

## Jabitherm RAPID-COOL

Processing of products in industrial sites require mostly defined process conditions, especially temperature. Deviations from these temperatures caused by uncontrolled heat losses results in process and quality problems to unusable products and thereby economic losses.

Consequently industrial companies invest in protection of process stability and minimizing wastage, done by employing cooling chambers, cooling lines and air conditioned production facilities. Due to the very low temperature of the products special requirements need to be fulfilled by the insulation of the piping. In addition to general problems during installation there is a possibility for condensation and ice-formation on the surface of the piping. Beside safety reasons the fulfillment of hygienic requirements is endangered by impurities below the piping line.



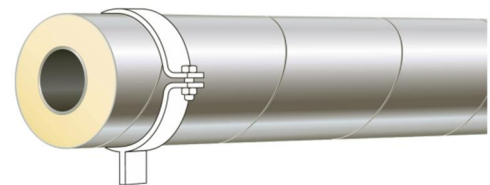
Cause for condensation is the large temperature difference between the cold outer surface of the piping and the ambient temperature (values of 50 K and more are common). When warmer air encounters the cold surface of the piping temperature drops rapidly. Warm air has the ability to bind more moisture than cold one (due to the special conditions at production halls the ambient air can have humidity up to 85%). This consequently unbounded moisture gathers in shapes of drops on the surface of the piping.

These may drop occasionally to areas underneath. For the case that moisture is able to get in direct contact to the carrier pipe, often caused by weak points in the insulation, complete icing may rise along the whole pipeline. Result: further safety problems!

Due to these problems the special design of the product line **RAPID-COOL** follows the challenge to avoid these points of condensations!

In opposite to conventionally insulated pipelines, the specific characteristics of insulation material and diffusion-resistant layers of metal products of the RAPID-COOL line behave significantly better and show excellent performance.

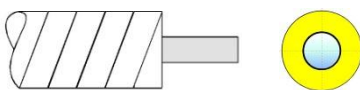
The well-known and approved system RAPID enables to avoid the most endangered weak points of a piping - the employment of the clamps with direct contact to the carrier pipe. The walk-over and robust construction prevents high maintenance costs and makes the piping line durable. The controlled production guarantees thereby a consistent standard of quality.



An additional advantage is the rapid installation due to the fact, that only the joints of the piping have to be insulated on site. This easy assembly saves costs for scaffolding and reduces delays of installation work and production downtimes in case of new installations or replacement of separate pipelines.

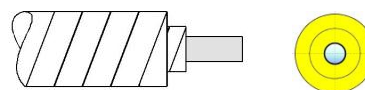
The product line **RAPID-COOL** provides the following designs:

### RAPID-COOL



Pipe system consists of PU foam insulation and a diffusion-resistant single jacket.

### RAPID-CRYO



Pipe system consists of PU-foam insulation layers and a diffusion-resistant multiple-jacket-system for cryogenic pipe lines.