digital printing technology as it offers more versatile, efficient and adaptable solutions - all tailored to modern production needs.

KOENIG & BAUER

KOENIG & BAUER KAMMANN GmbH

Weidehorst 80
32584 Löhne
☎ +49-5744 - 77100
✉ mail.kammann@koenig-bauer.com

kammann.koenig-bauer.com

LAHTI GLASS TECHNOLOGY

HALL 15
STAND F28


COMPANY PROFILE

Unleash the full potential of your glass production.

Lahti Glass Technology designs and delivers batch plants, factory cullet systems, glass recycling plants, and automation for glass manufacturers worldwide. With decades of experience and almost 300 batch plant deliveries worldwide, we design and deliver systems built for demanding industrial production.

Our expertise covers raw material receiving, storage, weighing, dosing, mixing and conveying, as well as factory cullet handling, automation and process control. From individual equipment and modernizations to complete turnkey plants, every solution is engineered around your process, capacity and production requirements.

Reliable technology. Precise material handling.
Built for glass production.

PEOPLE TO CONTACT AT OUR STAND

Jarmo Sopanen - CEO
Jamshid Shidfar - Sales Manager
Leo Raatikainen - Sales Manager
Marianne Valola - Sales Manager
and many other experts!

PRODUCT RANGE

- Batch plants
- Factory cullet system
- Glass recycling plants
- Engineering & Automation
- Modernization
- Lifetime care & spare parts



LAHTI GLASS TECHNOLOGY

Ahjokatu 4, FI-15800
Finland
☎ +358 - 40 - 7538125
✉ jarmo.sopanen@lahti-glass.fi

www.lahti-glass.fi

LINCO BAXO GROUP

HALL 13
STAND F34

PEOPLE TO CONTACT AT OUR STAND

Dr. Maurizio Nicolardi - President / Ceo
Mrs. Alessandra Nicolardi - Business Unit Director
Mr. Osvaldo Baldelli - Export Director
Mrs. Cristina Gambino - Sales Manager

PRODUCT RANGE

- Channel blocks and superstructures
- Working-end and forehearth blocks
- Feeder expendables: stirrers, tubes, plungers, orifice rings, spouts and accessories
- Refractory and insulating bottom blocks for melting furnaces
- Alumina, sillimanite, zircon and zircon-mullite bricks and special shapes
- Castables, ramming mixes, patching materials and mortars

COMPANY PROFILE

Linco Baxo has manufactured refractories since 1949. Production is based in Italy across four integrated plants covering monolithics, pressed bricks and slip-cast special shapes. Group output exceeds 100,000 tonnes per year and the organisation employs more than 250 people.

Sales and technical support are provided through a worldwide network of subsidiaries, distributors and agents. In the glass sector, Linco Baxo supplies refractories and engineering under supply contracts to a large number of producers, many of them long-standing customers.



refractories expertise,
together

LINCO BAXO GROUP
Second to none
in customer service

Via C. Boncompagni 51/8
20139 Milano (MI) - Italy
☎ +39-02-5520041
✉ info@lincobaxo.com

www.lincobaxo.com

LUBEN GLASS Srl

HALL 13
STAND C05

COMPANY PROFILE

At Luben Glass, our work starts from the glass industry itself: from its **production processes**, its daily challenges and, above all, from the needs of the people who work with glass every day.

We design and manufacture machines, equipment and components for the glass container industry, providing solutions for different stages of production, from the hot-end to the **mould shop** and **laboratory**.

Our range includes proven standard machines and **equipment**, but our technical **know-how** also allows us to adapt and develop solutions according to specific production requirements. This flexibility is an important part of Luben Glass: we believe that technology should adapt to the needs of the glassworks, not the other way around.

Reliability, simplicity of operation and practical results are at the heart of our **engineering approach**. At the same time, we continue to invest in automation, digital technologies, Industry 4.0 solutions and energy efficiency to respond to the evolution of modern glass production.

From the first technical discussion to manufacturing, testing, installation, training and after-sales assistance, our team remains directly **involved**. We believe in being present, in finding solutions quickly and in creating **relationships** that continue well beyond the delivery of a machine.

PRODUCT RANGE

- SPARE PARTS & GAUGES
- HOT/ COLD End machines & Laboratory machines
- Services & Refurbishments

PEOPLE TO CONTACT AT OUR STAND

Our qualified **commercial** and **technical** team will be at our stand to discuss and present our **products**, providing all the details regarding our product range and **showing samples**.



LUBEN GLASS Srl

Via Meucci, 23
26010 Offanengo (CR)
Italy
☎ +39 - 0373 - 244396
✉ info@lubenglass.it

www.lubenglass.eu



MARPOSS

HALL 14
STAND F52

COMPANY PROFILE

MARPOSS is a worldwide leader in measurement, inspection and testing solutions, designed for the production environment, across several market sectors.

Operating in the Glass Industry for about 30 years, the company provides advanced and highly automated quality control systems for both primary glass packaging (hollow glass) and flat/automotive glass.

Headquartered in Bentivoglio (Italy) and present in 34 countries, MARPOSS acts as a strategic partner to ensure maximum precision, scraps reduction and process optimization.

PRODUCT RANGE

Products for **glass packaging** include:

Flexible Automatic Systems:

- **VISIQUICK** for dimensional measurement
- **HYDRA** for volumetric measurement and pressure testing
- **ATMOS** for volumetric measurement

Semi-Automatic Systems:

- **VISIQUICK-mini** for external dimensions
- **IDSCAN** for bore diameter and internal profile measurement.

Suitable for **food & beverage, pharmaceutical, cosmetic and perfumery** containers.

Dimensional measurements include

- external dimensions and geometry
- internal bore analysis
- weight
- push-up
- wall thickness
- label area profile (sinks/bulges)
- push-up

Products for **flat/automotive glass** include:

- **MAESTRO**: a flexible robotized system for measuring dimensions, shape and thickness.

MARPOSS offer also includes **optical and tactile linear sensors** suitable for any glass application.



