BIRDfriend Mobile marks trendsetting HEGLA BORAIDENT bird protection

RETROFITTED BIRD PROTECTION USING LASER TECHNOLOGY

According to estimates by environmental organisations, well over a billion birds worldwide die every year as a result of collisions with glass, given

With the Laserbird, standard glass can be upgraded to bird protection glass or mobile radio-compatible glass via app controls.

Confronting 'head-on' the critical issue of bird collisions with glass that claims over a billion lives annually, HEGLA BORAIDENT will be proudly putting its transformative BIRDfriend Mobile on display during Glasstec 2024, which leverages advanced laser technology to retrofit existing surfaces with effective bird protection - all while enhancing safety and preserving aesthetic appeal.

The Laserbird uses laser processing to produce bird protection glass, heatable glass or even mobile radio-permeable panes without any set-up time.

that they are unable to recognise the transparent and reflective panes as obstacles. Using a laser printing process, HEGLA boraident from Halle (Saale), Germany, offers a solution for making windows, panes and facades visible to birds. At Glasstec 2024, the company will be presenting its BIRDfriend Mobile, which can also retrofit existing surfaces with bird strike protection.

PROTECTIVE PATTERN ON THE OUTSIDE

HEGLA boraident has specialised in the functionalization of glass for more than 20 years and is one of the pioneers of laser processing. "In our search for a functional and aesthetic solution, we tested many applications until we finally developed an effective process with the UniColor laser printing process," explains Head of Development Thomas Rainer. With this technology, the pattern is created by a laser that transfers ceramic particles from a transfer strip to the outside of the glass. This creates a uniform geometry of dots at intervals of five to ten centimetres, which is barely visible to the human eye but has the following threefold protective effect for birds:

1. Visual barrier: The dis-

tance between the dots is smaller than the wingspan of birds, making it seem impossible to fly through.
2. Interrupted reflection: The dot pattern interrupts deceptively real reflections of the surroundings, such as trees or bushes, which could attract birds. The coating on position 1 (outside) ensures that the protective dots remain recognisable, regardless of the position of the sun and reflections on the pane.
3. Altered UV reflection: The pattern visibly changes the UV reflection for birds and provides a further warning signal through additional light dispersal.

The opaque or semi-transparent print is scratch proof, light-resistant and weatherproof, resulting in a promised effectiveness of more than 30 years. Other product features include the fact that processing is always carried out on the outside (position 1), so that the pattern remains recognisable, even in case of strong reflections and poor sunlight.

