



THE OIL & GAS AND PETROCHEMICAL INDUSTRIES



CALIBRATION SERVICES FOR THE OIL & GAS AND PETROCHEMICAL INDUSTRIES

Global oil demand is forecast to grow by an average annual rate of 1.2 million of barrels per day. By 2023, oil demand will reach 104.7 million of barrels per day, and natural gas demand is expected to grow at 1.6% per year*.

As a result, the requirement for petrochemical products is also anticipated to grow, with strong demand from developing markets such as China, Africa and Asia.

As an independent calibration services partner, Trescal can play a major role in helping companies in the oil, gas and petrochemical sectors and its associated supply chain companies to achieve cost savings as well as compliance with the latest regulations and legislation.

Utilising its accredited calibration laboratories in United Kingdom, The Netherlands, Belgium, Denmark, Singapore and the USA combined with Trescal's recognized experience with upstream, downstream and petrochemical activities, Trescal ensures its customers have the highest quality metrological and market expertise.

Trescal's unique geographic coverage and extensive internationally accredited multi-domain capabilities enables Trescal to provide a 'local' support to its customers

WHAT DOES TRESCAL HAVE TO OFFER?

Trescal, the global specialist in calibration services, offers companies in the Oil & Gas and petrochemical sectors the largest multi-domain and multi-site capabilities for the instrumentation of processes, analysis, industrial facilities and laboratory equipment. Services include:

- > Calibration / Verification
- > Repair / Maintenance
- > Instrument operation and acquisition systems
- > Asset management and software solutions
- > Engineering / Training / Support / Consulting

We offer dedicated teams, proficient in the relevant standards and supported by our technical division and our national accredited laboratories. These teams may be located on site and integrated into the customer's organization to ensure a responsive and effective service solution.



WHY CHOOSE TRESCAL?

- > Independent and fully accredited service provider
- Contract management and reviews are handled by a dedicated team
- Integration of operational and organizational constraints related to the Oil & Gas industry
- > Large coverage of metrological domains related to Oil & Gas expertise such as Pressure, Gas / Liquid Flow, Temperature, Gas Density, Orifice Plate measurement and repair, Humidity
- > Teams with over 30 years of experience in the Oil & Gas sector
- > Control of measurement instrument's operating costs,
- > The ability to assist customers in adjusting and improving their calibration processes
- > Quality, metrological and market expertise through proficient knowledge of the Oil & Gas sector references and standards in force (ISO/IEC 17025, ISO 9001, ISO 14001...)

OUR ADDED VALUE

- > A unique range of technical skills and services: a "One-Stop-Shop"
- > A real proximity to our customers, with extensive worldwide coverage thanks to our regional branches and customers' satellites
- > A recognized expertise based on a worldwide network of accredited laboratories
- Solid experience in equipment and processes dynamic management and optimization
- Multi-brand expertise in repair and MOC (Maintaining in Operational Condition)
- > An extensive knowledge of standard requirements in our customers' industrial sectors (ISO/IEC 17025, ISO 9001, ISO 9100, IATF 16949, GMP, GLP, ISO 15189, ISO 22716, ISO 14001, ISO 10012, ISO/IEC GUIDE 98-3 (GUM), IVM (International Vocabulary of Metrology)...)
- > Engineers and projects managers that coordinate a structured network of experts



OUR AREAS OF EXPERTISE

CALIBRATION DOMAINS

- Accelerometry
- > Acoustics
- > Chemical
- > Dimensional
- > Electricity/Magnetism
- > Force
- > Gas flow
- Hardness
- Humidity
- > Liquid flow
- > Mass/Scale
- > Pressure / Vacuum
- > Radiometry/Photometry
- > Temperature
- > Time / Frequency
- > Torque
 - Volume

INSPECTIONS AND TESTING

- > Analysis
- > HVAC control
- Mechanical inspection
- Pressure processes and devices tests
- > Strain gauges testing
- Testing machines (Force & Hardness)
- Thermic and climatic testing

SPECIFIC SKILLS

- > Flow measurement
- > Gas Density
- > High pressure
- > Low pressure / Vacuum
- > Orifice metering

SOME OF OUR CUSTOMERS

Air Liquide • Air Products • BASF • Bayer • BG Group • BP • ExxonMobil (Esso) • Fluxys • Marathon Oil • Nexen • Noordgastransport • Nuon • Perenco • Petrofac Facilities Management • Repsol • Shell • Total ...



FOCUS ON TRESCAL CALIBRATION INTERVENTIONS ON OFFSHORE PRODUCTION PLATFORMS IN THE NORTH SEA

Trescal has the capability to send its calibration engineers to offshore production platforms to calibrate measuring instruments in-situ. By completing the calibrations offshore, the disruption and downtime of the platform's production is minimised without compromising the quality of the calibration.

The process starts by identifying the measurement parameters of the instruments requiring calibration and then selecting the appropriate calibration standards. The standards are then securely packed and shipped to the offshore location usually by a supply ship. When the client confirms that the calibration standards have

arrived safely, experienced Trescal's calibration engineers travel to the platform to undertake the required programme of calibration. The type of instruments normally calibrated on offshore installations, measure process conditions and monitor the safe operation of systems such as pressure, temperature and electrical parameters. In addition Trescal also undertake the calibration of power generation and telecommunication systems, critical to the operating processes.

Occasionally Trescal engineers also calibrate the test equipment used by the platform's maintenance personnel to carry out routine safety checks as well as breakdown services.

