

BE A TECGLASS CUSTOMER, BE ALWAYS ONE STEP AHEAD

TECGLASS AND THE FENZI GROUP. A GAME-CHANGING PARTNERSHIP.

- From the very outset Tecglass has ranked as an avant-garde company that focuses specifically on machinery and components
- for digital printing on glass. In 2016, this standout company
- became part of the Fenzi Group, a leading name in the market that does not need to be introduced. This has given rise to
- radically new scenarios for the entire flat glass industry.
- In fact, the sophisticated Tecglass technology melds perfectly
 - with the strategic vision of Fenzi and its natural propensity for
 - innovation. The Fenzi group works with companies across the globe, guaranteeing non-stop supplies and assistance through
 - its manufacturing facilities and distribution centers across
- the world. Over just a few years, digital printing has literally
- changed the face of decorated glass, and its huge potential remains unexplored, both in terms of technical research and
- commercially.
- Companies and trade people interested in this particular glass processing now have a new mix of services and products that
- meet the needs of designers and architects both in terms of aesthetic results and how to obtain these.
 - Tecglass digital technology is now closer to processers worldwide and can rely on the reliability and solidity that have been the distinguishing features of the Fenzi Group for more than 75 years.







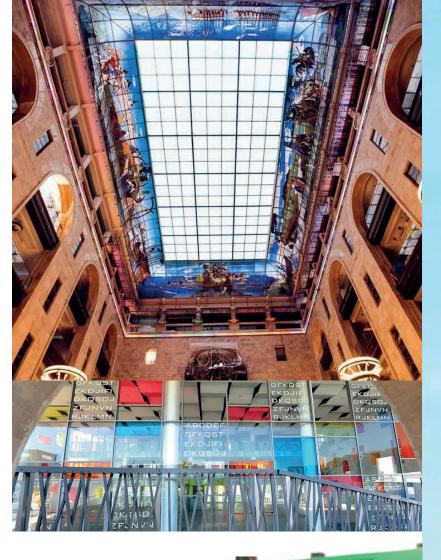




TECGLASS.

LEADING TECHNOLOGY TO OPEN NEW POSSIBILITIES.

- Tecglass was formed in 2002 by a group of dynamic professionals who, between them, share
- an in-depth experience of over 100 years in the glass industry. Since its inception, Tecglass has
- focused on the decoration of glass by introducing
- different machine ranges to enhance its beauty,
- like silkscreen print lines and roller coating lines. In 2006, Tecglass took a leap of innovation and started
- developing its range of digital printing machines
- for ceramic inks with the vision of offering its clients
- fast efficient means of applying graphic designs, photographic images, and a range of decorative
- imagery directly onto glass.
- The success of the company's innovational
- endeavors resonates in the fact that today Tecglass
- brand digital printing machines are successfully used all over the world.







BENEFITS ONLY A TECGLASS MACHINE CAN PROVIDE.

HIGH FLOWRATE RECIRCULATION SYSTEM.

No need to clean the heads.

Our exclusive high flowrate recirculation system eliminates ink deposits, so the heads never need to be cleaned, ever; not every day or at every break. We launched this system back in 2009 with the aim of offering our customers a clear, tangible advantage. In fact, we were never content to offer low flowrate recirculation; it simply does not eliminate the need for cleaning. Only with our High Flowrate Recirculation System will you save time and money while achieving impeccable quality.

SDT SIMULTANEOUS DRYING TECHNOLOGY.

ACHIEVE HIGHER QUALITY.

All of our machines come standard with the SDT simultaneous drying system. Print quality is vastly increased with SDT technology – printing and drying occur simultaneously. This is another exclusive system that you will only find on Tecglass machines.

1440 DPI RESOLUTION.

TOP PERFORMANCE, SINCE THE BEGINNING.

Tecglass machines never stop to compromise. Unbelievable definition -- a remarkable 1440 dpi -- was engineered into even the earliest models. Only Tecglass has consistently made such high definition fundamental from the outset.

VDS - 7 LEVELS OF VARIABLE DROP SIZE.

Power + Precision = FLEXIBILITY.

From the very beginning, Tecglass has employed this sophisticated technology instead of use other alternative systems with fewer levels. Once again Tecglass sets the benchmark. But, what are the advantages of 7 different drop sizes? They ensure absolute processing flexibility. In other words, VDS allows for precision printing, ideal for very high resolutions, using very small drops (12 pl) but it is also more powerful and therefore faster for jobs requiring high opacity using large and precise drops (84 pl). There are another five drop levels between the two extremes to perform a variety of jobs and that can be combined in a grey scale. Essentially, the system adapts brilliantly to the type of print job being done, combining precision and speed.

