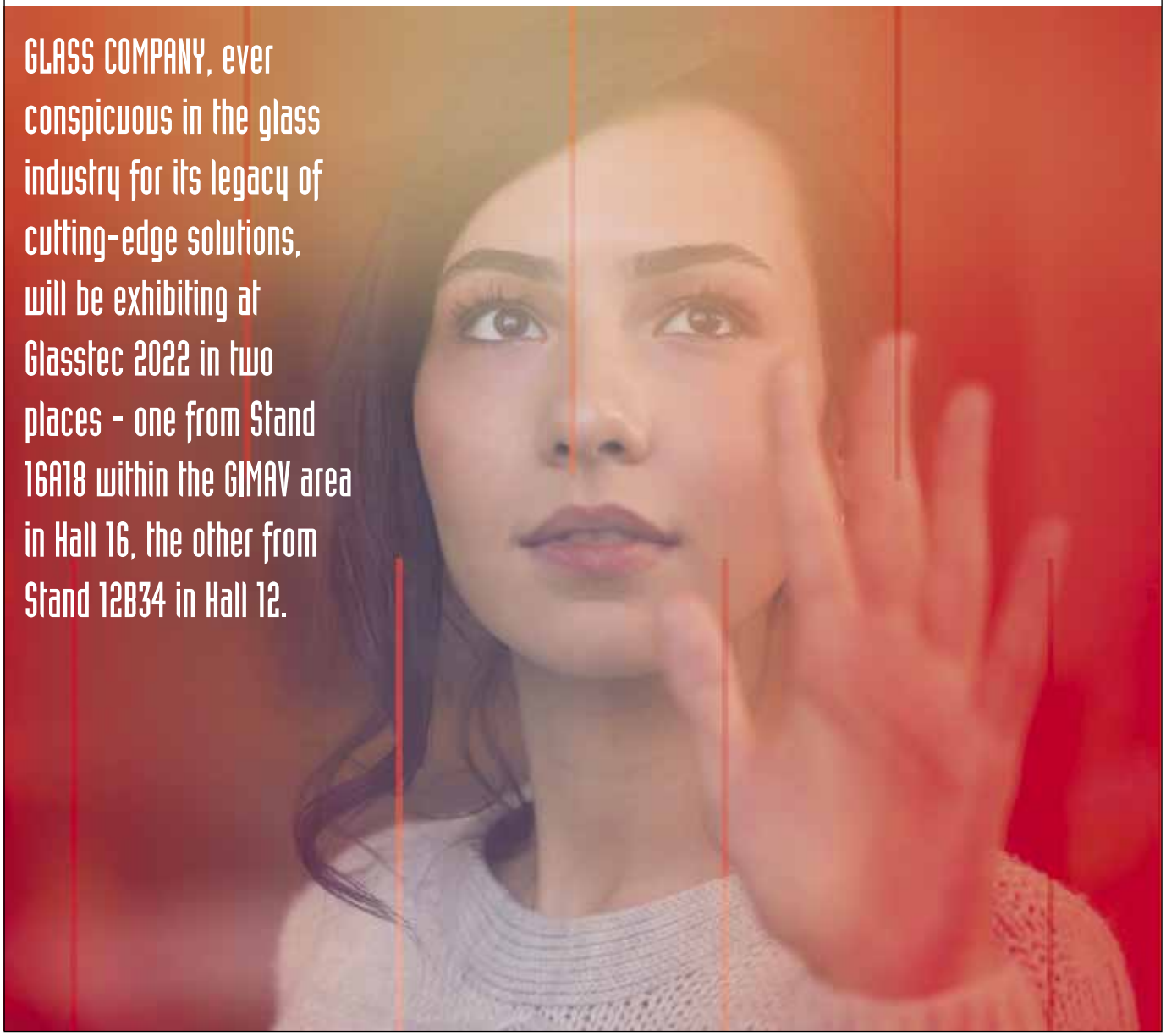
GLASS COMPANY takes innovation and added value to Glasstec

GLASS COMPANY, ever conspicuous in the glass industry for its legacy of cutting-edge solutions, will be exhibiting at Glasstec 2022 in two places - one from Stand 16A18 within the GIMAV area in Hall 16, the other from Stand 12B34 in Hall 12.



Customers and trade show visitors who visit Glass Company's stands this year can expect to see its latest machinery and systems proposals for glass production - all with completely new technological, functional and aesthetic characteristics.

SOFTMEK

The company's Softmek software will be presented for gauging and processing heated glass for the refrigeration sector, bathroom furniture, heated towel rails, etc. Developed to work in conjunction with Lasermek -the laser range that removes and engraves any coating type, including low-E, paint and silver- Softmek machinery offers glass a high added value for its drilling and cutting features.

LASER SCANNER

At Glasstec the laser scanner machine will include process demonstrations on different types of coatings throughout the day.