TRESCAL IN THE WORLD

Trescal Austria Gmbh
Dr. Auner Straße 21, 2. OG Ost
A-8074 Raaba-Grambach
Phone: +43 316 40 76 60
Fax: +43 316 40 76 60 20
E-mail: info.austria@trescal.com

BELGIUM

Trescal NV Vosstraat 200 B-2600 Berchem / Antwerpen Phone: +32 (0)3 542 62 90 Fax: +32 (0)3 542 62 89 E-mail: info.benelux@trescal.com

CZECH REPUBLIC

Rescal S.r.o Modlanská 1862 CZ-41501 Teplice Phone: +42 (0) 417 535 226 Fax: +42 (0) 417 575 630 E-mail: teplice@trescal.com

DENMARK

Trescal A/S Mads Clausens Vej 12 8600 Silkeborg Phone: +45 87 20 69 69 Fax: +45 86 81 26 54 E-mail: dkcalib@trescal.com

FRANCE

Trescal S.A Parc d'Affaires Silic 8 rue de l'Estérel - BP 30441 94593 Rungis Cedex (Paris) Phone: +33 (0)1 56 70 36 36 Fax: +33 (0)1 56 70 36 30 E-mail: france@trescal.com

GERMANY

Trescal GmbH Borsigstr. 11 64291 Darmstadt Phone: +49 (0)6151 3094 0 Fax: +49 (0)6151 3094 444 E-mail: darmstadt@trescal.com

ITALY

Trescal s.r.l Via dei Metalli n° 1 25039 - Travagliato (BS) Phone: +39 (0) 30 6842501 Fax: +39 (0) 30 6842599 E-mail: it.info.bs@trescal.com

MOROCCO

Trescal Maroc
Zone Indusparc - Sidi Moumen
Chemin tertiaire 1015
20400 Casablanca
Phone: + 212 (0) 5 22 74 09 01
E-mail: maroc@trescal.com

THE NETHERLANDS

Trescal B.V.
Storkstraat 2-4, Postbus 142
2722 NN Zoetermeer
Phone: +31 (0) 79 343 0000
Fax: +31(0) 79 343 0099
E-mail: info.benelux@trescal.com

ROMANIA

Trescal Romania Srl Trescal Romania Srl Electromagnetica Business Park 266-268 Calea Rahovei, 5th district 50912 Bucharest Phone: +40 (0) 21 423 01 30 Fax: +40 (0) 21 423 02 40 E-mail: romania@trescal.com

SPAIN
Trescal España de Metrologia S.L.U
C/ Arrastaria, 21
28022 Madrid
Phone: +34 (0) 91 62 50 900
Fax: +34 (0) 91 62 50 960
E-mail: spain@trescal.com

SWEDEN

Trescal Sweden AB Fraktgatan 6 633 46 Eskilstuna Phone: +46 (0) 16 15 33 80 Fax: +46 (0) 16 15 33 99 E-mail: seinfo@trescal.com

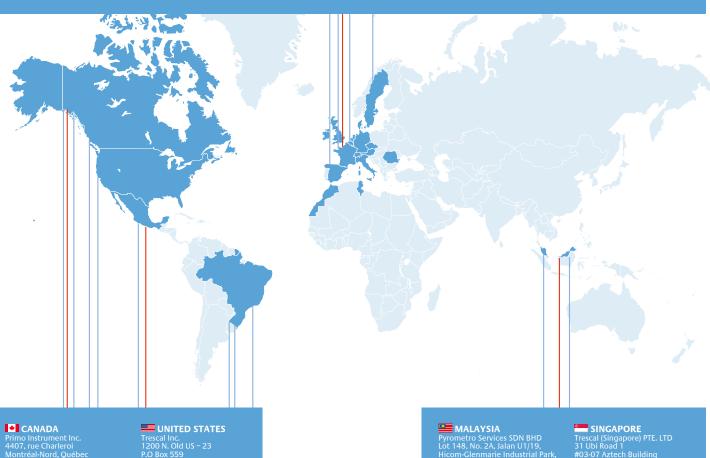
+ SWITZERLAND

Trescal NV 110 chemin du Pont-du-Centenaire CH 1228 Plan-Les-Ouates – Genève Phone: +41 (0) 22 794 18 91 E-mail: suisse@trescal.com

TUNISIA

Trescal SARL Commune de Fouchana - Mhamdia Lot 4A ZI Mghira II

Trescal Ltd
Saxony Way,
Blackbushe Business Park
Yateley, GU46 6GT
Phone: +44 (0) 1252 533 330
E-mail: info.uk@trescal.com



CANADA
Primo Instrument Inc.
4407, rue Charleroi
Montréal-Nord, Québec
Canada H1H 116
Phone: +1 (514) 329-3242
Fax: +1 (514) 329-3750
E-mail: info.canada@trescal.com

Trescal Inc. 1200 N. Old US - 23 P.O Box 559 Hartland, Mi 48353-0559 Phone: +1 810 225 4601 Fax: +1 810 225 4602 E-mail: info@trescal.us

WALAYSIA
Pyrometro Services SDN BHD
Lot 148, No. 2A, Jalan U1/19,
Hicom-Glenmarie Industrial Park,
40 150 Shah Alam,
Selannor. Selangor Phone: +603-5569 1648 Fax: +603-5569 1548 E-mail: hq@pyrometro.com

Trescal (Singapore) PTE. LTD 31 Ubi Road 1 #03-07 Aztech Building Singapore 408694 Phone: +(65) 6812 2500 E-mail: singapore.info@trescal.com

INTERNATIONAL ACCREDITATIONS



BRAZIL

MEC-Q Rua Francisco Bonilha, 19 Vila Príncipe de Gales Santo André - SP CEP 09060-550 Phone: +55 (11) 3463-8211 E-mail: brazil@trescal.com

MEXICO
Trescal (KalibrixCal)
Av. Colinas del Cimatario 381
Querétaro hone: + 52 442 248 0250 -mail: mexico@trescal.com







































Sites and scopes available on trescal.com