The leading edge Evo Series 1.0 delivers the most accurate and reliable ultrasonic inline inspection (ILI) available today. Combining a corrosion or crack assessment with ultrasonic-based geometry measurement enables a comprehensive inspection in a single run.

Accurate pipe geometry measurement and detection of dents is essential for pipeline integrity management. Using ultrasonic technology ensures precise, direct measurement of dents with depth resolution down to 0.1 mm (0.004 in). Evo Series is available in a variety of configurations for different types of threats, be it cracking (axial or circumferential) or corrosion and metal loss. An Atlas ultrasonic geometry (UG) sensor module is added to an Evo Series tool, delivering a complete corrosion/crack and geometry measurement solution.

Multiple datasets are gathered in a single inspection without time consuming calibration. Combined inspections enhance identification of combined defects as the data is fully aligned. Data analysis now utilizes this amalgamated data with improved identification of corrosion associated with dents.

As a market leader, NDT Global leverages its expertise in ultrasonic pipeline inspections to set new benchmarks for deformation inspection. The accuracy of a deformation measurement directly affects the precision of the integrity assessment.

The use of high-resolution ultrasonic geometry ensures complete coverage of the pipe wall. This coverage is maintained in bends with no loss of data. The absence of any mechanical calipers ensures that there is no risk of damage to the tool and allows the flexibility to perform bi-directional inspections.

**Evo Series 1.0 Atlas UG Your benefits**

| Combined geometry and corrosion/crack inspection | Multiple datasets obtained from a single inspection run which lowers costs |
| Fully aligned inspection data | Enhanced identification and classification of defects, especially associated with dents |
| Highest performance specification | Enhanced assessment and less unnecessary digs |
### EVO SERIES 1.0 ATLAS UG

**ENHANCED ACCURACY WITH AN ULTRASONIC COMBINATION**

### SPECIFICATIONS

**Key tool specifications: Evo Series 1.0 Atlas UG**

<table>
<thead>
<tr>
<th>Specification</th>
<th>6” to 30”</th>
<th>6” to 30”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool sizes</td>
<td>6” to 30”</td>
<td>6” to 30”</td>
</tr>
<tr>
<td>Pipeline medium</td>
<td>Liquid</td>
<td>Liquid</td>
</tr>
<tr>
<td>Max. operation speed</td>
<td>4 m/s</td>
<td>9 mph</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-10 to +50 °C</td>
<td>14 to 122 °F</td>
</tr>
<tr>
<td>Max. pressure</td>
<td>120 bar</td>
<td>1740 psi</td>
</tr>
<tr>
<td>Min. bend radius</td>
<td>1.5 D 90°</td>
<td>1.5 D 90°</td>
</tr>
<tr>
<td>Min. axial sampling distance</td>
<td>0.75 mm</td>
<td>0.03 in</td>
</tr>
<tr>
<td>Typical UG circumferential sensor spacing</td>
<td>15 mm</td>
<td>0.59 in</td>
</tr>
</tbody>
</table>

**Defect location accuracy**

- Axial from nearest girth weld: ±0.1 m ±3.94 in
- Circumferential:
  - for Ø < 20”: ±10° ±10°
  - for Ø ≥ 20”: ±5° ±5°

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.

### Key performance specifications (referring to API 1163)

**POD for dents and ovalities ≥ 90%**

- Min. dent depth: 2 mm 0.08 in
- Min. ovality: 2 mm 0.08 in
- Dent depth sizing accuracy: ±1 mm ±0.04 in
- Dent length sizing accuracy: ±10 mm ±0.39 in
- Corrosion depth sizing accuracy: ±0.4 mm ±0.02 in

Depth in percent can be calculated dividing the depth (mm/in) by OD (mm/in), absolute value is provided as direct measurement UT method.

**Detection, identification and sizing capabilities of Atlas UG**

- Dent
- Ovality
- Buckle
- Wrinkle
- Offtakes
- Roof topping & out of roundness
- Dent with metal loss or crack*
- Pipe expansion

*In combination with metal loss or crack detection technology, respectively.

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**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.

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