Geotextile roll packaging:

TenCate Geosynthetics

Bezons, France

TenCate Geosynthetics is a major manufacturer of geosynthetics. At the production facilities in Bezons near Paris, TenCate produces geotextiles in rolls, which all are packed into a film for protection against dirt and moisture during distribution.

Due to the demand for higher packaging capacity and improved packaging, TenCate has installed a new RoRo StretchPack® packaging solution to replace a heat shrink packaging line. RoRo StretchPack® is a cold packaging technology using a tubular stretch hood film for horizontal packaging of eg. large rolls.

Tight packaging without heat shrink

The new RoRo StretchPack® packaging line has increased the packaging capacity at the plant in Bezons. Plant manager Christophe Dupont says, "our packaging capacity has increased, and now we can pack more varieties sizes of our rolls". Especially on the very large rolls, TenCate has increased its packaging capacity. At the same time, the maintenance costs have been reduced.

TenCate

TenCate Geosynthetics is a major producer of geosynthetics rolls.

Using a tubular stretch hood film instead of heat shrink film has given a tight and narrow packaging. Previously, the packaging had a long-welded sealing along the roll side, which was prone to break during transport and handling. It is not the case anymore. The tubular stretch hood film leaves no sealing along the roll side, but only a short strong sealing at each roll end.

Reductions in film consumption and in energy consumption

The tight packaging removes an excessive use of film for packaging, which TenCate previously needed to reduce by heat shrink anyway. Also, stretch film has a higher puncture resistance than shrink film, which enables reducing the film thickness without compromising the packaging quality. It has reduced the film consumption, just like the energy consumption has decreased after removing the heat shrink oven. Overall, RoRo StretchPack® has contributed to improving the sustainability compared to the heat shrink packaging line.

The safety area has also improved. Firstly, removing heat shrink has eliminated the risk of fire at the packaging line. Secondly, there is further safety for the employees as all operations immediately stop when someone enters the safety zone.

TenCate has installed a RoRo StretchPack® packaging solution to replace heat shrink packaging. Using RoRo StretchPack®, packaging and waterproof sealing is done in one horizontal process.

A versatile packaging solution

The new packaging line is a versatile solution, which can pack random-size rolls. Currently, TenCate is producing rolls in widths up to 6200 mm, with a diameter of up to ø800 mm. To cover the product range, four film sizes are used. Each film stand can hold a ø800 mm film roll, which contains up to approx. 2400 m film with a film thickness of 100 my/4mil. The high film capacity limits the number of film roll shifts. TenCate is using the four film stands, for a combination of different film sizes and film with different print and branding. The fact that the roll is not passing through a heat shrink oven anymore, ensures uniformity and a nice appearance of the logo printed on the film.

Besides the packaging machine, the total RoRo StretchPack® solution consists of an infeed conveyor with a pusher, an outfeed conveyor with an integrated weighing system, swing- and tilt conveyors and a core plug applicator.

Automated core plug inserts

The newly developed core plug applicator from Tentoma automatically adapts to varied sizes of roll diameter. It is working together with the existing core plug applicator, so each plug applicator inserts a core plug in each end of the roll. The magazine in the new applicator has as standard a capacity of 100+ core plugs.

Benefits for TenCate

- Automated packaging line for multiple roll sizes
- Tight and smooth packaging without any sealing along the roll side.
- Improved packaging quality - 100% waterproof
- Film savings - due to the use of stretch hood film
- Energy saving
- Improved safety
- Adaptive core plug applicator

Using a tubular stretch hood film has given a tight and narrow packaging. There is only a short solid sealing in each end and no sealing along the roll.