Would you like more information about Bekaert UniDryer® or discuss a specific project with one of local sales representatives?

Contact us today!
Our skilled and responsive sales and service professionals will quickly serve you around the world.

infrared-drying.bekaert.com
www.bekaert.com

Minimize your operating costs while improving your paper quality
Why choose a combined infrared and air drying solution?

When choosing the right technology for drying coatings, several aspects need to be taken into account, such as energy consumption, quality, compactness, ease of implementation and flexibility.

While classic technologies like air-drying and infrared systems come with drawbacks, the combination of both offers a much better solution.

The Bekaert UniDryer® offers just that!

<table>
<thead>
<tr>
<th></th>
<th>Power density</th>
<th>Efficiency</th>
<th>Quality</th>
<th>Drying flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UniDryer®</td>
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</tbody>
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Bekaert UniDryer®

Our range of Bekaert UniDryer® systems includes UniDryer® V2 and UniDryer® V3. These systems consist of high velocity air flotation nozzles for an optimal convective heat transfer, high performance gas infrared emitters and integrated blowing fans. The combination of these features results in a fast heat-up, a high evaporation rate and ultimately in better paper quality.

Compared to the UniDryer® V2, the V3 features a new type of blowing nozzle. This consists of a combination of slot and impingement nozzles and a new compact design of integrated recirculation fans with higher air flows.

Benefits

- **Lower operating costs**
  - The UniDryer® reaches high energy efficiency levels thanks to the combination of the superior performance GemE emitters and the improved convection without requiring a heat exchanger or an external gas burner. Efficiency can be improved even more through our ERS (Energy Recovery System) solution by recirculating the final exhaust air from the UniDryer® into an air dryer.

- **Operating costs for different drying systems**
  - Traditional Infrared Dryer
    - 90-100%
  - Traditional Air Dryer
    - 80-100%
  - UniDryer®
    - 75-85%
  - ERS (UniDryer® + Air Dryer)
    - 60-70%

  Based on Bekaert lab results and measurements

- **Higher quality**
  - Thanks to its flexibility, the UniDryer® meets your high quality standard. By regulating the power level of each two rows of emitters, the drying rate can be controlled while the alternate use of air and infrared radiation stabilizes the coat temperature.
  - The cross direction moisture profile can be improved by integrating a profiling option. When each side of the web has a different coating weight, perfect quality can be achieved thanks to the top-bottom drying flexibility of the UniDryer®.

- **Excellent lifetime**
  - Bekaert’s range of Gem emitters has proven to have an excellent lifetime.

- **Save up to 50% on your installation costs**
  - Thanks to its compactness, integrated air fans and motors, the UniDryer® doesn’t require recirculation ducting. This makes the installation of the system a lot easier and cheaper.

Emitter types

- The Gem family includes Gem7E, Gem9E and Gem12E. This offers maximum flexibility to meet your future drying requirements.

Nominal emitter power

- Gem7E: Up to 7 kW
- Gem9E: Up to 9 kW
- Gem12E: Up to 12 kW

Options include:
- Cross direction moisture profiling
- Automatic web width selection
- Fire Prevention System
- ERS (Energy Recovery System)