hõnle group





IR Power Jet

A high-tech dryer module for water-based inks and coatings.

Features

- Innovative combination of infrared radiation and warm air (IR/WA).
- High-tech ceramic reflectors for increased energy efficiency.
- Steplessly adjustable power controls.
- Easily combinable modules to accommodate large process widths.

Advantages

- Excellent drying results through a combination of IR radiation and warm air.
- Compact and lightweight design.
- High power output in a condensed module.
- Highly flexible for adaptable system compatibility.
- Energy efficient.

A high-tech dryer module for water-based inks and coatings.

IR Power Jet is an innovative air-cooled module concept which uses a combination of powerful IR radiation and warm air to dry water-based inks, paints, and coatings.

Features

Excellent drying results are achieved with a combination of powerful IR radiation and warm air. The result is a high air exchange upon the substrate's inks or coatings. IR lamps emitting short- and medium-wave radiation evaporate the water in the ink or coating layer. Warm air then absorbs the evaporated moisture and removes it from the drying zone.

High-tech ceramic reflectors for each IR radiator provide increased energy efficiency. In addition, a specialized nozzle profile creates a direct and laminar flow of heated air to the substrate. Integrated high-performance fans ensure the exposure of the substrate surface to a high air volume. The substrate passes through three drying zones which significantly enhances the drying performance compared to standard IR dryer modules.

A compact and lightweight design allows for easy integration with existing machinery and offers significant advantages for systems processes that require movable modules. The modules can be placed side by side to accommodate for large working radiation widths. Independently operable lamps can provide varying radiation widths. When combined with the module's steplessly adjustable power controls, optimal adaptability to specific job requirements is achieved.

Handling

As a result of the module's lightweight and compact design, this module can be easily integrated into existing printing presses and production lines. All modules feature Plug & Play connections while a touchscreen or a complete integration in the machine control guarantees easy operation.

Application

IR Power Jet modules have been specially engineered to dry water-based inks and coatings used in Inkjet and Flexo printing and to accelerate the special drying demands within gravure printing processes. The drying modules are also ideal for use as an accelerator system for the front-end of floating-web dryers and for use as a separate drying system for narrow- to wide-web processes. Lastly, the heating of the substrate required for special processes is yet another application possibility for these compact and high performance modules.

Main Features

- High performance through a combination of IR and heated air.
- 3 nozzle zones providing a high air volume for optimal drying results.
- Steplessly adjustable power controls.
- Plug & Play connections.
- Customizable module arrangement for large process widths.
- Compact module for flexible use in a variety of machines and systems.
- Lightweight design for easy application in dynamic systems.
- IR power intensity of up to 250 kW/m² for high-demand drying requirements.
- IR lamps with high-tech ceramic reflectors for increased energy efficiency.

