TRANS ASIA
Industrial laboratories

CERTIFICATION & ACCREDIATION BODIES (CAB)

EIAC ACCREDITATION ISO / IEC 17025:2017

EIAC ACCREDITATION ISO / IEC 17020:2012

QUALITY MANAGEMENT SYSTEM ISO 9001:2015

ENVIRONMENTAL MANAGEMENT SYSTEM ISO 14001:2015

HEALTH & SAFETY SYSTEM ISO 45001:2018

ABOUT US

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Trans Asia Industrial Laboratories (TIL) , a part of the Trans Asia Group of companies has been established recognizing the vast demand for a high quality, single stop , multi- disciplinary professional testing and investigation facility supplemented by our field services that delivers quality and efficient services inline with international standards to cater to the needs of the various industries.

TIL facilities are fully equipped with the latest and most technologically advanced equipment to perform Physical, Mechanical, Corrosion, Metallography, Chemical, Microbiological and Environmental Tests along with field Non Destructive Testing services . Our team is made up of highly qualified and exceptionally skilled staff with vast experience in their relevant fields of inspection.

Our services include Mechanical Material Testing, Metallurgical Failure Investigation, Corrosion Testing, Metallographic Examination, Analytical Chemistry, Microbiology Analysis for potable, non-potable, waste water, sewage water etc. along with Conventional/Advanced NDT Inspection Services.

Trans Asia Industrial Laboratories (TIL) is certified for ISO 9001: 2015 , ISO 14001 : 2015 and ISO 45001: 2018 and are our quality management system is accredited to ISO/IEC 17025:2017 and ISO/IEC 17020 :2012 by Emirates International Accreditation Centre (EIAC)

Trans Asia Industrial Laboratories is fully equipped to serve and support various Industries / Companies related to Construction, Fabrication, Oil, Gas, Petrochemical & Offshore Marine Operations within the Middle East and world-wide.

In order to establish the accuracy and reliability of the test results, the laboratory participates in National and International Proficiency Testing Programs. All the activities governing TIL are planned to deliver high standards of service to the customers with regards to commercial, technical, quality and safety aspects.

VISION STATEMENT

To become the most preferred one stop solution for Testing and Inspection services for Industries / Companies related to construction, Fabrication, oil, Gas, petrochemical & offshore marine operations within the Middle East and world-wide with versatile quality systems and international standards.

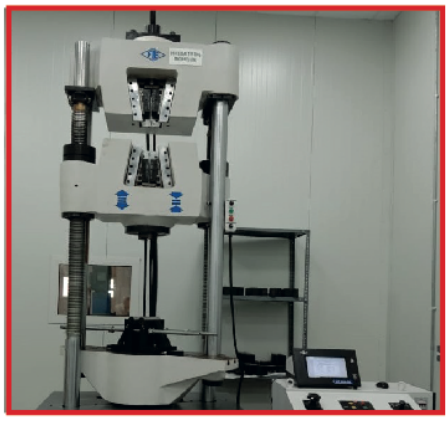
MISSION STATEMENT

TIL is dedicated to provide our customers with the most technically reliable and quality assured testing and inspection services. Our commitment is supported by diversified services, current technology, technical expertise, qualified facility & efficient customer services, to enhance continued growth at the most economic rate, holding on to the local regulation with regard to EHS aspects, to achieve a safe community.

MECHANICAL TESTING (DESTRUCTIVE)

Metallurgy department establishes the reliability of welds and identifies material grades and physical properties by conducting different types of mechanical tests in accordance with international standards and specifications.

The mechanical tests may include, but not limited to the following:



Tensile Test to determine the Yield Strength, Tensile Strength, Elongation, Reduction of area.
Hardness test- Vickers, Rockwell, Brinell & Micro Hardness.
Macro Hardness Survey on weld coupon.
Charpy Impact Test for Standard & Sub size specimens at ambient, Sub-zero and Cryogenic Temperatures.
Bend / Re-bend Test / Flattening Test.
Pull out Test.
Fracture Test.
Proof Load Tests.
Nick Break Test.
Compressive Load Test.

