

## Scanners and Accessories



- **Manual Scanners**
- **Motorized Scanners**
- **Accessories**

# The Company

Olympus Corporation is an international company operating in industrial, medical, and consumer markets, specializing in optics, electronics and precision engineering. Olympus instruments contribute to the quality of products and add to the safety of infrastructure and facilities.

Olympus NDT is a world-leading manufacturer of innovative nondestructive testing instruments that are used in industrial and research applications ranging from aerospace, power generation, petrochemical, civil infrastructure, and automotive to consumer products. Leading edge testing technologies include ultrasound, ultrasound phased array, eddy current, and eddy current array. Its products include flaw detectors, thickness gages, industrial NDT systems, automated systems, industrial scanners, pulser-receivers, probes, transducers, and various accessories. Olympus NDT is also a distributor of remote visual inspection instruments and high-speed video cameras in the Americas.

Olympus NDT is based in Waltham, Massachusetts, USA. The company has sales and service centers in all principal industrial locations

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**Note:** Scanners are usually not supplied with probes and wedges. For phased array probes and wedges, refer to the Phased Array Probe Catalog; for UT probes and wedges, refer to the Ultrasonic Transducers for Nondestructive Testing Catalog.

# Scanners and Accessories

An important aspect that influences inspection quality is the capacity of precisely positioning the probes according to the surface being inspected. Depending of the application, different constraints can occur that make the probe positioning difficult. Olympus offers a wide range of industrial scanners and accessories in order to always help inspectors in their work as well as getting the best data acquisition possible. Some of the applications covered by our scanner product line are: weld inspection, corrosion mapping, and aerospace. The supported technologies are: phased array, conventional ultrasonic, TOFD, eddy current and eddy current array. The scanner configurations can be of different types: one or two encoded axis as well as manual or motorized motion.

## Scanner Technical Matrix

	One-axis scanner		X-Y scanner
Inspection technology	Manual	Motorized	Manual
Conventional ultrasonics	HSMT-Compact™ HSMT-Flex™ HSMT-X03 CHAIN™ scanner-X HST-X04	WeldROVER™	CHAIN™ scanner-XY GLIDER™ WING™ scanner
TOFD	HST-X04 HSMT-Compact HSMT-Flex HSMT-X03 CHAIN scanner-X	WeldROVER	CHAIN scanner-XY
Phased array	Mini-Wheel HS10-X01 HSMT-Compact HSMT-Flex HSMT-X03 CHAIN scanner-X	WeldROVER	Mini-Wheel + Indexer-Clicker HS10-X01+ Indexer-Clicker CHAIN scanner-XY GLIDER WING scanner
Phased array and TOFD	HSMT-Compact HSMT-Flex HSMT-X03 CHAIN scanner-X	WeldROVER	CHAIN scanner-XY

## Scanner Application Matrix

Scanner model	Weld	Corrosion	Aerospace
Mini-Wheel™	✓	✓	✓
HS10-X01	✓	✓	✓
HST-X04	✓		
HSMT-Compact™	✓		
HSMT-Flex™	✓		
HSMT-X03	✓		
WeldROVER™	✓		
CHAIN™ scanner	✓	✓	
GLIDER™		✓	✓
WING™ scanner		✓	✓

