Spiral Dryer Belt
New development

Ammeraal Beltech
Innovation & Service in Belting

Frequently Asked Questions

Q. For which type of corrugator do we recommend AmDryer and AmTrac?

A. If the machine has pressure shoes (no roller pressure system or only just a few rollers at the front end, no Bartrol pressure System; shortpress system is fine to accommodate an AmDryer belt) single drive machines can accommodate AmDryer without modification. Double drive machines need power check.

Q. What is the maximum speed for AmDryer?

A. AmDryer can travel at the same speed as traditional belt types.

Q. What is the maximum temperature that AmDryer can achieve?

A. As long as the machine has a belt lift system in place, then AmDryer will cope with all temperatures currently in use with traditional belt types.

Q. Can I recommend AmDryer without changing the traction belt type?

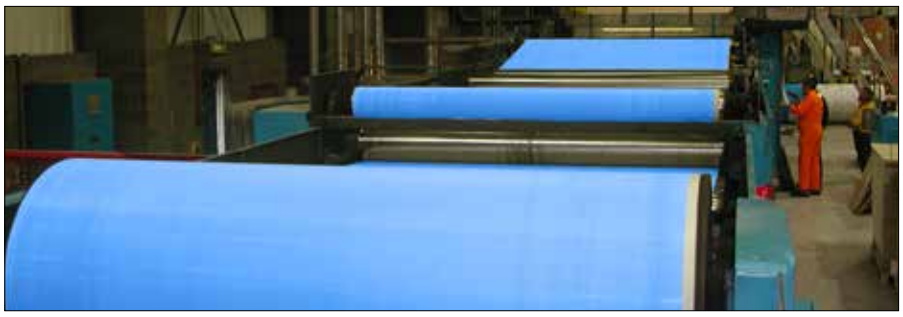
A. If the traction belt has a felt or woven fabric surface, then NO. You must recommend the customer to change to AmTrac for high friction positive drive (because the AmDryer belt has much lower friction than a traditional belt). In case of loss of friction of bottom belt, first measure: clean it from dust.

Q. What types of flute will AmDryer cope with?

A. Most flute types are possible but AmDryer will outperform traditional belt types especially where micro-flutes are produced.

Q. Are any changes needed when replacing traditional types with AmDryer?

A. Ensure that the lagging on the drive motor is in good condition. If not, get the customer to change it before running AmDryer. Check that there are no sharp edges on the pressure plates. If so, get the customer to smooth them before running AmDryer.



uni chains

Frequently Asked Questions

Q. What are the main benefits for the customer?

A.

- Annual money savings due to less electricity usage (belt weight reduces by more than 50%).
- Less paper and glue consumption; less glue due to better pressure distribution and heat transfer.
- Lower temperature needed to produce the board, therefore less steam pressure needed resulting in less steam consumption.
- Easy and quick to install with less people.
- Traditional belt needs retensioning once or twice (cutting out some length and rejoining with fastener). AmDryer doesn't need retensioning.
- No visible joint (just a pin in the spiral fabric). AmDryer' spiral belt design is self-cleaning, whereas traditional belts needs cleaning (starch build-up). No marking of the board!
- Higher quality board produced (better caliper, more dry, no marking of belt fastener).
- The AmDryer keeps its very high permability, whereas a traditional belt reduces its permability due to contamination of the surface (fibres from the board and starch).
- Less rejects.

Q. What belt tension do we recommend?

A. Unlike traditional belt types which require a high pre-tension to drive, Amdryer will drive at a much lower tension (2 to 3 N/mm or approx. 0.2% to 0.3% elongation). Due to a lighter weight and lower tension AmDryer will extend bearing life as well as reducing power required to drive the belt.

Q. How does AmDryer compare for belt life?

A. If the corrugator is well maintained then it is possible for AmDryer to last the same as traditional belts. Although the extra savings achievable with AmDryer make the cost of a belt insignificant.

Frequently Asked Questions

Q. What are the manufacturing lead times of AmDryer?

A. Due to stock held at the Czech OpCo short lead times are possible. We recommend that the customer stocks a spare belt as "accidents can happen at any time". This is also the case with traditional belts.

Q. How can energy cost savings become achievable?

A. The main electrical energy savings are achieved at the drive motor due to a much lighter belt weight. Lower steam temperature coupled with lower heating plate temperatures can also offer significant steam savings. Less glue needed will also contribute to savings.

The estimated average electricity cost/year: ± 70.000 €/shift *(NB: the machine is using 2/3 of the electricity to just support the felt blanket).*

Q. Are there further savings to be achieved?

A. The self-cleaning characteristics of AmDryer and the need for less glue will avoid pollution on the finished board. The thickness uniformity of AmDryer across the whole belt width will offer less paper waste. In a modern high speed plant paper savings (compared to traditional belts) have been measured at up to 7% annually (or €150,000 at the time of testing).

Q. Do I need to adjust the thickness of pulley lagging to compensate lower thickness of AmDryer compared with traditional belts?

A. No. The resulting difference of its surface speed is only minor and will be absorbed by its low friction characteristics.

To be avoided: speed of top belt highter than traction belt.

Q. What kind of pulley lagging is recommended or driving the AmDryer belt?

A. Any rubber (Shore A around 60 - 65) or hard wearing Silicone will do. Go for same thickness of lagging used as for traditional belt. 1 pulley lagging should last for about 2 - 3 AmDryer belts at least, if done properly.

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