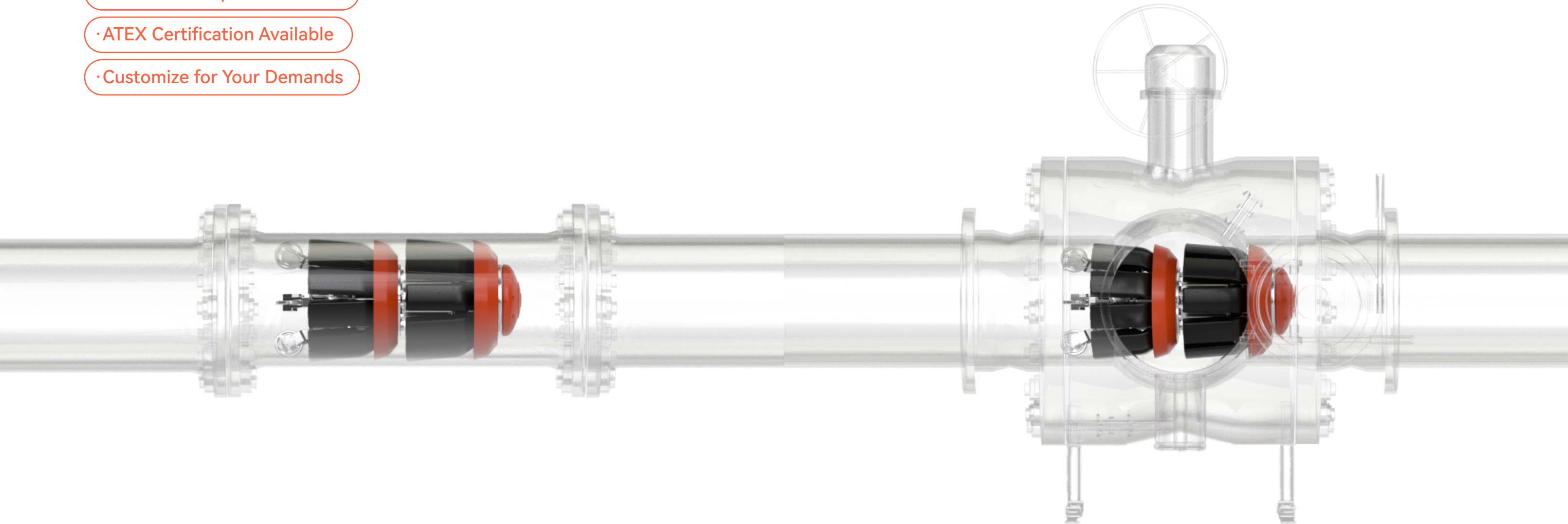




# PIGPROX<sup>®</sup> MEM

— PATENTED MFL ILI SOLUTION FOR SMALL DIAMETER PIPELINES —

- Short Length, Light Weight, Low Pig Stuck Risk
- Better Solution for Small Diameter Pipeline MFL Inspection
- API 1163 Compliant Services
- ATEX Certification Available
- Customize for Your Demands



## PIGPROX TECHNOLOGY INC.

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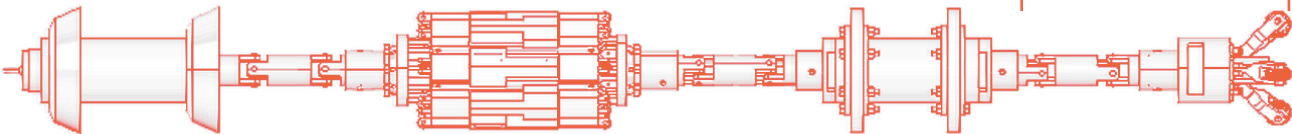
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**BETTER PIGPROX BETTER SOLUTION**

# ABOUT MEM

MEM is a specially-built MFL tool for small diameter and challenging pipelines. Leveraging PIGPROX’s patented mosaic localized magnetization technology and an integrated probe with a magnetic-focusing circuit, MEM is markedly shorter and lighter than traditional MFL tools. Its compact shape allows MEM launching through pig valves and temporary barrel, operation with low differential pressure, and significantly reduces stuck risk during the pigging operations. Compliant with API 1163 standards, MEM delivers reliable inspection performance, making it the optimal MFL solution for small-diameter pipelines.



## • ADVANTAGES & BENEFITS

### Shorter

- 25% of Traditional MFL Length
- Pig Valve and Non-Standard Traps Launching
- Min 1.5D bend, 20% ID Reduction, Low Risk Pig Stuck or Stall

### Lighter

- 20% of Traditional MFL Weight
- Minimum Lifting Equipment
- Min. Operation Pressure Just 5 bar (72.5 psi) with Gas
- No Steel Brush, Internal Coating Friendly

### Sensor & Structure Innovation

- Clearer Signal and High Resolution
- Lower Power Electronics

### Patented Mosaic Localized Magnetization

- More Sensors in A Single Probe
- Compact Integration and Encapsulation of Magnetic Source and Sensor

## • PARAMETERS

Item	PIGPROX-MEM
Size Range	8”-12” (Other Size Is Customizable)
Wall Thickness Range	≤12 mm
Running Speed Range	0.5---5 m/s (1.64---16.4 ft/s)
Max Operating Pressure	150 bar (2,175 psi)
Minimum Operating Pressure (Gas)	5bar (72.5 psi)
Temperature	Normal: -20°C---60°C (-4°C---140°F) High Temperature: 60°C---90°C (140°F---194°F)
Applicable Medium	Liquid & Gas
Applicable Material	Magnetic Conductive Materials
Passage Capability	1.5D Bend & 20% OD Deformation
Trap Requirement	Standard Traps, Short Traps, Pig Valves and Short Pipe Spool
Defect Detection Capability	Internal & External Corrosion, Pitting, Deformation, Dent, Wrinkle, Girth Weld Anomalies, Spiral Weld Anomalies
Feature Detection Capability	Valve, Tee, Bend, Tap, Flange, Girth Weld, Spiral Weld

Item	General Metal Loss	Pitting	Axial Grooving	Circumferential Grooving
Detection Depth Threshold at POD=90%	10%t	10%t	20%t	10%t
Depth Sizing Accuracy at 90% Certainty	±10%t	±10%t	±15%t	±15%t
Width Sizing Accuracy at 90% Certainty	±15mm	±15mm	±15mm	±15mm
Length Sizing Accuracy at 90% Certainty	±10mm	±10mm	±10mm	±10mm
Axial Positioning (with adjacent girth weld) Accuracy at 90% Certainty	±0.1m			
Circumferential Positioning Accuracy at 90% Certainty	±5° (±10min)			