# Manual One-Axis Scanner

## Mini-Wheel – Small Footprint Encoder

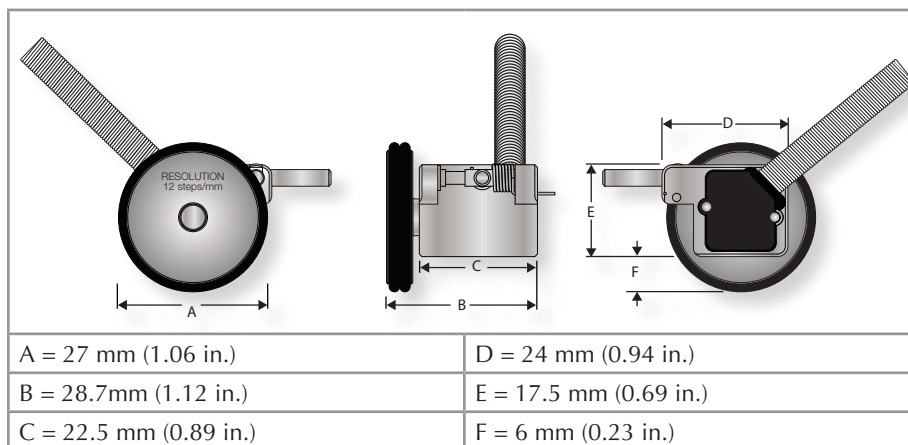


The Mini-Wheel™ encoder is used for the positioning and dimensioning of defects in the scan axis. It can synchronize data acquisition with probe movement.

The Mini-Wheel encoder is waterproof and compatible with the HST-X04 scanner, as well as Olympus standard PA wedges on which it can be mounted using the included bracket kit.

This miniature encoder is made of an anodized aluminium casing, a stainless steel wheel, and has a resolution of 12 steps per millimeters (304.8 steps per inch).

### SPECIFICATIONS



### FEATURES

- Waterproof (IP68)
- Small dimensions
- Encoder resolution is engraved on the wheel (12 steps/mm)
- Removable encoder wheel
- Double O-ring tire for better adherence
- Strain relief for cable protection
- Spring-loaded pin for adaptable encoder attachment
- 2 M3 threaded holes on top of the casing for rigid attachment
- DE version is compatible with the OmniScan® instrument
- BX version is compatible with the TomoScan FOCUS LT™ instrument

### STANDARD INCLUSIONS

- 1 encoder with standard rubber wheel
- 1 bracket kit
- 1 hexagonal key screwdriver for bracket attachment
- 1 carrying case

### ORDERING INFORMATION

Part number	Cable length (m)	Connector
ENC1-2.5-DE	2.5	DE-15
ENC1-5-DE	5.0	DE-15
ENC1-2.5-BX	2.5	Bendix
ENC1-5-BX	5.0	Bendix

### OPTIONS

#### MAGNETIC WHEEL

For maximum adherence of the wheel on ferromagnetic surfaces, a magnetic wheel is available.

**Part number:** ENC1-A-MagWheel

#### INDEXER CLICKER

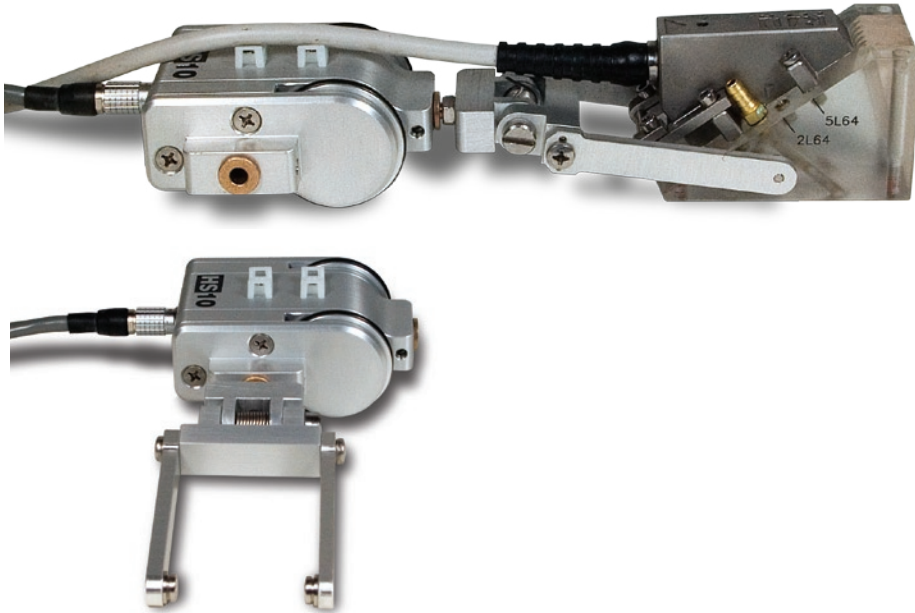
Clicker to send the indexing signal needed for 2-axis inspections with only one encoder. The kit also includes a 3-to-1 splitter cable (with DE-15 connectors) enabling connection of the encoder, the Clicker, and a digital input source (DIN) to the OmniScan.

