



**Technical  
Specifications**

# ELBOWFLEX

Easy. Versatile. Fast.

The ElbowFlex™ scanner is the perfect tool for quick, manual ultrasonic inspections of pipe elbows. It is ideal for detecting and measuring different types of flaws including corrosion pitting, mid-wall lamination and remaining wall thickness.

## RAPIDLY DETECT DEFECTS HIDDEN IN PIPE ELBOWS

The highly versatile ElbowFlex scanner can scan on both the straight and elbow parts of a pipe. It is designed so that one flexible phased array probe can inspect pipes and elbows from 100mm (4in) to flat.

Featuring simple button operation, magnetic wheels, and an aqualene membrane, the ElbowFlex scanner is easy to use and saves time while providing 100% coverage confidence.

## QUICK AND EASY

- One flexible Phased Array (PA) probe for the entire pipe range: one probe can adapt to the scanned specimen dimension and stay concentric throughout the inspection, saving time.
- C-scan imaging for easy and fast analysis: encoded data can be easily interpreted using UltraVision Touch software.
- Magnetic wheels: help the operator keep the scanner in place while following the scan lines for quick and complete coverage.

**An advanced  
electromagnetic  
inspection solution that  
excels in data acquisition,  
analysis, and reporting.  
ElbowFlex offers versatile  
data processing, multi-  
technology support, and  
an intuitive user interface  
for efficient inspections.**

## HIGHLY VERSATILE

Aqualene membrane: An aqualene membrane is used for coupling in lieu of the traditional water chamber, reducing water needs to only a thin film on the specimen surface.

- The scanner can work with standard coupling gel or a mixture of water and gel as the couplant.
- When combined with any TOPAZ family instrument, data can be saved at a high resolution.

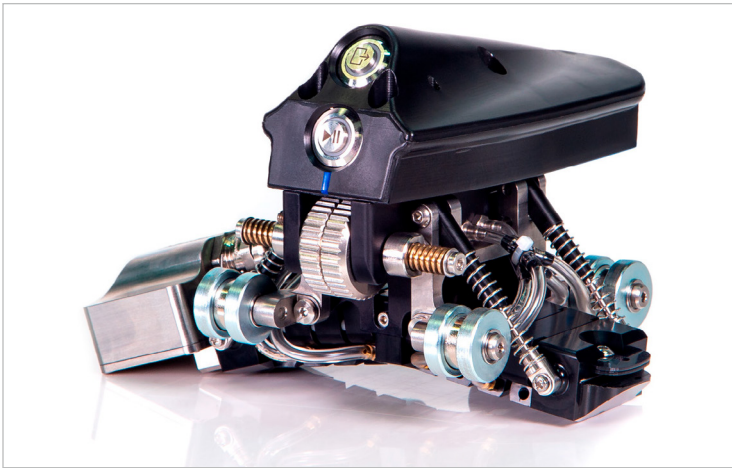


Figure 1: ElbowFlex Scanner for Pipe Elbow Inspection.



Figure 3: ElbowFlex Scanner for Pipe Elbow Inspection.

