

MsS Guided Wave System Specifications

Equipment/Component	Specifications
MsSR3030R and MsSRv5R Equipment	- Frequency range: 5 to 350 kHz
	- System band pass filter: 16, 32, 45, 64, 90, 128, 180, 250 kHz
	- Operation modes: pulse-echo, pitch-catch
	- Battery operation: 2 days (normal conditions)
	- Features: Time-corrected gain (TCG) function in hardware, lightweight
MsS Probe	- Operating center frequencies: 8 to 16 kHz, 20, 32, 45, 64, 90, 128, 180, 250 kHz
	- Coupling methods: Dry coupling, shear couplant, epoxy bonding
	- Installation: Any pipe diameter, minimum install clearance 1-inch
	- Temperature: Pipeline inspection up to 500°C surface temperature
	- Dead zone length: 4-11 inches
	- No near field length
MsS GIM Software	- Multi-frequency analysis: Up to 8 different center frequencies
	- Features: Amplitude, velocity, attenuation calibration, threshold level setting, indication finding, reduction of false calls, ultrasonic image generation, remaining wall loss calculation
MsS Sector Probe	- Application: Sectional focusing inspection (SFI) for pipe, plate, vessel, tank wall
	- Increases defect detection sensitivity: Up to 40 times (depending on pipe diameter)
Short-Range Inspection	- Dead zone length: 4 inches (128 kHz), 7 inches (64 kHz), 11 inches (32 kHz)
	- Wave modes: Shear-horizontal in plate, torsional in pipe



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	- Spatial resolution: High, with 1 cycle for pure modes
High Temperature	- FeCo strip Curie temperature: 938°C - Inspection capability: Up to 500°C surface temperature
CUI and PMI Inspection	- Probe width: 2 inches - Dead zone length: 4 inches (360° continuous probe, no near field) - High-frequency waves: 64, 90, 128, 180, 250 kHz for increased inspection range and sensitivity
MsS Permanently Installed Monitoring Sensor (PIMS)	- Ferromagnetic strip thickness: 0.004 inches - Center frequencies: 32, 45, 64, 90, 128, 180, 250 kHz - Features: Pure torsional mode in cylindrical, pure shear-horizontal mode in plate, short dead zone, high sensitivity, low profile, easy installation, low cost