

ROM  STAR GROUP
Intelligent Pigging Solutions

INTELLIGENT PIGGING SOLUTIONS



VISION

Towards Pipeline Integrity.

MISSION

To be the regional leader integral to pipeline inspection methodologies and technologies.



Baharom Hamzah, President & Group CEO



MALAYSIAN OWNED TECHNOLOGY

// **ROMSTAR** is one of the leading service providers of pipeline inspection and cleaning, not only in Asia, but also around the world. For the past years, we have successfully completed projects for many of the world's largest oil & gas companies. //



CHEVRON NIGERIA LIMITED 2022

19 YEARS OF ILI TRACK RECORD OVER 12 COUNTRIES WORLDWIDE



PIPELINE INSPECTION

Ensuring the integrity and safety of your pipelines

ROMSTAR owned an extensive and comprehensive fleet of In-line Inspection (ILI) consisting of High-Resolution Magnetic Flux Leakage (HRMFL) and High Resolution Caliper (HRCLP) inspection tools capable to inspect and deliver a complete profile of your pipeline in-line with the latest Pipeline Operators Forum (POF) requirements. It has the capabilities to detect, sized, locate, and provide a comprehensive assessment to any pipeline anomalies findings (internal & non-internal) meeting the API 1163 (IN-LINE INSPECTION SYSTEM QUALIFICATION), NACE SP0102-2010.

High Resolution Multichannel Caliper / Geometry tools

- Fleet size from (4" up to 42").
- Using the latest design of sensors technology.
- In-house design and built (mechanical and algorithms).
- Provide actual geometry mapping of the pipeline.
- Provide precise location and orientation information.
- Robust and reliable at any condition with any type of medium.
- Internal debris mapping.

High Resolution MFL Tools

- Covering the sizes from (4" up to 42").
- Using latest sensor technology giving high accuracy in detection and sizing.
- Advanced data acquisition capabilities using in-house developed algorithms.
- Providing high resolution survey data.
- Robust and reliable under hostile operating conditions.
- Ideal for hydrocarbon/non-hydrocarbon, single/multiphase pipelines.
- Applicable for low and high velocity pipelines.

INTERNAL PIPELINE CLEANING

Reducing risk and increasing productivity

(Manufacturing, Cleaning Method, Refurbishment, and supply of pigging kits)

Internal pipeline cleaning/maintaining the internal pipeline cleanliness are essential and critical to ensure the pipeline integrity as well as the production performance of the pipeline. It serves to prevent dust, sludge, debris, and wax build up which will lead to blockages and reducing the production transport capacity and capability. ROMSTAR POLYMER provides solution which cover but not limited to pipeline cleaning pig manufacturing (standard & tailored) suite to client requirements, providing a cleaning method solution based on problem solving methods, refurbishment of pipeline cleaning pigs and supply of pigging kits and instrumentations from listed supplier.

Manufacturing of cleaning pigs

- In-house design, engineering, and manufacturing.
- All types, sizes and specifications which covers but not limited to bi-directional, uni-directional, foam, dual diameter, polycast, flexible, D-scaling, D-waxing.
- Pig designed and quality as per standard requirements and can be adjusted to suit respective Client needs.
- Robust and compatible in any type of internal pipeline environments and products covering offshore and onshore.
- Known to have long life and endurance of the PU's.

Internal pipeline cleaning method of solutions

- A team of engineers and expertise in analysing the pipeline condition and providing solution method.
- In-house analysis procedure and method.
- Experienced in a wide range of pipelines cleaning process before the ILI inspection perform by ROMSTAR pipeline team.
- One stop solution in internal pipeline cleaning using combination of mechanical and chemical cleaning.

Supply of pigging kits and accessories

- Understand the needs and requirements for pigging operation system and mechanism.
- Capabilities to provide kits for cleaning pigs and pigging accessories (pig signaller, doors accessories, marker).
- Having a relationship with pigging accessories supplier worldwide.
- Capable to manufacture any type of mechanical accessories required by Client.