TCPT - Two Color Printhead Technology =

- -ULTIMATE DESIGN VERSATILITY
- -Production flexibility
- -INDUSTRIAL RELIABILITY
- -MAXIMUM PRODUCTIVITY

All Tecglass machines are equipped with the lastest and most versatile two color printhead technology from Xaar. The printheads, the **Xaar 2001+** have 2000 nozzles and jet one color at 720dpi native resolution or two colors at 360dpi each.







MACHINE TYPE Vitro-Jet DTYPE Amazing accuracy for amazing results Vitro-Jet I TYPE Industrial machine at a competitive price

AVAILABLE VARIABLES* BY GLASS SIZE (mm)

2.500 x 1.600

3.300 x 1.600

3.300 x 2.200

GLASS THICKNESS

2 - 19 mm (200 kg)

2 - 19 mm (260 kg)

2 - 19 mm (380 kg)

PRINTHEADS TYPE AVAILABLE

INKS **

Xaar / Toshiba / **Fuiifilm Dimatix**

Tecglass Ceramic



2.500 x 4.500 2.500 x 6.000

2.800 x 4.500 2.800 x 6.000 2 - 19 mm (540 kg) 2 - 19 mm (720 kg)

 $2 - 19 \, \text{mm} \, (680 \, \text{kg})$

2 – 19 mm (800 kg)

Xaar / Toshiba / **Fujifilm Dimatix** **Tecglass**

Ceramic

VITRO-CATALOG. EASY AND EFFECTIVE PRESENTATIONS.

Vitro-Jet FTYPE The highest quality at a highest speed

1.600 x 3.500 2.200 x 4.000 2.500 x 4.500 2.800 x 4.500 2.800 x 6.000 3.300 x 6.000 3.300 x 9.000 3.300 x 12.000 3.300 x 15.000 3.300 x 18.000

 $2 - 19 \, \text{mm} \, (270 \, \text{kg})$ 2 - 19 mm (420 kg) $2 - 19 \, \text{mm} \, (540 \, \text{kg})$ $2 - 19 \, \text{mm} \, (680 \, \text{kg})$ 2 - 19 mm (800 kg)2 – 19 mm (1.000 kg) 2 – 19 mm (1.450 kg) 2 – 19 mm (1.900 kg) 2 - 19 mm (2.350 kg)2 – 19 mm (2.900 kg)

Xaar / Toshiba / **Fujifilm Dimatix**

Tecglass Ceramic A catalog of ideas and solutions always available to our customers on our website. It is an outstanding tool for showing the effect of various designs applied to glass when presenting projects to your architect customers. And a brilliant way to highlight just what amazing work you can do.

VITRO FRAME/PATTERN TOOL DIRECTLY FROM THE MACHINE.

With this tool the operator can introduce a frame or a pattern to be printed on the glass without any need for graphic editing or file creation. This tool eliminates the need of creating all the graphic files for a job. The operator can print directly from the machine, on the fly. This tool provides a lot of flexibility and speeds up the process from the moment the order enters arrives at the plant to it is printed.

VITRO-PALETTE. FREEDOM OF CHOICE.

Thousands of color formulations are stored in the computer, ready to use. Choose from RAL, Pantone, NCS or Color-book color formulations. No need to develop a specific formulation from scratch, we've already done that for you.

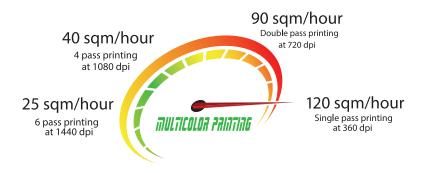
^{*} Customized sizes available

^{**} Ask for approved external ink suppliers in your region

VITRO-JET D TYPE. Amazing accuracy for amazing results.

- Print and dry simultaneously in the same machine with SDT technology.
- Very easy and comfortable manually glass Load/ unload.
- Up to 12 sqm/hour printed and dried with SDT, ready to go to the tempering furnace.
- All movements with linear magnetic drive technology. High precision and no mechanical wearing.

