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NobleLight

Air-Knife Infrared Module

Infrared Drying with intensive Air Exchange

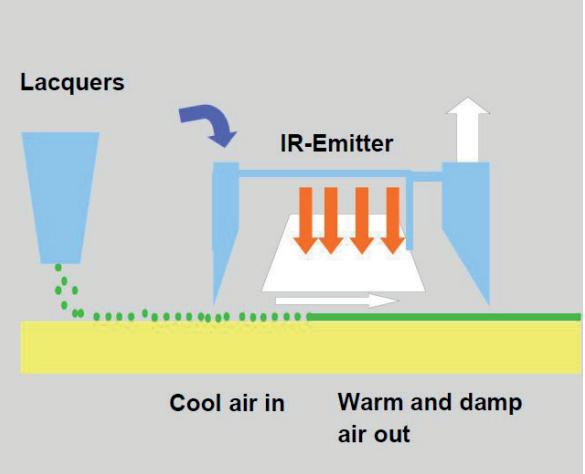
Air-Knife modules are infrared modules equipped with an air flow system. An intensive air flow ensures a rapid gas exchange in the drying zone.

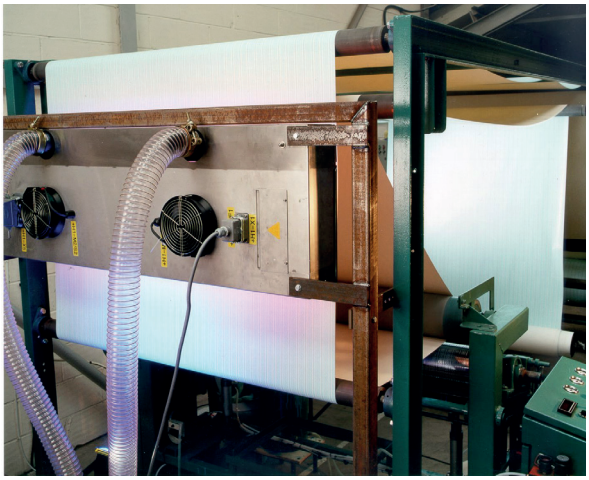
An evenly distributed stream of air is blown with high speed into the drying area through the Air-Knife. The dry air takes up the vapours and removes them from the infrared zone. The warm and damp air is extracted immediately after the drying zone. This maintains system balance and the solvents can then be condensed out.

In the drying area, this process reduces the moisture barrier so that further evaporation is not hindered and the infrared radiation is utilised to its full extent. This air exchange shortens the drying procedure and ensures more efficient yield per unit of energy.

Benefits

- High drying power
- Saves energy due to high efficiency
- Saves space due to short drying sections
- Infrared emitters according application
  Wave length suits to material and process
- Particularly suitable for
  fast running conveyour systems
  water based coatings
  paper, textils and plastics
  wood, plates
  printing ink





Technical Data

Air systems

The Air-Knife Module requires two separate air systems:

- one to cool and purge the infrared emitters
- one to supply the Air-Knife housing

Device description

- Side and back walls are prepared with drilled holes for mounting to a frame or interconnection of several modules
- Integrated connection terminal strips
- Power connection through pre-installed cable stands using heat resistant cable 180°C / 350°F

The output of the infrared emitters and the air exchange brought about by the Air-Knife system can be regulated by means of a control unit, thus adapting the drying process to individual product requirements.

Air-Knife Sample Module

	with fast response medium wave emitters	with Carbon emitters
Nominal power rating	10,8kW	40,8kW
Nominal voltage	400V	400V
Total length	1040mm	1420mm
Total width	235mm	450mm
Height	200mm	210mm
Heated length	800mm	1200mm

Our Service

- we can loan you an Air-Knife Module for tests on- site
- Tests with drying of your materials by an Air-Knife Module can be carried out with the support of our technicians

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We reserve the right to change pictures and technical data of this brochure. 06/2025