

Cugher Glass: specific approach for architectural glass processing

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The architectural glass sector: difficult to please and even more difficult to supply machines to. Developments must follow the needs and demands of this market with innovation, technology and precision. And it is with these factors in mind that Cugher Glass is presenting its new product to our readers – the Series J – expressly studied to handle large-sized architectural glass, able to reduce errors by 50 per cent.

“We have taken part in the growth of a sector, and now our commitment is to be the leaders in its development.”

According to this statement from Cugher Glass, in order to achieve this aim, a period of field work and advanced research was necessary, and which was targeted at realizing a new generation of screen printing machines meeting the highest market requirements.

The results of this research could soon be seen and also led to the development of a line of screen printing machines especially aimed at the architectural sector where, due to the characteristics of the glass sizes and thicknesses used, a specific approach is needed.

The concepts that are behind these new silk screen printing machines are totally innovative and are based on the application of completely updated technology.

Competitors often carry out simple “make-overs” of their lines; Cugher Glass, on the other hand, has created a new generation of silk





Series G130 x 200L

screen printing machines which combine technological innovations with fundamental features of reliability and solidity: more than 600 customers all over the world, the most important industrial groups in the glass market, are, for Cugher Glass the proof: our machines are still up and running since 1980.

FLEXIBILITY, MAXIMUM PRECISION, RELIABILITY, EASE OF USE

The companies that operate in the architectural glass sector need machines that guarantee extreme versatility and that enable them to respond to the ever more complex demands of this particular market.

The versatility of the machine cannot forget the need for absolute printing precision, as it is only with this precision that companies can offer the highest quality finished products that are also extremely competitive. To this aim, Cugher Glass has created the Series J automatic printing machines able to offer printing repeatability

with precision up to 0.08 millimetres, enabling to have continuously sharp images, also with multiple strokes and polychrome images.

Ease of use is a further strongpoint of Cugher Glass' new screen printers. An innovative recipe system enables the operator to recall, by means of a touch panel, all data relative to the glass that needs to be printed. The system also prepares the instant setup of the machine that is automatically ready to receive the glass.

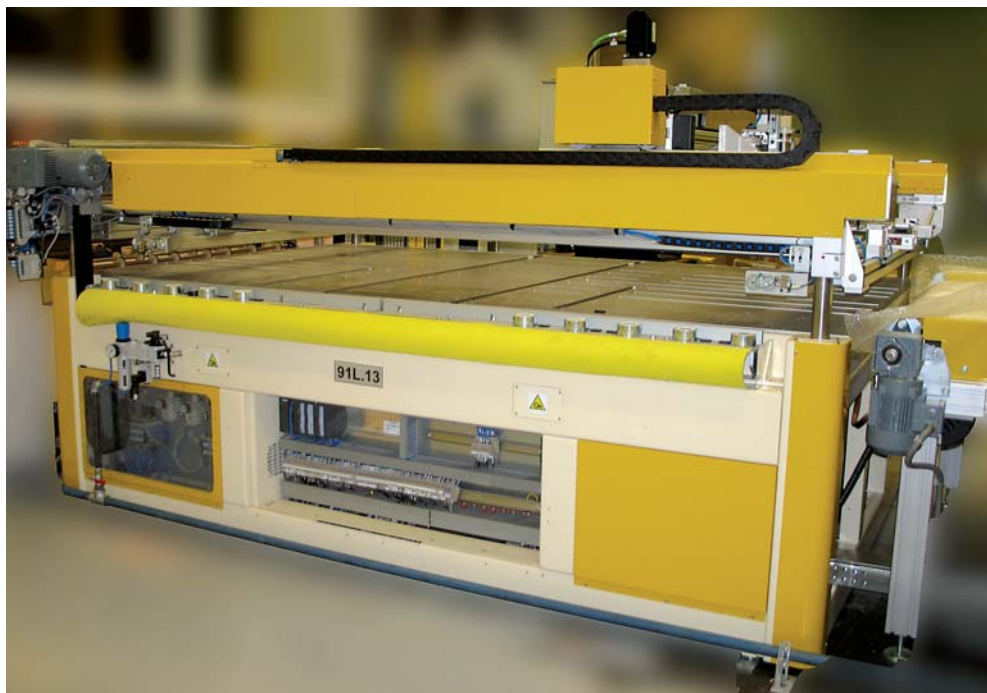
This system also enables to realize change in format in the shortest time, increasing significantly the production of the same machine in the ever more frequent case of small batches of diverse types and sizes of glass.

