

# Electromagnetic Bracelet Probe™

Rapid Detection of Internal and External Corrosion Damage



## Detect unseen hazards that cause life-threatening leaks, pollution and property damage

CPM's Electromagnetic Bracelet Probe™ technology quickly and easily adapts to any size ductile-iron, cast-iron or steel pipe starting at six-inch diameter. Bracelet Probe™ contains 16 high resolution sensors that cover a 10-inch wide scan path along the outside of the pipe utilizing a low frequency electromagnetic field that penetrates through the pipe wall. Variations in the thickness of the pipe result in changes to the field that is detected by the sensors. These field variations are measured by a Ferroscope™ instrument that records and displays via lap top computer. Data is displayed immediately and is available for instant analysis.

## Flexible solutions for your inspection needs

Bracelet Probe™ provides a practical solution for the fast, economical inspection of bare, coated or wrapped pipes.

## Rapid results: Near real time

Screen snap shots can be saved of the 3D color maps, strip charts and voltage planes which are used to display and size the degree of damage. Trends in wall thickness reductions can be easily seen and understood. Individual pits, graphed data and erosion are all immediately visible.

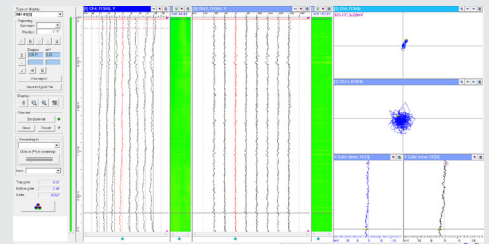
- Scan at up to 12-feet/minute
- Horizontal and vertical pipes
- Insulated plant piping
- Bare pipe in excavations
- 10-inch wide scans cover the entire pipe in a few quadrant scans

## Ultrasonic Confirmations

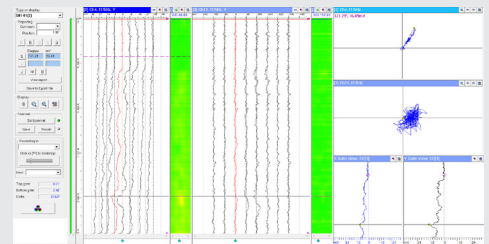
Ultrasonic readings taken on the ductile-iron pipe (Data A) confirm external corrosion.

Individual pits are seen in the right side strip chart and overall thinning in the left side strip chart.

In this example the pipe had thinned to 50% of its original thickness due to external corrosion.



Data A: normal pipe



Data B: corroded pipe

