

# MagneScan Triax provides greater insight into pipeline defects

When MagneScan™ was introduced to the pipeline industry, its advanced Magnetic Flux Leakage (MFL) technology set the standard for reliable metal-loss inspection. Now equipped with Triax sensors and a number of other innovations, MagneScan is again setting new standards.

Triax can read MFL signals on three separate axes (versus one or two with traditional MFL tools), enabling detection of general and axial defects from the same inspection data. This can eliminate the need to launch separate tools for each class of defects – increasing your data utility and decreasing your overall inspection costs.

The Triax electronics are housed in one of GE's new light-weight, miniature sensor heads. This versatile adaptation allows Triax to run on board every size of MagneScan tool, from 12" in diameter upwards. It also means that the Triax module can be quickly and easily transported for a pipeline inspection anywhere in the world.

## One tool for general corrosion and long axial defects

Triax has the ability to identify the linkage between individual pitting and the formation of NAEC. It is therefore ideal where long axial defects are a potential problem. Its improved sizing performance also makes it well suited to critical pipelines with major corrosion problems, lines with high consequences of failure and those that are likely to suffer from axial defects.

## When you need higher performance

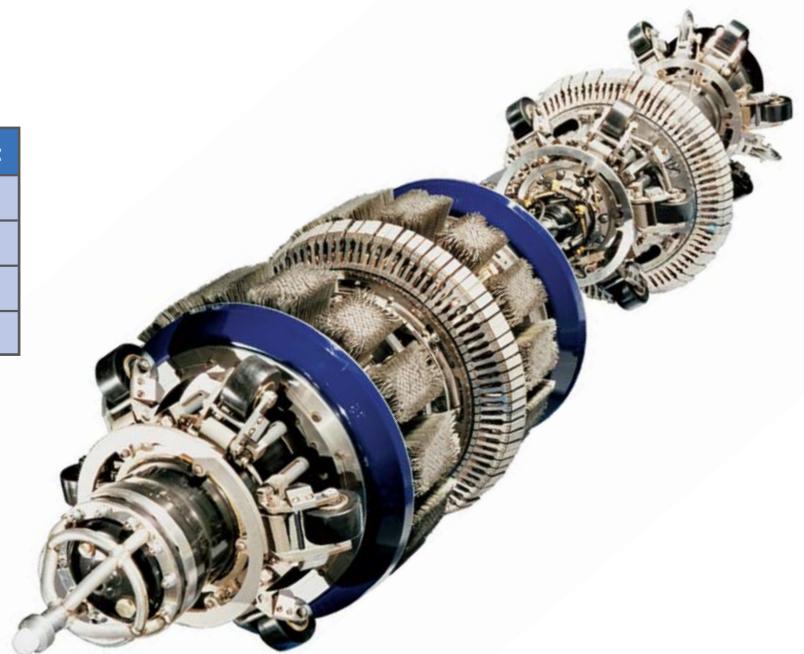
Triax provides pipeline operators with advanced inspection performance that goes beyond what is currently available in the industry's standard MFL tools.

It offers improved length and width sizing capability at a higher level of confidence – so you get a more precise picture of your pipeline's condition. As a result, your integrity maintenance plans can be optimized by reducing conservatism at the defect assessment stage.

Triax can also operate in combination with one of GE's new embedded Inertial Mapping Units (IMU) – effectively making MagneScan Triax a 3-in-1 inspection tool. IMU gives the most precise depiction of pipeline route and profile and enables defect location accuracy of  $\pm 4.921'$ .

Triax delivers superior inspection specification. Its electronics and harnessing are water-protected, while Hall and velocity sensors enable it to run down to zero product speed, offering pipeline operators more flexibility. Triax provides higher confidence levels and more accurate defect data, making it possible for you to better identify the most critical anomalies and undertake fewer costly repairs.

Triax Advantages	Standard MFL	MagneScan Triax
Depth Sizing Accuracy	$\pm 10\%$ WT	$\pm 10\%$ WT
Length Sizing Accuracy	$\pm 0.787''$	$\pm 0.394''$
Width Sizing Accuracy	$\pm 0.787''$	$\pm 0.59''$
Confidence	80%	90%



# Streamline operations and enhance knowledge

MagneScan Triax can eliminate the need to run separate metal-loss inspections for general and axial defects. It operates in a wide range of diameters, with thin and heavy-walled pipes, in either gas or liquid pipelines.

## Key Features

- Detects all metal-loss defects, including:
  - Circumferential slotting and grooving
  - General corrosion
  - Shallow and deep pitting
  - Axial slotting and grooving
  - Narrow Axial External Corrosion
- Identifies linkage between individual pitting and NAEC
- Uses Hall effect and 'zero speed' inspection sensors for low-speed accuracy
- Able to undertake thin and heavy wall measurement
- Upgrade capability
- High bypass capability

## Contact

For more information on MagneScan Triax, contact your GE representative or visit [www.ge.com/pii](http://www.ge.com/pii)



By generating data from magnetic signals on three separate axes, MagneScan Triax is capable of identifying links between individual pitting (left) and NAEC (right).

## Deliverables

Property	Specification
Software & Data	PipelImage (extended)
Cycle Time	60 Days
Analysis Basis	Length, Width, Depth
Automatic Dig Sheets	Yes

## Operating Parameters

Property	Specification
Diameter	12-38"
Wall Thickness	0.25-1.1"*
Speed	0-16 ft/s
Temperature	32-104°F**
Max. Pressure	3,100 psi
Min. Bend Radius	3D***

\* depending on diameter and tool speed  
 \*\* please consult for higher temperature  
 \*\*\* please consult for tighter bend capability

