Company Profile

for

Forever Consultants (Singapore) Pte. Ltd.

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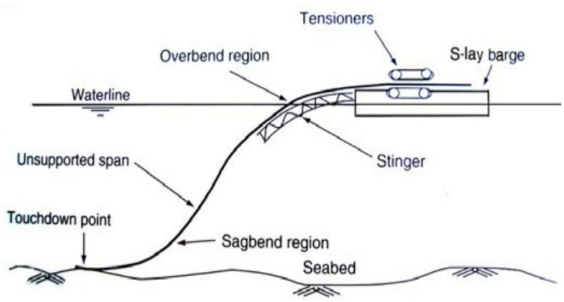

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Introduction

- Forever Consultants (Singapore) Pte. Ltd. (herein after referred to as "Forever Consultants") is incorporated in Singapore since year 2016 and currently providing Consultancy Services, Third Party Inspection (TPI) Services and Quality Assurance & Surveillance Services to Oil/ Gas and Energy Industry.

- The professional team comprises of highly qualifies individuals in Oil & Gas field over 10-20 years of experience in Consultancy Services such as Engineering Critical Assessment (ECA), Fracture Mechanics Assessment (FMA), Fitness-For-Service (FFS), Finite Element Analysis (FEA), ILI Consultancy Services, Pipeline Repair and Emergency Pipeline Repair Solutions, Independent Third-Party Inspection, Vendor Surveillance Inspection, Quality Assurance, Quality Control, NDE Level III Services in Conventional/ non-conventional NDT methods. Equipment (Christmas Tree), Downhole Equipment Manufacturing and Plant in Service & New Construction.

- All Professionals are Trained and/or Qualified to API/CSWIP/AWS/PCN/ASNT Certificates and relevant competencies.

- We have wide range of Quality Professional network in Singapore, Malaysia and Indonesia.

- Below summary are the company details from the Government Portal.

ACCOUNTING AND CORPORATE REGULATORY AUTHORITY (ACRA) bizfile+

INFORMATION RESOURCES

WHILST EVERY ENDEAVOR IS MADE TO ENSURE THAT INFORMATION PROVIDED IS UPDATED AND CORRECT. THE AUTHORITY DISCLAIMS ANY LIABILITY FOR ANY DAMAGE OR LOSS THAT MAY BE CAUSED AS A RESULT OF ANY ERROR OR OMISSION.

Business Profile (Company) of FOREVER CONSULTANTS (SINGAPORE) PTE. LTD. (201618445W) **Date: 03/12/2020**

The Following Are The Brief Particulars of :

Registration No.	:	201618445W
Company Name.	:	FOREVER CONSULTANTS (SINGAPORE) PTE. LTD. (w.e.f.19/08/2019)
Former Name if any	:	FOREVER HEALTH AND BEAUTY PTE. LTD.
Incorporation Date.	:	05/07/2016
Company Type	:	EXEMPT PRIVATE COMPANY LIMITED BY SHARES
Status	:	Live Company
Status Date	:	05/07/2016

Principal Activities

Activities (I)	:	ENGINEERING DESIGN AND CONSULTANCY ACTIVITIES N.E.C. (71129)
Description	:	ENGINEERING DESIGN AND CONSULTANCY ACTIVITIES
Activities (II)	:	CORPORATE TRAINING SERVICES AND MOTIVATIONAL COURSE PROVIDERS (85491)
Description	:	CORPORATE TRAINING SERVICES AND MOTIVATIONAL COURSE PROVIDERS

Capital

Issued Share Capital (AMOUNT)	Number of Shares *	Currency	Share Type
15000	15000	SINGAPORE, DOLLARS	ORDINARY

* Number of Shares includes number of Treasury Shares

Paid-Up Capital (AMOUNT)	Number of Shares	Currency	Share Type
15000		SINGAPORE, DOLLARS	ORDINARY

COMPANY HAS THE FOLLOWING ORDINARY SHARES HELD AS TREASURY SHARES

Number Of Shares	Currency

Quality Policy

- Forever Consultants is committed to deliver high quality deliverables as per company and client project quality document and be recognized as leader in provide High Quality services at competitive price.

