

Remote sandblasting control: FRATELLI PEZZA's MistralApp drives automation

MISTRALAPP: THE DIGITAL REVOLUTION FOR AUTOMATIC SANDBLASTING MACHINES

In fully-automatic sandblasting cabins, the MISTRAL EV+ is the latest version of the Mistral series. Compatible with Industry 4.0, it allows for all the benefits of the MistralApp - an innovative web application for remote programming via PC or tablet. This service represents an important support for glass

factories seeking to optimize planning and processing times - thereby significantly reducing both production costs and consumption. Its main advantages include the ability to:

- create programmes remotely without interrupting the process;
- provide a preview of glass to be processed and programmed areas;
- name and copy programmes without having to rewrite them each time - all while using them with glass of different sizes;

- save an unlimited number of programmes - all of which retrievable;
- share programmes to identify the best configuration for each process.

GLASSTEC 2024

At Glasstec 2024, the MISTRAL EV+ series will be presenting a software update that brings operational advantages for the user. In particular, these include:

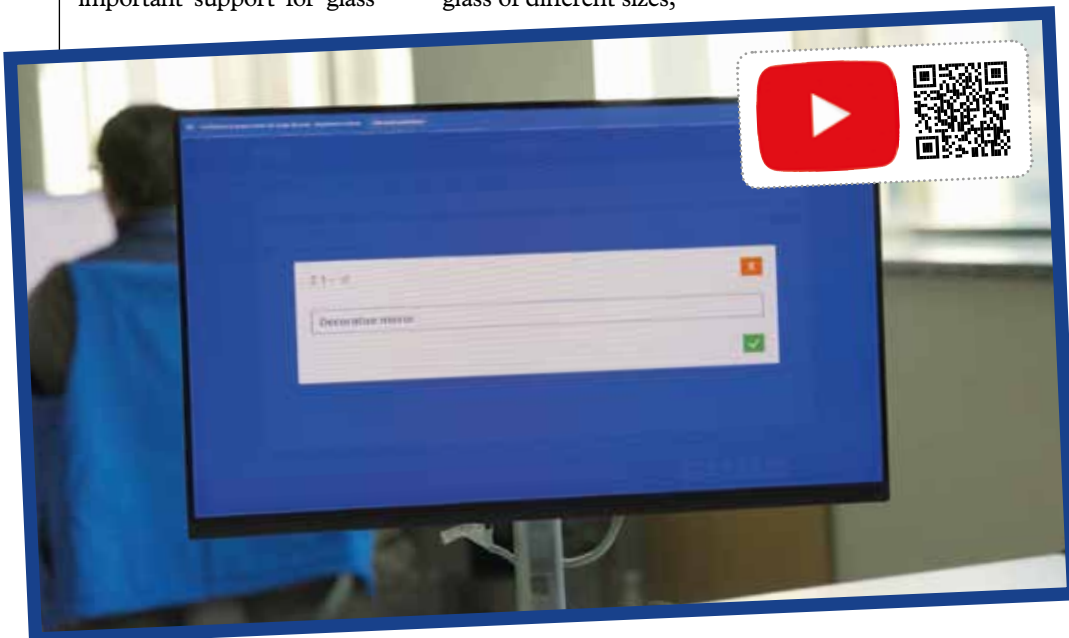
- the consumption of secondary compressed air that's been optimized by

reducing it by up to 75 percent with clear economic and ecological advantages - all while also allowing the cabin to be managed with less powerful compressors;

- a created configuration that's dedicated to LED mirror processing which ensures safe and defect-free processing;
- a drawing that's uploadable to the MistralApp web application - thus making programming of the sandblasting areas both easier and faster.

OPTIMIZATION OF THE LED MIRROR MANUFACTURING PROCESS

The possibility to programme up to 50 sandblasting areas, even of different types (thick, shading, deep engraved), offers various decoration options while allowing for reduced LED mirror production process



Among FRATELLI PEZZA's solutions emphasizing sustainability and energy efficiency for multiple materials that include glass, marble and solar panels, the company's innovative Mistral EV+ sandblasting range offers Industry 4.0 compatibility, reduced energy consumption and enhanced LED mirror processing. Key features here include remote programming, MirrorProtection for spark prevention and bird-safe glass patterns - all of which will be on display at this year's Glasstec.

times. For example, four sandblasting areas can be programmed to correspond with the classic 'perimeter frame' which is then backlit - allowing for a drastic reduction in processing times coupled with significant savings in abrasive material, compressed air and all wear elements.