**Part number:** OPTX674



# Manual One-Axis Scanner

## HS10-X01 – PA General Purpose "Mouse Scanner"



The HS10-X01 is a mouse-type scanner designed for encoding phased array scans in laboratory or production environments.

This scanner offers an efficient one-hand encoded manual-scan solution. The encoder wheels are specially made not to slip on wet surfaces.

The yoke of the HS10-X01 is easy to set up on a IHC-type wedge by using standard attachment holes. The spring loaded system is optimized to offer the lowest clearance possible. The yoke is also attached to the scanner using a quick-connect system in order to have the probe parallel or at a 90° skew according to the weld.

### SPECIFICATIONS

Probe-holder position	Length in scan axis (mm)	Width (mm)	Height (mm)	Weight (kg)
Front	178	66	41	0.3
Side	80	165	41	0.3

### FEATURES

- Encoded linear-scan (one axis) for phased array
- 2 rubber wheels in contact with surface for maximum adherence
- Easily clipped and spring-loaded yoke can be positioned with 90° skew
- Encoder resolution: 5 steps/mm
- Durable aluminum casing
- Compatible with the OmniScan, the TomoScan FOCUS LT™ (with optional adaptor), and other instruments using the appropriate encoder cable

### STANDARD INCLUSIONS

- OmniScan-compatible encoder with 5 m cable
- Phased array yoke for standard 40 mm wide wedges
- Carrying case

