

User report

High-speed turbo roll-up doors support modern production processes

A somewhat different type of “promotion of small and medium-sized enterprises” links the high-speed door manufacturer EFAFLEX with the GROB-WERKE in Mindelheim.

Two medium-sized partners have found each other: The GROB-WERKE in Mindelheim, manufacturer of highly complex automated manufacturing systems and machine tools, EFAFLEX, the specialist in high-speed door systems. Both family companies operate worldwide, both are innovation leaders in their industries.

“For us, it is unbelievably important, that a service provider is very flexible,” explains Peter Nägele, Civil Engineer of the construction department of the factory in Mindelheim. “We have a great many construction projects which are not always easy to oversee. Therefore, we include the service provider in the work even in the planning phase. Of course, we are pleased when a partner complies with our wishes without complications and is in a position to implement individual solution concepts, even for the most difficult installation situation”.

Logistics gain in speed and efficiency.

More than 25 high-speed doors from EFAFLEX carry out their duty reliably in the GROB-WERKE. “Our requirements for the doors are very high,” points out Peter Nägele. “Even the high-speed doors with flexible hanging must remain sealed and stable, even if there are large differences in air pressure, as otherwise drafts can occur as a result. We produce the highest quality machines and systems, as a reliable partner for the automotive industry, their suppliers, the general mechanical engineering industry and other branches .e.g. aerospace, innovative machines and systems, and need constant temperatures to be able to adjust the

machines precisely for the manufacturing conditions at the future location.” Therefore, the planning department chose the high-speed turbo roll-up doors EFA-STR®. Of course, EFAFLEX also uses the tried and tested original spiral technology in this series, where the door leaf is integrated contact-free and wear-free into a spiral. Compared to “shutter” type constructions, which are wound layer by layer, the materials look like new for years.

Granite blocks must remain precisely tempered

The measurement facilities have particular requirements for planning and design. Triple-glazed outer windows and double-glazed inner windows, as well as special wall and ceiling insulation are one side. Peter Nägele explains the economic significance of the high-speed doors from EFAFLEX at this point: “If we have built a machine, the parts that it will later also produce are manufactured in our factory. The work pieces are measured in these highly insulated rooms. The measurement instruments for this stand on large, precisely tempered granite blocks. If they cool down even a little, it may take days to recalibrate them. This would cause a great deal of expense for us and our customers.”

High-end in every regard

With demonstrable door leaf speeds of over 4 m/s, the EFA-STR® is unparalleled amongst vertical high-speed doors worldwide. The same applies for enormous load bearing capacity, very quiet door movement and requiring very little maintenance. A flexible, but absolutely sealed hanging, ensures almost constant temperatures, even in the case of heavy frequentation in the direct door area. The door leaf consists of segment modules with four fields, and is precisely guided in side hinge chains. Aluminium, horizontal cross-bracing, attached in a grid dimension of 225 mm, provides stability. The “infill” can optionally be carried out with permanent transparent PVC or coated polyester fabric, which is available in many colours. In the case of repairs, even individual modules can be exchanged quickly and easily at any time.

Diverse application possibilities

For example, at the GROB-WERKE in Mindelheim, overwidth doors are required in the shipping area: “The finished machines often protrude sideways over the low-loaders. This means, that we need very wide entrances to avoid unnecessary shunting. Furthermore, we have a lot of crane tracks in our halls, which must not be restricted by bulky door frames during operation. Uniform EFAFLEX controllers make it easier for employees to have an overview of operation.”

Exemplary development story

The collaboration between GROB-WERKE and EFAFLEX is excellent, “although we often have to pass on the deadline pressure, that we have from our production site, to our partners,” points out Peter Nägele. Both family companies have been at the service of their customers from the beginning. From the founding to the first series product, right up to today’s industry leading position as a “global player”, it was a long path in both cases. Innovation and the highest technology expertise both accompanied exemplary development stories. This was significantly characterised by owners and management personalities with entrepreneurial flair and particular social commitment.