GOODBYE TO SPARKS, WITH MIRRORPROTECTION

As a system that's integrated into the MISTRAL EV+ and ZEPHIR+ sandblasters, MirrorProtection limits the build-up of static electricity within the cabin - preventing the formation of sparks during mirror sandblasting which, when hitting the surface of the item, would otherwise damage it irreparably. This means a significant reduction of scrap, thus reaping great economic benefits while also promoting sustainability.

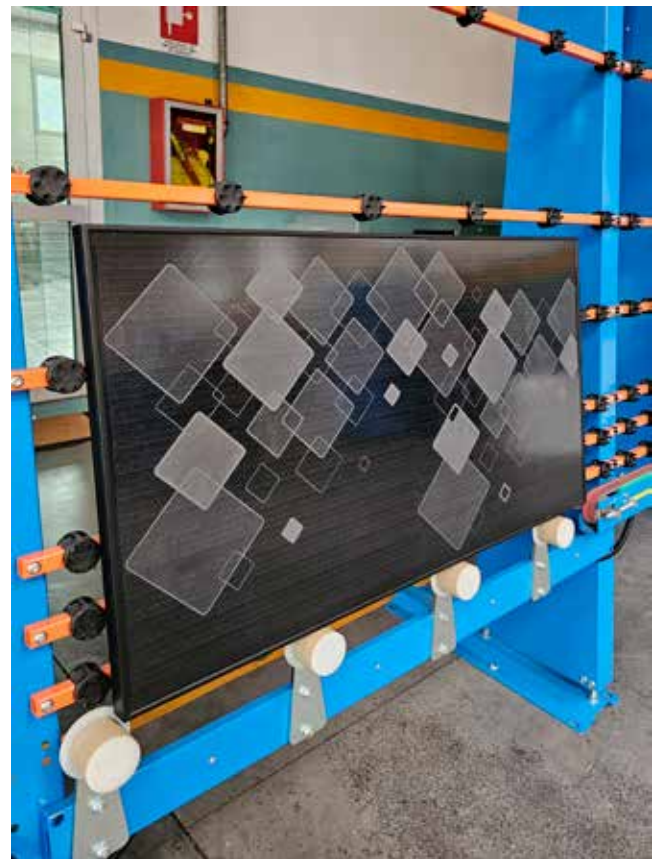
SHADING SANDBLASTING FOR SHOWER BOXES, BALUSTRADES AND INTERIOR DESIGN

The cabins of the MISTRAL EV+ series are

equipped with the shading sandblasting feature - which is widely-used in bathroom furniture in the production of shower enclosures, balustrade and design solutions, as well as the fittings sector. The machine automatically varies the working pressure according to set parameters, resulting in a shaded effect of superb aesthetic quality.

REDUCING CONSUMPTION AND RECYCLING

Fratelli Pezza sandblasting machines have always stood out on the market in terms of energy savings too. With an eye towards Industry 5.0, the latest version of the MISTRAL EV+ and ZEPHIR+ automatic sandblasting machines will reduce the consumption of service compressed air ensuring stability and improve sandblasting accuracy - even with less efficient compressors. Here the aim is not only cost saving but also consumption reduction, which further avoids waste while protecting the environment. Fratelli Pezza sandblasting cabinets maximize the efficiency of abrasive material - all



thanks to a system that recovers and recycles it to the point that it is reduced to powder that's then captured by filters. Fratelli Pezza sandblasters offer an effective solution for recycling damaged glass. Indeed glass with surface defects can be sandblasted and returned to the market with a new look - adding value for glassworks. This process not only reduces

waste. It also contributes to greater environmental sustainability.

SANDBLASTING OF PHOTOVOLTAIC SOLAR PANELS

A new industry trend is that of solar panel sandblasting, a technique that allows for the opacification of the surface without jeopardizing its effectiveness in attracting the solar rays.



PROTECTIVE COATINGS FOR SANDBLASTED, NON-SANDBLASTED GLASS AND SOLAR PANELS

Fratelli Pezza nanotechnological water-repellent and anti-fingerprint treatments are designed to offer maximum long-term value. Here there is a specific trio of products for sandblasted glass as well as for float, clear and extra-clear glass, namely:

- **MIX30 PRO:** designed for sandblasted glass. This is a Mix30pro anti-fingerprint treatment that lasts for over 6500 washes - equivalent to 18 years of daily cleaning;
- **Ghostglaze:** for clear, extra-clear and acid-etched glass, Ghostglaze offers the same impressive durability of 6500 washes or 18 years of uncompromising reliability;
- **Sprayglaze:** for clear glass with automated application, Sprayglaze stands out

Here it's also possible to carry out decorations that embellish and personalize the solar panel itself.

