

Inspection tool name	Remote Field Testing (RFT) Electromagnetic Tool
Inspection tool description	A wheeled cart containing a single exciter coil and a linked wheeled cart with an adjustable array of 132-168 detector coils.
Dimensions of inserted inspection tool	48-inch to 96-inch diameter 240-inch to 260-inch length
Technical Constraints	
Pipe Material	PCCP, concrete cylinder (bar-wrapped steel), reinforced concrete steel cylinder, steel, ductile iron, cast iron
Pipe Diameter (inches)	48-inch to 96-inch
Pipe slope (%)	100% during tethered operation
Flow requirements (feet per sec)	Large diameter tools for Link Pipeline (78"-84") are not compatible with free-swimming applications
Pressure (psi)	N/A
Maximum inspection distance per access location (feet)	Tethered: 6,000 feet, or a total of 360° in combined bends, whichever comes first
Types of anomalies detected	Localized pitting, general wall loss 1 in. x 1 in. x 30% deep wall loss (threshold of detection)
Resolution of detected anomalies	1 inch circumferentially 0.1 inch axially
Anomaly detection limitations (pipe barrel thickness, joints, pipe thickness, valves)	Cylinder thickness cannot exceed 0.5-inch. There is a blind spot on one side of fittings like valves, elbows, flanges, etc. Depth sizing is typically accurate within +/-20% (with 80% confidence)
Pipe entry access requirements (flange dia., manhole diameter/height, etc.)	Minimum 18-inch diameter manhole access
Typical analysis time required	6 to 8 weeks On-site preliminary data analysis in 2-3 days
Typical rate of inspection (e.g., miles/day)	Inspection speed = 15-20 feet/minute Inspection coverage = 1 mile/day
Other applicable restrictions/limitations	Can pass through full-port inline valves (i.e., gate valves, if fully open), but cannot pass through butterfly valves without disassembly on one side and re-assembly on the other.