PRINTING SPEED:



Available variable



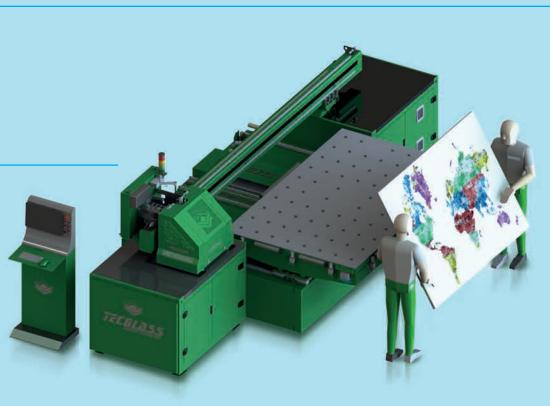
GLASS LOADING

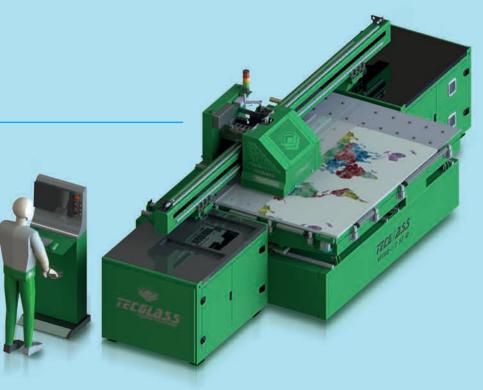
PRINTING AND DRYING











VITRO-JEY I TYPE. INDUSTRIAL MACHINE AT A COMPETITIVE PRICE.

The Tecglass historical suction cups glass movement system.

- Print and dry simultaneously in the same machine with SDT technology.
- Robust suction cups transport system which can accurately move the maximum glass size at the maximum glass thickness.
- Very heavy structure and strong construction for keep the best accuracy over the time.
- Split Head Technology SHT to print double vision glass in only one process.
- 3 possible configurations of the printing line, possible upgrades from the basic configuration to the highest configuration.
- Includes a polyvalent jig for print of irregular shapes.
- Inline automatic glass positioning, no man intervention needed.

Available variables:

