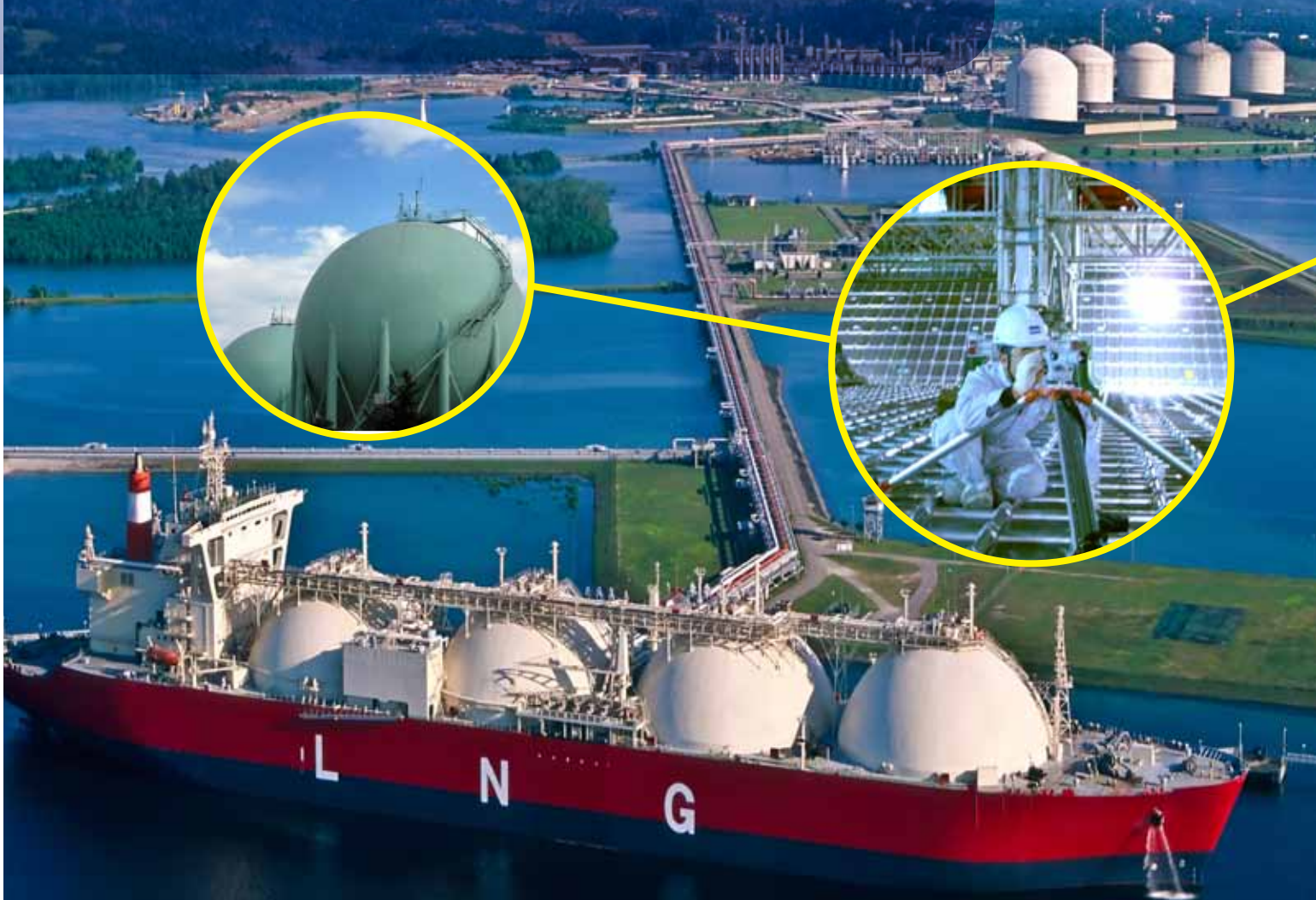


LNG Services

Intertek

Valued Quality. Delivered.