- The company and its employees/ representatives shall endeavour to deliver services to meet or exceeding our Customer's needs through focused efforts on continuous process improvement and engagement with customers.

- Management commits the resources and create an environment in which each employee can contribute skills, talents and area to a continuous process of improvement and innovation.

Mission

• To provide the highest quality consultancy and third-party Inspection services for a long-term benefit to our Customers, Shareholders and Employees

• Strive to meet, or exceed, our Customer's expectations at every opportunity

• Be a Technically superior and innovative company that fosters an atmosphere for continuous improvement

• Promote a safe working environment where our employees can develop their capabilities and grow through education and skill development

• Build trust in our business relationships by placing the height value on personal and corporate integrity

Vision

To be best in the business in the region by any measure.

HSE Policy

Forever Consultants Management and Employees will:

• Asses the risks at the workplace before commencing the work at the site.

• Ensure that the workplace satisfies health, safety and welfare requirements for ventilation Temperature, lighting and staff facilities

• Ensure safe and clear access to and egress from the building, including fire exits

• Ensure that all equipment is suitable for its intended use and is properly maintained and used

• Provide appropriate protective clothing

• Provide appropriate training as requires by various clients and work environments such as Basic Sea Survival, Fire Fighting, HUET, Basic first Aid etc.

The Management considers this matter of such importance, that breach of health and safety procedures by staff constitutes misconduct and will be dealt with as a disciplinary matter

Employees will also be made aware of their responsibilities under the Health and Safety at work act and will:

• Take reasonable care of their own health and safety and that of others around them.

• Co-operate with the Employer or Customer on matters of health and Safety

• Use work equipment correctly

Services Provided

Engineering Critical Assessment (ECA)/ Fracture Mechanics Assessment (FMA)

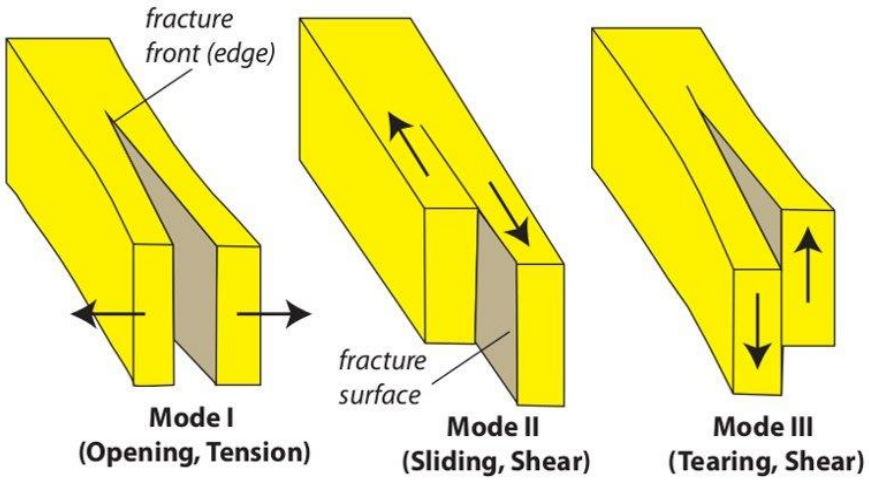
Construction of pipelines (onshore/ offshore), pressure vessels, piping, structures involve large amount of joining of metal pieces using fusion welding process. The welding process like any other process is known to have weld imperfection as welds cannot be made totally free from imperfections/ defects. The different welding techniques have different characteristics, for instance, manual welding or sub-merged metal arc welding (SMAW) is known to contain volumetric imperfection in process of welding due entrapped gas and slugs. On contrary Pulse Gas Metal Arc Welding p-GMAW welds are known to contain planar imperfection and much less volumetric imperfections/ defects. The planar imperfections/ defects are more detrimental than volumetric imperfections due to fact that high stress concentration factor is applicable for the planer flaws such as lack of fusion, lack of penetration etc.

Further, sometimes pipelines are designed to transport sour service fluid and combined with high stress/ strain during installation (see Figures below) and operation phase of the pipeline. The welded connection/ joints need to be inspected to check the integrity and control the quality of the weld against an acceptance criterion. The acceptance criteria must be sound to ensure good quality weld which can be found to be fit for purpose of fit for service. For this reason, the acceptance criteria are derived based on engineering critical assessment considering all relevant load cases and all relevant material conditions. The acceptance criteria must account for the under-sizing error of the NDT system to be used for the production inspection of the welds.

