

LASERMEK, the new laser by Glass Company

THE LASERMEK LINE

The already well-known and appreciated LASERMEK line, is now enriched with new functionalities and application sectors:

- paint removal leaving glass and mirror surfaces completely transparent
- vitrified paint removal on tempered glass, leaving

the glass transparent

- coating removal from reflective glass, including glass with dielectric coating (spy mirror), leaving the glass completely transparent
- metal coating micro ablation of most low-E glasses (hard and soft coating)
- low-E coating ablation
- internal engraving to the

thickness of the glass

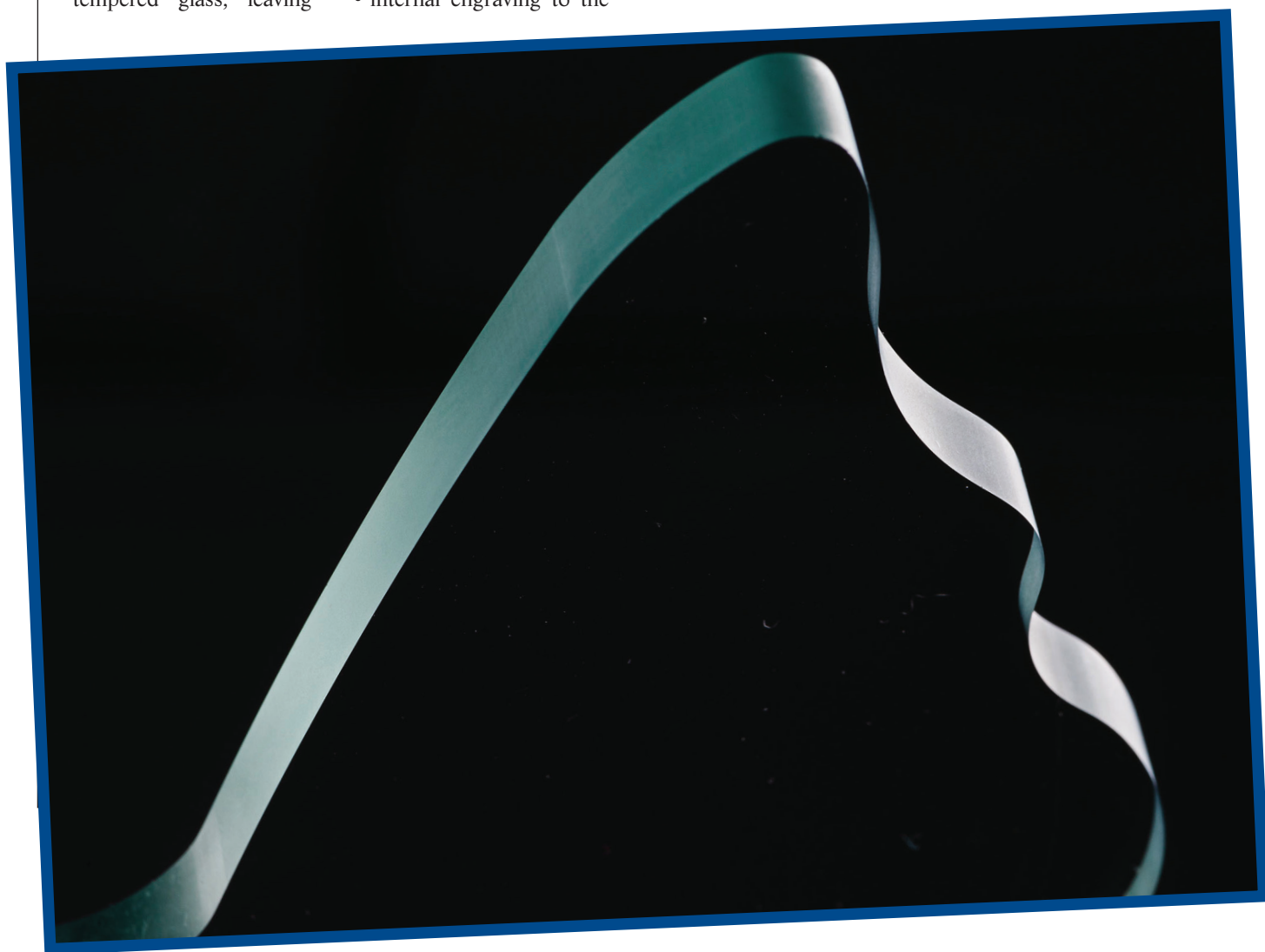
- micro incision of the transparent glass surface
- glass cutting and drilling up to a maximum thickness of 12mm