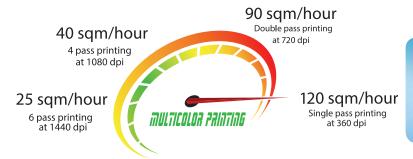


CONFIGURATION WITH INLINE DRYER

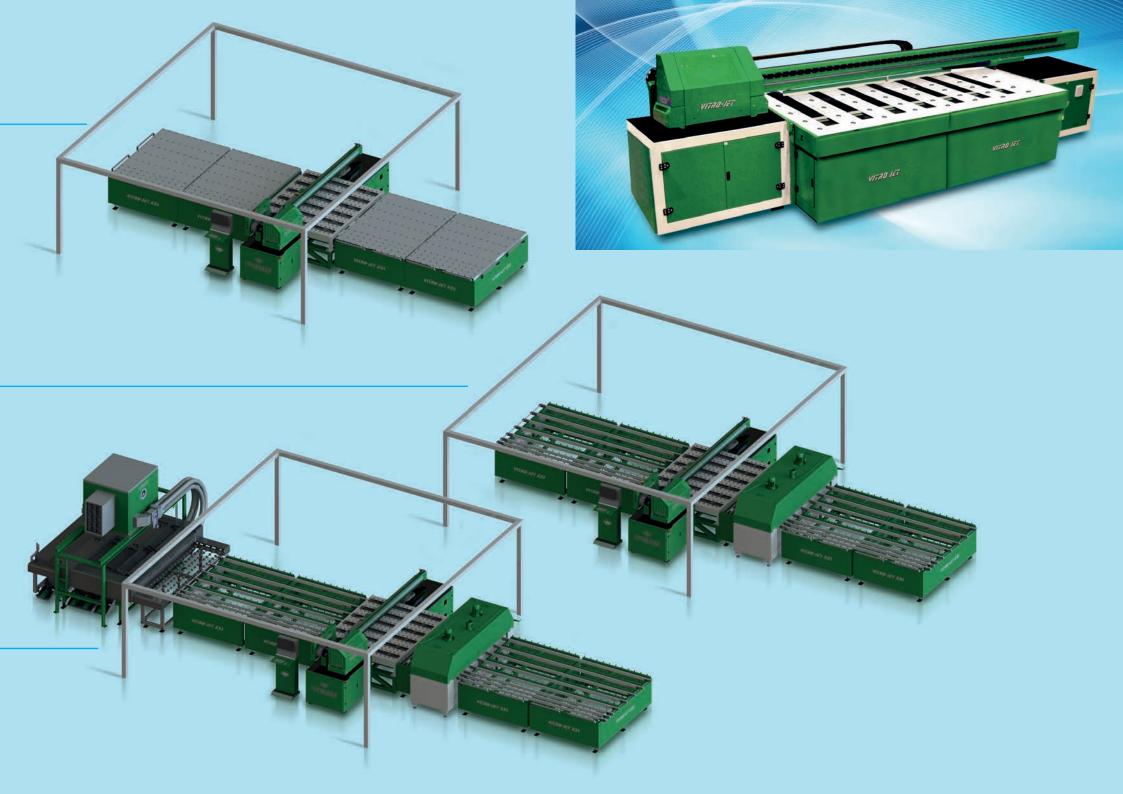
BASIC

CONFIGURATION

PRINTING SPEED:



CONFIGURATION
WITH WASHER
AND INLINE DRYER



VITRO-JET F TYPE. THE HIGHEST QUALITY AT A HIGHEST SPEED.

- X and Y movement of the printing bridge with high precision magnetic linear drive technology.
- Very easy and precise positioning of irregular shapes.
- Inline automatic glass positioning, no man intervention needed.
- Two independent belt stations integrated in the printing table increase productivity reducing cycle time.
- FAST FRAME PRINTING TOOL
 (Exclusive Tecglass patented feature)
 Application:
 - П

- -Insulation glass for frameless windows
- -Solar panels
- -Automotive
- -TV screens

PRINTING SPEED:



Available variables:

Vitro Jet F Type 35/16 Max Glass size 1.600 x 3.500 mm

Vitro Jet F Type 40/22 Max Glass size 2.200 x 4.000 mm

Vitro Jet F Type 45/25 Max Glass size 2.500 x 4.500 mm

Vitro Jet F Type 45/28 Max Glass size 2.800 x 4.500 mm

Vitro Jet F Type 60/28 Max Glass size 2.800 x 6.000 mm

Vitro Jet F Type 60/33 Max Glass size 3.300 x 6.000 mm

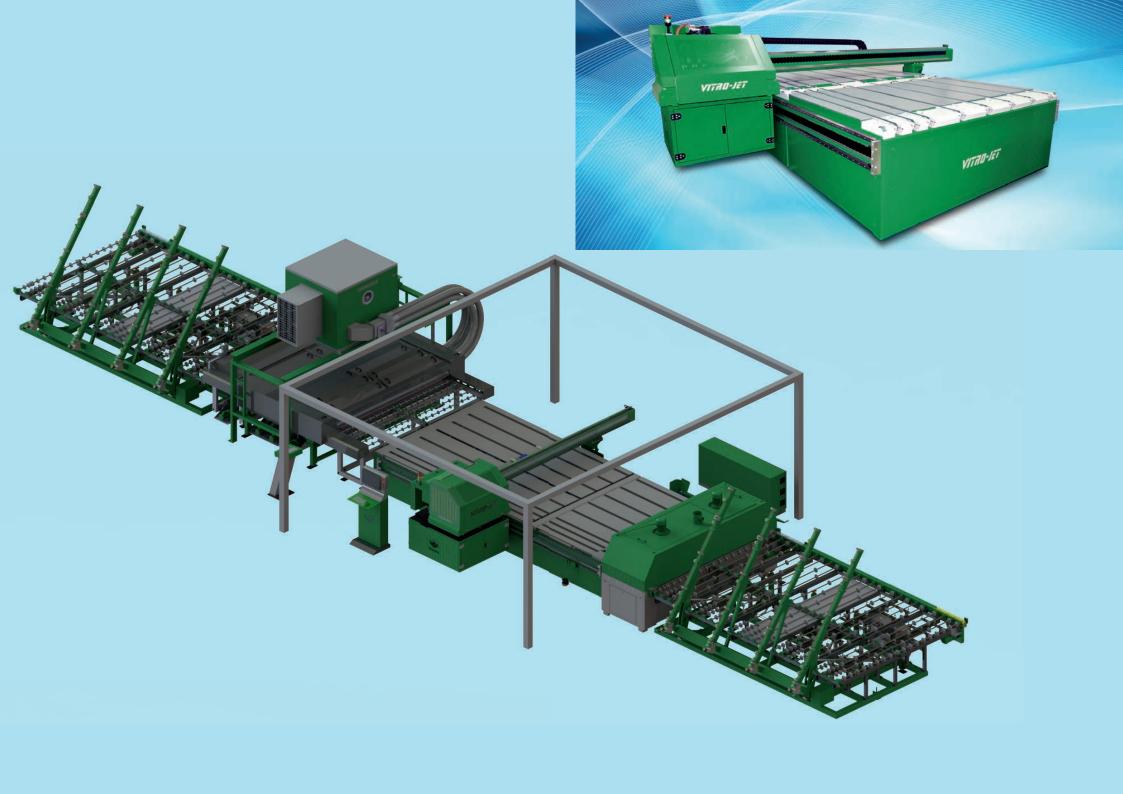
Vitro Jet F Type 90/33 Max Glass size 3.300 x 9.000 mm