On shore Pipeline Installation

Offshore Pipeline Installation

The weld imperfections or weld flaws are accepted by the weld flaw acceptance standard. If the weld imperfections exceed the acceptance standard then that flaw shall be repaired. However, in recent years it has been proven than the unnecessary repairs, sometimes could cause degradation in the material properties and thus are not preferred.



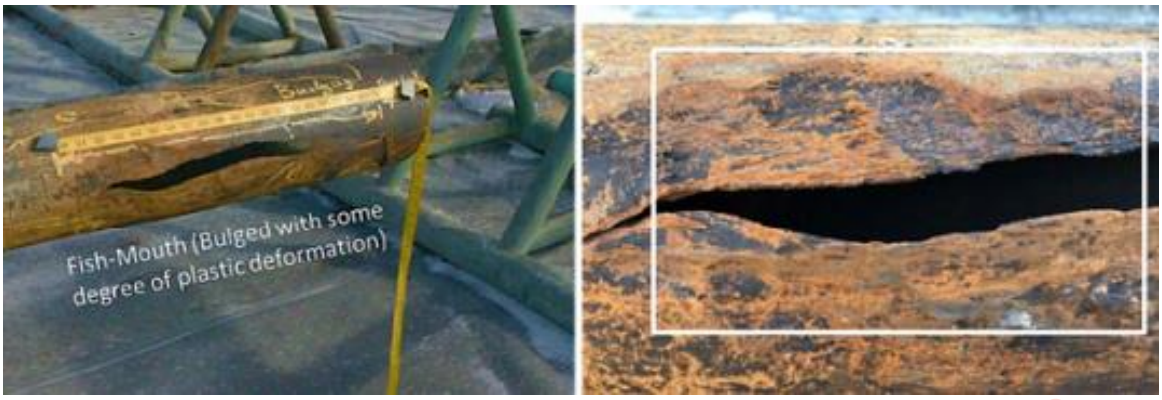
Fracture Modes

In such situation, fracture mechanics assessment as per British Standard, BS 7910:2005 can be performed to demonstrate the integrity of the welds based on design information, material properties and other project specific details.

FCPL has experienced consultants with sound knowledge of material and welding technology, fracture mechanics to perform FMA and assist the client.

Fitness-For-Service (FFS) assessment

The operational experience within the oil, gas and process industry has shown that process equipment such as pressure vessels, piping, components and structures & pipelines encounter damage during operation phase and sometimes the damages exceed the design requirements. In this situation the continued operation of the said item is questionable. Also, the regulatory authorities will not allow the damaged equipment to be operated with the known flaw without any remedial action. The most widely used design codes ASME, ANSI, API etc do not allow flaws such as cracks due to deterioration during operation. However, API recommended practice 579 provides guidelines on Fitness for Service (FFS) assessments on process equipment, structures & pipeline for continued service. API 579 provides criteria to make a decision whether to continue to operate the said equipment with the known flaw detected during inspection or to repair, monitor or replace the entire equipment.



Axial Cracking and Corrosion-Wall Thinning in a portion of a pipeline

API 579-1/ ASME FFS-1: 2016 provides the assessment procedures for the various possible damage mechanisms as listed below.

- Assessment of existing equipment for brittle fracture
- Assessment of general metal loss
- Assessment of local metal loss
- Assessment of pitting corrosion
- Assessment of hydrogen blisters and hydrogen damage associated with HIC and SOHIC
- Assessment of weld misalignment and shell distortions
- Assessment of crack-like flaws
- Assessment of components operating in the creep range
- Assessment of fire damage
- Assessment of dents, gouges, and dent-gouge combinations
- Assessment of laminations

The assessment procedure shall be selected based on operative damage mechanisms in the component/ equipment in questions.

For each of the above assessment procedures there are different level of assessment routes namely Level 1, 2 and 3. In some cases the assessment routes are more than 3 especially for the crack-like defects.

FCPL has experienced engineers in performing FFS assessments for variety of assets as per API 579-1/ ASME FFS-1: 2016.

