



EVO 1.0 UMp

Ultrasonic Metal Loss Inspection








Detecting and Sizing Metal Loss

Pipeline integrity plays a critical role in the overall success of your business. Anomalies such as corrosion and gouging can cause metal loss, significantly reducing pipe wall thickness. Measuring these key parameters and determining the safe operating pressure is paramount for pipeline integrity.

EVO 1.0 offered by NDT Global significantly improves tool performance by enhancing speed, resolution and reliability. Representing state-of-the-art electronics and incorporating high-resolution sensor carriers, this innovative technology marks a milestone in the inline inspection (ILI) evolution. By increasing the performance of inspection equipment, tools have the capability to travel faster, or the axial resolution can be higher.

For each project, we identify your unique requirements and tailor our service accordingly to ensure high standards of reliability, expertise and responsiveness.

Our global engineering team has the required skills and experience to efficiently manage complex and challenging tasks, including dual and multi-diameter, deepwater and bi-directional inspections.

-  Axial Cracks
-  Circumferential Cracks
-  **Metal Loss**
-  Geometry Ovalities
-  Mapping

EVO 1.0 UMp

- Metal loss inspection, quantitative wall thickness measurement with pitting resolution/pinhole
- Provides the best resolution for pitting detection and sizing
- No loss of throughput/reduction due to ILI
- UMp service reliably detects defects and sizes as small as 5 mm (0.2 in)
- Available for diameters from 6" to 48"

EVO 1.0

Your benefits

Up to four times faster inspection speed	No reduction of flow rate
Up to four times higher axial resolution	High performance metal loss profiling and pitting inspection
Shorter tool lengths	Enhanced tool operation
Maximized ILI tool flexibility	Customization to your needs

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Specifications

Key Tool Specifications: EVO 1.0 UMP⁺

Tool sizes	6" to 48"	6" to 48"
Pipeline medium	Liquid	Liquid
Max. operation speed	2 m/s	4 mph
Temperature range	-10 to +50 °C	14 to 122 °F
Max. pressure	120 bar	1740 psi
Min. bend radius	1.5 D 90°	1.5 D 90°
Min. axial sampling distance	0.75 mm	0.03 in
Circumferential sensor spacing	4 mm	0.16 in

Max. operating speed and min. axial sampling distance depend on specific ILI tool set-up. Special configurations for high-temperature, high-pressure, multi-diameter and bi-directional inspections available upon request.

Defect Location Accuracy

Axial from nearest girth weld	±0.1 m	±3.94 in
Circumferential		
• for $\varnothing < 20"$	±10°	±10°
• for $\varnothing \geq 20"$	±5°	±5°

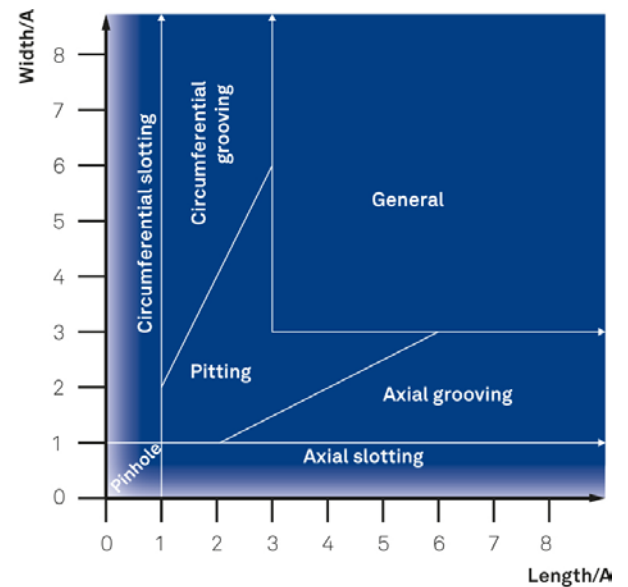
Key Performance Specifications (referring to API 1163)

POD for corrosion and metal loss features $\geq 90\%$		
• Min. diameter	5.0 mm	0.20 in
• Min. depth	0.8 mm	0.03 in
Depth sizing accuracy	±0.4 mm	±0.02 in
Wall thickness determination	±0.4 mm	±0.02 in
Mid-wall features, laminations and inclusions		
• Min. diameter	10.0 mm	0.39 in
Location in pipe wall		
• Internal/external/mid-wall	Yes	Yes



Inline inspection tool – EVO 1.0 UMP

Metal loss feature classification chart (according to POF 2016)



A = wall thickness or 10 mm (0.39 in), whichever value is greater.

Please note: Tool and performance specifications depend on inspection and pipeline conditions. Please contact your local NDT Global representative for further information. NDT Global reserves the right to introduce modifications and changes without prior notice.