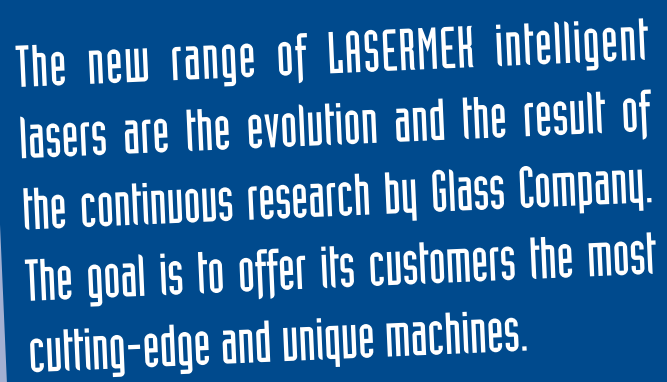
LASERMEK SCANNER

Glass Company's latest-generation LASERMEK SCANNER, designed for

the glass sector, is specific for the incision and ablation of electro-conductive coatings. It is capable of processing large glass sheets, with less than 1 KW/hour electricity consumption.

SCANNER laser technology is extremely fast and accurate and can quickly process large glass surfaces. Moreover,





The new range of LASERMEK intelligent lasers are the evolution and the result of the continuous research by Glass Company. The goal is to offer its customers the most cutting-edge and unique machines.

ver, it has no consumable parts and is equipped with a source with several thousand hours of battery life.

The SCANNER laser machine is able to remove parts of low-E, hard and soft coatings, from 0.05mm to several millimetres in a single pass, without engraving or altering the transparency of the glass, a particularly popular feature for the production of anti-fog glass. It is also used to make heated glass (heated towel rails) and to micro-engrave metal coatings for various uses including special anti-collision patterns for birds.

By generating shapes and/or lines at high speed, barely visible to the human eye, the machine interrupts the electrical conductivity on glass with electro-conductive coating. Glass Company's laser SCANNER machine is highly appreciated by manufacturers of refrigerator doors and by glass manufacturers for the refrigeration sector.

THE SOFTWARE

Simple and intuitive software gives indications on how to micro-engrave the electro-conductive coating to have the correct temper-



ature, the correct electrical absorption and the correct resistance of the glass. The incision of the electro-conductive coating allows the client to design a mandatory electrical path, guaranteeing uniformity of heating and keeping the temperature constant in every part of the glass.

LASERMEK SCANNER is also able to engrave (cut) the silver-based vitrified paint used on heating glass, interrupting its electrical conductivity. LASERMEK SCANNER is an essential machine for all companies that produce glass for the refrigeration and heating sectors, in-

cluding manufacturers of glass radiant panels (such as heated towel rails) obtained with laser SCANNER technology, through the engraving of heating coils in the electro-conductive coating. These heating glass panels offer functionality and comfort, generating heat often considered therapeutic, with