MARPOSS SPA

Via Saliceto, 13
40010 Bentivoglio (BO)
☎ +39 899111
☎ +39 899870
✉ info@marposs.com

www.marposs.com

PEOPLE TO CONTACT AT OUR STAND

Eleonora Bordini
Corporate Industry Manager Glass Packaging



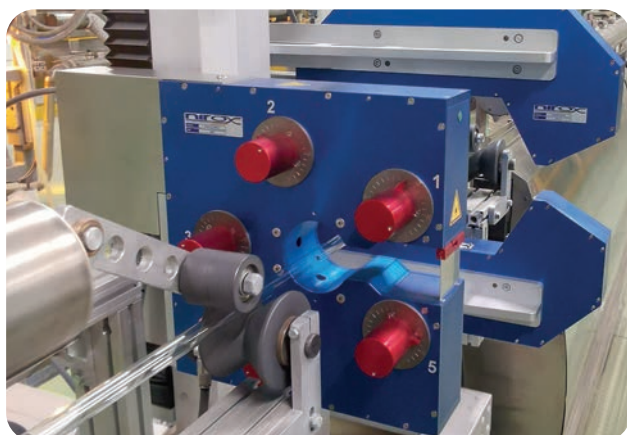
NIROX SRL

HALL 14
STAND A03

COMPANY PROFILE

NIROX is an Italian company that designs and manufactures **optoelectronic sensors and systems for automatic measuring and quality inspection.**

Glass is our main market, particularly **pharmaceutical quartz automotive telecom electronic and scientific glass.**



NIROX SRL

Optical measurement and control systems
Viale E. Mattei, 8
25080 Mazzano (BS) - Italy
☎ +39 030-2304606
✉ info@nirox.it

www.nirox.it



Our devices can **detect**:

- **outer diameter and ovality**
- **thickness of glass**, such as panels, tubes, preforms
- **dimensional, bottom and cosmetic features of vials**
- **thickness of PVB** in the stretching lines
- **interlayer PVB**
- **car glass screen printing**
- **thickness of layers**, including coating
- **glass thickness during chemical etching process**
- **cross-section of glass capillaries in the drawing process**

“YOU MAKE, WE MEASURE”

OCMI-OTG S.p.A.

HALL 13
STAND B12

PRODUCT RANGE

"OCMI is leading supplier of complete production lines to manufacture tubular glass containers for pharmaceutical and cosmetic use (ampoules, vials, droppers, cartridges) with four production plants located in Milan - Italy (OCMI headquarters), Chelles - France (Moderne Mecanique), Madrid - Spain (KYP) and Ahmedabad - India (OCMI India), as well as a commercial office in Shanghai - China. OCMI is also dedicated to the supply of glass processing machines for tableware articles such as sealing/stretching machines for stemware, presses and press-blow machines.

Thanks to the partnership with Italian company MT Forni Industriali, OCMI can also supply turnkey factories for the production of technical glass items such as high voltage insulators and glass bricks. MT Forni Industriali has been operating since 1968 in the field of industrial furnaces for the glass industry, specially used for the preparation of glass raw materials, melting, thermal treatment, annealing and bending."

OCMI

- Ampoule, vial, dropper, cartridge forming machines
- Vial after-forming lines
- Hot-end camera inspection systems
- Automatic glass tube loaders
- Automatic ampoule/vial packing machines
- Sealing/stretching machines for stemware
- Pressing, press-blow machines
- Glass blocks production lines
- Glass insulators production lines

MODERNE MECANIQUE

- Ampoules, vials, dropper, cartridges after-forming lines
- Ampoule forming machines
- Ampoule and vial printing lines

OCMI INDIA

- Vial index forming machines
- Vial cooling conveyors
- Droppers, cartridges forming machines

KYP ACCESORIES

- Ampoule forming machines
- Ampoule after-forming lines
- Automatic ampoule packing machines
- Automatic glass tube loaders

- Cold-end camera inspection systems

INNOVATIONS

- Complete vial production line developed for new index rotation forming machine FLA18.
- Complete cartridge lines production index or continuous motion option
- OCMI lines with full connectivity to SCADA & MES, batch report, OEE
- Mass flow meter integrated technology option for GAS & O₂ SAVINGS



OCMI-OTG SPA

Via Venezia Giulia 7,
20157 Milano Italy
☎ +39 - 02 - 3909181
☎ +39 - 02 - 3570944
✉ info@ocmigroup.com

MODERNE MECANIQUE

13, Avenue de la Trentaine
77507 Chelles - France
☎ +33 - 1 - 60087171
✉ info@ocmigroup.com

KYP ACCESORIES S.L.U.

C/Madrid 22 - Nave 07-12
28813 Torres de Alameda
Madrid - Espana
☎ +34 918863090
✉ info@ocmigroup.com



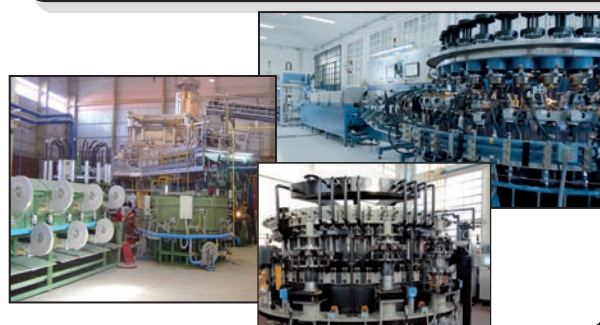
OCMI INDIA

Office & Works Plot: 92 to 94,
Phase - I G.I.D.C. - Estate Vatva,
Ahmedabad, 382 445 - India
☎ +91 - 79 - 25834010/11
✉ t.majmudar@ocmigroup.com

OCMI TRADING (SHANGHAI) CO., LTD.

6th Floor, No.1, Lane no. 129,
Datian Road, Jing'an District
☎ +86 138 1666 2360
✉ davy.qi@ocmigroup.com

WWW.OCMIGROUP.COM



OLIVOTTO GLASS TECHNOLOGIES S.P.A.

HALL 13
STAND A43



PEOPLE TO CONTACT AT OUR STAND

Sergio Sarvia - President & CEO
Pierluigi Terzuolo - General Manager
Massimo Pucci - Sales Director (BU Hollow Glass - Pharma Packaging)
Marco Giraudo - Sales Director (BU Flat Glass Engineering)
Salvatore Rizzo - Sales Engineer (BU Hollow Glass)
Antonio Cesaretto - Sales Engineer (BU Hollow Glass - Pharma Packaging)
Massimiliano Iuli - After Sales Manager
Gianluca Corrias - Spare Parts Service
Giorgio Peracchiotti - Spare Parts Service

PRODUCT RANGE

- Servo Feeders
- Servo Press & Blow Machines
- Blowing Lines
- Multifunction Machines for Stemware Production
- Stretching Machines
- Burn-Off Machines
- Welding/Sealing Machines
- Fire Polishing Machines
- Press Machines
- Spinning Machines
- Container Glass Machines
- Turkey lines for flat Manufacturing and Process
- Automatic Packaging Line
- Tubing Lines
- For Pharma-Packaging
- Glass Wool And Rook Wool Manufacturing Lines
- Rook Wool Sandwich Panels Production Lines
- Production lines for float and patterned glass.
- Processing lines for solar, architectural and automotive glass.
- Handling equipment for flat glass
- Glass Insulator forming lines & Automatic assembling lines



OLIVOTTO GLASS TECHNOLOGIES S.P.A.

Headquarters:
Viale Gandhi 22 - 10051 Avigliana
(TO) - Italy
☎ +39 - 011 - 9343511
✉ info@olivotto.it

www.olivotto.it



OMS GROUP PACKAGING SOLUTIONS. SINCE 1949.

