

5 10.811

E

EVALUATION

14 92.906

N

NORMALISATION

1 1.0079

A

APPLICATION

2 4.0026

B

BENEFITISATION

12 24.305

L

LIQUEFACTION

5 10.811

E

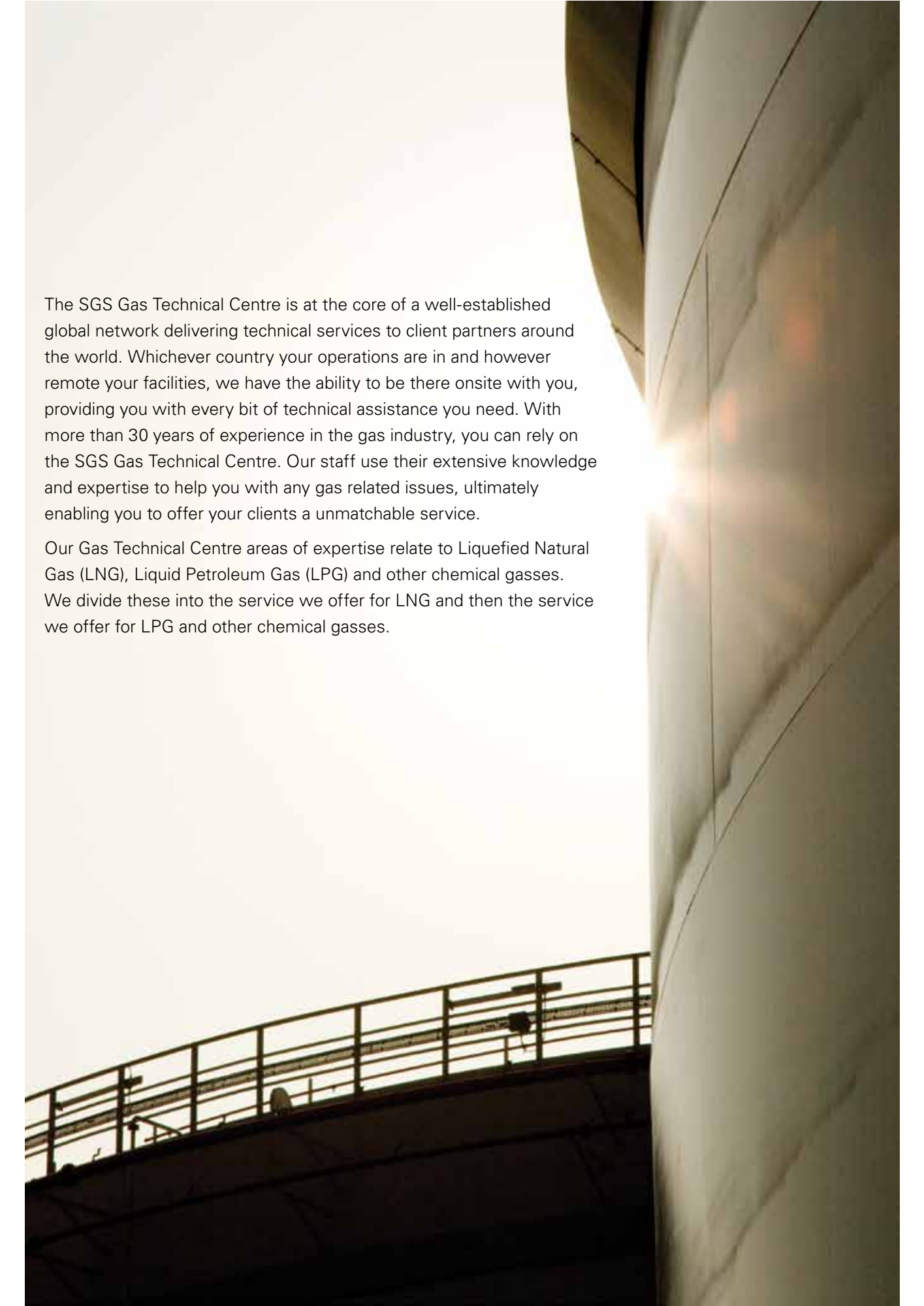
EXPERIMENTATION

4 9.0122

D

DEDICATION

**SGS GAS TECHNICAL CENTRE – EXPERTISE ENABLING
RELIABLE LNG, LPG & CHEMICAL GAS PRODUCTION**



The SGS Gas Technical Centre is at the core of a well-established global network delivering technical services to client partners around the world. Whichever country your operations are in and however remote your facilities, we have the ability to be there onsite with you, providing you with every bit of technical assistance you need. With more than 30 years of experience in the gas industry, you can rely on the SGS Gas Technical Centre. Our staff use their extensive knowledge and expertise to help you with any gas related issues, ultimately enabling you to offer your clients a unmatched service.

