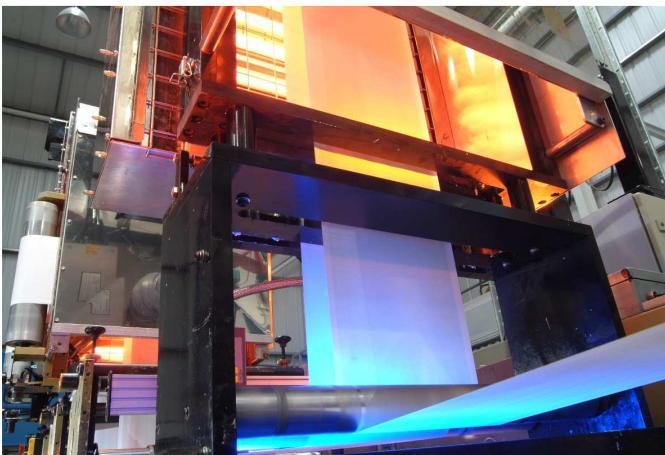




Drying non-slip coating on paper mats

A carbon infrared system from Heraeus Noblelight is helping Orvec International to achieve the quality of non-slip coating required on disposable tray mats to meet the stringent demands of major passenger airlines. Orvec International is a world leader in the design and manufacture of hazard protective workwear and passenger care products. Its range of disposable tray mats can be in paper or crepe, coated and uncoated and printed to a very high standard. When the Kingston-upon-Hull company recently decided to introduce a new range of non-slip tray mats to meet the specifications of a major airline, a new manufacturing line was set up and the manufacturing technology was adapted to allow an extremely high quality non-slip coating to be applied. The manufacturers of this new water-based coating advised that it should be dried quickly after application and suggested that the most efficient and effective method of achieving the required drying rates would be infrared radiation. Proving trials established that a carbon infrared system could achieve the required drying at web speeds of up to 70m/min and, as a result, a full-size system was installed at Orvec.

Since installation, the infrared system has proved to be highly energy-efficient and its high power density, coupled with the suitability of medium wave infrared for water removal, has ensured that the applied coating is dried effectively to give a high quality finish. The fast response of carbon infrared has also proved important in this application, as the heating can be switched off very rapidly if needs be, so preventing any damage to the web in the event of production line breakdown. Following successful operation of the system over a number of months, Orvec decided to see if line speeds of the drying section could be increased even more, to meet rising customer demand for the non-slip trays. Accordingly, a 7kW carbon infrared was retrofitted and this has allowed a further 30% improvement



Features

- high quality non-slip coating, water-based
- energy efficient drying
- high quality finish
- fast response of heaters, preventing damage in case of line break down

Technical Data

- carbon medium wave infrared system
- web speeds of up to 70m/min
- two 20.7kW cassettes,
- each containing nine, 2.3kW emitters,
- closed loop thyristor control system ensures precise drying profiles

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