HALL 13
STAND C65



OMS GROUP PACKAGING SOLUTIONS. SINCE 1949

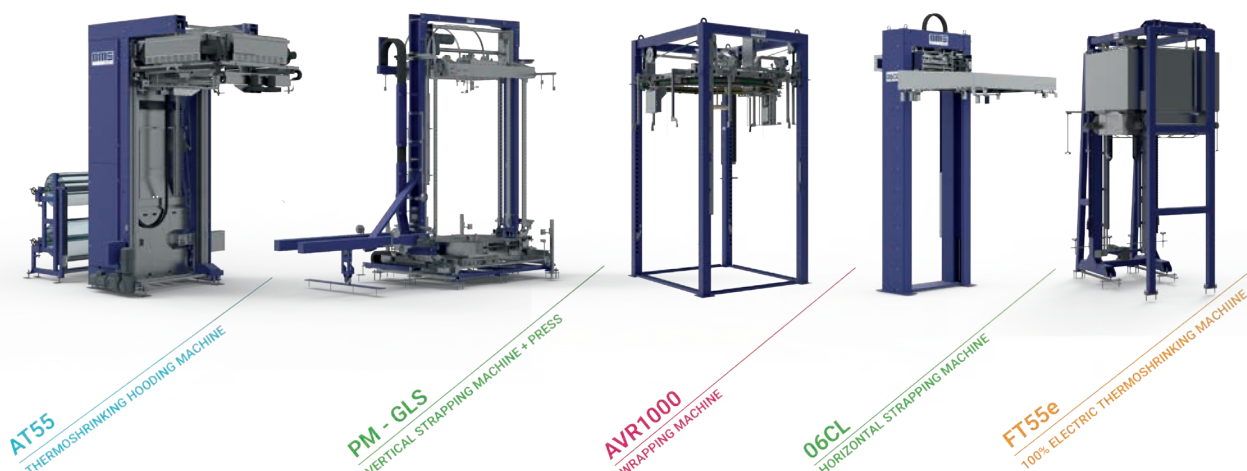
Via Borgomanero, 44
28040 Paruzzaro - Italy
☎ +39 - 0322 - 541411
✉ info@oms-group.com

www.oms-group.com

As a global leader, **OMS Group** specializes in the **design** and **manufacture** of **end-of-line packaging solutions** and **complete packaging lines**. Established in Italy, **OMS Group** currently operates **12 branches worldwide** and provides **cutting-edge technologies** for every stage of the end-of-line process, including strapping heads, **strapping machines**, **hooding machines**, **thermoshrinking** and **wrapping machines**. OMS Group has always been committed to consolidate and expand its global sales network and service assistance, ensuring complete customer satisfaction. Discover some of our solutions for the Glass Industry.

PEOPLE TO CONTACT AT OUR STAND

Mauro Zonca
Sales Director



OMSO S.p.A.

HALL 12
STAND D15



OMSO S.p.A.

Via Adige, 11 - 42124 Reggio Emilia (RE) Italy
☎ +39 - 0522 - 382696
✉ info@omso.it

www.omso.it

COMPANY PROFILE

OMSO Spa, based in Reggio Emilia, is the leading Italian manufacturer of screen printing machines for printing on glass, plastic and aluminium containers. Since 1952, it has distinguished itself in the industry by combining tradition and innovation through constant investment in R&D.

OMSO machines, designed and manufactured in Italy, are renowned for reliability, precision and ease of use.

In the glass industry, SBO21.25 is a state-of-the-art screen printing machine that combines precision and efficiency with reduced energy consumption.

Equipped with fully servo-assisted movements, it delivers controlled operation and superior print quality in up to 3 colours.

The single loading and unloading station optimises handling while freeing a station for an in-line camera-based quality control system, without sacrificing a printing colour; enabling zero-defect production.

The intuitive proprietary interface, HMI, developed on a Windows platform, ensures easy control.

The use of UVLED lamps for ink curing reduces energy consumption and eliminates ozone generation associated with traditional mercury lamps.

Maintenance is facilitated by advanced safety systems and easy access to the machine's main components.

Servobottle leading machine in this context, represents a technological breakthrough, improving print quality and reducing waste with a precise positioning system for up to 10 colours and UVLED lamps for drying. Both machines are compatible with ceramic inks.

PEOPLE TO CONTACT AT OUR STAND

Vezzani Corrado - Sales Manager
Danovaro Massimo - Sales Leader
Manicardi Marica - Marketing



GLASS DECORATING MACHINES

ERNST PENNEKAMP GMBH & CO. OHG

HALL 14
STAND E20

PEOPLE TO CONTACT AT OUR STAND

Mr. Peter Ashok Seidel - CEO / Owner
Mr. Ali Karimi - Intl. Sales & Marketing

COMPANY PROFILE

Pennekamp is a leading manufacturer of Annealing, Decorating & Tempering Lehrs, with an excellent reputation worldwide, referenced to more than 2.500 Lehrs which have been built and supplied since 1945. We continuously aim to assist our clients in all glass industry sectors such as Container, Tableware, Solar, Float and Automotive Glass with reliable, economical and energy efficient equipment on the highest technical level.

For the first time in the history of Glass Industry, **Pennekamp** is now offering Full **HYBRID Lehrs** (gas & electric heating in one lehr). These Hybrid lehrs are PLC controlled via a sophisticated Software to guarantee the highest energy efficiency

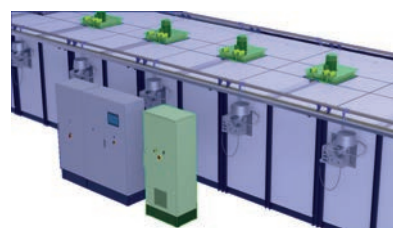
PRODUCT RANGE

ANNEALING, DECORATING & TEMPERING LEHRS with intelligent energy saving heating medias. Hot-End Handling equipment; **Multi Axis Servo Stackers**, **Cross Conveyors** and **Ware transfer**. **Cold-End Coating Systems**; Upper & Under Belt spray systems containing **Dosing unit**.



Our preheating **Mould Ovens** and **Deflector Firing Kilns** bring reliability into the clients' production, and our Automation techniques at the Cold End area provide our clients by the highest productivity, where the articles are supposed to be coated.