Pipeline Damage Assessment (PDA)

Pipelines are generally the most economical way to transport large quantities of oil, refined oil products or natural gas as compared to other means such as rail transport and tanker service.

The pipelines transport sometimes highly corrosive fluid and that leads to various types of corrosion damage such as metal loss and pitting corrosion and extent of corrosion sometimes exceed the design specified limits. In such situation damage assessments as per ASME B31G, DNVGL-RP-F101 can be done to document the remaining life of the pipeline with sustained damage or repair method can be suggested.

Corrosion Damage to the portion of pipeline

FCPL consultant with sound knowledge of material technology and pipeline technology can offer PDA services for damage assessment.

In-Line Inspection (ILI) Consultancy Services

To operate the pipelines without interruption, pipeline operators implement an pipeline integrity management (PIM) program. One of the aims of PIM to determine the condition of a pipeline and then perform integrity assessment based on condition of the pipeline and if needed maintenance is performed to avoid a critical failure. The condition of the pipelines are inspected using Non-Destructive Testing (NDT) methods such as an In-line inspection (ILI) “tools”, referred to as “intelligent” Pipeline Integrity Gauges (PIG’s) or “smart” PIG’s, which carry a variety of sensors to inspect pipelines for internal and external corrosion, geometric deformation, lamination, cracks, and other defects.

The inspection technology for Carbon steel and CRA clad pipeline is totally different and proper calibration and proper qualification of the ILI tool suitable for the purpose of inspection is required to get the information pipeline operator would like to know.

Selection of an appropriate ILI tool or combination of tools based on the product the pipe carries, type of damages mechanism anticipated, and type of defects/ imperfections and the physical and operational characteristics of a pipeline are of paramount importance. The tools used shall be qualified sufficient to perform the detection and sizing of all the features, defects, imperfections within the desired accuracy.

FCPL consultant with many years of experience dealing with various ILI sub-contractor has knowledge of inspection technology and pipeline technology can offer best In-Line Inspection (ILI) Consultancy Services.

Emergency Pipeline Repair System Consultancy Services

An Emergency Pipeline Repair System (EPRS) documentation is a fundamental part of any Pipeline Integrity Management System (PIMS). It is intended to sufficiently prepare for- and mitigate against the consequences of unplanned incidents breaching the pipelines' integrity. Such breach causes downtime, could cause damages to people and the environment and in any case have financial implications in direct costs for repair, and indirectly in loss of revenue.

A full EPRS comprises the entire processes and activities that is required from time of incident to re-commissioning to operation of pipeline upto maximum allowable operating pressure and flow. There are many aspects of this process that can have a higher impact on the critical path planning of the pipeline reinstatement than equipment delivery time. All of these aspects can be prepared in advance and depending on the situation could reduce the overall response time from several months to even a year.

Based on FCPL expertise and pragmatic approach and literature available, all the specific pipeline's failure modes can be listed down and relevant repair methods can be summarized. The repair scenarios can be pre-defined and summarized for easy selection at the time of implementation based in scenarios that might occur during the operation of the pipelines. Besides the repair activities decommissioning, isolation and recommissioning procedures are defined. All preparatory works are carefully documented in an auditable manner allowing for periodic updating to ensure the EPRS remains effective at all times.

Third Party Inspection & Expediting Services:

• Forever Consultants provide independent impartial Third-Party Inspection Services, Forever Consultants will not involve any other business activities (Design, Manufacturing, Trading) other than Inspection.

• Forever consultants deliverables reflect unbiased statement of fact reporting and confirms verification and inspection services to one or more internationally recognized codes, standards, design specifications and specific technical Project/ Po. requirements. Forever Consultants focused mainly on Oil & Gas Industries Especially:

• **Surface Wellhead equipment (Christmas trees)**

Cross head Housing, Casing - Head Spools , Tubing - Head Spools , Cross-over Spools, Adaptors, connectors , Tees and crosses , Adaptors and Spacer Spools, Clamps Mandrel hangers , Manual and Actuator Valves, Surface and underwater Safety Valves and Actuators.

• Sub Sea Wellhead and Christmas tree Equipment

Tree connectors, Tubing Hanger spools, Valve , Valve blocks and valve Actuators , Flow line connectors , Well head housing , Casing hangers , Seal Assemblies etc.

