

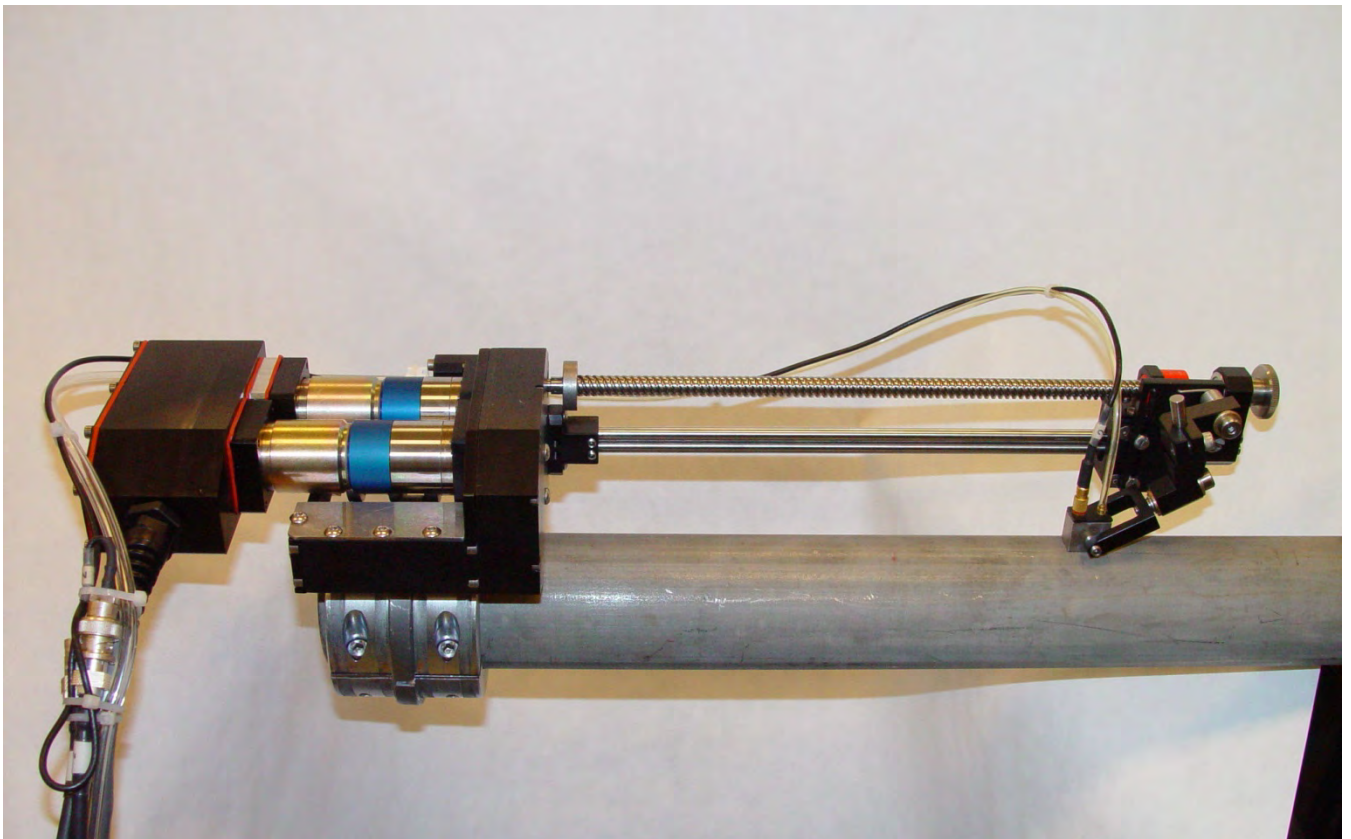
Model 5015 Automated Scanner

The Model 5015 is a remotely controlled automated scanner. This scanner is designed to permit the deployment of a variety of sensing elements including ultrasonic transducers and eddy current probes. It is compatible with all AMDATA data acquisition systems. The design allows for fast installation on a wide variety of flat or curved surfaces. It uses magnetic wheels to mount to a variety of scanning tracks.

The 5015 scanner uses DC servo motors to power each of the two axes. Position feedback is provided by magnetic encoders that are housed in a sealed enclosure. The X axis consists of a timing belt driven

tractor arrangement with magnetic rollers. The Y axis uses a precision lead screw to actuate the slide carriage that supports the transducer gimbal. The Y axis arm has a standard length of 8" of stroke. Shorter or longer stroke Y-arms can be provided if necessary. Contact WesDyne NDE Products & Technology for pricing..

Variations in the height of the inspection surface are absorbed by the transducer gimbal assembly. The 5015 scanner gimbal assembly spring loading affords approximately 1.0 inch of stroke, and 1.0 inch of fixed height adjustment.



The 5015 scanner is shown on a 2" stainless steel pipe (2.375" OD). The scanner is mounted on a two piece clam shell type rigid track assembly. The Y-arm shown has an 8" long stroke.

Model 5015 Automated Scanner

Physical Characteristics

- Scanner height: 3.0 inches (excluding thruster)
- Scanner width: 7.0 inches (including idler encoder)
- Scanner length: 20.25 inches (with 8 inch stroke Y-arm)
- Scanner weight: 8.5 lbs. (with 12 ft scanner pigtail and 8 inch stroke Y-arm)
- Min. pipe diameter: 2.0 inches**

X Axis

- Max. scan speed: 3 inch/sec
- Encoder resolution: 8073.11 counts/inch
- Positional accuracy: ± 0.200 inch per 3 feet
- Min. scan increment: 0.008 inch
- Payload capacity: 8.0 lbs.
- Drive description: Servo motor, belt drive gear head, gear drive, magnetic roller

Y Axis

- Max. scan speed: 4 inches/sec
- Encoder resolution: 14,043.61 counts/inch
- Positional accuracy: $+ 0.020$ inch per 8 in.
- Min. scan increment: 0.001 inch
- Payload capacity: 4.0 lbs.
- Drive description: Servo motor, timing belt, lead screw, travel block
- Available arm lengths: 4 to 12 inches

Minimum required equipment to operate a Model 5015 Scanner - IntraSpect™ imaging system with IMC or MCS 1002 scan control subsystem, 2-axis joystick, cabling, and track.