Pennekamp equipment and services stand for the highest quality internationally. The higher quality of the machines, the longer time they last. The more user-friendly the technology, the less downtime in production.



pennekamp

ERNST PENNEKAMP GMBH & CO. OHG

Königsfelder Str. 38 – 42,
D-58256 Ennepetal - Germany
☎ +49 (0)2333 6050
✉ sales@pennekamp.de

www.pennekamp.de

GIANCARLO PEREGO SpA

HALL 13
STAND E66

PEOPLE TO CONTACT AT OUR STAND

Leonardo Perego - CEO
Gordan Spiljak - GM Croatian Plant
Andrea Galli - Group CTO

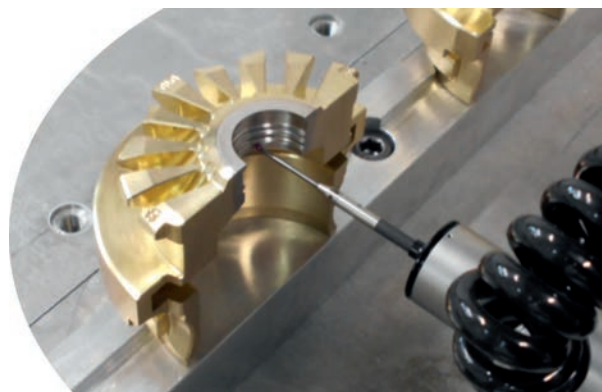
Michele Giordano - Group Sales Director
Elia Oldani - Sales Manager
Stefano Riboldi - Sales Manager

COMPANY PROFILE

Giancarlo Perego Group has been manufacturing moulds for the glass industry since 1964. With 60 years of experience, and with continuous huge investments in new machinery and technology, the company is continuously consolidating its leading position in the global mould market every day. With its mould shop in Croatia, acquired

in 2001 and completely renovated in 2012, Giancarlo Perego Group has a total covered area of 12,000 square meters. All these investments enable the Giancarlo Perego Group to significantly increase its production capacity; with more than 4,000 cavities per month, the company is able to

supply tools all around the world, exporting the 80% of production to South America, USA, Europe, North, Center and South Africa, developing day by day strong business relations with major international partners. Well aware of the difficulty of communicating the full scope of our activity in a few lines, Giancarlo Perego Group invites you all to visit our plants of Italy and Croatia.



GIANCARLO PEREGO SPA
MOULDS FOR GLASS INDUSTRIES



GIANCARLO PEREGO SpA

Via Marchesina, 58
20090 Trezzano sul Naviglio MI - ITALY
☎ +39-02-4840-0060
✉ gperego@gperego.it

www.gperego.it



PNEUMOFOR S.P.A.

HALL 13
STAND A60

COMPANY PROFILE

Pneumofore is a leading supplier of **centralized vacuum and compressed air systems** for glass manufacturing. Founded in 1923, the company manufactures vacuum pumps and air compressors for industrial applications worldwide and supplies the glass industry with a full range of product solutions designed for top performance and constant efficiency. The air compressors and vacuum pumps are built to last and are found worldwide, even in remote areas where customers require extraordinary reliability. Leader in **Rotary Vane Technology**, Pneumofore solutions focus on constant performance, long lasting operation, **minimal Life Cycle Cost and high environmental respect**.

PRODUCT RANGE

- Energy Savings Solutions for the Supply of Vacuum and Compressed Air in Glassworks
- Centralized Vacuum Systems
- Compressed Air Systems
- Rotary Vane Technology
- System Engineering



PEOPLE TO CONTACT AT OUR STAND

Our qualified personnel will be at our stand to present Pneumofore full range of products and solutions for the Glass Industry and their clear results: high energy savings, trouble-free operation over decades and the **lowest Total Cost of Ownership**.



Pneumofore

PNEUMOFOR S.P.A.

Via N. Bruno, 34
10098 Rivoli - Italy
☎ +39 011-9504030
✉ info@pneumofore.com

www.pneumofore.com

RAMSEY PRODUCTS

HALL 13
STAND C43

COMPANY PROFILE

RAMSEY SILENT CHAIN.

Ramsey is a worldwide leading manufacturer of silent chains (inverted tooth chains) for conveying and power transmission applications. Ramsey offers the world's widest range of top quality silent chain products, the highest level of service, and competitive prices. Ramsey works with glass manufacturers in every part of the world, providing conveyor chains that can run at faster speeds, operate more smoothly, and deliver longer life than ever before.

Ramsey Silent Chain - Featured Products

- **Sentry® Chains** — Built by combining the proven durability of Ramsey's wear protected designs with innovations developed for high speed power transmission.



- **Ramsey RZ3™** — A third central support tooth boosts stability, durability, and smooth operation while reducing wear.
- **RKO® Tool** — A patented US and European solution that enables quick, easy connection and disconnection of V-Wear Protected chains.
- **Wear Protected Chains**

o **Lifeguard®** — Protected by multiple US and European patents.

o **Allguard® FX** — Designed with recessed pin heads for maximum wear protection.



- **R-Select®** — Engineered with highly wear resistant chromium alloy links placed only where the chain experiences the most wear; protected by a US patent.

- **Ultralife® Silent Chain** — Long time industry favorites that reflect Ramsey's commitment to developing chains and sprockets tailored to the rigorous demands of glass production.



Ramsey Products
CORPORATION

RAMSEY PRODUCTS

135 Performance
Dr. Belmont, NC - USA
☎ +1 - 704 - 394-0322
✉ +1 - 704 - 394-9134
✉ sales@ramseychain.com

www.ramseychain.com

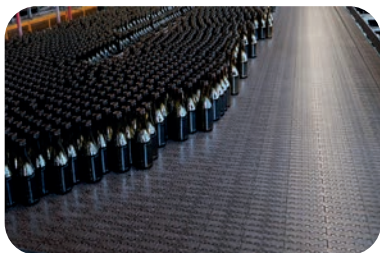
REGINA CATENE CALIBRATE S.p.A.

HALL 13
STAND C78

COMPANY PROFILE

Established in 1919, **Regina** is a world leading developer and manufacturer of high-quality conveyor chains, belts, roller chains, components, offering a complete cutting edge product portfolio of standard and special applications for glass, beverage, food, packaging and many other industries. Regina is recognized among the 'fathers' of high performance conveying and power transmission solutions for the Glass Industry at global level.

Our products are fully developed and manufactured at our premises by means of a wide range of top-tier engineered plastics and steel grades and available in metric and imperial standards.



We are strongly committed towards continuous innovation and development of our value proposition, process capabilities and human capital, with a continuous drive on sustainability.

We are stable partners of the leading OEMs and producers at global level in the glass industry and across overall industry sectors in which we operate.

Highlights for the Glass Industry:

- Full range of dedicated high-quality chains, modular belts and components for top-tier cold-end lines
- State-of-the-art product design, engineering and materials
- Fully proofed low-dusting solutions
- Unique high-performing solutions for Lube-Free Bottle-Turner applications
- Innovative eco-sustainable product portfolio of POM solutions
- Complete in-house manufacturing and control of overall product portfolio
- More than 1.000 lines worldwide equipped with Regina products



PERFORMANCE IN MOTION

REGINA CATENE CALIBRATE S.p.A.

