

Innovative tools with a tradition from **ARTIFEX**

German based company Artifex can look back on a tradition spanning over 90 years in the fabrication of custom-fit grinding and polishing tools. The company offers its expertise in its mission to meet the needs of customers, satisfying individual requirements with flexibility in application and development each and every day. As a globally operating manufacturer for the glass working industry, Artifex develops and manufactures today the products for tomorrow's technology.

100 YEARS OF EXPERIENCE, TRADITION AND STATE-OF-THE-ART EXPERTISE

Founded in 1924 Artifex, a medium-sized company, started out by producing domestic metal cleaning blocks. Today it is one of the leading manufacturers of elastic bonded abrasives with a global sales network. Specialists in professional glass and metal working, their consulting services incorporate a varied industry sector ranging from the process industry, steel and machine engineering right through to the aerospace industry. Customers can rely on 100 years of experience, tradition and state-of-the-art expertise.

FLEXIBILITY – THE KEY TO IDEAL SOLUTIONS

Artifex is constantly researching the perfect materials and shapes for a vast range of applications, developing technologies and ideal solutions to match the requirements of new products and surfaces through intense dialogue with customers, machine manufacturers and application engineers. All done in a speedy and uncomplicated manner.

ARTIFEX'S MISSION

Passionate about finding specific solutions for customers, Artifex brings together the individual expert knowledge of all its staff. This teamwork enables Artifex to offer much more

than a classic consultation, engaging with the needs of customers with curiosity to individual needs, flexibility and expertise.

ARTIFEX TOOLS – FROM GLASS TO METAL

Elastic polishing and grinding tools are used in the most varied sectors and are designed for the most diverse surfaces. For grinding flat glass edges, elastically bonded abrasives ensure unmatched brilliance and enable facades, furniture or bathroom furnishings to be realised at the highest level. In metal working, surface finishes range from the most delicate surgical instruments through to heavy-duty turbine blades.

ARTIFEX – GLASS EDGE FINISHING

Artifex's elastic bond abrasives can be applied in almost all sectors of glass edge processing, regardless of whether flat edge, arris, mitre, bevels or laminated glass. The company offers a wide range of products for single- and double edger machines, alongside perfect pencils and straight edges, plus the ideal tools for working on laminated glass and decoating of low-E glass. Over 90 years of experience in tool development and production ensures the highest quality.

ELASTIC – FLEXIBLE – HIGH-PERFORMANCE

Abrasive grain types such as silicon carbide, alumin-



ium oxide or garnet are flexibly embedded in elastic materials such as polyurethane, rubber or resin. This makes the grinding and polishing disks as soft as a sponge, fine porous or hard, but always elastic. Depending on the application, the desired finish is achieved by the specifically matched composition of grain and bond.

DESIRED FINISHES

Artifex offers the right abrasive combination, consisting of polishing wheels, a cerium wheel and the matching special wheels for the arris for every desired finish. Customers can select from the following:

- for mirror finish;
- for the longest service life;
- for low tool costs;
- for laminated glass;
- for edge decoating low-E glass.

INCREASED OPERATING EFFICIENCY

ARTIFEX tools speed up the production process and increase operating efficien-

cy in production. For individual requirements Artifex is able to develop tools to the highest level of technology in its research department. Flexible application to individual requirements.

THE SERIES

Artifex's material compositions are as individual as customers' requirements. The ideal composition of polyurethane, resin or rubber with the corresponding grain guarantees the perfect result. Regardless of whether initial equipment, tools with a long service life, economic variants or special glass: Artifex meets customers' needs with the matching series.

Artifex constantly develops material compositions for the special needs of customers should the perfect series not be found in the existing range.

'WHAT IS WHAT' AT ARTIFEX

Artifex tools are manufactured in the most varied material compositions. Polyurethane as a bond module can be ideally com-



bined with grinding and polishing abrasives ranging from aluminium oxide and garnet up to cerium oxide.

Spe-cially developed rubber bonds and high-tech resin ensure flexibility and a long service life.





RANGE AND TYPE OF DELIVERIES

Artifex provides peripheral wheels, cup wheels, rings, sleeves and mounted points in addition to the most varied special shapes according to customers' special requirements. Segmenting of full material cup wheels and cup wheels with plate can be realised alongside special cooling bore holes.

ARTIFEX – TOOLS IN APPLICATION

With the Artifex product range, single- and double edger machines just

as CNC milling machines are equipped, custom-fit and cover all price groups regardless of whether flat edge, arris, mitre, bevels or laminated glass. Depending on the application, the type of glass and the polishing result, Artifex can provide the perfect tool for almost any machine.

HIGH GLASS TRANSPARENCY OR PERFECT HIGH SHINE?

Artifex's elastically bound polishing tools are produced for all standard machine types. The customer



decides whether their priority lies on a high glass transparency or the perfect high shine.

For initial equipping, Artifex fits out many single and double edgers of renowned manufacturers, also providing alternative tools besides the OEM tools made to customer specifications for almost all machines.