Special hardness tests as well as ferrite measurements are carried out at site by using portable equipment. Such testing is particularly suited for jobs that do not allow the samples to be transported to the laboratory.

Welding procedure tests, welder qualification tests, material conformation tests are all carried out on numerous ferrous and non-ferrous materials for various clients.

METALLOGRAPHIC EXAMINATION

Metallurgical Evaluation of metallic and non-metallic materials, having hands on experience & expertise in,

- In-situ Replica Metallography as per ASTM M 1351.
- General macro examination as per ASTM E 340.
- General microstructure of the materials as per ASTM E407.
- Grain size measurement as per ASTM E 112.
- Ferrite count (manual point count method) as per ASTM E 562.
- Inclusion count as per ASTM E 45 Method D (manual microscopic method).
- Determination of intermetallic phases as per ASTM A923 Method A (microscopic method).
- Coating thickness measurement (microscopic method).

Also special techniques such as creep damages (creep voids, dissipation of pearlite - graphitization or spheroidization, grain boundary tearing and grain shrinkage etc).

Evaluations of HIC, SSCC, Quench cracks; Surface hardening inconsistencies; metallic, intermetallic & non-metallic inclusions. Manufacturing defects such as Lap, seam, casting & forging defects other anomalies in the microstructure.

Metallurgical Failure Investigation of oil & gas refineries, marine, industrial components and commercial equipment's etc. Carrying out investigation & preparing analysis reports with photographic documentation, technical findings, discussion, conclusion and recommendations of materials. Hands-on experience with corrosion related failures of components from oil/ gas production and refinery industries. Also carried out investigations for court claims / insurance etc.

CORROSION TESTING & EVALUATION

One of the exclusive features of TIL is its capability to undertake special tests on corrosion as per international standards and specifications.

Corrosion tests to check susceptibility to Inter Granular Corrosion, Pitting Corrosion, and Stress Corrosion Cracking under Sulphide, Chloride and other halide atmospheres and Hydrogen Induced Cracking are performed at our test house. Fracture tests like CTOD and K1C are also undertaken as per client's requirements. It is noteworthy that the clients from other countries are conducting such tests at TIL because of the professional attributes, timely approach and expertise even though such facilities are available in their respective countries.

(HIC) Hydrogen Induced Cracking Test as per NACE TM 0284.
(SSCC) Sulfide Stress Corrosion Cracking Test as per NACE TM0177 Method A
(SSCC) Four point Bend as per EPC Publication 16/G39/NACE TM0177
SOHIC (Stress oriented Hydrogen Induced Cracking) as per NACE MR0175/ISO 15156
Pitting Corrosion Test for duplex and super duplex stainless steels per ASTM G48 Method A & C / ASTM A 923 Method C.
(IGC) Intergranular Corrosion Test for austenitic stainless steel as per ASTM A 262 Practice A, B and E.
(IGC) Intergranular Corrosion Test for Nickel based alloys & Inconel materials as per ASTM G 28.

NON DESTRUCTIVE TESTING & ADVANCED NDT

TIL provides Non Destructive Services pertinent to Structural steel works, Piping, Vessels, Tanks, and Castings as per applicable international specifications like AWS, ASME, API etc. and Major Class Specifications like DNV, BV, LRS, and RINA etc. The NDT services provided are listed below which can be carried out on site or at our lab as required by the client:

Radiographic Testing
Magnetic Particle Test
Visual Inspection
TOFD, Image Analyser
Flux Leakage
Ferrite Test
Coating Thickness Measurement
Ultrasonic Testing
Dye Penetrant Test
Phased array Ultra Sonic Testing
Tank Floor Inspection
Vacuum Test
Positive Material Identification
On-site Portable Hardness Test

CHEMICAL TESTING

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TIL Chemistry department is equipped to conduct Analysis of Metal, Oil, Gas, Drilling Fluids, Chemicals, Mud, Effluents etc., and also help the industry by providing extensive consultancy in identifying & cross-checking the material's elemental composition, comparing results, analyzing and investigating, arbitrations on material selection & evaluation. The tests conducted regularly are highlighted below:

