

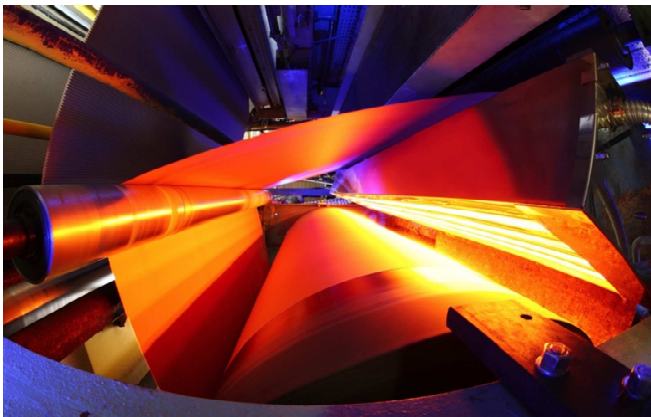


## Infrared Drying Improves Corrugator Capacity

An infrared drying system has helped Tri-Wall Europe Limited to improve corrugator capacity of coated board at their Monmouth factory. The installation of the new infrared system has also contributed to a reduction in downstream waste as well as a decrease in energy usage.

Tri-Wall Europe Limited is well-known as a manufacturer of quality packaging solutions to the automotive and heavy engineering markets, with over 40% of its turnover in corrugated board packing boxes being exported to mainland Europe. Some of the company's new and existing markets require their packing cases to be coated with an acrylic coating, to aid water resistance and to improve cosmetic appearance. This involves applying the acrylic coating to the outer liner sheet board before the layers of board pass into the blanketing section of the line, where they are heated under hot plates to gel the bonding glue between the layers. Previously, the coating had been dried by passing the layered boards over a steam-heated roller but this had not proved very efficient as an increase in running speed had resulted in inadequate drying of the coating, which, in turn, had led to coating being deposited on the hot plates in the blanketing section, with consequent quality problems and increased maintenance requirements. As a result, coated board had to be run at around half the speed of standard board and the inefficient coating drying also led to problems down the line where the board is converted into boxes. Options to increase the running speed of the coated board drying section were limited by various factors including space constraints around the corrugator area, compounded by the fact that any solution chosen would have to span the 2.4 meter board width.

Preliminary on-site tests proved so successful that a full-scale 56kW carbon infrared heating system was installed. "Since installing the Heraeus system, we have been able to double the line speed at the coating drying section," says Operational Improvement Manager, Paul Welford, "This means that we can now double our production speed of coated corrugated board and boxes to meet anticipated growth projections. Not surprisingly, this means a pay-back for the project of less than 12 months."



### Features

- Acrylic coating of cardboard
- Doubling of line speed by infrared drying of coating
- Pay-back in less than 12 months

### Technical Data

- rapid response carbon medium wave infrared heaters
- 56kW, built-in facility to upgrade to 70kW
- heated length of 2500mm
- Operation manually or automatically

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