Via Monza, 90
23870 Cernusco Lombardone (LC)
Italy
☎ +39 - 03999801
✉ sales@reginachain.net

www.reginachain.net

PRODUCT RANGE

- New imperial standard heavy duty modular belts and dedicated widths chains, 1305 Series
- Range extension with 4 1/2" width also available for the new GS gripper chain for bottle-turner applications, top-tier solution for conveying unstable products
- Lube-Free Gripper Chains for bottle-turner applications
- Full-range of chains, modular belts and components for top-tier Cold-End lines
- State-of-the-art lube-free material (e-SLIDE and SUPREME-S) for guides and curves
- Innovative eco-sustainable product portfolio of POM solutions

RONDOT GROUP

HALL 13
STAND C14

PEOPLE TO CONTACT AT OUR STAND

Raphael Constantin - CEO, Rondot Group / **Simon Holmes** - Managing Director, Sheppee and Graphoidal
Graham Womersley - Director of Global Sales, Pennine / **Melanie Basset** - Sales Director, Novaxion
Frederic Nio - Key Account Manager, Novaxion / **Bob Hughes** - Sales Manager, Ramsey
Prashanth Koshy - Managing Director, Rondot Americas / **Alexander Raddon** - Managing Director, Rondot Germany
Natalia Bolotskikh - International Sales & Marketing Manager, Rondot
Miguel Martin - Managing Director, Rondot Iberica / **Alessandro Morata** - Managing Director, Rondot Italy
Steven Kozora - Managing Director, Quantum / **Aleksander Pinda** - Managing Director, LWN
Alain Boury - Managing Director, Sonicam

COMPANY PROFILE

Rondot Group connects specialist technologies, brands and people across the glass hot end. Bringing together nine complementary companies, the Group provides expertise across lubrication, cooling, robotics, mould management, ware handling, conveyor systems and specialist equipment. By working closely with glassmakers, Rondot Group develops connected solutions that solve operational challenges today and help prepare plants for tomorrow.

OUR COMPANIES

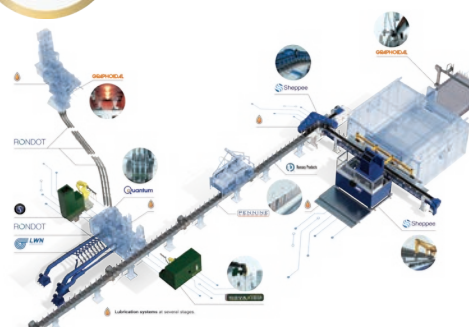
Graphoidal
Lubrication and coating systems
Pennine
Silent conveyor chains and sprockets
Rondot
Delivery, measurement and variable equipment
LWN
Glass cooling systems
Sheppee
Hot-end ware handling solutions

Quantum
Plunger mechanisms and forming equipment
Novaxion
Hot-end robotics and data acquisition
Ramsey Products
Conveyor and power transmission chains
Sonicam
Mould maintenance and measurement solutions

SUSTAINABILITY LEADERSHIP



TOP 3% of all companies assessed by EcoVadis
TOP 1% of companies in our industry



RONDOT GROUP

9 Rue Jean-Elysée Dupuy,
69410 Champagne-au-Mont-d'Or,
France

www.rondot-group.com

SIGMA GROUP

HALL 13
STAND B41

COMPANY PROFILE

Built through time, strengthened by experience.
Sigma Group combines technical expertise, manufacturing know-how and a deep understanding of the glass industry, delivering reliable refractory solutions and building long-term partnerships worldwide. With two manufacturing facilities in Italy and Bulgaria, and more than 80% of production sold internationally, Sigma serves glassmakers across global markets. **Precision is at the core of everything we do.**
From development to manufacturing and quality control, Sigma applies a rigorous approach at every stage. Our technical expertise, advanced technologies and in-house laboratory support the development of reliable, high-performance solutions. **Excellence means never standing still.**
Continuous improvement drives our products, processes and solutions. Our lean and agile structure allows us to respond quickly to customer requirements with flexibility and close cooperation. **Three generations of experience, one clear vision for the future.**
Now in its third generation, Sigma combines its heritage with a forward-looking approach. Investment in technology, research, manufacturing and sustainability drives the Group towards increasingly efficient solutions for the glass industry.

PEOPLE TO CONTACT AT OUR STAND

Roberto Mari - CEO
Federico Mari - COO
Luigi Mandelli
Alberto Tedeschi } Sales
Radostina Saenko }

Plovdiv facility



Technical
Department
Team



Locate Varesino facility



S.I.G.M.A. S.R.L.

Via delle Grigne 12/A
22070 Locate Varesino (CO) - Italy
☎ +39 - 0331 - 823195 a.r.
✉ office@sigmaref.it

SIGMA REF SRLU

Koshovete, 158 str. - Municipality Maritsa
4199 Trud, Plovdiv - Bulgaria
☎ +359 - 32 - 396423
✉ office@sigmaref.bg

www.sigmaref.it

PRODUCT RANGE

- Furnace refractories
- Working ends and forehearth
- Feeder expendables

SORG KERAMIK SERVICE GMBH (SKS)

HALL 15
STAND C44

PEOPLE TO CONTACT AT OUR STAND

Alexander Sorg - Managing Partner SKS
Herbert Lorz - Managing Director SFB
Afonso Morna - Managing Director SKS Iberica
Holger Mayer - Managing Director Fusetech
Torsten Richter - Managing Director Glasofenbau Leipzig
Key group employees and Sales Team

PRODUCT RANGE

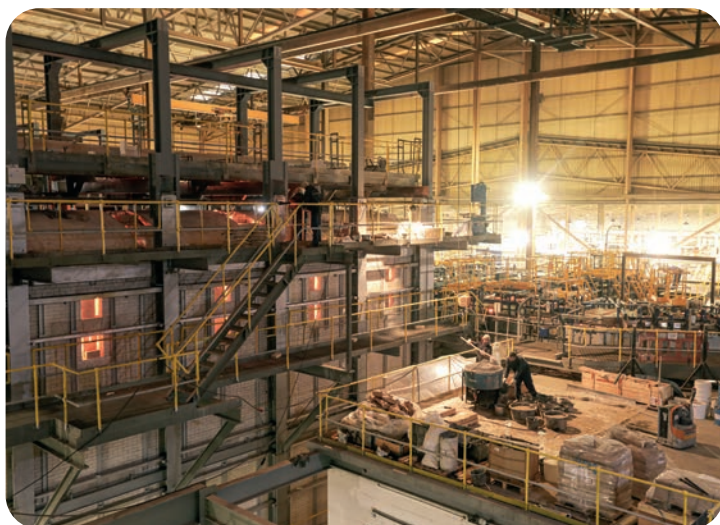
- Construction of glass melting furnaces
- After sales & Maintenance Services
- Furnace Audits and Inspection
- Special Hot Repairs



SORG KERAMIK SERVICE GMBH

Stoltestraße 23
97816 Lohr am Main
Germany
☎ +49 (0) 9352-507-600
✉ info@sk.net

www.sk.net



COMPANY PROFILE

SORG Keramik Service GmbH (SKS) brings together seven subdivisions which all share the same goal: Providing unparalleled service, performance and reliability to glassmakers worldwide. Together with Nikolaus SORG and EME we can deliver a single source solution from batch and cullet handling over engineering, equipment to construction and after sales. With over 200 in-house experts, we support customers worldwide at every stage of their furnace life. Offering the complete services from construction over maintenance, furnace audits and special hot repairs – only SKS is capable to do. To find out how SKS can support you, we look forward to seeing you at glasstec 2026.

