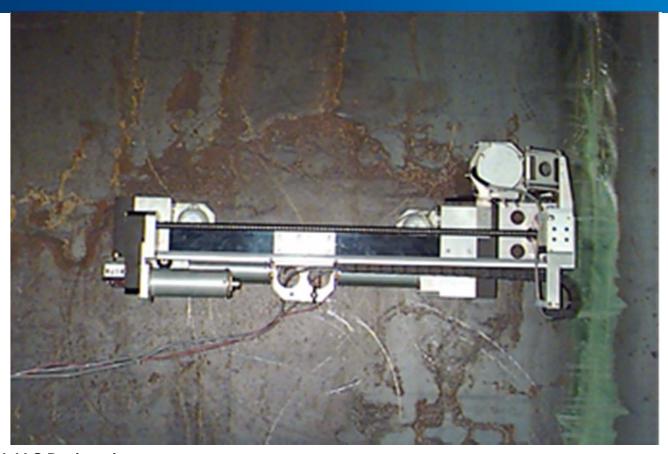
# Navigator Scanner, Model LS



### **Model LS Designation**

WesDyne NDE Products & Technology's Model "LS" refers to a Navigator which contains a Lead Screw style Y-arm.

## Physical Characteristics

- Scanner Height: 6 inches
- Scanner Width: 12 inches
- Scanner Length: 32 inches
- Scanner Weight (w/o cable): 30 pounds
- Additional Payload Capacity: 50 pounds
- Minimum Component Diameter\*:~ 9 feet \* with full maneuverability
- Minimum Pipe Size\*\*:~ 30 inches \*\* straight line, X-axis oriented circumferentially only with illustrated gimbaling; ~ 24 inches with an alternative gimbal mechanism
- Umbilical Cable Length:75 to 100 feet
- On-board UT calibration check plate, and parking area to reduce probe wear during scanner maneuvering to an inspection area.
- · Reusable shipping case for Navigator scanner, and drum for cabling





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#### X-Axis Features

- 2 independent drive modules connected by a flexible compliance plate
- Compliance plate allows independent negotiation of modules over convex surfaces and weld crowns.
- Each drive includes 2 high power magnetic wheels.
- DC servo/gear motors
- Adheres to carbon steel surfaces, no tracks required.
- Joystick operation allows independent movement of each module for curving or circular movement as well as straight line motion (i.e., bulldozer steering)
- Maximum Movement Speed: 2.5 in/sec
- Encoder Resolution: 0.0005 in/count
- Positional Accuracy: + 0.10 in (over 3 ft travel)

#### **Y-Axis Features**

- Precision lead screw provides up to a 24 inch stroke
- DC servo/gear motor driven
- Spring loaded gimbal mechanism to concurrently hold both ultrasonic and eddy current probes
- Scan Speed: Up to 20 in/sec with MCS 1003 controller
- Encoder Resolution: 0.001 in/count
- Positional Accuracy: + 0.020 in

### **Optional Accessories**

- Radiation tolerant cameras (Qty = 2) with low power lighting
- 9 in black & white video monitors (Qty = 2) for on-board cameras
- On-board inclinometers (Qty = 2) with digital readout to assist operators in parallel maneuvers
- Remote 360 degree skewing device with angular positional display to rotate probe

#### **Required Equipment**

Use of a Navigator scanner requires a 3-axis servo controller (AMDATA Model IMC) and IntraSpect<sup>™</sup> or IntraPhase<sup>™</sup> based imaging system.





