Events

Focus on Efficiency and Quality

The innovative power of glass machinery and equipment builders is a crucial factor for the performance of glass manufacturers and processors. These days their development efforts focus on maximum production efficiency, high product quality and, increasingly, on energy efficiency.

The requirements made of glass machinery and equipment manufacturers are more comprehensive and challenging than ever before. The increasing international competition in the glass sector, the associated price pressure, the growing number of different glass products and the strongly diverging batch sizes mean many glass converters are looking to high-performance technologies. To stand their ground against competitors the production of these enterprises must be highly efficient and they must consistently deliver the best possible product quality and ensure maximum flexibility. Another challenge is the rising weight of construction glass. Large-format glazing units are in fashion and the proportion of laminated toughened glass is also continuously on the rise. To efficiently manufacture these heavy large-format sheets processing machines and in-house and external logistics need to be modified. Moreover, the greater variety in types of glass requires a faster changeover between glass types – one prerequisite for this being optimised storage.

Modern glass finishing machines must deliver the best product quality in shortest cycle times and blend perfectly with the company's production workflow. The photo features the new XXL flatbed printer from glass finisher sedak in operation. Photo: sedak GmbH & Co. KG / Photographer René Müller

New Benchmark

A new benchmark concerning the size of glass-processing machinery possible today was recently created by the German company sedak GmbH & Co. KG. These multi-national glass finishing specialists are able to print complex, multi-coloured pixel designs in a high-resolution photo quality on extra-large format sheets measuring up to 3.21 by 15 metres with their new digital flatbed system for ceramic glass printing, which was commissioned in spring 2014. "With a resolution of 720 dpi we not only produce excellent prints. Our digital printing process also makes for a significantly thinner ink layer than obtained through screen or roller printing. This allows us to produce translucent prints and to design flowing transitions," explains Bernhard Veh, CEO of sedak. The ceramic ink is sprayed onto the glass sheets by means of a plotter. After burning in the furnace the ink is permanently linked to the glass and scratch-resistant. These printed glass sheets can be processed further into insulating glass and laminated toughened glass and are even suitable for cold bending (lamination bending) during the lamination process.

Trend towards Vertical Machines

A current trend in finishing glass surfaces and edges of glass doors and textured glass, for instance, is the use of vertical machinery. Their advantage: they have a markedly smaller footprint than machines with a horizontal layout. An example of this new type of machinery is the vertical drilling and grinding machine Vertmax made by Italian glass machinery manufacturer Intermac, a company of the Biesse Group. By company accounts, the new machine scores not only with its new user-friendly operator software but also with its finishing for float and laminated glass. Furthermore, the system, it is said, requires only minimal set-up times and it ca drill, mill, grind and polish glass for a multitude of applications quickly and with highest precision in an automated working process.

Big is trendy. Spring 2014 saw German glass finisher sedak GmbH & Co. KG commission the world's largest digital flatbed printer for ceramic inks. It can print complex, multi-coloured pixel designs in high -resolution, photo quality onto glass sheets as big as 3.21 x 15.00 metres. The photo impressively shows the dimensions now possible. Photo: sedak GmbH & Co. KG/Fotograf Hubertus Hamm

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