ILI DATA ANALYSIS

Profiling your pipeline condition to facilitate remedial action

We have a team of dedicated, trained, and qualified Data Analysis in accordance with the latest ANSI/ASNT-ILI-PQ qualification requirements performing the data analysis and gathering by our ILI inspection tools. They are responsible in providing a comprehensive preliminary assessment on site followed by a more complexity of data interpretation at our Head Quarters in Kuala Lumpur, Malaysia.

The analysis and deliverables are in accordance with the latest Pipeline Operators Forum (POF) requirements including but not limited to ASME B31G, Modified ASME B31G, RSTRENG, DNV-RP-F101 which all have been embedded into our wholly owned proprietary software (ROMSOFT).

ROMSOFT is capable to assist our Data analysis in analysing the ILI run data which collates, organizes, and display the information in various presentation formats that suits the Clients requirements formats in such as 2D and 3D graphics, graph, and charts.

Anomalies Assessment

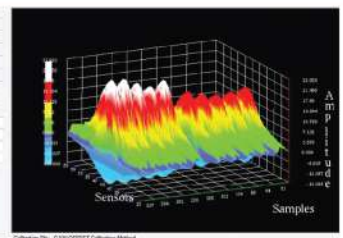
- Automated and manual evaluation.
- Detailed assessment which includes but not limited to defects locations, sizing, category, signal log and contour plot.
- Providing run comparison with previous inspection findings.
- Generate various ways of data to assist on pipeline health assessment.
- Generation of reports in line with client's specific requirements and current industry standards.

ROMSOFT

- Engineered and developed in house and wholly owned by ROMSTAR Sdn. Bhd.
- Probability Of Detection (POD) and Probability Of Identification (POI) results are meeting the industry standards for ILI inspection.
- Credibility and integrity of the software are proven based on series of after inspection dig verification & Pull Through Test exercise executed by our client locally & internationally.
- Compatible with any laptops and PC processor/system.



Selection Information			
Start Sensor 31	Start Angle 1.250276	Start Index 7640	
End Sensor 86	End Angle 10.20807	End Index 7673	
Run Time 1422			
Start Distance(D1)	2.1405718	Start Distance(D2)	0
Start Distance(D3)	2.1405718	Start Distance(D4)	0
Start Velocity(V1)	1.2270463	Start Velocity(V2)	1.2270463
Start Velocity(V3)	1.3030279	Start Velocity(V4)	1.3030279
Parameters Information			
Length Threshold 3.0	High Threshold 3.0	Calibration Method	
Wave Length 3.0	Sensor Resolution 0.3	Actual Length 0	
Class L48 12	Class L48 12	Actual Width 0	
Class H48 12	Class H48 12	Actual Depth 0	
Global Measurements			
Q11 0.042 0.043 0.044	Q12 0.045 0.046 0.047	Q13 0.048 0.049 0.050	
Length 174	Time 8	Distance 1.188 (km) (ft)	
Width 31	Area 3.1	Sensor 44	
Depth 25.2222	Volume 25.000000	Velocity 1.2270463	
Category 1111	API 1.000	Correction 0.00 (Cm)	





PIPELINE INSPECTION • DATA ANALYSIS • PIPELINE CLEANING



ROMSTAR SDN BHD
199701004522 (420018-H)
In-line Inspection Services



ROMSTAR RESEARCH & DEVELOPMENT SDN BHD
200201001062 (568725-K)
Technology & Innovation



ROMSTAR POLYMER SDN BHD
199901004209 (479109-V)
Pipeline Cleaning Pigs

www.romstargroup.com

Lot 32, Jalan 11, Salak South New Village, 57100 Kuala Lumpur, Malaysia.
T: +603-9282 3434 **F:** +603-9282 4434 **E:** romstar@romstargroup.com