

## HydroFORM®/RexoFORM™ Scanner for Corrosion Mapping



The HydroFORM and RexoFORM scanners are designed to offer the best inspection solution for the detection of wall-thickness reductions due to corrosion, abrasion, and erosion. Our solution also detects mid-wall damage such as hydrogen-induced blistering or manufacturing-induced laminations and easily differentiates these anomalies from loss of wall thickness.

The unique quick adjustment device offered by both scanners enables the wedge/probe assembly to be positioned to any curvature greater than 4 in. OD (101 mm).

### Specification Comparison

	HydroFORM	RexoFORM
Phased array probe	I4	A12, A14
Maximum one-line scan coverage (width)	60 mm	38 mm (A12), 60 mm (A14)
Delay line medium	Water	Rexolite
Delay line height	14 mm or 24 mm	20 mm
Position of repeat interface echo (in steel)	125 mm	50 mm
Typical near-surface resolution (1/8 in. FBH)	1.5 mm	2 mm
Depth resolution	0.1 mm	0.1 mm
OD inspection range	4 in. and greater	4 in. and greater
ID inspection range	10 in. and greater	N/A
Contact device	Wheels	Carbides
Footprint	110 mm x 130 mm	40 mm x 95 mm
Scan direction	Circumferential	Circumferential
Scan speed (1 mm x 1 mm resolution)	100 mm/s	100 mm/s
Scanner compatibility	ChainSCANNER	ChainSCANNER, GLIDER, and VersaMOUSE

### Features

- The first commercially-available, semi-automated phased array product for corrosion mapping applications.
  - Reduced probe raster movement increases safety for operators and improves mechanical reliability.
- The patent-pending quick radius adjustment enables the inspection of different curvatures. No wedges are needed.
  - Convex surface: 4 in. OD, up to flat.
  - Concave surface: 10 in. ID, up to flat (HydroFORM).
- The HydroFORM and RexoFORM scanners can be attached to automated or semiautomated scanners and used independently as manual scanners.
  - Cost effective.
  - Minimal tools required for normal operation.

### Standard Inclusions

The HydroFORM manual corrosion mapping scanner kit includes:

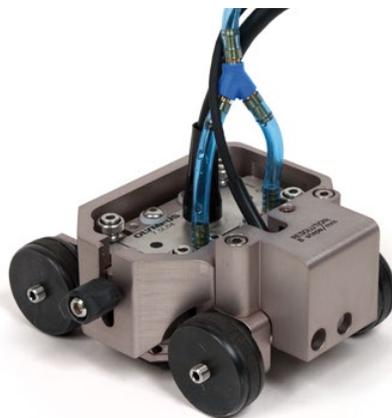
**P/N:** HYDROFORM-K-MANUAL [U8775182]

- One probe holder with a water delay line.
- One carriage with four magnetic wheels.
- One phased array probe. (7.5L64-14-P-7.5-OM)
- 100 foam gaskets.
- One application-specific Mini-Wheel™ encoder.
- One 7.5 m encoder cable extension.
- Irrigation tubing and accessories.

The RexoFORM manual corrosion mapping scanner includes:

**P/N:** REXOFORM [U8775241]

- One probe holder with a Rexolite® delay line.

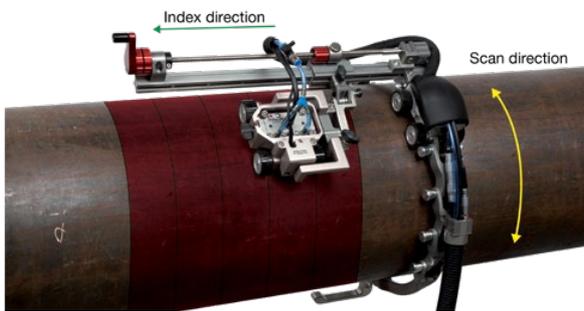


A patent-pending quick radius adjustment enables inspection of different curvatures without the need for wedges. The HydroFORM scanner also has an integrated encoder, which is required for manual inspections.

## HydroFORM® Scanner

### High-performance corrosion mapping for rough and uneven surfaces

The HydroFORM scanner uses an innovative water column that eliminates the need for a wedge, providing the benefits of a phased array immersion tank inspection. Easy gate synchronization with the front wall enables accurate backwall corrosion monitoring and remaining wall thickness measurements. The water column, which uses a low-flow water supply and consumable gaskets, offers excellent surface conformance and optimized coupling conditions, even on rough surfaces.



XY mapping principle on pipes with the HydroFORM scanner and ChainSCANNER™ scanner.

## RexoFORM™ Scanner

### Quick and easy corrosion mapping for smooth surfaces and limited-access areas

The RexoFORM scanner is a versatile wedge for phased array zero degree and angle beam inspection with a Rexolite® delay line. With its unique design, the RexoFORM scanner can be used on pipes of different diameters without the need for multiple curved wedges. It is also compatible with the A12 and A14 probes you may already have, making it an affordable solution.



Example of beam possibilities with the RexoFORM scanner and A14 probe.

## Ordering Information

Part Number	Item Number	Description	HYDROFORM-K-ADPCHAIN (U8750058)
<b>HYDROFORM</b>			
HYDROFORM-K-MANUAL	U8775182	HydroFORM corrosion mapping scanner kit	✓
HYDROFORM-A-ADPCHAIN	U8775183	Kit for adapting the HydroFORM to the ChainSCANNER	✓
HydroFORM-K-SAUT	Q750007	HydroFORM kit compatible with the MapSCANNER	
HydroFORM-K-AUT	Q7750068	HydroFORM kit compatible with the MapROVER 7.5 m	
HydroFORM-K-AUT-30m	Q7800018	HydroFORM kit compatible with the MapROVER 30 m	
HYDROFORM-SCN	U8750059	Same content as the HYDROFORM-K-MANUAL, without the phased array probe	
HYDROFORM-A-LITEHOLDER	U8840177	HydroFORM lite holder to mount the HydroFORM on GLIDER scanner using the optional ADIX893 (U8775084) yoke	
CFU03	U8780008	Electric water pump and tubing; 120 V and 220 V	
HYDROFORM-SP-FOAM	U8775184	100 foam gasket spare part kit	
<b>REXOFORM</b>			
REXOFORM	U8775241	The RexoFORM corrosion mapping probe holder with the Rexolite delay line for use with A12 or A14 probes	
ENC1-5-LM	U8780198	Mini-Wheel™ encoder with 5 m long cable	
REXOFORM-SP-WEDGE	U8775242	Spare Rexolite delay line and gasket for RexoFORM	