

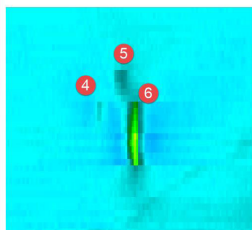
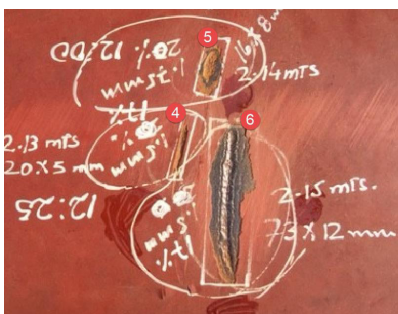
Hundreds of oil and gas pipeline failures occur every year. These failures are mainly caused by corrosion, incorrect operation or excavation damage unknown to the operator. If these threats to pipeline integrity are not addressed in a planned and systematic manner the pipeline failures may lead to spills of hydrocarbons or other hazardous materials. Such accidents damage the environment and force the pipeline operator to pay clean-up and recovery costs to affected stakeholders and communities.

Aging pipeline infrastructure makes the challenge of keeping the integrity of the pipeline systems even more critical. In-line inspection allows pipeline operators to have better information on the condition of their pipeline systems and make informed integrity decision based on that information.

PIPECARE Inspection Services provides in-line inspection services to the gas and liquid pipeline operators enabling them to monitor their pipelines and develop adequate maintenance and repair programs. Our services include preliminary engineering and assessment, tool selection and configuration, project management, ILI tool runs and data analysis and integration.

## PIPECARE SERVICES

- PIPECARE in-line inspection services include:
- Pipeline pre-inspection cleaning
  - Pipeline gauging
  - Geometry inspection
  - MFL and TFI inspection
  - Ultrasonic inspection
  - Pipeline mapping
  - Combination tools - virtually any combination



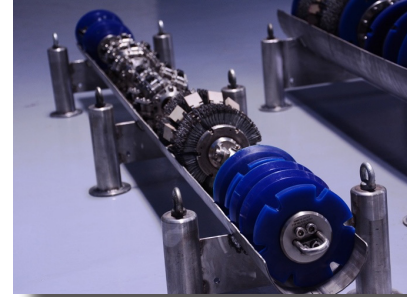
## PIPECARE ADVANTAGES

- Proven inspection technologies
- Reliable tool design and extended bore passage capability
- High sampling rate and circumferential resolution
- Tri-axial hall-effect sensors measuring magnetic field in axial, circumferential and radial axes
- Superior anomaly detection, identification and sizing
- Powerful data analysis software
- Quality service and quick report delivery
- Post-final-report support, including locating of integrity digs and defect reassessment
- Modular tool design and flexible tool configurations
- Customized solutions for difficult-to-pig pipelines



## PIPECARE MFL TOOLS

Tool sizes	3" to 24"
Pipeline product	Gas, liquids, multiphase
Operating pressure range	0 to 120 barg
Operating temperature range	-20 to 85° C
Tool velocity range	0.2 – 5.0 m/sec
Min. pipeline bend radius	1.5D (6" and above)
Min. passage bore	80-85% of OD



Tools of other sizes and higher performance specification are available upon request.

## PIPECARE GEOMETRY TOOLS



Tool sizes	3" to 24"
Pipeline product	Gas, liquids, multiphase
Operating pressure range	0 to 120 barg
Operating temperature range	-20 to 85° C
Tool velocity range	0.2 – 5.0 m/sec
Min. pipeline bend radius	1.5D (4" and above)
Min. bore reduction	70-75% of OD

Tools of other sizes and higher performance specification are available upon request.

## PIPECARE PIGGING SUPPORT SERVICES

We provide support services in partnership with Maxx North America Services Ltd.:

- Design, provision and installation of temporary and permanent pig traps
- Pipeline mechanical and chemical cleaning programs, provision and injection of chemicals
- Pigging projects requiring water and nitrogen operations
- Collection, handling and disposal of recovered sludge and debris
- Pipeline integrity digs and pipeline repair

