

RoCorr IEC Service

Internal Metal Loss Detection and Sizing

Undetected and untreated corrosion within your pipeline assets will lead to performance loss and containment failure. Making in-line inspection services a part of your integrated pipeline threat management strategy will help you manage this risk. Our RoCorr service suite is designed to detect, evaluate and locate metal loss due to corrosion and associated threats. This allows you to take remedial action before your pipeline integrity suffers.

Drawing on the largest ILI tool fleet in the world, our RoCorr features multiple and flexible options to suit your inspection needs while minimizing impact on pipeline operations. This includes a wide range of sensors that incorporate leading technologies to address your pipeline threats. The data gathering is supported by our unique data analysis and reporting tools, delivered by a dedicated team of experts. RoCorr reduces your corrosion and metal loss threat risk.



Detect and treat pipeline corrosion before it impacts on performance



Multiple sensor technologies to identify all metal loss threats



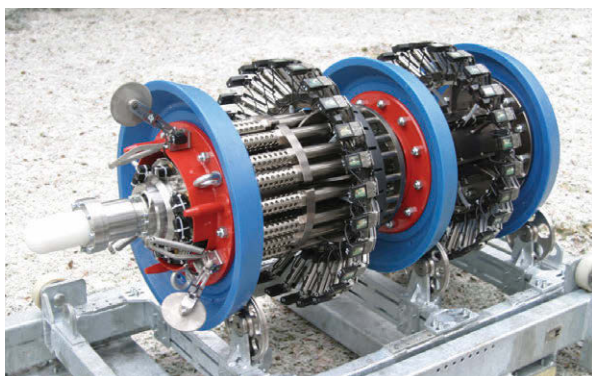
Assess the integrity of your surface and subsea pipeline assets

Extra heavy wall pipelines – typically found in offshore applications – often need to operate at higher pressures. This makes identifying any internal corrosion an early-stage imperative. Our eddy current principle technology uncovers the incidence of shallow internal corrosion by coupling the application of high-density eddy current sensors with high sampling rates.

- Accurate, reliable detection of corrosion onset
- Outstanding bend and passage capabilities
- High-precision mapping under tough operating conditions

Benefits of IEC Technology

- Eddy current technology eliminates the need for liquid medium, so is optimally suited for gas and multiphase lines
- Electromagnetic technology overcomes low-level interference sources for clearer final inspection results
- Captures geometric profile data for advanced integrity assessment of deformation



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Technical Specifications

Standard Operating Specifications

Tool sizes available	6" - 56"
Pipeline product	Gas or liquids
Product temperature range	0 °C - 65 °C (32 °F - 149 °F)
Maximum operating pressure	15 MPa (2175 psi) 25 MPa (3625 psi) optional
Operating speed range	Up to 3.0 m/s (6.7 mph)
Minimum pipeline bend radius	1.5D
Maximum operating time	400 hours
Maximum inspection length	1000 km (620 miles)
Minimum clearance/passage	80 % of nominal diameter

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

Performance Specifications for ID Anomalies

Feature	OD [inch]	Accuracy ¹	Detection threshold	
OD² Changes		±0.8 mm (0.03")	0.8 mm (0.03")	
Ovalities	Ovality	±0.5 %	0.5 %	
	Length	±15 mm (0.59")		
	Orientation	±12°		
Dents³	Depth	<10"	±0.5 %	1 %
		10"-16"	±0.5 %	0.8 %
		18"-28"	±0.3 %	0.5 %
		30"-38"	±0.2 %	0.3 %
		40"-56"	±0.15 %	0.2 %
	Length	±7.6 mm (±0.3")		
	Width	±25.4 mm (±1.0")		
Orientation	±12°			

¹ Values are given for a certainty level of 80 %

² Or ID, respectively

³ Including wrinkles and buckles

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

Sizing Capabilities for Metal Loss Anomalies

Depth at POD = 90 %	1.5 mm (0.06")
Depth maximum*	10 mm (0.40")
Depth sizing accuracy at 80 % certainty	±1.3 mm (0.05")
Length sizing accuracy at 80 % certainty	±6.0 mm (±0.24")
Width sizing accuracy at 80 % certainty	±5.0 mm (±0.20")

* Deeper features will be reported at Dmax.

Note: The wall thickness is not measured by the tool.

Abbreviations: POD = Probability of Detection

	Pinhole L = W ≥ 10 mm (0.39")	Circumferential slotting
Depth at POD = 90 %	≥ 1.5 mm (0.06")	≥ 1.5 mm (0.06")