

RoGeo MD Service

In-line Passage Analysis and Detection of Geometric Deformation

Pipeline assets are at risk of reduced operational performance, damage and eventual failure because of geometrical deformation. High-resolution in-line inspection and mapping of your pipelines can detect, categorize and locate deformation, enabling you to act before minor damage turns into a major shutdown.

You cannot predict geohazards, climate extremes or the actions of third parties that might damage your pipelines. However, you can design and implement a holistic and integrated geometric deformation risk management strategy. This reduces your risk and, as part of a wider integrity management framework, can identify multiple threats to further safeguard your pipeline assets.



Optimize pipeline uptime and performance



World's largest ILI tool fleet ensures high availability



Cost-effective deformation assessments

Our entry level RoGeo MD in-line inspection solution identifies, sizes and locates geometrical deformation that could negatively impact pipeline integrity, and confirms pigability.

The ILI service tool is equipped with multiple calipers. Its complete circumferential and axial coverage reliably detects dents, buckles, bends and wrinkles and other ID changes and installations, such as valves, tees, flanges and welds.



RoGeo MD Assures Your Pipeline Reliability

- Prevents deformation-related failure by identifying internal diameter (ID) anomalies, even through 1.5D bends
- A high number of calipers ensure full ID coverage, while bespoke design minimizes lift-off
- Excellent detection capabilities and sizing performance reliably confirm passage for subsequent in-line inspections
- Tested to be compliant with common codes, standards and regulations like API
- Well-proven tools deliver consistent data quality with a first run success rate of 95%

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Technical Specifications

ID-Changes, Ovalities and Dents

Internal diameter changes, ovalities and dents will be detected, localized and identified. In case of detecting dents, the information will be given in depth [%] of pipeline OD. Information on accuracies is given in the table below.

Standard Operating Specifications

Tool sizes available	3" - 56"
Pipeline product	Gas or liquids
Product temperature range	0 °C - 55 °C (32 °F - 131 °F)
Maximum operating pressure	15 MPa (2,175 psi) 25 MPa (3,625 psi) optional
Operating speed range	Up to 5.0 m/s (11.2 mph)
Minimum pipeline bend radius	1.5D

Note: Please contact ROSEN for conditions outside of these specifications.

Remarks and Features

- API 1163 compliant services
- CE and ATEX certification available
- Tailored solutions with different specifications upon request: multiple tool sizes or multi-diameter tools, higher pressure rating
- Contact ROSEN for more detailed information about the presented service
- Specifications are subject to change, depending on specific requirements or tool configurations

Performance Specifications

Feature	OD [inch]	Accuracy ¹	Detection Threshold
OD² Changes		±1.5 mm (0.06")	1.5 mm (0.06")*
Ovalities	Ovality	1.0 %	1.0 %
	Length	±25 mm (0.98")	
	Orientation	±15°	
Dents³	Depth	≤8" ±1.5 % ≥10" ±1.0 %	1.0 %
	Length	±25 mm (0.98")	
	Width	±50 mm (1.97")	
	Orientation	±15°	

* Detection of shallow features in outer bend curvature is limited

¹ Values are given for a certainty level of 80 % and a POD of 90 %

² Or ID, respectively

³ Dent definition:

