

Crystal clear, smart

ORAFOL – leading self-adhesive and film manufacturer relies on EFAFLEX for smooth logistics at corporate Head Quarters.

ORAFOL Europe GmbH is a leading manufacturer of innovative self-adhesive polymer films and graphic products with its Group headquartered just outside Berlin in Oranienburg. They attribute their success to using only the highest standards in quality, innovation and environmental responsibility, and little wonder therefore that they chose to partner with global leaders EFAFLEX who share these same values.

30 high-speed doors designed and manufactured bespoke to ORAFOL were installed at their corporate headquarters as part of an expansion programme. The doors blended aesthetically into the appearance of the huge plant, positioned in the middle of the green landscape, and feature crystal-clear laths which provide high transparency and allow natural daylight to flood into the production halls.

The new hall 11 has now been in operation since 2018, where reliability is vital. “For this hall, we were looking for larger pressure-resistant doors, and these ones work great; our systems operate almost continuously except for two days a year and are in constant use.” reports Steffen Winkler, Mechanic Maintenance and Facility Manager in the ORAFOL corporate headquarters. His colleague, Daniel Frank, In-House Technician for Building Automation and Power-Operated Doors, adds: “With the initial doors, EFAFLEX technicians would come to site to change the airlock function, but now with the latest EFASmartConnect device, I am able to control the doors (EFA-STT® CR) or change the functions really quickly and easily using my iPad.”

Entering and exiting the airlocks is controlled by traffic lights. “This has been a fantastic experience for us, we are really pleased.”

The effective functioning of the airlock doors is very important for the production and storage of the graphic and reflective films, as well as of the adhesive tapes, which are produced in the plant. “All halls are temperature controlled to 21 degrees Celsius for production. They are operated with overpressure to keep the rooms free from particles, as the films have to be absolutely dust-free,” explains Steffen Winkler.

If one of the airlock doors opens, air escapes from the hall due to the overpressure of approx. 8 Pa. Using the EFAFLEX airtight doors prevents an air flow contaminated with particles from entering the production or storage rooms.

Other doors have been used to separate the production areas. “The drying of the films, for example, generates a lot of heat which is rather undesirable in other areas of the facility.”

Just as the internal doors feature transparent laths, the external doors too fit almost invisibly into the façade design: the laths and door frames have been matched to the RAL colour of the walls. “Our management attaches great importance to the overall aesthetics of our plant,” says Daniel Frank. “It starts with continuing the green belt which surrounds our premises, and the drinking water catchment area, right up to the halls.” He uses his hand to describe a semicircle around the hall, and it is obvious that creative ideas and financial investment too, have been used in the design of the outdoor facilities. But that is not all. “With the colour design of the façades, the planners continued to mirror the plant premises to the near-natural environment of the corporate headquarters. We are delighted that EFAFLEX was able to offer such a wide variety of colours for the door leaves.”

“In the past few years, there has been a lot of construction activity on the plant premises,” say Steffen Winkler and Daniel Frank. “The next hall is already under construction, and in this building also EFAFLEX doors will ensure the safe closure of the halls and the insulation of special production areas.”

With the transparent cleanroom solution EFA-STT® CR, the door manufacturer has provided a solution for processes which are all about speed and rooms which feature pressure differences. Thanks to the spiral mechanism, this high-speed door opens and closes reliably at a speed of up to 2.5 m/s. It is particularly suitable when the exchange of pressure and atmosphere needs to be minimised, for example during the inertisation for dry fire prevention. Compared with a normal EFA-STT® door, the cleanroom version achieves this tightness by means of a so-called labyrinth packing.

The fixed door leaf, consisting of two outer posts and single-walled transparent laths, is kept at a certain distance during winding up onto the door spiral, to reduce wear and noise.

With a history dating back to 1808, ORAFOL supplies customers in more than 100 countries, that rely on their quality products. Partnering and installing EFAFLEX highspeed doors at this prestigious production facility will help ensure that the quality remains for many years to come.

ORAFOL Europe GmbH company information

The corporate headquarters of the international ORAFOL Group has been located just outside of Berlin, in Oranienburg since 1996. On an area of more than 250,000 m², they produce innovative self-adhesive graphic products, reflective materials, and industrial adhesive tapes. 2,500 employees work in Oranienburg and in the subsidiaries across five continents.

The company's reflective films are an indispensable part of everyday life and can be seen worldwide on traffic signs, protective workwear, and rescue vehicles. The advertising and graphics industry is one of the company's largest customers for self-adhesive films for printing and digital printing. The special adhesive tapes produced at the Oranienburg site are used in industry and by end consumers.