Global Liquefied Natural Gas Expertise



Supporting the LNG Industry with 24/7 Technical Services

Intertek provides a wide range of inspection, testing, consulting, and other technical services supporting the global LNG industry. Strategically located in over 100 nations, Intertek's trained professionals conduct LNG cargo inspection, vendor inspection, laboratory quality analysis, metering, calibration, troubleshooting, electrical equipment certification, materials analysis and much more.

Intertek LNG services support all phases of the industry, including engineering, production, distribution, ship-building & marine, FPSO projects, plant construction and more.

LNG Cargo Inspection, Testing, Measurement Services:

Intertek supports the full onshore and offshore production, transport, storage and custody transfer process for LNG cargos with professional cargo inspection and quality testing for owners, operators and traders of LNG plus ship and shore tank calibration. We help our clients confidently manage risk and exposure.

LNG Cargo Related Services:

- Custody transfer inspection, including thermal energy calculations reporting
- Master Sales Agreement (MSA) and Sale and Purchase Agreement (SPA) contract review and consultation
- LNG tank calibration (vessel and shore tanks)
- Vessel CTMS factory acceptance testing (FAT Inspection for new builds)
- Vessel CTMS site acceptance testing (SAT Inspection for new builds)
- Re-certification of vessel CTMS equipment (for existing fleet)
- Vessel Bunker stem survey (Quality and Quantity)
- Delivery and re-delivery inspections (charterer on-hire and off-hire inspections)
- LNG composition analysis and impurity testing to ISO, GPA, and ASTM methods
- Regulatory testing for environmental compliance
- Mercury determination by ISO 6978-2 (onsite for ng/M³ measurements) and by UOP, ASTM, and other methodologies
- Trace sulphur analysis and sulphur speciation (H₂S, Mercaptans, Thiophenes, etc.)
- Energy calculations and conversions to different standards and reference conditions
- On-Site laboratory and operations services, and more



LNG Infrastructure Services:

Intertek supports infrastructure and component engineering, manufacturing, inspection and life-cycle integrity needs with a full range of capabilities and expertise.

- Vendor inspection during plant procurement and construction
- Risk Based Inspection (RBI)
- Life-cycle analysis
- Asset Integrity Management (AIM)
- Design verifications for equipment and facilities
- Industrial Survey & Dimensional Control Services:
 - ♦ Surveying Modular Integration Verification Assurance (Structural/Piping)
 - ♦ 3D Laser Scanning of as-builts, Topographic/Pipeline Surveying
- In-service inspection activities
- Technical auditing and assessment
- Pipeline inspection and integrity studies

LNG Hazardous Location Services:

Intertek works with clients to provide the certifications needed to operate electrical equipment in hazardous areas around the world. Hazloc safety services include consultancy, training, certification, and more. Intertek engineers and technicians can provide solutions designed for the client's specific needs.

Product Certification

- ATEX Certification for the European Union (ATEX Directive 94/9/EC)
- ETL Certification for qualified products used in hazardous locations and listed to North American safety standards, including the Limited Production Certification (LPC) Program
- IECEx Scheme for International Markets including Korea, Australia, Russia, Brazil, and many others

Product Design Consulting

- Product consulting for hazardous locations compliance requirements. Intertek consultants understand the standards and protection methods, providing design guidance, protection method selection and other services to help prepare you for certification.

Personal Certification

- CompEx Certification for engineers and technicians, covering design, sites, installation, maintenance and auditing.



Intertek



Confidence
through
expertise

Intertek

Valued Quality. Delivered.

About Intertek

Intertek is the leading quality solutions provider to industries worldwide. From auditing and inspection, to testing, training, advisory, quality assurance and certification, Intertek adds value to customers' products, processes and assets. With a network of more than 1,000 laboratories and offices and over 35,000 people in more than 100 countries, Intertek supports companies' success in a global marketplace. Intertek helps its customers to meet end users' expectations for safety, sustainability, performance, integrity and desirability in virtually any market worldwide. Visit www.intertek.com.



Email: LNGEnquiries@intertek.com

Regional Telephone numbers:

Americas: +1 888 400 0084 or
+1 281 971 5600

EMEA: +44 1708 680 248

Australia: +61 3 9315 1844

Singapore: +65 6322 8228

Website: www.intertek.com/lng

www.intertek.com/lng