NIKOLAUS SORG GMBH

HALL 15
STAND C44

PEOPLE TO CONTACT AT OUR STAND

Alexander Sorg – Managing Partner
Michael Sorg – Managing Partner
Dr. Sebastian Woltz – Sales Director
Thomas Breidfelder – Technical Director Process
Dirk Schnurpfeil – Manager R&D
Clemens Eidmann – Technical Director Engineering
Key group employees and Sales Team

PRODUCT RANGE

- Melting Technologies
- Conditioning Technologies
- Mathematical Modelling
- Engineering & Equipment
- Full-service Services
- Sustainable Solutions

SORG

NIKOLAUS SORG GMBH

Stoltestraße 23 - 97816 Lohr am Main - Germany
☎ +49 9352-5070
✉ nsorg@sorg.de

www.sorg.de



COMPANY PROFILE

As Nikolaus SORG celebrates 150+ years at the forefront of glass melting and conditioning, we are proud to be one of three industry-leading specialists in the SORG Group. Responsible for designing the world's most advanced furnaces, glass conditioning systems and related technologies, our tireless commitment to research and development supports glassmakers in improving the sustainable performance of their furnaces to maximise asset lifespan.

SORG sets milestones in the decarbonisation of the glass industry. With the successful market introduction of the CLEAN Melter®, and now with the development and industrial application of the fully electric VIKING® forehearth, SORG has done a significant step in direction of the strongly reduced carbon footprint of the glass production. By the combination of the SORG VSM® melter with the VIKING® forehearth a 100% carbon-free glass production is possible.

STARA GLASS

HALL 13
STAND E87



PEOPLE TO CONTACT AT OUR STAND

Simone Ferraro - Technical Director
Temistocle Fabbris - Sales Director
Gabriele Bollani - Sales Manager
Andrea Zucconi - Sales Manager
Chiara Bruzzo - Sales Manager
Giorgio Minestrini - Chief Project Officer
Ernesto Cattaneo - Head of Innovation Department
Elisa Gerali - R&D Engineer



STARA GLASS

Piazza Raffaele Rossetti 3 A/1
Genova, 16129 - ITALY
☎ +39-010-576391
✉ staraglass@hydragroup.it

www.staraglass.com

COMPANY PROFILE

Stara Glass specializes in supplying state-of-the-art furnaces and forehearths, offering innovative solutions and global services to support the glass industry's transition towards decarbonization. The company's R&D department is also actively involved in research projects focused on reducing CO2 emissions and enhancing the sustainability of glass production, with initiatives such as Sugar, H2Glass, and CorEu. Stara Glass can supply EPC projects for all types of melting furnaces, including hybrid solutions, working ends, and forehearths. These include sustainable solutions to reduce NOx emissions and lower energy consumption through patented technologies. Stara Glass also offers maintenance & customer support services, such as hot works, repair services, start-up, and shutdown services. Please visit us to discover all our capabilities.

PRODUCT RANGE

- EPC
- MELTING FURNACE
- HYBRID FURNACE
- WORKING END AND FOREHEARTH'S ENGINEERING
- EQUIPMENT ENGINEERING AND SUPPLY
- BOOSTING SYSTEM
- SUPER BOOSTING SYSTEM
- TOP QUALITY REFRACTORY
- DEMOLITION
- CONSTRUCTION
- COMMISSIONING
- OPERATIVE SUPPORT
- HOT REPAIR
- SUSTAINABLE SOLUTIONS

This is our commitment: at Stara Glass, we recognize the world's shift towards a renewed value chain, and we are ready to lead with unmatched engineering excellence.

Let's lead the change together.

TECO GROUP

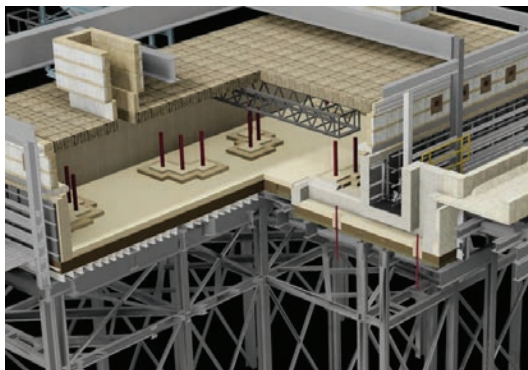
PROMOTED PRODUCTS

- Glass furnaces of all types
- Forehearths and working ends
- Glass plant equipment including the SX electrode holder and electric boosting



COMPANY PROFILE

As part of the **TECO Group**, Toledo Engineering, Tecoglas, and KTG Systems, can offer total furnace capabilities in glass furnaces of all types with KTG Engineering supporting this activity as glass plant equipment manufacturers. Zedtec are the **TECO Group** specialists in forehearth and working end technology. The **TECO Group** has been designing, building and modernising for the world's primary glass manufacturing industry since 1927.



HALL 13
STAND B56

TECO

TECO GROUP

Toledo Engineering Co., Inc. 3400
Executive Parkway P.O. Box 2927
Toledo, Ohio 43606-2927 - USA
☎ +1 - 419 - 5379711
✉ sales@teco.com

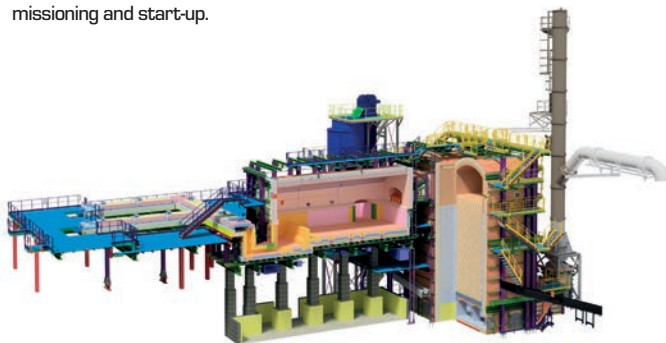
www.teco.com



TECSIGLASS S.r.l.

COMPANY PROFILE

Tecsiglass is an integrated technical partner for the glass industry, providing engineering, supply, equipment and complete site services for glass furnaces and forehearths. The company supports customers throughout the entire project lifecycle, from design and material procurement to demolition, installation, commissioning and start-up.