FIREMEK

Stand attendees will also see the quality of fire resistant glass produced with the Firemek system, which uses a latest generation intumescent mixture based on Silica. This guarantees high glass performance, superb quality as well as durability in the event of exposure to fire or very unfavourable environmental conditions. Firemek contains sophisticated technology which, thanks to its great ease of use, renders fire-resistant glass production no longer exclusive or the prerogative of just a few manufacturers - such that medium and small businesses can now use it as well.

LASERMEK

Lasermek covers the range of laser machines designed and proposed by Glass Company Srl - including scanner and beam technology, which were both developed for the engraving and ablation of any type of glass surface coating. Lasermek Scanner is an innovative multifunctional technology that, in a single step, can very swiftly remove portions of coating from tens of centimeters of the final product (mirror, lacquer, hard coating, reflective, etc.) or engrave high quality lines of a few hundredths of a millimeter with extreme precision.

LASERMEK BEAM

Lasermek beam performs the same processes as those of the above machine, only with longer times given that it removes a few hundredths of coating at each step. Indeed both technologies can be applied to different types of processes:

- For the furniture sector - in particular bathroom furniture and generally any environment or furniture for which mirrors with a high aesthetic impact are required. They allow for the removal of silvering from mirrors - leaving glass completely transparent and able to reproduce any image and/or photo type upon the mirrors or, for example, insert TVs.
- Also for the furniture and construction sector, by choosing an appropriate laser source one can create graphic and decorative workings on the glass surface with an opaque effect. This technology allows for engraving, for example of logos on tempered glass, as well as for

partitions, glass doors and windows, etc.

- For the refrigerated counters sector it's possible to micro-engrave electro-conductive coating on the glass surface, creating lines and coils that are almost invisible to the human eye which, by interrupting conductivity, allow one to obtain heated anti-fogging glass that's also suitable for thermo sector furniture - allowing for simultaneous creation of both heating and decorative panels.
- Glass Company lasers can engrave most coatings to create glasses with special performances - such as (among others) anti bird-collision glass, glass allowing for the passage of radio waves, glass that become antennas and those with antibacterial performances.

DRILLING AND CUTTING TECHNOLOGIES

At Glasstec, information will also be given on other highly-innovative technologies within the Glass Company laser range, namely the Glass Drilling Laser, the Lasermek Drill and Lasermek Cut glass-cutting laser. With the Lasermek Drill it's possible to make holes of any shape and geometry - from the classic round hole with square, oval, trapezoidal or mixed square with round holes to recesses and slots at the edge of the glass. Here the maximum hole size is 80 x 80mm - a dimension that can be increased using very sophisticated optics.
Processing times are close to those of classic water-jet cutting systems, only they offer the added advantage of processing with the total absence of water and abrasiveness. As such they generate no expensive waste that requires disposal whilst having an energy consumption of about 3Kw as opposed to the required jet power - which is at about 40Kw. Created for the automotive, medical and hi-tech equipment glass sector, the LaserMek Cut allows for straight and shaped cuts on glass with a thickness of up to 15 mm. An innovative technology, it finds application in very specific fields of industry and is appreciated for the extreme precision of the cut, coupled with an excellent edge-finish. Both lasers work at low energy consumption and environ-

mental impact as they use no water, oils or diamond and abrasive tools and work with the almost total absence of noise. Not only. By not using mechanical tools they guarantee great drilling and cutting precision. Since the laser beam won't wear out as common tools do, an infinite repetition of drilling and cutting tolerances is guaranteed. Consequently it can be confidently deduced that the laser allows for significant energy savings just as energy costs are weighing so heavily upon the entire industrial sector - offering significant water savings but also a greater respect for the environment given the lack of waste generation and generally very low impact. Also, duration of the laser source exceeds thousands of work hours, thereby rendering this technology a genuine alternative to traditional drilling and cutting systems.

FIREMEK

For years now, Glass Company innovation has led to the development and subsequent implementation of the company's own technology for producing fire resistant glass, which is suitable for both flat and curved glass - namely Firemek. Initially developed as a manual system, Firemek was implemented over time as a semi-automatic system for the production of a few hundred square meters per month of fire-resistant glass - later becoming a fully-automated turnkey line for the production of large quantities of fire resistant glass. Continuous evolution of the system has since allowed for error-free preparation of the intumescent mixture owing to the absence of the human component. Automatic weighing of the components, perfect automatic management of the heating and cooling of the mixer during the vacuum process, precision during glass-filling thanks to PC-controlled weight/volume pump dispensing all ensure that daily production of the intumescent mixture based on Silica -which is extremely transparent and without bubbles- can be replicated over time without variation or error. The process ends with a crosslinking of the previously prepared sandwich in an oven that has characteristics specifically-designed for fire resistant glass production. All production line components were designed to reduce and eliminate typical glass defects - making the process as standardized as possible in conformity with the most stringent European glass protection regulations for classes E, EW and EI to counter flame hazards, noxious gasses and heat. With a sandwich system, consisting of two glass enclosing the intumescent mixture of the Glass Company system, resistance times rise for EI30, EI60, EI90, EI120 glass as the glass layers and intumescent mixture increase.

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