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

### OPTIONS

#### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

Part number: C1-DE15F-BXM-0.30M

#### OPTIONAL FORK

55 mm wide yoke for SA4, and SA5 type wedges

Part number: AEIX0505

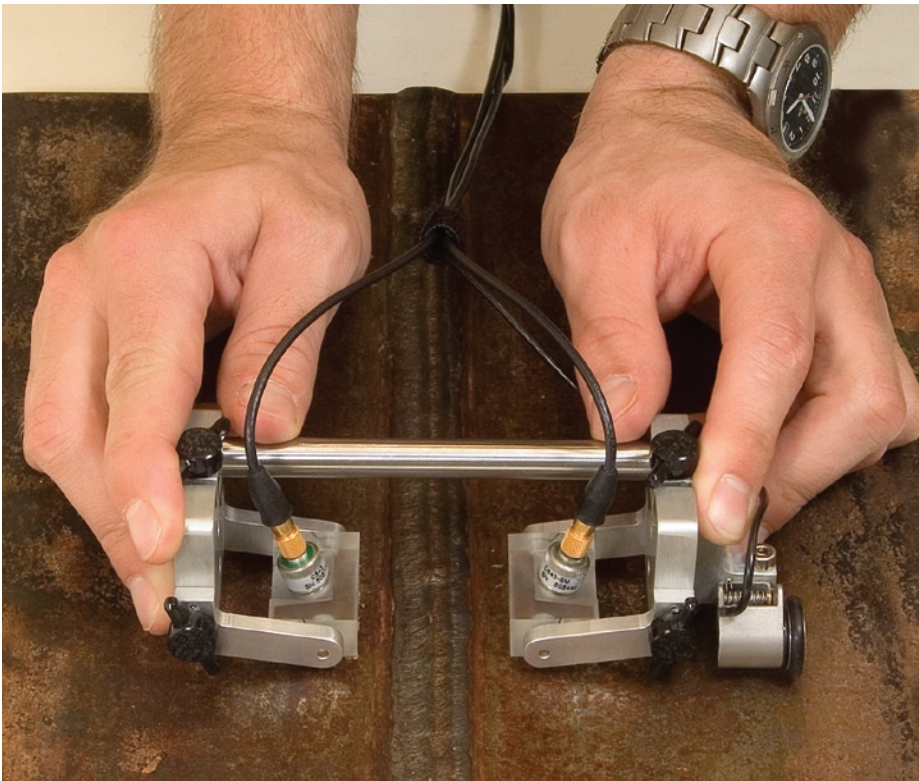
#### INDEXER CLICKER

Clicker to send the indexing signal needed for 2-axis inspections with only one encoder. The kit also includes a 3-to-1 splitter cable (with DE-15 connectors) enabling connection of the encoder, the Clicker, and a digital input source (DIN) to the OmniScan.

Part number: OPTX674

# Manual One-Axis Scanner

## HST-X04 – TOFD Weld Inspection



The HST-X04 time-of-flight diffraction (TOFD) manual scanner offers an efficient, low-cost, and versatile weld inspection solution. This manually deployed single-axis scanner is designed to be used on plates, pipes, and curved surfaces such as the ones found on pressure vessels, storage tanks, and structural components. The HST-X04 operates either on flat surfaces or on pipes as small as 51mm (2 in.) OD.

### OPTIONS

#### PREAMPLIFIER

Panametrics® 5682 preamplifier. Refer to the accessories section on page 19.

#### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

Part number: C1-DE15F-BXM-0.30M

### SPECIFICATIONS

Frame bar length (mm)	Length in scan axis (mm)	Width (mm)	Height (mm)
150	60	190	50
250	60	290	50

### ORDERING INFORMATION

Part number	Description
HST-X04	Standard kit (see standard inclusions)
HST-X04-SCN	Scanner and Mini-Wheel™ encoder only (no probes, wedges, and cables)
HST-X04-PA	Scanner to hold 40 mm wide phased array wedges, and Mini-Wheel encoder

### FEATURES

- Encoded linear scan (one axis) for TOFD or pulse-echo inspections with appropriate yoke
- Waterproof spring-loaded encoder with rubber wheel for maximum adherence on inspected surfaces
- The encoder has a resolution of 12 steps/mm and can be positioned parallel to the weld or at a 90° skew
- Compact, light, and versatile
- Cost-effective
- Durable construction
- Can fit a full range of probes and wedges including the CentraScan™ composite product line (wedges must be 31.75 mm wide)
- Probe-center separation (PCS) fully adjustable from 17 mm to 180 mm
- Low-profile frame for use in constrained areas
- Quick, tool-free release of wedges and probe holders
- Compatible with the OmniScan, the TomoScan FOCUS LT™ (with optional adaptor), and other instruments using the appropriate encoder cable (not included)

### STANDARD INCLUSIONS

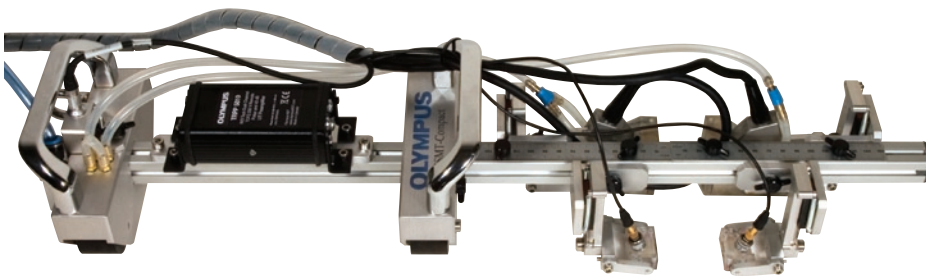
- Scanner with 150 mm frame and supplementary 250 mm frame for wider probe center separation
- Two 10 MHz (3 mm element diameter) plus two 5 MHz (6 mm element diameter) CentraScan™ composite TOFD probes
- Three pairs of ST1 wedges with carbide wear pins and irrigation holes for 45°, 60°, and 70° inspection
- Two 2.5 m LEMO® 00 to Microdot transducer cables
- 2 LEMO® 00 to BNC adaptors
- Spring-loaded, friction-driven, and waterproof Mini-Wheel™ encoder for X-axis or Y-axis data encoding (see page 4 for details)
- Brackets for flexible encoder positioning
- Carrying case

