

## User report

### smart production uses innovative EFAFLEX doors

Door specialist has been supplying the smart factory in Hambach in France for 15 years

**Anniversary of a partnership: for 15 years, EFAFLEX – the leading manufacturer of high-speed industrial doors – has been supplying the production site of smart in Hambach/France regularly with doors. The world-famous small car has been produced here since 1998. Since the year 2000, the plant’s construction management has relied exclusively upon the premium products from EFAFLEX.**

“In keeping with the “just in time” logistics concept, it is essential to have a swift material flow for the speedy supplying of parts to the production lines and this necessitates an efficient and reliable opening concept for all industrial door systems,” explains Laurent Depoutot, responsible for construction projects at smart. He describes the cooperation with the door manufacturer in detail: “The folding and roller doors must prevent draughts and heat loss as far as possible, especially during cold seasons, in order to ensure that the production employees have an acceptable working climate and at the same time to meet the logistics requirements while taking into account the safety regulations.”

Defective doors that no longer function properly and unreliable, unsafe and outdated doors with poor heat insulation constantly produce disruption that is systematically reflected in considerably increased costs.

“We have therefore been applying the “one-door technology” suggested by EFAFLEX for many years, in order to implement a targeted campaign against heat losses,” says Laurent Depoutot. Previously, he says, the automotive producer’s building closure consisted of a total of three different door elements:

at first, the halls were only protected against break-in and theft during the night, because the relative slowness of the sealing doors means that they had to be constantly open during the day. There was therefore a second, so-called “factory door” installed immediately behind each of these outer doors, with faster speeds of movement and automatic closure in order to protect the door entrances against draught and other effects of the weather. The insufficient tightness of the PVC panels used for this, in a hanging or folding design, meant that these doors were unable, however, to prevent to a satisfactory degree the gradual cooling-down of the halls. As a third measure, the planners then put warm air blowers in place at each of these doors. “It has only been the technology of EFAFLEX that has made it possible for us to replace these arrangements of three different pre-suppliers with one single door system with a high energy-saving performance and with the highest opening speed of the currently available doors,” explains Laurent Depoutot. “The door light-line grid “TLG” is an excellent system for also ensuring the greatest possible safety of personnel. Due to the well-known problems in production areas with very high density of traffic, we have also equipped some of the EFAFLEX doors with the intelligent detection system EFA-SCAN®.”

The patented laser scanner EFA-SCAN® was developed by the Efaflex engineers as the world’s first laser scanner for horizontal use in combination with high-speed doors. A single compact device carries out both precise motion detection and reliable door-area safeguarding. The geometry of the up to 10 x 10 metre detection zone of the EFA-SCAN®, which can be individually programmed on-site by remote control, reacts to moving objects or a person and triggers the opening of the door in fractions of a second, like a rapid activator. Distance, direction and speed are calculated for this, so that e.g. a “pinpoint” opening pulse only goes to the door if vehicles or people move toward it; but not if people are merely passing by. In the static safety field directly in front of the door, EFA-SCAN® reacts like a ramp securing system. The laser scanner monitors the complete door width fully and prevents the closure of the door as soon as a moving or stationary obstacle is registered. The depth of the safety field can be freely selected. EFA-SCAN® thus also protects the door and

prevents accidents. At the same time, the laser scanner ensures safe, lightning-fast and convenient opening of doors due to its protected installation and precise functioning. It scans the horizontal with a detection angle of 95 degrees and in addition scans 6 degrees into the vertical along this range. With its 16,000 measurements per second, the laser scanner misses nothing. Complex software logarithms also prevent the scanner from being erroneously triggered by rain, snow or outside light sources. “The technology from EFAFLEX helps us to reduce energy consumption and contributes to the well-being of our production employees,” says the Construction Manager in summary. “Finally, we would like to emphasise that so far we have not noticed any functional problems whatsoever with the EFAFLEX doors installed at our plant!”

Press contact  
at EFAFLEX:  
Herr Alexander Beck  
0049 8765 – 82126  
[alexander.beck@efaflex.com](mailto:alexander.beck@efaflex.com)