• Downhole Equipment:

Landing Nipples , Control line cross coupling , Mandrels , Packers

• Various Control Panels FAT etc.

• Source of Inspection are tailored to meet specific need and may include(but it not limited)

- Pre-Inspection Meeting - Attend and discuss PO &Customer requirements
- Review Raw Material Mill Certificate
- Witnessing Mechanical Testing
- Witness and Monitor Dimensional, NDE & Hardness Inspections and Perform visual Inspections

• Witness Hydro, Gas and Drift Tests on various Wellhead Christmas Tree equipment

• Perform Final Inspection and Pre-shipment Inspections

• Final Documents MDR review and Release item to Customer

• Attending to all customer complaints & giving a corrective feedback

• Witness PQR, WPS and Welding Inspection activities

Vendor Surveillance Services

• Vendor inspections are surveillance activities carried out at supplier's premises behalf of Customer.

• Verify various stage/ process like Machining/ PWHT/ NDE/ Dimension/ Hardness activities during manufacturing in vendor premises to make sure process as per Customer need and various international code & standard like API, ASME, ASTM etc.

• Witness and monitor activities as per Witness/ Hold/ Monitor point as per ITP.

Manpower Supply:

• We provide Technical Manpower supply to Oil & Gas Industries

• We have technical experts in all the field who can be outsourced in short- and long-term basis to carry out client work, which will largely reduce the hassle of hiring and training the employees

• We will check/ interview/ screen the professionals to meet the Customer specific requirements. ASNT Level III Services:

• Act company Level Ill and monitor and supervise the various NDT activities

• Make written practice and written procedure for various NDT Methods like UT, MT, PT & RT

• Implement and execute advanced NDT like AUT, PAUT/ TOFD in lieu of Radiographic (RT)

• Train and certify Quality NDT personals.

Reporting

Flash Reports (FLR)

• We will send Flash Report to customer on end of the Inspection activity(every day & within 4 hrs)

Inspection Report (lR)

•Detailed Inspection Report with photos will send to customers with in 24 hrs on completion of the Inspection activity

Inspection Release Certificate or Note (IRC/IRN) :

•We will check the all-ITP activities and Customer requirements and conduct Final

•Inspections, once it complies to requirements Forever Consultants will provide Inspection Release

•Certificate or Note (lRC/lRN)

Site Visit Report (SVR)

- The attending inspector will issue site visit report for each trip with photographs and other relevant details

Project Experience

FFS assessment of offshore pipeline with dent

ECA and Testing of two QG NFPS CRA clad pipelines

ECA and Testing of ten (10) nos. of sour pipeline for Bul Hanine Project

ECA and Testing for QP NFA WHP3 EPIC PROJECT – CRA Clad Pipeline in Year 2018

General AUT and PAUT System Qualification for Oceaneering for CRA "J" and "V" bevel Girth Weld inspection

Review of ECA VerComm for Greater Enfield Project in Year 2018

ECA and testing for Celse pipelines in Year 2018. Project Sponsor Project Specific AUT Procedure validation (29 defects) for-D6463 & D7040 projects in year 2018

- ECA and Consultancy Services for Emergency Rehabilitation and Repair of 6" OIL PIPELINE project in Year 2018

ECA for Angelin Pipeline in Year 2018

Root Cause Analysis (RCA) and Material Failure Analysis (MFA) of 12 SK-SC-1 line in Year 2017-2018

Angore Surface Facilities - Advanced NDT subject matter expert (SME) support for NDT System Qualification and Validation in Year 2017-2018

ECA and Associated Services for TANAP pipelines for Sapura in Year 2017

ECA of Long-Term Agreement Bl-10-00799 Pipelines in Year 2016

General qualification of PA-UT system (OmniScan MX2) as per ASME Code Case 181/ 2235 and DNV-OS-F101 (2013) guidance for C-Mn steel Girth welds inspection on V bevel weld configuration,