SUPPLY & INSTALLATION EQUIPMENT

- Refractories and steel
- Burners, manifolds and combustion skids
- Furnace pressure and reversal valves
- Electrical panels and instrumentation
- Cooling, ventilation and auxiliary equipment

PEOPLE TO CONTACT AT OUR STAND

GIACOMO BRUNO - giacomo.bruno@tecsiglass.com
ENEZA ZAPPULLO - e.zappullo@tecsiglass.com
LUCA MASSOLOI - l.massolo@tecsiglass.com

HALL 13
STAND F32

TECSIGLASS

TECSIGLASS S.r.l.

Genoa - Italy
☎ +39 - 010-9913351
✉ info@tecsiglass.com

www.tecsiglass.com

ENGINEERING

- Glass melting furnaces and forehearths
- Refractory engineering
- Structural steel engineering
- Combustion systems
- Electrical and automation systems
- Ventilation, CFD and energy studies

COLD & HOT REPAIR

- Complete cold repairs
- Hot sealing and overcoating
- Crown and superstructure repair
- Forehearth hot repairs
- Component replacement
- Maintenance and technical support

COMPLETE GLASS FURNACE SOLUTIONS



HALL 14
STAND C31

PRODUCTS BEING PROMOTED

Vertech' at a glance

For 30 years, Vertech' has been the reference provider of software solutions for the glass industry. SIL is a Manufacturing Execution System (M.E.S.) developed for glassmakers producing hollowware, tubes and glass decoration. With a wide range of products, SIL provides glassmakers with very precise, real time KPIs on the performance of the whole plant. Thanks to all this shared data and the full traceability of products, production rates improve, losses decrease and customer risks are reduced.

Vertech' at an international scale

All over the world, more than 750 running production lines are equipped with SIL. SIL is currently installed in 35 countries, on 5 continents, and available in 28 languages.

A wide range of products

SILProd enables to oversee the production line. It ensures data acquisition from production or decoration lines with real-time display facilitating communication between hot end and cold end.

SIL4.0 is a customized solution that enables data acquisition throughout the plant starting at raw materials. This module guarantees the full digitalization of the glass manufacturing plant. KPIs are accessible and displayed on a customizable dashboard.

SILXQual is an indispensable tool across the glass manufacturing plant for managing quality control not only of raw materials or glass performance, but also articles - in the lab and on the lines - and pallets.

SILXMould guarantees the quality and specifications of the article enabling the traceability of each mold - units and series - independently.



PEOPLE TO CONTACT AT OUR STAND

Ulas Topal - Chief Executive Officer
Andrea Borgno - Area Sales Manager

SILXManager is a management interface for the SIL modules, designed for managers. It ensures the extraction of data for analysis purposes and the generation of daily reports.

SILXMaint improves the maintenance budget to secure the efficiency in the production. It optimizes the maintenance of the IS machine components allowing the production to meet its full capacity.

Trustworthy collaborations with partners and customers

Thanks to trustworthy collaborations with partners, SIL is an independent system that's capable of being connected to any production and inspection machine available on the market.

Besides being a very complete system, SIL includes an individualized follow-up, an annual maintenance contract, on-site and remote installation and customer service.

Vertech' is there every step of the way from the first technical visit and to the installation process to full system implementation and on-site/off-side training. Vertech' customer support is available during office hours (GMT+1), with an optional subscription to the 24/7 hotline for technical support. For long-term system optimization, Vertech' offers expert maintenance on-site and remote service with yearly updates.

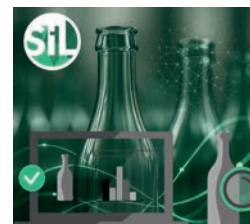


VERTECH'

Campus SaoneOr
11, rue Alfred Kastler
71100 Chalon-sur-Saône - France
☎ +33 - 3 - 8598 1919
vertechsales@vertech.fr

www.vertech.fr

Follow Vertech' on LinkedIn



HALL 13
STAND F30

PEOPLE TO CONTACT AT OUR STAND

Francesco Cavatorta - Glass Division Sales Manager
Filippo Mattioli - Area Sales Manager
Luca Bucci - Area Sales Manager
Felice Cappuccio - Area Sales Manager

COMPANY PROFILE

Vetromeccanica, established in 1992 in the province of Parma, the heart of the Italian packaging area, has been an important industrial international player right from the very beginning.

With 30 years of expertise in containers handling, Vetromeccanica is a reliable partner during all the phases of the process: from feasibility studies, ex-

cutive engineering, the choice of the best supplies, right up to the supply of innovative, patented and competitive handling and automation solutions to meet specific needs.

Vetromeccanica offers Cold End Lines fromlehr exit up to palletizing units for the handling of glass containers of different sizes and shapes.

PRODUCT RANGE

- Cold End Lines
- Stacker Units
- Columnar Palletizers / Depalletizers
- Beam Palletizers / Depalletizers
- Robotic Units
- Tray Formers
- Labelling Systems
- Empty Pallets Dressing Lines
- Shuttle Cars
- Sorting & Decorating



VETROMECCANICA SRL

Strada Isolanda, 26 - 43024
Loc. Provazzano (Parma) - Italy
☎ +39 0521 - 343011
✉ sales@vetromeccanica.it

www.vetromeccanica.it

VIDEO SYSTEMS SRL

HALL 14
STAND C23

PEOPLE TO CONTACT AT OUR STAND

Alessandro Liani - CEO
Jacopo Zoratti - Sales Director

PRODUCT RANGE

- **Oculus** - The universal portable micro control
- **Linea** - Shoulder checks contactless control and checking of mouth defects
- **Vertigo** - Geometric contactless control
- **Omnia** - Multi-format total sidewall control
- **Extrema** - Advanced bottom control of containers
- **Arcus** - Continuous glass colour monitoring
- **SBI** - Checking mouth defects
- **Multi oculus** - Smart cut search
- **Versus** - Smart product selection
- **Kit finish** - Intelligent quality control of container Finish
- **Proximus** - Counting and check for hot bottles clogging
- **Libra A20** - Liquid level check, presence and conformity of the plug/cap position
- **Vip line** - Federal Mark codes tracking solution



COMPANY PROFILE



Video Systems is specialized in the design and construction of high-tech sensors, vision and quality control systems for the main industrial sectors, including the hollow glass market, where our company has developed a vertical competence deriving from a long term experience with important companies of this sector. Imago is the complete range of advanced solutions for inline quality control in hollow glass production - bottles, jars etc. - developed by Video Systems and based on its deep expertise in Artificial intelligence, artificial vision and IIOT.