The new centring systems, together with printing precision guaranteed by Cugher Glass machines, is the main feature of the Series J.

The new technologies applied to the positioning and centring of glass, in fact, offer a cutting error compensation function that intervenes automatically, and systematically reduces errors

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in the High Rising sector, has recently installed a complete Series J line able to print glass up to 3,000-millimetres, thus offering architectural glass decorated with multi-colour images and drawings. The line also includes a Cugher Glass IR 2000 Power Saving furnace, which enables optimized energy consumption and decreased running costs.

The Series J (expressly studied to handle large architectural glass sizes) is available in different models, able to print glasses sizes starting from 1,300 x 2,000 up to 3,210 x 6,000

by 50 per cent. The effectiveness of this system enables to obtain prints that are always centred with respect to the median line of the glass and a finished product of the highest quality and value.

The centring setup is connected to the recipe system and is able to position itself automatically as per the memorized data. In the case of symmetrical glass, the setup procedure is so fast that it is almost “invisible” to the operator.

The Series J also uses some solutions that have already been tried and tested on other Cugher Glass screen printing machines, such as the possibility of removing the screen for cleaning operations without losing registration (with considerable savings of time and machine downtime reduced to a minimum), automatic and instant active control of printing squeegee bar pressure that guarantees absolute pressure uniformity during the entire printing phase, as well as the Edge to Edge system. This extremely innovative system is already widely used by many of our avant-garde clients, and enables to print right up to the edges of glass without smears.

The reliability of Cugher Glass machines is guaranteed by the company’s considerable experience in over 40 years of activity and by all its clients that consider the company a valid partner for the solution to their needs regarding screen printing on flat glass.

Protimp Glass, a leading Canadian company

**Series J
130x200S**

millimetres (jumbo glass sheets).

Cugher Glass develops and supplies solutions based on the highest market standards and can satisfy any specific production requirement. The company’s product range also includes equipment such as stackers, handling lines, powdering machines, lifting conveyors, rotating tables, UV and IR dryers, inspection units, clean rooms and more.

NO MORE PROBLEMS WITH ASYMMETRICAL GLASSES

The automatic centring procedure of asymmetrical glass has always represented a big challenge for professionals who find this type of glass used typically in the automotive sector, as well as that of home appliances, where designers have introduced innovative and fanciful glass shapes.

Thanks to efforts made in the research and development of new technologies, Cugher Glass has realized a new centring device that is able to perform easy centring of extremely asymmetrical glasses.

The device is PLC controlled and is made up of reference pins that can be moved independently electronically. Once the pins are correctly positioned, the system is able to memorize the position of the edges of the glass.

All the data of the processed glass can be automatically stored in the recipe system (stan-



From the top: Architectural Silk Screen Printing Line, composed of a Series J 200x300 printer and an IR Dryer 2000 plus loading and unloading conveyors. Assymetrical glass centring device

dard on Cugher Glass Series G and Series J silk screen printing machines). This system allows the operator to simply recall the recipe of the glass to be printed, arranging the automatic setup of the machine.

Besides the coordination of the pins' positions, the recipe can also collect other data useful to process the glass and setup the machine, such as: glass thickness, squeegee run length, activation of the antidrop system, distance from the screen to the glass surface, printing squeegee bar pressure (optional), etc.

The standard system is able to store up to 50 different recipes and, on request, systems are available for up to 1,000 recipes.

AUTOMATIC ERROR COMPENSATION

The system, of course, can also centre symmetrical glasses, automatically aligning the glasses in respect to the first "master" glass.

Centring offers a very noticeable and exclusive advantage. In fact, this innovative device is driven by dedicated software with a sophisticated algorithm, and is able to keep possible "cutting errors" under control. This makes the difference between one glass and the others, automatically adjusting the pins' position to compensate the error.

In this way, the system reduces centring errors by 50 per cent, offering an evidently improved quality of final printed products.

This function has been also inserted in the new Cugher Glass printing machine expressly developed for the large-sized architectural glasses, up to 6,000 x 3,210 millimetres. ■



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