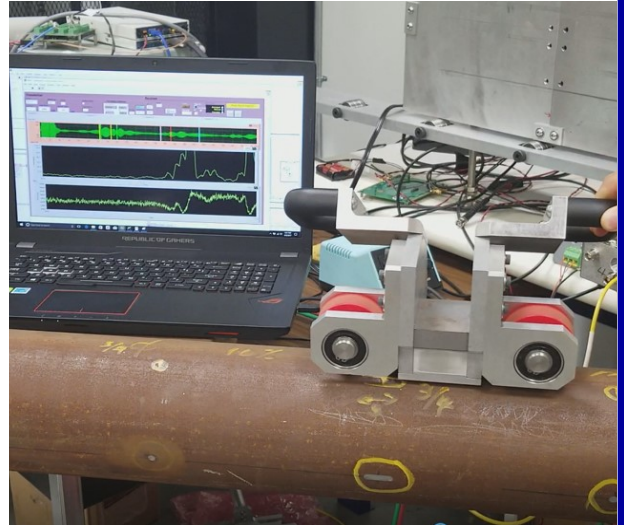


EMAT Technology Platform

Pipe Inspection

VALUE PROPOSITION

itRobotics' patent pending EMAT technology is at the core of our methods for inspecting metallic infrastructure across a wide range of industries. Systems may be configured for fixed installations, robotic manipulation or manual operation. Our EMAT pipe inspection systems do not use any surface modifications and only require electromagnetic coupling to the curved test object surface. Inspection parameters adjust automatically to changing test object geometry such as varying pipe wall thickness and diameter. As a result, high probability of defect detection is maintained throughout the entire material volume including near and far wall surfaces and welds.



itRobotics' Flowline Inspection System

Key Features

- High detection performance for near wall, far wall, surface and subsurface defects of any orientation including those in seam welds
- Ability to rapidly sequence through different wave modes to achieve, in effect, simultaneous mode generation for improved inspection reliability and repeatability

Key Features (cont'd)

- Accurate real-time measurements of geometric features such as wall thickness and pipe diameter
- Scanning speeds up to 1 meter/sec while maintaining sensitivity to small defects
- Meeting various ISO specifications

Benefits

- Enables currently impractical inspections
- Volumetric inspection of inaccessible areas
- Simpler and more hassle-free inspections
- Higher throughput, less down time, lower inspection cost
- Can be implemented as ID or OD inspection
- Reliable packaging for harsh environments

Current and Potential Applications

- New and old (installed) flow lines
- Tubulars: seamless and seam-welded pipes
- Ferrous and non-ferrous metallic tubulars
- Shoulder/elbow region inspection
- Coated and un-coated pipes and flow lines including ones that are partially buried in soil/sand