Analysis of Precious Metals
Scales and Sludge Analysis
Analysis of Ores and Minerals
Mud Analysis
Oils and Fuels Analysis
COD and BOD Levels etc.
Effluent and Sludge Analysis
Potable and Waste Water Analysis
Analysis of Drilling Fluids
Industrial Effluents Analysis
Paints Analysis
Evaluation of Biocides
Positive Material Identification (PMI)
Sampling of Waste Effluents
Microbiological Testing of Domestic Drinking & Swimming Pool Water

ENVIRONMENTAL TESTING

Trans Asia Industrial Laboratories provides stack testing and ambient air monitoring services to solve many environmental challenges:

- Regulatory Compliance (Title V, MACT, BACT, NESHAP, NSPS, PSD, etc.)
- Control Equipment Specification / Performance /Acceptance
- Real-Time Process Evaluation and Optimization
- Worker and Public Safety / Air Quality
- CEMS/PEMS Certifications
- Emissions Surveys
- Waste Reduction
- Trial Burns

Monitoring Parameters

Gases are monitored both in the stack and ambient air. Our sampling expertise includes airborne contaminants and these routinely analyzed constituents:

- Particulates (Total, PM10-, Condensable, Size Fractioning)
- Heavy Metals including Low Level Mercury
- Semi-volatile Organics (PAHs, PCBs, POHCs)
- Volatile Organics (Speciated and Total)
- Dioxins and Furans
- Acid Gases (HCl,HF, H2SO4)
- Combustion Products (CO, SO2, NOx

MICROBIOLOGY TESTING

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Microbiological analysis is carried out to determine the amount of micro-organisms present which guide the manufacturers and suppliers regarding the suitability of the product for the intended end use. This will also ensure that relevant statutory requirements are fulfilled for the specified usage of the product.

An important aspect of water microbiology, particularly for potable ,non-potable, waste water, sewage water etc to ensure that it is safe to drink or to use proper water quality to provide best solutions which offers a comprehensive range of testing services for any types of water analysis through our extensive microbiology laboratory services to estimate and numeration of various pathogenic bacteria that are present in the water by using standards methods for the analysis .These tests determine the quality of water and to ensure if it's safe for usage. The parameters tested for the microbiology analysis are as follows

- Heterotrophic plate count
- Escherichia coli
- Total coliforms
- Fecal coliforms
- Fecal streptococci
- Pseudomonas aeruginosa

Legionella sps. & sero groups

Sampling of water plays an important role to measure the microbiology tests to avoid contamination following the standard methods of sampling need to be performed.

- Sampling of Microbiology
- Sampling of legionella

ACCREDITATIONS & CERTIFICATIONS

TRANS ASIA
Industrial laboratories

ACCREDITATION CERTIFICATE

LB-TEST-225

Emirates International Accreditation Centre

has accredited

TRANS ASIA INDUSTRIAL LABORATORIES L.L.C

Warehouse No 10, Al Qouz Industrial Area 1

Dubai- United Arab Emirates

In accordance with the requirements of

ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories

to undertake the tests in the attached accreditation scope

This Accreditation is invalid without the attached accreditation scope and shall remain in force within the validity period printed below, subject to continuing compliance with the requirements of the accreditation criteria.

Validity: 15/10/2020 to 14/10/2023

Initial Accreditation Date: 15/10/2020

CHIEF EXECUTIVE OFFICER APPROVAL

ACCREDITATION CERTIFICATE

188-IB

Emirates International Accreditation Centre

has accredited

TRANS ASIA INDUSTRIAL LABORATORIES LLC

Warehouse No 10, Al Tayer Warehouse, Al Qouz Industrial Area 1

Dubai-United Arab Emirates

In accordance with the requirements of

ISO/IEC 17020:2012

to undertake the inspection in the attached accreditation scope

This Accreditation is invalid without the attached accreditation scope and shall remain in force within the validity period printed below, subject to continuing compliance with the requirements of the accreditation criteria.

Validity: 062020/09/ to 05/09/2023

Initial Accreditation Date: 06/09/2020

CHIEF EXECUTIVE OFFICER APPROVAL

TRANS ASIA
Industrial laboratories

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