Vitro Jet F Type 120/33 Max Glass size 3.300 x 12.000 mm

Vitro Jet F Type 150/33 Max Glass size 3.300 x 15.000 mm

Vitro Jet F Type 180/33 Max Glass size 3.300 x 18.000 mm





TECGLASS INKS. The Best machines deserve the Best Inks.

Supply and development of various ceramic inks have always been one of the main research and development activities of Tecglass. This has led the company to have a comprehensive range of ceramic inks that are compatible with every modern technology. As seen below, test results are outstanding.

- Resistance to alkali attack according
 ISO 695-1991 in accordance with
 EN 1096-2 by Stazione Sperimentale del Vetro.
- NO CITRIC ACID ATTACK
 Resistance to attack of citric acid according
 to ISO 28706-1:2008 by Stazione
 Sperimentale del Vetro.
- NO SULFURIC ACID ATTACK VISIBLE THROUGH THE GLASS Resistance to attack of sulfuric acid according to ISO 28706-1:2008 by Stazione Sperimentale del Vetro.
- NO WATER CONDENSATION ATTACK Water condensation test UNI 1036-1:2007

resistance to humidity and corrosion.

 NO COLOR CHANGE AFTER WEATHERING TEST GREATER THAN DELTA E 1.5

Weathering test according to ISO 16474-2:2013, method A cycle 1.1000 hours irradiance of 60w/m2 between 300nm and 400nm with rain simulation by spraying. Test made at the Fraunhofer ISC.

- CLASS 3 (69 USRV)
 Determination of resistance slip / skid of a surface,
 pendulum test, according UNE-ENV 12633:2003
- CLASS 4 (SUITABLE FOR HIGHT TRAFFIC FLOORS) Determination of resistance to surface abrasion according UNE-EN ISO 10545-7:1999
- VERY HIGH SLOPE ANGLE, ABOVE 35°

Slip resistance according to DIN51130 (inclined plane wearing shoes) R-13

Glass is special and an unique material. Glass innovation has invented a countless range of high performant and special glasses.

Tecglass inks have been developed solely for glass, based on the continuative inputs received by our customers.

Whatever is your glass and whatever is your application, we have a special ink for you





THERE ARE NO LIMITS TO WHAT YOU CAN DO WITH YOUR TECGLASS MACHINES.

These projects crafted by our customers are proof of what can be achieved with Tecglass machines, the utmost in terms of performance and state-of-the-art design.

A VIRTUALLY INFINITE ARRAY OF READY-TO-USE DESIGNS.

With Tecglass it is easy to obtain truly unbelievable results, like those you see on these pages. Now, thanks to our exclusive Vitro-Design App, you can show your customers (especially the architects) an almost infinite number of designs and decorative patterns and how stunning they will look on glass. All of this quickly and easily, from any of your mobile devices, without even needing an internet connection

– just download the App and you will have a phenomenal sales tool right at your fingertips.



Download here: www.tecglassdigital.com

TECGLASS SPEAKS INTERNATIONAL STANDARD COLOR LANGUAGE.

The whole range of RAL, Pantone, NCS and Color-Book formulations for ceramic colors is ready whenever, wherever you need it. And, as always with Tecglass, the results are sure to meet or exceed your expectations.













Plot P-8A, 3rd Phase, Pol. Ind. Lalin 200-36500, Lalin (Pontevedra) Tel: +34 986 787 627 Fax: +34 - 986 787 629 Email: comercial@tecglass.es



Your local Tecglass partner