Imago solutions learn directly from the production line, with great advantages in terms of reliable results, cost reduction and great ease of use; moreover, they guarantee fault-finding of any kind of defect, while reducing false rejects to the minimum. Video Systems supplies customized solutions that matches the customer needs, starting from an accurate study of data and production line. A full tele-assistance service is part of Video Systems support to our customers.



VIDEO SYSTEMS SRL

Viale Mangiarotti, 4
33033 Codroipo (UD) - Italy
☎ +39 - 0432 - 913582
✉ sales@videosystems.it

www.videosystems.it

VMA GMBH

HALL 14
STAND C03

PEOPLE TO CONTACT AT OUR STAND

Nico Thomae - Managing Director
Fred Vogler - Managing Director

COMPANY PROFILE

VMA GmbH develops and manufactures non-contact opto-electronic sensors for the global glass industry, with a strong focus on thickness measurement. Backed by decades of industry experience, VMA's engineers understand the highest demands in glass quality control and production technology. The company's sensors are tailored to customer needs, ensuring reliable support for high-quality glass manufacturing.



PROMOTED PRODUCTS

1. Container Glass: TMC-FLX-System for on-line, non-contact wall thickness measurement at the cold end.
2. Float Glass: TMF-FLX-System for on-line, non-contact thickness, stress and temperature measurement at both the hot and cold end.
3. LabTMC® for the hot end: Portable offline, non-contact thickness gauge for sample inspection at the hot end of the production line
4. LabTMC® for the cold end: Portable offline, non-contact thickness gauge for laboratory quality control and sample inspection at the cold end of the production line
5. Special Solutions:
 - Tubular glass: on-line and off-line wall thickness measurement, diameter measurement and sorting
 - Tableware: on-line wall thickness and glass distribution measurement
 - Fibreglass: TOGA preform analyser

INNOVATIONS

1. FLX-UNO: flexible single-sensor solution for individual measurement applications
2. In-house developed stress sensor: new sensor technology for stress measurement of float glass



VMA GMBH

Gräfinauer Str. 2
D-98693 Ilmenau
Germany
☎ +49 - 36785 - 5870
✉ info@vma-online.de

www.vma-online.de



WALTEC MASCHINEN GmbH

HALL 13
STAND E69



WALTEC MASCHINEN GmbH

Kronacher Strasse 2a
96352 Wilhelmsthal - Germany
☎ +49 - 9260 - 9901-0
✉ info@waltec.de

www.waltec.de



Double gob press



Press-blow machine W12

PEOPLE TO CONTACT AT OUR STAND

Britta Höfer – Managing Director & Partner
Rainer Wagner – Chief Operating Officer
Falk Höllwarth – Director Project Management
Klaus Kestel – Head of Sales



COMPANY PROFILE

Tableware, cookware, stemware, toughening/tempering, microwave and technical articles like washing machine cover glass, glass insulators, glass blocks

PRODUCTS BEING PROMOTED

- Electronic gob feeders
- Electronic shear systems
- Fully automatic glass presses
- Press-blow machines
- Blow-blow machines
- Spinning machines
- Fire polishing and rim glazing machines
- Take-out and turning
- Stackers
- Handling systems
- Conveyor belts
- Transfer systems
- Single gob lines
- Double gob lines
- Triple gob lines
- Quadro gob lines
- Spinning lines
- Stemware lines
- Press-blow lines
- Blow-blow lines
- Toughening/tempering lines

ZIPPE INDUSTRIEANLAGEN GMBH

HALL 13
STAND A31



ZIPPE INDUSTRIEANLAGEN GMBH

Alfred-Zippe-Str. 11, D-97877 Wertheim
Germany
☎ +49 - 9342 - 8040
✉ zippe@zippe.de

www.zippe.de

PEOPLE TO CONTACT AT OUR STAND

Dr. Philipp Zippe - CEO
Dr. Andreas Emrich - CTO



PRODUCT RANGE

- Batch Plants
- Cullet Plants
- Automation
- Engineering
- Modernization
- Factory Cullet Recycling
- Glass Recycling
- Batch Charging
- Preheating
- Audits
- Maintenance & Service



COMPANY PROFILE

Our core business is the development and construction of batch and cullet plants.

We pride ourselves on being amongst our customers' most reliable partners, with an infrastructure, the expertise and capability to deliver projects of any magnitude.

As one of the few full-service providers in our industry, our spectrum covers all service areas within plant construction – engineering, planning, design, production, automation technology, installation, site management for all disciplines, commissioning, training for personnel, and services for ongoing operations.

Be it flat glass or hollow ware, Zippe batch plants ensure that the batch for every glass type is fully automatically fed into the furnace with the exact consistency and homogeneity needed, at the required amount and at the right point in time – 24 hours a day, every day.

State-of-the-art control technology is a key element for optimal operation of a batch plant. There are around 40 Zippe automation and control systems specialists hard at work for you. Our 24-hour support service enables our customers to contact an expert around the clock, and now, thanks to the new Zippe smart@360 online service & maintenance tool, a live system for completed and ongoing service activities is available for your operating personnel 24/7!

Zippe has been focused on the future for more than 100 years and, having realised well over 690 batch plant projects, has the longest standing experience in our industry sector:

Zippe – right from the start.



MARCH 03-05, 2027

EXPAND YOUR BUSINESS IN AFRICA



ORGANIZED BY:



Y T International
Enterprise Inc

WWW.EXPOAFRIGLASS.COM
INFO@UZGLASS.COM

follow us@ ExpoAfriGlass





FLUORITAL

THE Colors OF SUSTAINABILITY



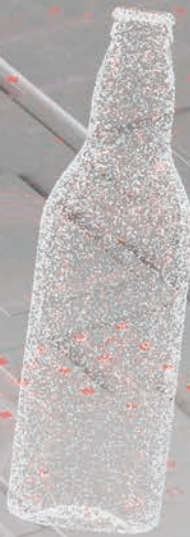
WWW.FLUORITAL.COM



FLUORITAL has made its eco-sustainability policy a *true pact with the planet*, sealing this pact thanks to its environmental certifications.

For over 60 years it has been the main reference in the sector of **high quality paints** and inks for glass, plastic and metal; as well as a pioneer in non-flammable water-based products, with cross-linking at low temperatures and with low contents of volatile organic compounds.

HEADQUARTERS: Fluorital S.r.l. Via Roma 54, 31020 Villorba Italy | info@fluorital.com
FLUORITAL GROUP: FRANCE - USA - ITALY - POLSKA



SmartInspectAI

Meaningful AI in Glass Inspection

SmartInspectAI from Bucher Emhart Glass can instantly identify unique flaws and defects on your line and adjust production automatically, resolving them without human intervention. It's the only glass inspection system to truly make use of AI, learning to recognize emerging issues, and eradicating them in real-time.

Hall 13, Booth 31

glasstec
20-23 OCT 2026
DÜSSELDORF | GERMANY



BUCHER
emhart glass