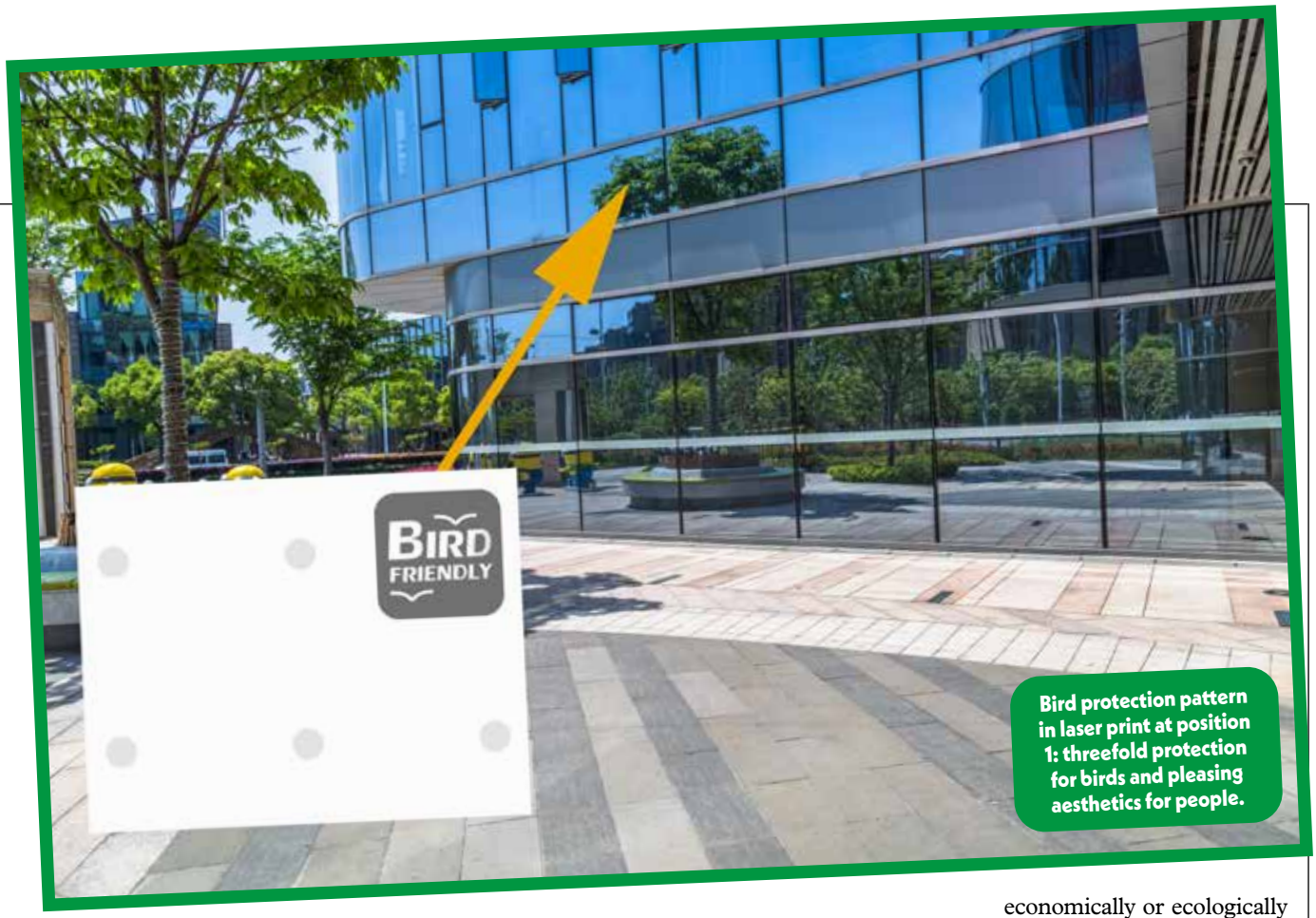
SCIENTIFICALLY-CONFIRMED EFFECTIVENESS

The efficacy of the bird-protection glass was certified in 2022 through scientific tests carried out by the American Bird Conservancy (ABC). Various glass structures and coatings were tested. "A special feature of our gentle process is that the glass surface remains completely undamaged and the stress properties remain unaffected," emphasises the laser specialist with many years of experience. Here the value-added finishing of the glass or the insulating unit is carried out in a stationary position with the Laserbird processing system, which can not only functionalise bird protection but also mobile radio-permeable or heatable glass, to give another example. The parameters are stored in the app control system and finishing takes place without set-up times.

BIRD PROTECTION GLASS: MOBILE RETROFITTING SOLUTION

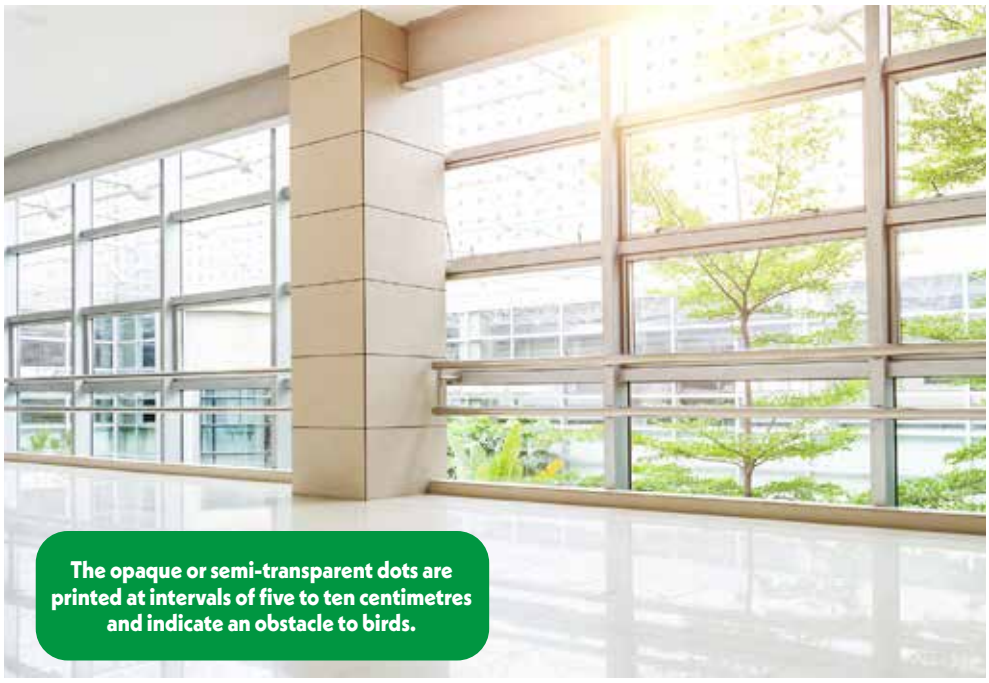
At Glasstec 2024, the company will be presenting its newly-developed BIRD-friend Mobile for the first time, which can retrofit facades, windows or glazing with bird protection. Both the flexibility of the pro-

With opaque or semi-transparent dots on side 1, the treated glass provides maximum protection against bird strikes. The process was tested by the American Bird Conservancy (ABC) using a range of coatings and glass structures.



Bird protection pattern in laser print at position 1: threefold protection for birds and pleasing aesthetics for people.

cess and the system enable the imprint to be applied without having to remove or replace the glass panes. The mobile printing device is attached to the facade so that the pattern can then be revealed. "Sustainability and bird protection are now more relevant than ever before," Rainer asserts. "There is great interest in such a solution, especially for public, commercial and prestigious buildings, as dead birds in front of properties are neither attractive nor appropriate." The option of retrofitting is also attractive for buildings where the original appearance is to be preserved or where replacing the glazing is not economically or ecologically justifiable. Demand for bird protection has increased internationally and in some countries, such as Sweden, it is now regulated by law. "With our mobile solution, we support the subsequent functionalization of existing glazing and are pleased to be able to provide an impetus for nature conservation," Rainer explains. "We are looking forward to Glasstec - exchanging information with the industry and catching up with many customers and interested parties."



The opaque or semi-transparent dots are printed at intervals of five to ten centimetres and indicate an obstacle to birds.

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