CUSTOM-FIT SINGLE AND DOUBLE EDGERS

Artifex helps to achieve perfect high gloss, long service lives or industrial gloss for each specific machine and glass requirements. This custom-fit set consists of polishing wheels with different grain sizes, abrasives and the corresponding arris wheels for optimum results.

PERIPHERAL WHEELS – PERFECT PENCILS

Artifex tools for round edges, regardless of whether pencil, flat bull nose or half bull nose, respond to special requirements as for use on single and double edgers as well as CNC machines. The entire bandwidth from the perfectionist (BK – WR) and the classic (AO – UQ5) up to the more economic variant (EK – UJ) is offered and is adaptable to budget.

THE PROS FOR LAMINATED GLASS

Laminated glass requires special processing. Artifex renders it an easy process making these problems a thing of the past. All product series segmented with 3-mm or 5-mm slots for perfect laminated glass



processing are offered with the advantage of no clogging of the cup wheels, no sticking of foil on the glass edges.

EXPERTS FOR SMALL MACHINES

Glass edge finishers with just a few polishing spin-

dles can also be excellently equipped with Artifex tools. Starting off with the polishing cup wheel quality AO – BQ6, followed by the rubber cerium oxide cup wheel CE – R which achieves optimum high gloss on the edge. If no diamond stations are avail-

able for the arris, this can be roughed up with the SC 280 HS cup wheels and polished out.

PERFECT HELPERS FOR DECOATING OF LOW-E GLASS

Artifex grinding wheels fulfil all requirements

for work on low-E glass whether on manual or vertical machines or cutting tables. The selection of the right composition depends on the layer to be stripped and the number of metal layers. Amongst others, these consist of silver, copper and stannic oxide.



PRODUCT SERIES

The durable one: series ao – q

Regular aluminium oxide embedded in an extremely durable polyurethane bond ensures outstanding service lives.

Colour: brown

The sparkler: series ao – bq

A polyurethane bond encloses the regular aluminium oxide resulting in perfect gloss. Guarantees optimum stability in any process position due to the solid backing plate.

Colour: varies according to grain size

The economic one: series ao – bj

A mixture of grinding and polishing abrasives merge to an economic full material cup wheel in a polyurethane bond.

Colour: varies according to grain size

The versatile one: series bk – pr

A balanced mixture of aluminium oxide in a durable polyurethane bond ensures versatile applicability. These full material cup wheels have the optimum price/performance ratio.

Colour: varies according to grain size

The classic: series bk – wr1

Pumice and aluminium oxide in a special rubber bond produce a good industrial gloss with a proven long service life.

Colour: grey

The first choice at benteler: series bk – pbr

As an OEM version, these pre-polish cup wheels are used on Benteler machines.

Aluminium oxide in a polyurethane bond combines long service life with a good quality polishing result.

Colour: varies according to grain size

The gloss expert: series ce

Brilliant white cerium oxide with an extremely fine grain is embedded in elastic resin, a rubber or polyurethane bond, depending on the application, for the best gloss possible.

Colour: white

The extra-sharp one: series ek – s

The perfect choice for arris with diamond pre-grinding: white special fused aluminium oxide

in resin bond polishes without negatively changing the arris geometry.

Colour: yellow

The inexpensive one: series ek – sj

These full material cup wheels made of special fused aluminium oxide in a polyurethane bond create an appealing arris at an economic price.

Colour: red

The multi-talent: series sc – s

One for everything: silicon carbide in a resin bond grinds and polishes arris without diamond pre-grinding.

Colours: green, red

The low-E glass pros: series t

Decoating requires special effort. This series with garnet, silicon carbide and regular aluminium oxide as abrasive grain, decoates the layers on low-E glass without leaving any residue. Abrasive grain type, grain size and the hardness of the polyurethane bond depend on the respective layers.

Colours: brown, grey, green



Each manufacturer offers its own types of glass. For example, LOW-E (soft) or Sun Stop|Solar (hard). To meet the requirements of varying suppliers Artifex produces grinding disks that differ with respect to grain size, type of abrasive grain and bonding strength. The Artifex quality SC 150

HT scores with a special polyurethane bond and silicon carbide passing the butterfly test with absolute certainty. custom-tailored to demands.

CUSTOM-FIT FOR MANUAL MACHINES

Artifex recommends disks with a core reinforcement,

such as the SG 100 HT when using converted angle grinders or manual circular saws whose rpm value has been reduced.

PERFECT FOR VERTICAL MACHINES

Different series for glass-working on vertical machines are stocked, depending on the coating strength or the integration of protective foil.

IDEAL FOR CUTTING TABLES

Different variants for more complex processing methods on cutting tables with an integrated decoating unit, are offered, depending on requirements: hard offline coatings or for glass with a protective foil such as Guardian TPF.

YOUR EDGES ARTIFEX'S TOOLS

Conscious that not all

edges are alike, the type of glass, the thickness and the glass profile determine the tool. Artifex offers the right polisher for any edge. The classic polishing cup wheels and disks already result in an outstanding industry gloss. Following on, the cerium oxide products of the CE series provide the perfect high gloss.

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