Would you like more information about Bekaert e-UniDryer, the combined air and electrical infrared drying system for the paper and board industry?

Our skilled and responsive sales and service professionals will quickly serve you around the world.

infrared-drying.bekaert.com
Bekaert e-UniDryer for non-contact drying and profiling

Benefit from our services to the paper and board industry
Bekaert supplies drying systems based on gas and electrical infrared technology, combined with air drying, characterized by a high efficiency and high power density. Our systems are used in a wide range of industries, including paper and board, converting and metal processing applications. Today, more than 1000 systems have been installed worldwide, of which 60% comes from repeat orders with existing customers. We provide service and different upgrade options to increase your production, improve your product quality and reduce your operating costs.

What can we offer you?
The Bekaert e-UniDryer is a non-contact drying and profiling system that follows size press and coating stations. The system is based on a combination of air and electrical infrared technologies, combining the advantages of radiation and convection. The e-UniDryer consists of air flotation nozzles, electrical infrared modules and integrated air circulation fans and motors. These unique features result in a compact design that can be easily implemented in your machine while guaranteeing optimal system efficiency.

Experience the benefits of Bekaert e-UniDryer

Minimize your operating costs
The Bekaert e-UniDryer system has several features that will help you to reduce your operating costs. The built-in air flotation nozzles evaporate and stabilize the web by blowing hot air coming from the infrared modules. This way, the system doesn’t need a heat exchanger or an external gas burner which improves the energy efficiency. The integrated blowing fans also have a positive impact on your energy bill and the use of deep parabolic golden reflectors even allow you to save up to 50% on your energy costs for profiling. Furthermore, the extreme compactness of the e-UniDryer and the sine-wave web flotation will also contribute to optimize your machine runnability.

Improve your paper quality
The use of high power modules allows reaching the gel point as fast as possible which leads to a binder migration and mottling reduction. After the gel point, you can control the drying rate by the selection and power level of each electrical infrared row. The paper or board temperature is controlled along the drying arch by the alternative use of air flotation and infrared. You can also optimize your moisture profile by integrating a profiling option into your e-UniDryer system. Each module can be individually controlled from 0% to 100% of the maximum installed power in order to adapt the cross direction energy transfer and to improve the moisture profile. Even if you apply different amounts of coating on each side of your paper or board, the e-UniDryer ensures a perfect quality thanks to top-bottom drying flexibility.

Save up to 50% of your installation costs
Thanks to the integrated air fans and motors, the Bekaert e-UniDryer doesn’t need recirculation ducting which makes the installation of the system a lot easier and cheaper.

Long lifetime at the highest power
The energy transfer to the paper or board web happens through radiation by electrical infrared modules. Thanks to the patented design of these modules, the lamps in the Bekaert e-UniDryer last over twice as long than conventional emitters.

Bekaert e-UniDryer product specifications

- **Hood dimensions**: 98.2” MD x 23.2” height (2-row hood), 124.6” MD x 23.2” height (3-row hood)
- **Module dimensions**: 5.6” CD x 7.9” MD
- **Module max power**: 81,962 Btu/h
- **Max power density**: 89.4 Btu/h’/’
- **Max evaporation rate**: 91.5 lb/h’/’

* CD: Cross Direction
MD: Machine Direction

Options include:
- Reflectors made of high ceramic material that doesn’t require air cooling, associated air drying or fan
- Cross direction moisture profiling
- Automatic web width selection
- WebSafe, a patented water shower technology for optimal risk-free operation
- Temperature line scanner; this scanner offers you the highest resolution and sampling frequency for temperature measurement. It is located outside the zone of high moisture and temperature to guarantee a continuous trouble-free operation.