

Global expert in cables & cabling systems



Infrastructure - Industry - Building

## Oil & Gas products

Instrumentation cables

Fire-performance & mud-resistant cables

ROV dynamic umbilicals

Maritime LAN

Data acquisitic cables

Copper/fiber LAN

Umbilicals

Remote Operated Vehicles

Marine fiber backbones

Heating cables

Optical fiber backbones

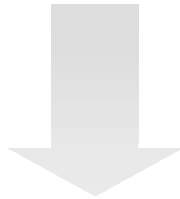
LV, MV, HV cables

Accessories & custom software

**LNG Transfer Lines**

## Global presence

- Industrial presence in more than 30 countries
- Commercial activities worldwide
- 21,000 local experts



- Proximity with the customer
- International experience
- Full mastery of national & international standards



- ✦ Nexans is a world leader in the support of flexible transfer lines for cryogenic liquids
  - ✦ Experienced in design and production for more than 30 years
  - ✦ Pipe systems in continuous operation without maintenance for more than 10 years
  - ✦ We supply standard products as well as products for special applications
  - ✦ Special aspects in terms of
    - ✦ pressure
    - ✦ heat inleak
    - ✦ temperature
    - ✦ pressure drop
- can be designed to customer requirements



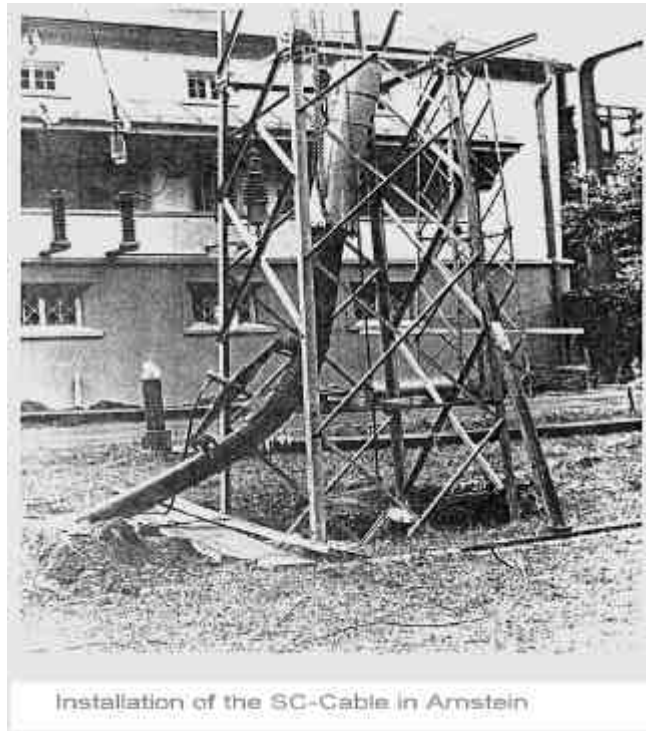
1. Corrugated inner pipe
2. Spacer
3. Super insulation
4. Vacuum space
5. Corrugated outer pipe
6. Jacket