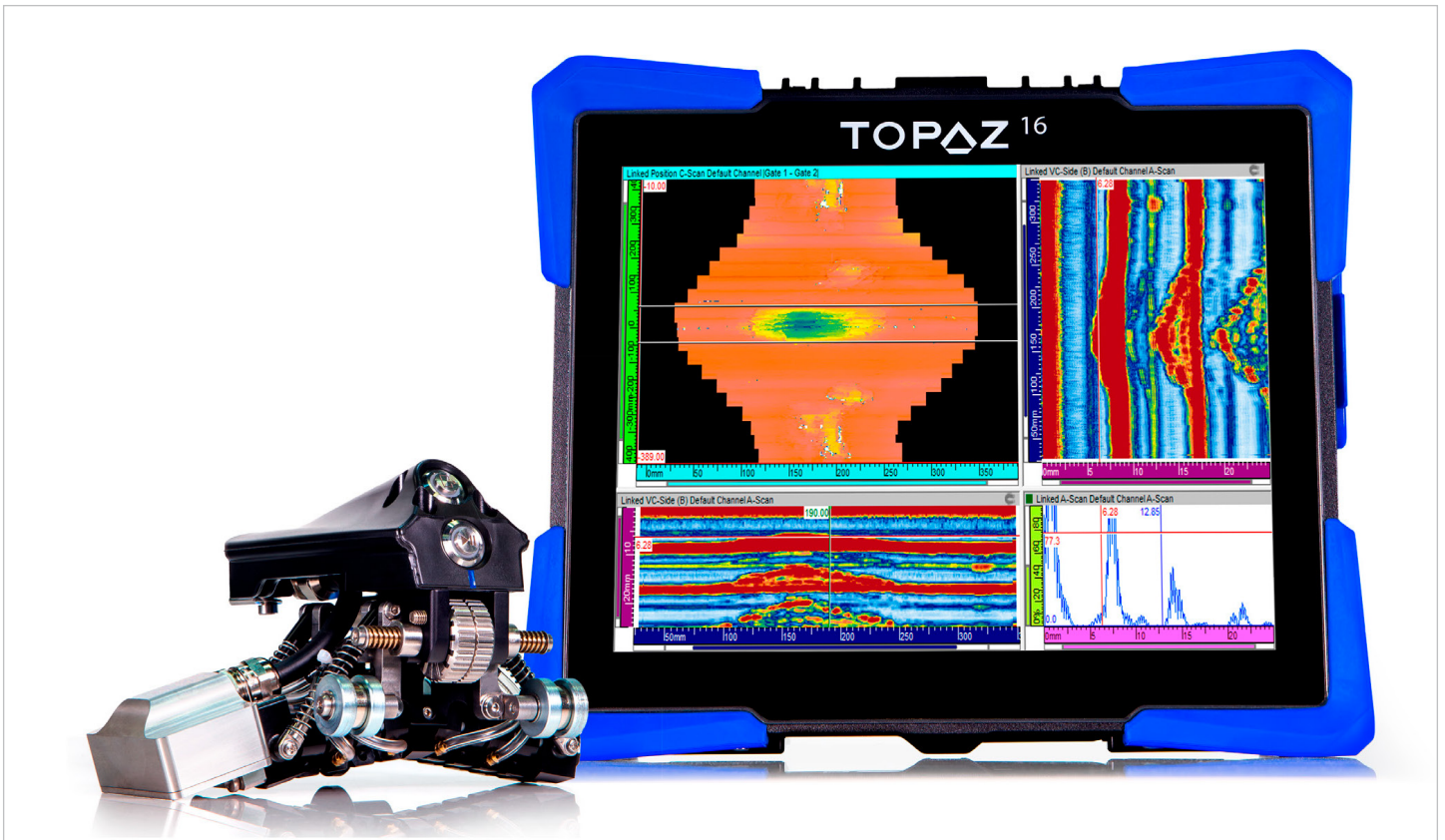


Figure 2: Corrosion detection and visualization using ElbowFlex combined with TOPAZ16 for high-resolution C-Scan images.

# SPECIFICATIONS

## INSTRUMENT

Dimensions (h x l x w)	Maximum 78 x 137 x 102mm(3.1 x 5.4 x 4.0in)	
Weight	600g (1.3lb)	
Inspection Surface	Any steel surface	
Inspection Surface Curvature	100mm (4in) NPS (115mm/4.5in) to flat	
Probe	Type	Flexible
	Elements	64
	MHz	7
	Pitch	1mm
	Elevation	7mm
	Connector	ZPAC or IPEX
Encoder	Type	Quadrature
	Resolution	14.17
Umbilical Length	5m (16.5ft)	
Operating Temperature	0°C (32°F) to 45°C (110°F)	
Maximum Inspection Surface Temperature	40°C (104°F)	
IP Rating	IP66	

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