

Jabitherm RAPID-CRYO

RAPID-COOL represents a product series created to fulfil the requirements for transport of cool media down to -60°C operating temperature.

The special pipe design prevents the pipe against development of moisture inside thermal insulation as well as formation of dew or ice on outer protective jacket.

The conceptual design of product series RAPID-CRYO is focused on extreme operating conditions of cryogen temperatures down to -200°C [-328°F].

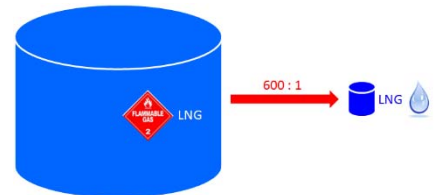
Typical scope of application for those products are liquefied gases which facilitate an economic transport and storage initiated by the ability of volume reduction to an almost evanescent low target. Achieved by an extremely reduced medium temperature of -196°C [-321°F].

Transport of gases, e.g. LNG (Liquefied Natural Gas at about -163°C [261°F]), either liquefied ethylene (C_2H_4 at approx. -110°C [-166°F]) or liquid oxygen at -196°C [-321°F] constitute a peculiar challenge for operating resources. A secured and permanent medium temperature at exposed values needs to be insured, independent from ambient temperatures of e.g. $+25^{\circ}\text{C}$ and more in summer inside pipes, containers or tanks.

The construction of **RAPID CRYO** incorporates a thermal barrier. This assures always extremely low temperatures of cryogen gases scored by special design of thermal insulation and diffusion resistant pipe configuration.

Depending on process conditions thermal insulation can feature in double- or triple-layer thermal insulation. All layers content of high-effective polyurethane foam, separated by thin layers of metal sheets. The inside fold technique with fourfold bend of sheeting ensures a diffusion resistance formation. In consequence of this design, condensation or ice, the indication of thermically inadequate insulation, is construction-conditioned eliminated.

Confirmed by more than thirty years of experience together with more than 10,000 km of pipe installed.



Product design options

Relevant for the choice an appropriate product like RAPID-CRYO are operating and ambient conditions.

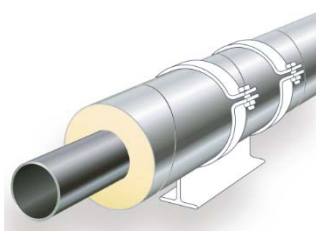
They are individually designed and require a close analysis of influencing factors and operation conditions at site.

Jabitherm Rohrsysteme AG offers support during engineering and choice of an appropriate pre-insulated pipe solution.

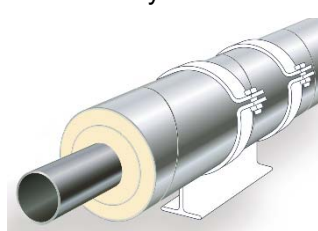


RAPID-CRYO

single-layer insulation



double-layer insulation



triple-layer insulation