ECA for EMAS OCTP Ghana Pipeline in Year 2017 – 2018

Provision of 3rd Party Services for AUT Validation in Batam in Year 2017

CPOC CRA Clad CRA weld Overlay Transition joint study in Year 2017

ECA for Tie-in welds in Year 2017

Measurement and Characterization of Flaws in Turret Tee Structures in Year 2017

ECA for Bu Haseer Project in Year 2017

ECA for NPCC Bahrain Pipeline project in Year 2017

Laboratory Investigation of Cracking in Long Seam Welds in Year 2017

ECA-24inch-KJO pipeline for Saudi Aramco in Year 2017

ECA - testing-of girth welds for IGD-E pipeline Project in Year 2017

Project specific AUT procedure/ system validation of RTD RotoScan PA AUT system as per DNV-OS-F101 (2013) for Vashistha and S1 Project in Year 2017

General AUT system qualification of GE WeldStar AUT system operated by OTI as per DNV-OS-F101 (2013) and DNV-RP-F118 (2010) in Year 2017 – 2018

Root Cause Analysis (RCA) and Failure Analysis (FA) for 16" Rupture Pipeline in Year 2016

Project specific procedure/ system validation of PipeWizard V4 AUT system operated by McDermott Middle East Inc. as per DNV-OS-F101 (2013) for Manifa and ADMA OPCO Project

COOEC AUT Calibration block design review, ITP design to define the detail of AUT calibration block fabrication inspection process and quality assurance requirement, AUT calibration block verification as per PTTEP specifications

COOEC AUT system qualification as per PTTEP's AUT inspection specification (same requirement as TOTAL AUT testing specification) for ZAWTIKA phase 1B project

Project Specific AUT Procedure Qualification of PipeWizard V2 AUT system operated by COOEC for Zawtika Offshore pipeline: Technical Advisor and Internal Verifier.

ECA and Associated Testing in pre-strained and aged condition and derivation of Alternative flaw acceptance criteria for 8" /12" pipe-in-pipe pipelines installation by reeling method for Siakap Project

ECA, associated testing and Project Specific AUT Procedure Validation as per DNV-OS-F101 for UTScan system operated by UT Quality for Talisman/ Rapsol Offshore Pipeline Project in Malaysia: Technical Advisor and Internal Verifier

Generic AUT System Qualification as per DNV-OS-F101: 2013 and DNV-RP-F118: 2010 for PipeWizard V4 AUT System operated by Sievert Veritas a BV Company for V, J and modified J (CRC/ K) Bevel

Generic AUT System Qualification as per DNV-OS-F101: 2013 and DNV-RP-F118: 2010 for TDFocus AUT System operated by KPG Synergy Sdn. Bhd. for V, J and modified J Bevel (CRC/ K)

Generic AUT System Qualification as per DNV-OS-F101: 2013 and DNV-RP-F118: 2010 for PipeWizard V2 & V4 AUT System operated by Oceaneering International for X, V and J Bevel

Generic PAUT & ToFD System Qualification as per DNV-OS-F101: 2013 and DNV-RP-F118: 2010 for Focus LT and OmniScan MX 32/128 Systems operated by Oceaneering International for X, V and J Bevel

Project Specific AUT Procedure Qualification of UTScan AUT system operated by UT Quality for APLNG onshore pipeline

Project Specific AUT Procedure Qualification of GE WeldStar AUT system operated by OTI for KPOC offshore pipeline

Engineering Critical Assessment (ECA) of 16" x 24 mm WT CRA clad pipeline girth welds for GWF-1 Pipeline Installation project based on actual material test data from pipe test welds in the project

Engineering Critical Assessment (ECA) to derive critical flaw sizes for the 12" ID x 23.6mm WT (inclusive of 3mm of clad) pipeline girth welds for Bien Dong 1 project: Internal Verifier and Advisor

Desktop Engineering Critical Assessment (ECA) on 16" x 24 mm WT CRA clad pipeline girth welds for Greater Western Flank (GWF) project

Project Specific AUT Procedure validation, Audit, compliance assessment of AUT activities onboard lay barge as per DNV-OS-F101 and DNV-RP-F118 for Sarawak Shell Berhad (SSB) F14 Offshore Pipeline Project: Technical Advisor and Internal Verifier

ECA and associated testing for Sarawak Shell Berhad (SSB) F14 Offshore Pipeline Project Technical Advisor and Internal Verifier