### CRYOFLEX Transfer Lines

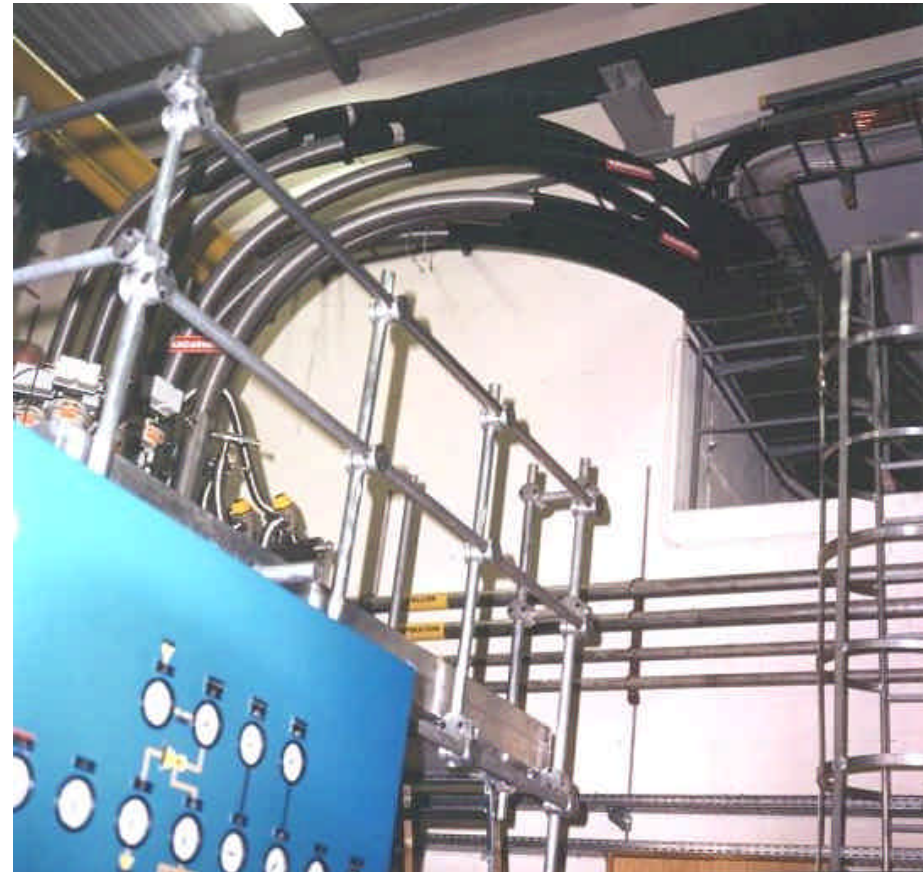


- Manufacturing of transfer lines on special machines ( UNIWEMA<sup>®</sup> )
  - longitudinal welding of stainless steel
  - continuous welding and corrugating in one step
  - winding of superinsulation and spacer
- He-leak testing with sensitivity of  $10^{-9}$  mbar l/s
- Guaranteed vacuum for 2 years
- Low thermal losses
- Expertise in cryogenic couplings, terminations, phase separators, valves





LTS Cable



CERN 7 x 50 m LHe Transfer Lines



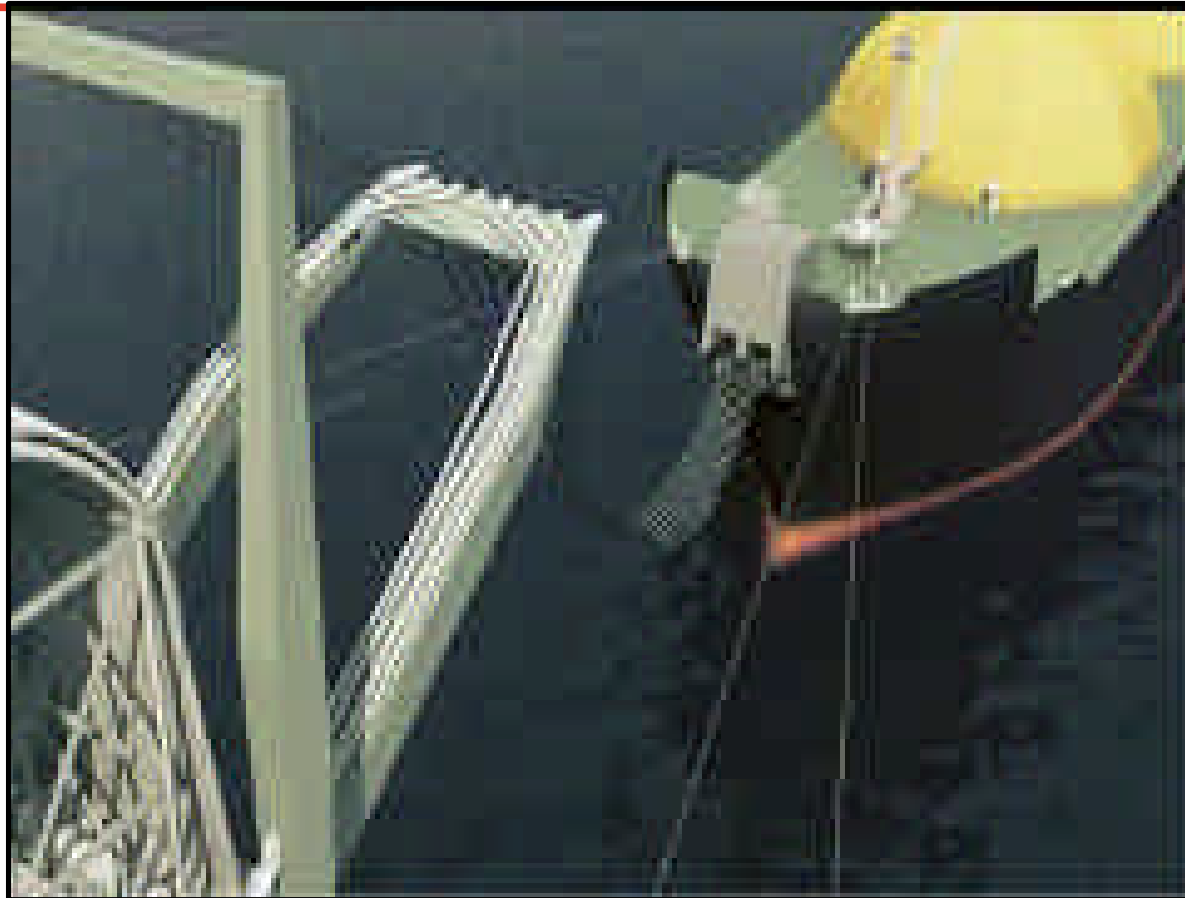
Ariane Transferline Coupling



Ariane Rocket



LTS Cable for Fusion Technology 1998



**Flexible LNG pipes for dynamic applications**



