



# IRCON | SOLARONICS

<https://www.ircon-solaronics.com>

## **COAT DRYING**

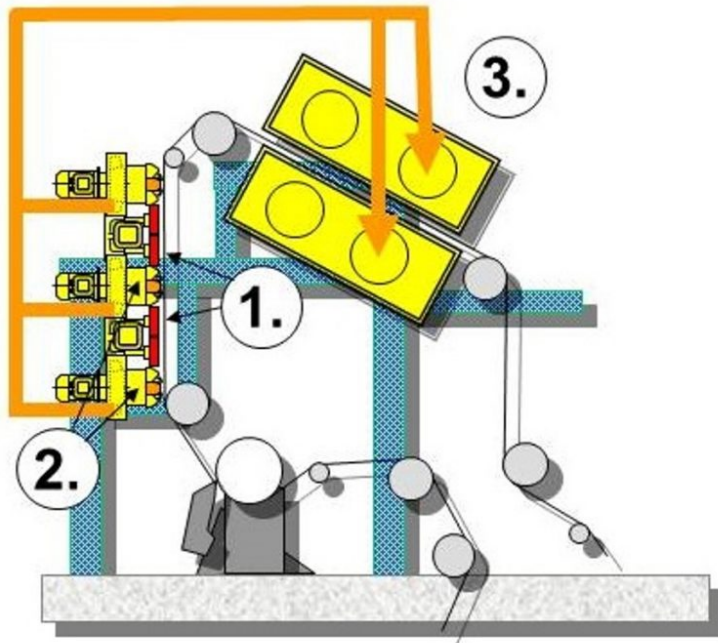
The production of **coated paper** or **coated board** requires contactless drying of the coating which is applied until it is sufficiently dry to touch guiding rolls or drying cylinders. This is done either in Offline Coating Machine or in Online coating sections.

Our drying solutions are customised to your specific process needs and available energy sources, including the use of:

- **gas infrared drying** (Gemdryer®)
- **electrical infrared drying** (DryMaster™)
- **the combination of infrared drying with air drying** (UniDryer®)
- **air drying** (FoilMaster™, FoilMaster™Turn, AirBarDryer™)
- **air cooling** (CoolMaster™)

The most common layout is to start with infrared drying after the coat application, immediately followed by air dryers. The combination of infrared drying and air drying provides a perfect combination of available technologies to optimise your drying system for optimal quality and energy efficiency.

For most graphical coatings, it is crucial to start the drying with a high drying rate to reduce risk of binder migration and mottling, while controlling the temperature and avoiding overdrying or overheating the coating components. We have a long experience in designing coat drying in such a way that the coated board or paper surface keeps optimal print quality when used by our customers.



Concept for optimal coat drying with 3 high efficiency products: high performance gas IR emitters **Geme (1)**, integrated air drying with **UniDryer® (2)** concept and **ERS (3)**: exhaust air from IR is used as energy source in Air Dryer.

For specialty coatings and barrier applications, the combination of infrared and air drying with the same dryer, allows for optimal temperature control along the drying to ensure the delicate surface coating remains perfectly stable without risk of blistering or other coating defects lined to wrong drying strategy.

We supply every non-contact drying equipment which is required in your coating process, including the web cooler if paper or board temperature needs to be reduced before winding it on the pope.

Whether your project is a new investment, an upgrade or a rebuild, we can offer a solution which considers the total drying strategy, including the simulation of the cylinder drying and optimises your overall coating operations.

Our products are designed for optimal energy efficiency, high reliability, long lifetime and flexibility.

## GAS INFRARED EMITTER

The **workhorse** of our gas infrared dryers is the gas infrared emitter. We have a range of emitters designed for high lifetime, combined with optimal efficiency. Our installations are designed in order to be able to use any of the emitters from our product range.



In the market since more than 10 years, our E emitters, GemE (for Ircon-Solaronics systems, 143 x 200mm) and GerE (for competitor systems, 150 x 200mm), benefit from two high-technology screens for higher infrared efficiency and a solid ceramic material known for its excellent mechanical properties and offer around 10% higher direct efficiency. The emitters are optimised thanks to a specific surface treatment to efficiently operate at high temperatures. Input power: from 4 to 12 kW.

Our emitter may be fitted to competitive dryers usually improving drying and increasing emitter service life.

	Gem7+/Gem7E	Gem9+/Gem9E	Gem12+/Gem12E
			
<b>Max input power</b>	Up to 7 kW 233 kW/m <sup>2</sup>	Up to 9 kW 300 kW/m <sup>2</sup>	Up to 12kW 419 kW/m <sup>2</sup>
<b>Dimensions</b>	143mm (5.6") x 200mm (7.9")	143mm (5.6") x 200mm (7.9")	143mm (5.6") x 200mm (7.9")



We also supply a range of lower power emitters and emitters for competitor systems, information available upon request.

For all enquiries within Australia & NZ, please contact our local representative:

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 **Mill Link Services**