Review of Project Specific AUT Procedure Qualification of PipeWizard V2 AUT system operated by McDermott Middle East Inc. for Manifa Offshore Pipeline Project

Generic PAUT System qualification for Girth Weld Inspection in Pipings for KPG Malaysia

Advanced Phased Array Validation trials to inspect the girth weld in C-Mn process pipings for Aker Riser Project

Advanced Phased Array Validation trials to inspect the girth welds in Duplex Stainless Steel for BP PSVM Angola Deepwater Programme Project

Advanced Phased Array Validation trials to inspect girth welds in Duplex Stainless Steel for BP Skarv Project

Phased Array/ ToFD System Validation trials for North Rankin B Project for Woodside Western Australia

Fitness-For-Service (FFS) and Integrity Assessment of 10” API 5L X52 subsea pipeline for PCSB SKO:]

Phased Array/ ToFD System Validation trials for Platong-II Project for Chevron Thailand

RBI Study for Olefin-2 for PCS using Orbit+ Onshore software

RBI Study for hydrogen cracker for Perstrop

ECA and Associated Testing in Sour Service Environment and derivation of Alternative flaw acceptance criteria for 30” X 26.5/ 19.0 mm WT Pipeline Girth Welds for Shell Pearl GTL Project

Engineering Critical Assessment (ECA) to develop alternative AUT flaw acceptance criteria for 28” OD x 15.9 mm WT API 5L Grade X65 pipeline girth welds for the TGI replacement gas pipeline project

Engineering Critical Assessment (ECA) to develop theoretical NDT flaw acceptance criteria for zone-1 (i.e., 24" x 16 mm WT) and zone-2 (24" x 25.4 mm WT) pipeline field production girth welds as per pipeline design documents for Cili Padi F28 gas field development projects

Validation of OmniScan PAUT System operated by Lott Inspection, Malaysia as per ASME 31 Code Case 181 and 2235

ECA, Associated Testing derivation of Alternative flaw acceptance criteria for 30” OD x 24 mm and 27.1 mm WT API 5L Grade X60 pipeline girth welds for the GASCO’s Offshore Associated Gases (OAG) EPC Package-2 project

ECA and Associated Testing in Sour Service Environment and derivation of Alternative flaw acceptance criteria for QG 3 and 4 38” x 23.8 mm WT pipeline girth welds

Validation of OmniScan PAUT System operated by A-Star Testing and Inspection, Singapore as per ASME 31 Code Case 181 and 2235: Project Manager

2005-2010

Validation of OmniScan PAUT System operated by Renu Engineering, Singapore as per ASME 31 Code Case 181 and 2235: Project Manager

Fitness-For-Service (FFS) assessment to assess the structural integrity of the pipings with gouge-like defect for RY and DY central processing plant (CPP) pumps

Fitness-For-Service (FFS) and structural integrity assessment of API 5L X65 subsea pipeline for SSB Engineering Critical Assessment (ECA) to develop alternative NDT flaw acceptance criteria for zone-1 and zone-2 high pressure/ high temperature (HP/HT) CRA pipeline field production and field repair girth welds for Saderi offshore pipeline projects

Automated Ultrasonic Testing (AUT) Qualification Trials Applus RTD AUT System

Automated Ultrasonic Testing (AUT) Qualification Trials for Oceaneering Phased Array PipeWizard V2 AUT System for Saudi Aramco Offshore Pipeline Project

Engineering Critical Assessment to develop alternative AUT flaw acceptance criteria for QG 3 and 4 38" x 23.8 mm WT pipeline girth welds developed using ISO 3183-3 L450MCS grade line pipe welded by the p-GMAW welding process

Engineering Critical Assessment (ECA), Associated CTOD and Tensile testing and Automated Ultrasonic Testing (AUT) Qualification Trials for 16" x 15.9 mm WT API 5L X60 pipeline girth welds for Aramco Shallow water project

Engineering Critical Assessment (ECA) to assess the fabrication flaw rejected by ASME code in 28" OD x 37 mm WT Topside Riser welds

Engineering Critical Assessment (ECA) to develop critical/ tolerable excavation dimensions for onboard repairs after tensioners for 14" OD x 14.3 mm WT and 14" OD x 17.5 mm WT pipelines based on test data of 14" OD x 14.3 mm WT for Atlantis pipeline project