Our Gas Technical Centre areas of expertise relate to Liquefied Natural Gas (LNG), Liquid Petroleum Gas (LPG) and other chemical gasses. We divide these into the service we offer for LNG and then the service we offer for LPG and other chemical gasses.



LNG SERVICES

Liquefied Natural Gas (LNG) is one of the cleanest and safest of all energy sources with many applications in the domestic and industrial markets. Dealing in LNG has become a commercial business with a high need for inspection and control. This is where SGS comes in.

We have more than 25 years of experience within the LNG industry providing expertise in custody transfer measurement and validation, shore and marine tank calibration services using laser measurement technology and specialist training to plant operators involved in custody transfer operations.

SGS has ongoing operations at all key LNG producing and importing facilities in current operation around the globe.

OUR EXPERTISE

We offer you an all-encompassing LNG technical service. It covers a wide range of production systems, metering, analysis and verification, liquefaction and regasification services, calibration and training.

Production Services

- Auditing metering systems
- Calibration checklist
- Reservoir fluids analysis
- In-line analyser
- Instrument verification
- Laboratory outsourcing
- Mercury analysis and consultancy
- Mobile laboratory
- Production accounting
- QA/QC audits of systems
- Recertifying metering systems
- Safety auditing
- Start-up testing
- Technician supply

Ocean Transport & Custody Transfer

- Calibration GC analyser
- Composition change
- Custody transfer
- In-line sampling verification
- Instrument verification
- Instrument calibration
- Loss control
 - LNG composition change database
 - SPA (M&T) review
 - Commercial exposure

Liquefaction and Regasification Services

- Instrument verification
- Instrument calibration
- Lab testing/outsourcing
- Mass balance audits
- Mobile laboratory

Calibration

- Ship/shore tank calibration

Training Services

- Operational staff
- Operational management
- Tailor-made training



LPG & CHEMICAL GAS SERVICES

Liquid Petroleum Gas (LPG), with its low carbon emitting composition, is increasingly being used as a fuel for heating and running vehicles. Further to this, its use as an aerosol propellant and refrigerant is also on the rise. This increasing demand means the need for expert industry support grows with it. This is the service that SGS can offer for LPG and other chemical gases.

OUR EXPERTISE

We provide you with support and advice when it comes to buyer-seller issues and contracts, quantity and quality issues and start-up, auditing and training.

- Acting as an independent party in buyer-seller disputes
- Acting as an independent party in quantity and quality issues
- Acting on behalf of the seller or buyer in an advisory role
- Assisting in grade changes (e.g. cleanliness, purging)
- Advising on and review of presentation clause/technical contracts
- Standardising calculation sheets and methods
- Assisting in start-up operations
- Auditing terminals
- Providing training courses both in-house and for your clients

CERTIFICATION

SGS Oil, Gas & Chemicals Services is ISO 9001 and SCC** certified. All our Gas Technical Centre staff are trained in the latest national and international transport legislation, safety and environmental issues.

USING THE EXPERTISE OF THE GAS TRAINING CENTRE

Investigating potential operations

- Delegate inspectors
- Instructions to inspectors
- Investigation of terminal infrastructure
- Advising on presentation clause
- Advising on pre-inspections
- Advising on purging conditions

During operations

- Follow-up loading/discharge sequences
- Communications between customer and local SGS office
- Advising in case of off-specification situations
- Theoretical quality calculations
- Theoretical quantity calculations
- Special surveys

After operations

- Investigating outturn loss
- Investigating transit loss
- Investigating time consumption
- Investigating nitrogen consumption
- Recalculating load port and discharge port figures



GLOBAL AND LOCAL



SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 64 000 people and operate a network of more than 1 250 offices and laboratories around the world.

Our industry knowledge, alongside our experience and recognition allows us to offer you our advice and to share with you our expertise. Our full Oil, Gas and Chemicals (OGC) programme covers upstream, midstream and downstream as well as LNG.

Our competence in this core business is based on our experience and expertise gained since 1878. We have been the established industry leader in the sampling, measurement, analysis and certification of bulk liquids and gases since the 1950s as a unified Group and for many decades before that in the form of the individual international companies who were merged to form what is today's OGC division.

Our unique mix of local knowledge and global intelligence, led by the SGS OGC team, is unmatched across the industry. Our testing, verification, audit and certification solutions assist our clients worldwide, throughout the value chain, from research and development, project verification, extraction of commodities, production and manufacturing, processing, and finally up to the distribution of the energy to the final consumer.

Partnering with SGS guarantees access to an unparalleled global network of technical know-how and capabilities. We eliminate uncertainty, enhance mutual confidence, and offer you the freedom to concentrate on the things that really matter: the growth of your core operations and the profitability of your business.

**FOR MORE INFORMATION ABOUT
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AND ITS SERVICES, CONTACT
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GAS TECHNICAL CENTRE

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