BIRD-SAFE SANDBLASTED PATTERNS

An increased use of glass within the building sector now poses a serious threat to birds owing to its transparency and reflectivity. To reduce bird collisions against glass facades, Fratelli Pezza provides a solution that's widely used in the sector - making the glass surface more visible from all angles and in all weather conditions. Thanks to special Amacor moulds it is possible to sandblast strips or other surface patterns - rendering the glass facade sufficiently visible to birds to significantly reduce collisions. Light sandblasting, too, will greatly reduce reflectivity of the glass while yielding a pleasant aes-

thetic effect to the facade. Used on the automatic sandblasters of the MIS-TRAL EV+ and ZEPH-IR+ lines, Amacor moulds will allow the glass surface to be decorated without any need to stick a mask to each glass - all with much-reduced production times and process costs. Sandblasted glass is the most reliable, time-tested method for making glass facades bird-friendly and at the same time aesthetically pleasing. Whereas the greater roughness and porosity of any sandblasted surface would typically attract dirt, application of the protective coating Mix30Pro will avoid this problem - making it water-repellent and resistant to both dirt and limescale.

NOT ONLY GLASS

With FP sandblasters it's possible to process a lot of materials other than glass. Depending upon material

type, hardness and surface finish (smooth, rough, white, coloured) the customer can obtain different effects and results. Check-out some of the materials that can be treated:

- Mirrors
- Marble
- Ceramic
- Wood
- Metal
- Leather
- Fabric
- Plastic
- Plexiglass



with over 14,000 washes, which means more than 35 years of protection and brightness. Applied to glass intended

MARKING DEVICES FOR GLASS AND MIRRORS

The need to identify glass with special features has

ing line for flat glass since the 1990s, which affords it extensive experience with this application type. The production range has im-

THE MANUAL/PORTABLE SERIES

This series is made up of two models: the Marker 101T can make marks up to 25 mm in diameter, the Marker 301T up to 30 mm. Both are equipped with a timer by which the desired sand-jet duration can be set. Once the set timer period elapses, the flow will stop even if the operator continues to press the control lever. Portable marking machines allow for marking even on already installed glass - all while offering maximum flexibility during factory use.

THE EASYMARKER+ SERIES

Companies that deal with mass production and must automate the process and/or interconnect the machinery to the company's production network will find an

for photovoltaics, these coatings prevent dirt, lime and impurities from adhering to the surface, thereby maintaining panel efficiency and making the item easier to clean. In addition, sandblasting solar panels not only reduces glare but also give buildings a sleek, modern look - making them compatible with landscape protection. For the regular maintenance of sandblasted glass treated with MIX30PRO, the Fratelli Pezza team developed LongCare30. This nanotechnological product not only effectively cleans sandblasted glass. It also revives and extends the protective effect of MIX-30PRO.

made glass marking an essential element in the sector. Indeed recent years have seen national and international regulations regarding the different types of glass become increasingly stricter. Fratelli Pezza has had a sandblasting mark-

proved and expanded over time, with automatic marking units being added to the catalogue. Such equipment is suitable for coupling to any glass processing machinery, whether vertical or horizontal.





optimum solution in one of the automatic models of the EASYMARKER+ series. These marking devices are equipped with 4.0 software, which allows production data to be downloaded for statistical and control purposes and interconnection of the device to the company's network. Thanks to that

interconnection, it is also possible to send a pulse to the marking machine - prompting it to start, fully automatic, without the presence of an operator. The automatic line consists of two models, namely EASYMARKER EV+ that can be combined with vertical machinery (washing machines, drilling ma-

chines, etc.) and EASYMARKER UP+ which has horizontal machinery (tempering furnaces, cutting tables, etc.). Each model is available in a version that allows for logo imprinting of up to 25 mm in diameter.

AUTOMATIC MARKING

Easymarkers EV+25 and UP+25, together with EV+30 and UP+30 in their 30 mm versions all constitute automatic marking equipment that's used increasingly in the LED mirror industry. Setting the sandblast duration proportionate to the paint type that covers the back of the mirror makes it possible to have the shape of

the power button or any other symbol appear on the front of the mirror. Finally, the great advantage of a sandblasting marking system is that it can provide a very high quality, clean and indelible mark. It is also possible to mark the edge of the glass if the thickness allows it.



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