

CHAIN Scanner



The CHAIN™ Scanner is the optimum two-encoded axes manual pipe-inspection solution for a pipe range with outside diameters from 1.75 in. to 38 in. (45 mm to 965 mm). The scanner, which is held by chain links instead of magnetic wheels, is capable of inspecting ferromagnetic or non-ferromagnetic surfaces. The chain links also help ensure a straight displacement of the scanner by eliminating steering problems. It is also very useful when the area around the pipe is not entirely accessible, as the scanner can be rotated by pulling on the chain links.

Main applications

- Circumferential-pipe weld inspections with phased array, TOFD, or conventional UT (picture above)
- Corrosion mapping in conjunction with HydroFORM phased array solution (picture below).



Features

- Standard configuration using one or two probes, and optional configuration using four probes for TOFD, phased array, or pulse-echo inspections.
- A pipe range with outside diameters from 1.75 in. to 38 in. (45 mm to 965 mm).
- An encoded manual scan with up to two axes.
- Ergonomic handle to protect encoder connectors and provide cable management.
- Independent chain links which are mounted on bearing wheels coated with urethane for smooth rolling.
- An easy clamping device for quick scanner positioning.
- Spring-loaded probe holders that ensure good probe contact in any scanner position or orientation.
- The majority of adjustments can be made without the use of tools.
- Compatible with the OmniScan®, the TomoScan FOCUS LT™ (with an optional adaptor), and other instruments using the appropriate encoder cable.

Standard Inclusions

- Main module with a scan-axis encoder.
- Encoded probe-positioning system with lead screw adjustment.
- Chain links for up to 38 in. pipe ODs, with a quick-release adjustable buckle.
- One 5 m encoder cable for OmniScan.
- One 450 mm (17.7 in.) probe-holder bar.
- Two spring-loaded probe holders with two adjustable PA yokes.
- Two adjustable TOFD–P/E yokes.
- One 5 m divisible cable conduit (19 mm ID).
- Cable conduit attachment fixture.
- Irrigation tubes and fittings.
- A CHAIN Scanner custom tool.
- A carrying case.

Note: probes and wedges are not included with the scanner.

Specifications

Length in scan axis (mm)	Width (mm)	Height (mm)	Weight (kg)
114	75	84	1

Note: specifications above apply to the main module

Encoder resolution:

Circumferential (X) axis: 19.2 steps/mm

Longitudinal (Y) axis: 226.8 steps/mm

Options:

Probes and Wedges*

See Olympus' "Phased Array Ultrasonic Probe" and "Ultrasonic Transducers" catalogs

TomoScan FOCUS LT Encoder Cable Adaptor

Part number: C1-DE15F-BXM-0.30M [U8767107]

Couplant-Feed Units

Manual Water Pump

Part number: WTR-SPRAYER-8L [U8775001]

Electric Water Pump

Part number: CFU03 [U8780008]

1-Channel TOFD Pre-amplifier

Part number: 5682 [U8120006]

Chain Links

CHAIN scanner short link. For pipe OD less than 9.6 in.

Part number: ChainScan-A-Slink [U8775127]

CHAIN scanner long link. For pipe OD greater than 9.6 in.

Part number: ChainScan-A-LgLink [U8750042]

Arm Stabilizer

CHAIN Scanner arm stabilizer kit. Includes a magnetic wheel block and the holder.

P/N: ChainScan-A-Stabilizer [U8775210]

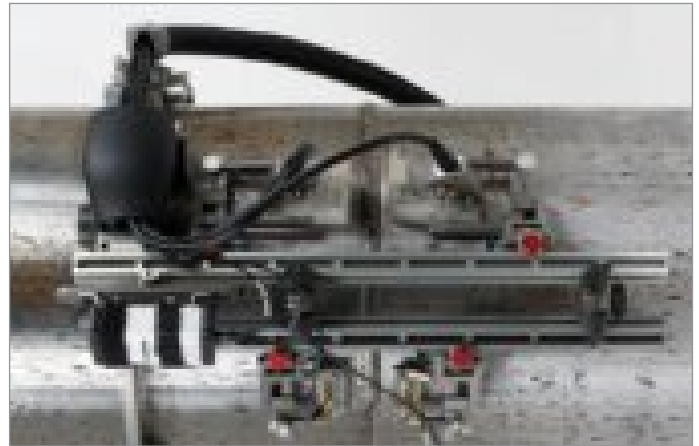
*Wedge must be of the IHC type (hole, irrigation, and carbides) in order to be used with the scanner.

Ordering information

Part Number	Item Number	Description
ChainScan-XY38	U8750041	CHAIN Scanner for 45 mm to 965 mm (1.75 in. to 38 in.) OD pipes with two encoded axes.
ChainScan-SP-Basic	U8779370	Basic spare part kit for the CHAIN Scanner which includes: lead screw and lever for buckle, wedge pivot buttons, dovetail nuts, tool, plastic wheel, and screws.

Additional Packages

Two Additional Probe Package



Needed to perform inspections with four probes on the CHAIN Scanner.

P/N: ChainScan-A-4Probe [U8775128]

Mouse Package



Needed to use the CHAIN Scanner as a mouse scanner with magnetic wheels holding the system instead of chain links.

P/N: ChainScan-A-Mouse [U8750037]

Short Bar Package



A 20 cm probe-holder bar and lead screw kit for restricted space applications.

P/N: ChainScan-A-SBar [U8775129]

OLYMPUS NDT INC. is ISO 9001 and 14001 certified.

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forests, controlled sources and
recycled wood or fiber

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