interpipe

CRYOGENIC

LH2 - LNG - ETHANE - LPG - AMMONIA

SUBSEA & BURIED
Pipe in Pipe Solutions

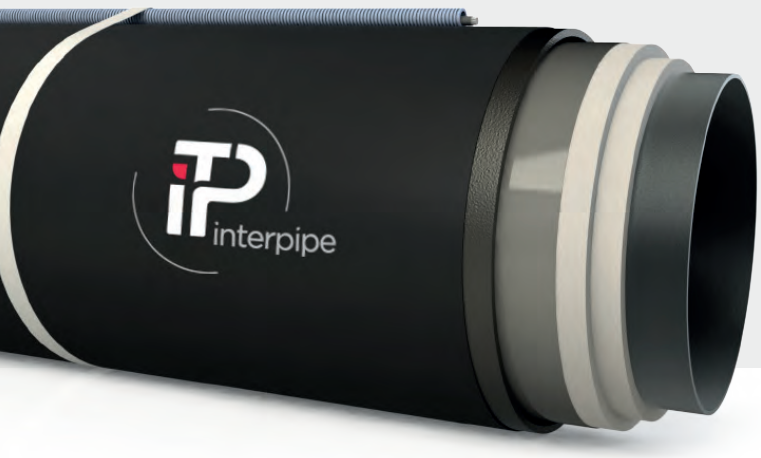
ENABLING CRYOGENIC PIPELINE TRANSPORT WHERE ENERGY MATTERS

ITP cryogenic pipeline solutions cater to a wide variety of liquid gas products, including: Liquid Hydrogen, LNG, LPG (Butane / Propane), Ethane, Ammonia and even, Oxygen or Nitrogen.
Pipe-in-pipe provides the necessary containment and double envelope protection from the environment for subsea or fully buried cryogenic pipelines. This is a terminal enabler with respect to site selection. The subsea Cryopipe eliminates the need for long unsightly and expensive trestle structures.

ITP's qualification and use of expansion-controlled alloys for pipeline materials eliminates all expansion loops, and no internal bellows are required. This opens up the opportunity to fully bury your cryogenic pipelines.

The extremely low conductivity of Izoflex® means the Cryogenic PIP systems are compact. This reduced-diameter system is advantageous for construction with HDD, thrust boring or tunnelling, and provides improved on-bottom stability in subsea applications.

The Izoflex® insulation system provides U-values of typically 0.1 W/(m².K). This U-value is throughout the pipeline length, with no field-joint effect or points of heat-leak.
The closed annulus system provides an elegant and extremely sensitive leak detection capability. Leak location can also be provided using Distributed Temperature Sensing (DTS) fibre optic technology integrated into the PIP system.



- > Cryogenic down to -254°C
- > Enabling terminal architecture
- > Double containment
- > Trestle-less
- > Continuous integrity monitoring
- > Subsea & Buried

SUBSEA & BURIED CRYOPIPE

- > REDUCED RISK
- > LOW CAPEX
- > NO DREDGING
- > NO MAINTENANCE
- > NO EXPANSION LOOPS
- > LIMITED BOIL-OFF GAS
- > ENVIRONMENTAL FRIENDLY
- > REAL-TIME LEAK DETECTION
- > NO IMPACT ON MARINE TRAFFIC
- > FOR COMPLEX OR CONGESTED FACILITIES
- > FOR ALL OFFSHORE ARCHITECTURES