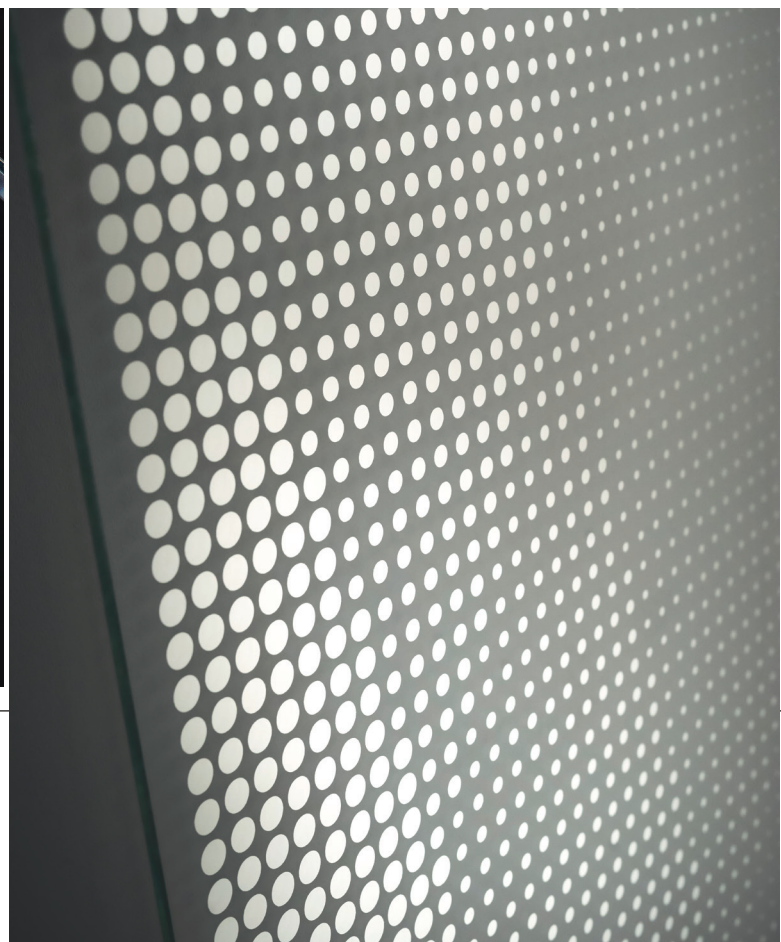
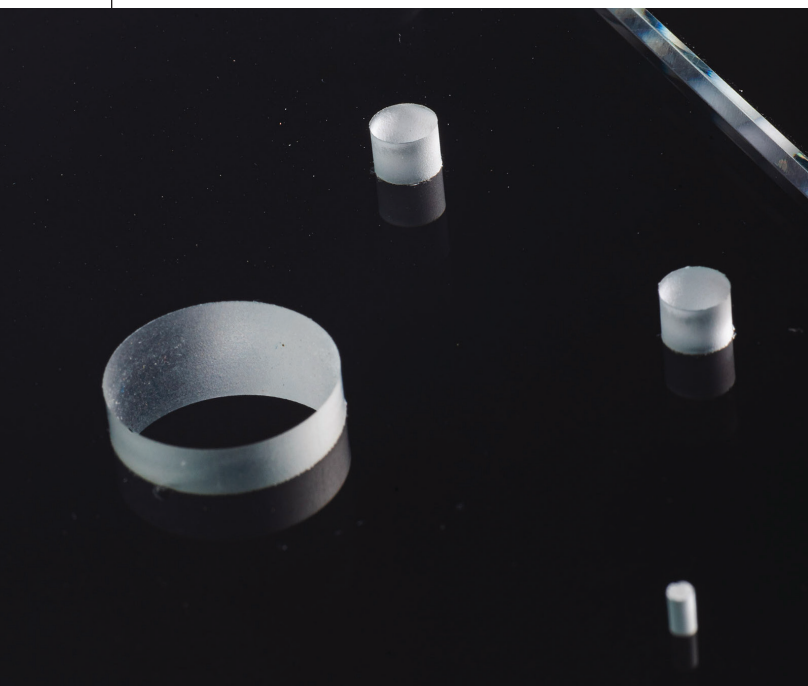
the possibility of diversifying areas with higher or lower temperatures in the same panel.

Heating glass can be considered an extreme goal of anti-condensation glass which, thanks to the use of electro-conductive glass and the control of its potential, can become a real source of heat. The same technology can, however, also be adopted for various other sectors, for example:

- Transport – Processing of WI-FI wave grids for passengers' personal devices.
- Nautical – Anti-fog heating glasses.
- Permeability to electro-magnetic waves.

Functional glass is another area with a lot of potential for the future.

Thanks to laser processing, it is now possible to



produce glass with greater permeability to radio waves for mobile communications. This is ideal for external use, in areas such as conference rooms and offices.

- Anti-collision glass for bird protection

LASERMEK SCANNER technology can create special geometric shapes on the glass, which can be used on external facades of buildings. This is invisible to the human eye, whilst showing a framework to birds. The invisible design allows birds to change their flight path without accidentally hitting the windows.

The range of glass surface processing lasers that the company offers embraces different technologies and sizes, in order to cover almost all market demand,

including, for example, worktops such as:
1,000x2,100mm
1,500x3,000mm
2,000x4,000mm, etc.
variable according to customer needs.

FURTHER LASERMEK EVOLUTION

The evolution of **LASERMEK** goes beyond the surface treatment of glass. The close collaboration with important producers of the latest generation laser sources allows the company to propose lasers suitable for drilling and cutting glass, up to a thickness of 12mm.

New solutions have been developed for the cutting of float glass up to a maximum of 12mm, circumscribed in an optimal area of about 200x200mm, expandable according to the needs of customers.

Glass cutting using laser technology is particularly useful when making shaped cuts with variable geometry, as well as for hinges, square and oval holes, grooves and similar processes. The cut is neat, without shards, and is suitable for glass tempering.

The laser source has a very low energy consumption and is suitable for multiple applicable processes, such as drilling operations on the edges of large glass sheets, internal and external cutting of small glass sheets, technical drilling where extreme precision is required. The laser beam does not have a customary mechanical tool consumption and therefore its tolerance is higher.

The machine is produced as per specific customer requests, to adapt to spe-

cific needs. The range of drilling and cutting lasers that Glass Company offers includes different technologies and sizes, in order to cover almost all of the market demand, including worktops such as:

500x500mm

1,000x2,000mm

1,500x3,000mm, etc.

variable according to customer needs.



Glass Company Srl

GLASSCOMPANY

Via Brigata Garibaldi, 33/35

61122 Pesaro (PU) - Italy

Tel.: +39-0721-283519

Fax: +39-0721-283310

E-mail: info@glasscompany.com

www.glasscompany.com

