ITP INTERPIPE

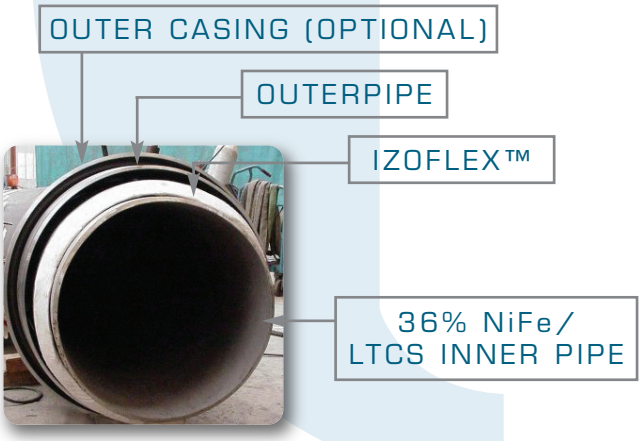
CRYOGENIC SUBSEA/ BURIED PIPE-IN-PIPE



PERFORMANCES	• U value typically 0.1W/(m².K). • Reduced boiled off rates. • Low stress, long fatigue life. • No need for bellows.
COST SAVINGS	• Highly compact insulation → use of smaller diameter outer pipe(s). • Load bearing insulation → No spacers required (No risk of spacers collapse). • Eliminates requirement for jetty / trestle. • No need for intermediate expansion loops.
SUITABLE FOR	• Subsea, underground (buried), and on a trestle • Local content manufacturing. • LPG / LNG / Ammonia / Cryogenic petrochemicals • Subsea / Buried / Landfall / On a trestle.

IZOFLEX™ INSULATION TECHNOLOGY COMBINED WITH MULTIWALL SYSTEM


- Izoflex™ : Inert / Non ageing.
- As installed thermal conductivity < 5 mW/(m.K).
- Compliant to -200 to 900ºC.
- Compressively strong → No need for centralizers.



LNG SYSTEM

- 36%NiFe inner pipe :

→ Low thermal expansion coefficient (10 times less than stainless steel): No need for intermediate bellows, or expansion loops.
→ Proven material in LNG industry.

- Integrated, highly sensitive leak detection system.

Thermal performances

Insulation materials	Izoflex™ technology	Aerogels (with spacers)	PU Foam (with spacers)
Thermal conductivity in mW/(m.K) (as installed value)	5	13	18

A proven & recognized technology

- 2 x 4km LPG subsea flowline manufactured in Peru (Pluspetrol Camisea project), in use since 2004 and with a thermal performance of 0.35W/(m².K)
- Subsea Ammonia spool manufactured in Chile in 2011.
- LNG system prequalified by BRASS LNG.
- LNG system certified "Fit for Service" by DNV.

JIP Qualification team