Reliability and adaptability the keys for Owens Corning

One recent case for Pesmel was the delivery of a stretch film wrapping line to Owens Corning in the USA, the second big order from this firm. Wim Weeres, technical director for non-woven at Owens Corning, explained what it is about Pesmel that brought them back.

Owens Corning is a global corporation based in Ohio, USA, that develops, manufactures, and markets insulation, roofing, and fiberglass composites. Its roofing shingles and insulation products are a well-recognized brand. It also produces fiberglass composites. Examples of these products include the faces for high-quality acoustic ceiling tiles, cushioned vinyl flooring, “lay flat, stay flat” glass sandwich carpet tiles, circuit boards, glass-faced gypsum board, and even the blades for wind turbines.

Specialty composites in Apeldoorn

The first project was part of a production overhaul at the Owens Corning plant at Apeldoorn in the Netherlands. The plant produces a wide variety of specialty non-woven glass fiber composite products. Examples of these products include the faces for high-quality acoustic ceiling tiles, cushioned vinyl flooring, “lay flat, stay flat” glass sandwich carpet tiles, circuit boards, glass-faced gypsum board, and even the blades for wind turbines.

Being a specialty plant means that it has frequent changes of production, where the plant shuts down production of one type of product, cleans everything up, and then starts up again making a different product. “I remember at one point we had 600 different products that the plant was shipping out for 200 customers over the entire world,” explains Weeres, who has overseen both projects with Pesmel.

“ ‘The existing wrapping line was not completely satisfactory,’ Weeres tells us, “and as part of a de-bottlenecking project, we redesigned the entire back end of the plant.” One of the big drivers was safety; the packing area can involve large masses of material moving at quite high speeds, there is always the risk of an accident. Improving the capacity of the packing system was the other main goal. Speciality plants can be producing small rolls at quite high speed: more than 50 rolls an hour. This means almost one roll is entering the packing area every minute. Owens Corning opted for a single automated system that could cope with different types of packing and high speeds, as well as eliminating labelling errors.

Flexible attitude brings results

They had previously had problems with automated packing systems. Glass can be very fragile if it’s not handled correctly, and earlier wrapping systems had exerted too much pressure, compressing the fibers and breaking them. Pesmel worked closely with Owens Corning to find the perfect solution. “They spent a whole lot of time with us to understand our needs and convert that to the equipment,” explains Weeres. “Several times we needed to adjust the concept.” Pesmel’s flexibility and adaptability contributed greatly to the successful outcome, and the final system adds a foam layer and technology designed so that the stretch wrapping doesn’t apply too much pressure. The rolls are also lifted from the middle using poles, rather than clamped.

For their Apeldoorn project, Owens Corning spent a lot of time doing studies, talking with others in the industry, and evaluating suppliers before finally settling on Pesmel. When the time came to build their new plant in Gastonia, North Carolina, however, their previous good experience of working with Pesmel and the flexibility and reliability that Pesmel had displayed in the previous project convinced them to go with Pesmel for the new mill right from the start. Their only real concerns were about whether a Finnish company could support a plant in the U.S., but Pesmel’s proven ability to support plants in India, China, and elsewhere in the U.S. convinced them. During the execution of the project, Pesmel finalized their North American service organization, which finally allayed this concern.

Safety the #1 priority

Similarly to Apeldoorn, the Gastonia plant is a specialty plant producing non-woven composites. It serves the same market and customers, and it will partially replace the Apeldoorn plant as a supplier. “The market here in the U.S. is growing,” explains Weeres. “The market in Europe is more mature, meaning they developed earlier. In the U.S., they’re still converting non-glass-based applications to glass-based applications.”

The concept for the wrapping system was also similar to that used in Apeldoorn. The biggest difference between the two plants is that the Apeldoorn plant uses parent reel cars to move parent reels between the buffer storage and winder, whereas the Gastonia plant uses cranes above the parent reel buffer storage system that Pesmel delivered. The one number design factor was safety. “Safety is something that cannot be debated,” says Weeres. “The Gastonia line makes rolls that have diameters of up to two meters and they can weigh two-and-a-half tonnes. If something goes wrong, you’ve got that coming towards you.” The rolls are just too big and the lines too fast for manual packing. OC’s own safety requirements are stricter than those in the US or EU, and Pesmel had to meet them, as well.

A trusted and flexible partner

Pesmel’s cooperative attitude and flexibility is as important for Owens Corning as the systems themselves. Some suppliers have their own ways of doing things and do not want to change anything. Pesmel, on the other hand, are always happy to discuss OC’s requirements. “They may question the need for something, but once they understand why, they make sure that their equipment fulfills all requirements,” according to Weeres. “Some companies have become so slim, so lean, that they don’t have the manpower anymore to do something special. But Pesmel re-evaluated, reprogrammed or redesigned basically every element. They have the manpower, the creativity and the flexibility to be able to do that.”

Owens Corning is also happy that it can rely on Pesmel to keep their promises. Once something is agreed, it will be done as agreed. Weeres was also “surprised by the communication skills of the Finns,” as he puts it. Pesmel’s willingness to listen and eagerness to communicate about issues exceeded his expectations – and broke the stereotype about Finns.