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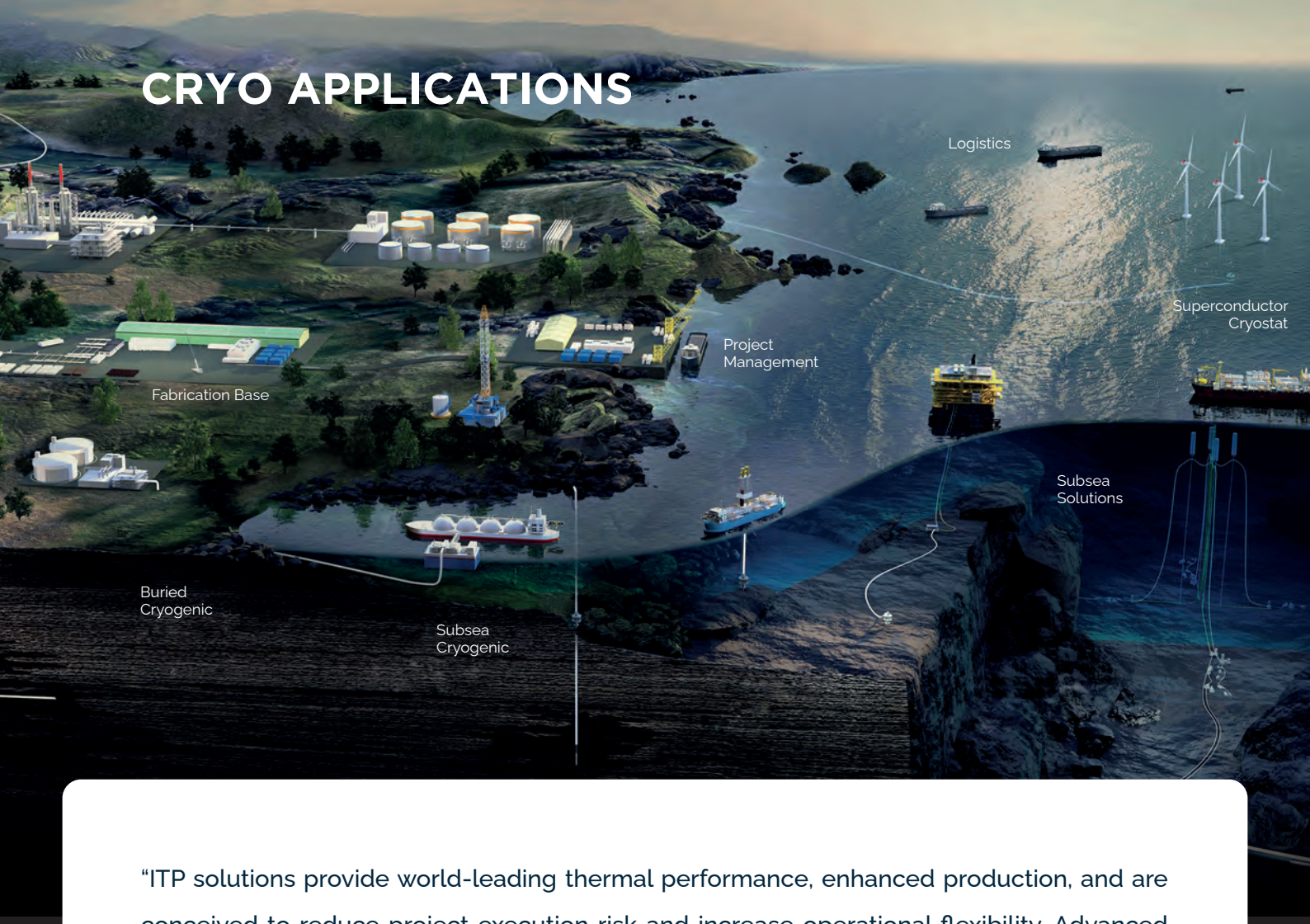
CRYO APPLICATIONS



"ITP solutions provide world-leading thermal performance, enhanced production, and are conceived to reduce project execution risk and increase operational flexibility. Advanced pipeline systems, for example our groundbreaking Cryopipe, enables new terminal architectures and locations, reduced risk profiles and low system CAPEX, improving return on investment."

ITP CAPABILITIES

Innovation and Developement

Studies and Engineering

Project Execution

Life of Field

interpipe

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