Engineering Critical Assessment (ECA) to assess the installation flaw subjected strain due to lateral buckling in 24" OD Gas Export Pipeline Girth Welds for Malampaya Deep water Field

GO"/ "NO GO" CRITERIA FOR PLIDCO CLAMP INSTALLATION ON 24" OD X 13.8 MM WT PIPELINE

Engineering Critical Assessment (ECA) to derive alternate AUT flaw Acceptance Criteria for the pipeline field girth welds for 10" OD X 14.9 MM WT high pressure/ high temperature (HP/HT) CRA CLAD LINE PIPES FOR M3S and G7 PIPELINE PROJECT

ENGINEERING CRITICAL ASSESSMENT (ECA) AND ASSESSMENT OF FLAWS IN FACTORY GIRTH WELDS OF 10" OD X 14.9 MM WT high pressure/ high temperature (HP/ HT) CRA CLAD LINE PIPES FOR M3S and G7 PIPELINE PROJECT

Engineering Critical Assessment (ECA) to derive alternate AUT flaw Acceptance Criteria for the pipeline girth welds for 20" SSB-F13E PIPELINE GIRTH WELDS

Engineering Critical Assessment (ECA) to derive alternate AUT flaw Acceptance Criteria for the pipeline girth welds for ONGC C-series project - 22" x 20.6 mm WT and 28" x 23.8 mm WT pipelines

Engineering Critical Assessment (ECA) to derive alternate AUT flaw Acceptance Criteria for the pipeline girth welds of 20 pipelines for Maersk Oil Qatar AS (MOQ) Offshore Pipeline Project

Engineering Critical Assessment (ECA) of a 34” and 38" OD Pipelines FOR QATARGAS-II DEVELOPMENT PROJECT-OFFSHORE FACILITIES

Engineering Critical Assessment (ECA) of a pipeline to derive alternative flaw acceptance criteria for THIRD TRANSMISSION PIPELINE PROJECT PART 3 OFFSHORE PIPELINE SYSTEM, JDA A-18 TO B-17 GAS PIPELINE PROJECT, OFFSHORE PIPELINE SYSTEM

Engineering Critical Assessment of rolling defects detected in Jacket VRB Leg A4 Can P1

Finite Element Analysis (FEA) of a Injection Flowbase Structure

FAILURE ANALYSIS OF CTOD SAMPLES WITH LOW CTOD VALUES:

REVIEW AND FAILURE ANALYSIS OF A CRAWLER RINGER CRANE ACCIDENT

FAILURE ANALYSIS OF WELD CRACKS ON CARBON STEEL WELDED PIPE SECTIONS

FAILURE ANALYSIS OF FRACTURED CTOD SPECIMENS WITH LOW CTOD VALUE

Fracture Toughness Testing and Engineering Critical Assessment (ECA) of a 32” South Sumatra-West Java Gas Transmission Pipe line

Sulfide Stress Corrosion (SSC) Testing of Welded Joints

Welding Procedure Qualification Testing for Welded Joints of Steel Plates/Pipes

Failure Analysis of a Leaking FRP Linepipe

Engineering Critical Assessment of Vehicle Launched Bridge (VLB) Auxiliary Frames made of Aluminium Alloy as per BS 7910: 1999

Engineering Critical Assessment (ECA) of Planar Surface Defects on Spiral Welded-Pipe Subjected to Internal Pressure as per BS 7910: 1999

Engineering Critical Assessment (ECA) of Cracks in Gear Box Housings:

CTOD-Testing Evaluation of Steel Plates

Failure Analysis and Metallurgical Evaluation of Copper Bus-Bar

Charpy V-notch Test of Steel Plate

Failure Analysis of a Bottom Chord Junction Plate

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Future Expansion

It provides to Oil & Gas Industries in below methods:

- Hydrogen and Sour Service Consultancy
- Material Selection and Pipeline Design
- Liquid Penetrant Testing * Magnetic Particle Testing
- Radiography Testing
- Ultrasonic Testing
- Positive Material Identification
- Phased Array Ultrasonic Testing
- Time of Flight Diffraction Testing

Contact Us

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