# Manual One-Axis Scanner

## HSMT-Compact – Weld Inspection



The HSMT-Compact™ is a manual one-axis encoded scanner designed for maintenance weld inspection. In particular, it is light and small, and also versatile. It can be used (with up to four probes) on plates and for circumferential scans on pipes as small as 4 in. schedule (4.5 in. OD). The scanner width can be changed and the frame can extend outside the limit of the wheels, providing a configuration that is well-suited for hard-to-reach places such as pipe-to-component welds.



This configuration that is well-suited for hard-to-reach places such as pipe-to-component welds.

### OPTIONS

#### DIVISIBLE CABLE CONDUIT

Refer to the accessories section on page 20.

#### MANUAL WATER PUMP KIT

Refer to the accessories section on page 17.

#### REMOTE PULSER/PREAMPLIFIER

Refer to the accessories section on page 18.

#### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

Part number: C1-DE15F-BXM-0.30M

#### EXTRA PROBE HOLDER KIT

Set of two short spring-loaded arms (SLA) mounted on 90° brackets.

Part number: OPTX0739

#### YOKES

Refer to the accessories section on page 23.

#### REPLACEMENT ENCODER

Part number: ACIX895

### FEATURES

- Circumferential scan using up to 4 probes on 4 in. schedule pipes (4.5 in. OD), or greater
- 4 plastic-covered magnetic wheels hold the unit against a ferromagnetic inspection surface.
- Light aluminum frame with customizable width
- Frame design allows probes to be positioned outside the wheels.
- Independently positioned and spring-loaded probe holders
- Waterproof spring-loaded encoder with 12 steps/mm resolution
- Removable handles for lower profile
- Eyelet for umbilical attachment
- Integrated water manifold simplifies couplant distribution
- Metric/US Customary unit rulers on the scanner for easy probe separation measurement

### STANDARD INCLUSIONS

- Scanner frame with handles, and:
  - 250 mm (10 in.) frame bar
  - 450 mm (18 in.) frame bar
  - 650 mm (26 in.) frame bar
- OmniScan-compatible waterproof spring-loaded wheel encoder with 5 m cable
- Four 90° probe holder brackets
- 4 spring-loaded arms (SLA)
- 4 TOFD-P/E yokes (31.75 mm wide)
- 2 phased array yokes (40 mm wide)
- Irrigation tubing and accessories
- Hard carrying case

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

### CONFIGURATIONS

A typical configuration includes two phased array probes and a pair of TOFD probes, to comply with ASME code.

Other possible configurations:

- 1 pair of TOFD probes
- 2 pairs of TOFD probes
- 2 PA probes

### SPECIFICATIONS

Length in scan axis (mm)	Width (mm)	Height (mm)	Weight (kg)
152	94 + bar length	102	3.2



# Manual One-Axis Scanner

## HSMT-Flex – Weld Inspection



The HSMT-Flex™ is intended for one axis encoded inspection of circumference welds on pipes of 4 in. schedule (4.5 in. O.D.) and greater. The scanner comes equipped with four probe holders but can be mounted with a total of eight probes with optional probe holders. Mounted probes can be either phased array or conventional UT for most efficient inspections.

The major characteristic of the scanner is its capacity to bend in the center. This allows the scanner to fit on smaller pipes and also to bring the force of the spring-loaded arm in the radial direction of the pipes for better stability of the wedge, and therefore, optimum data acquisition. For the same reason, optional probe holders that are installed on the outside of the scanner can also pivot.

The HSMT-Flex also allows one of its side frames to slide. This feature allows having the probes mounted on the outside of the scanner. This provides a configuration that is well-suited for hard-to-reach places such as pipe-to-component welds.

### OPTIONS

#### UMBILICAL

Refer to the accessories section on page 20.

#### REMOTE PULSER/PREAMPLIFIER

Refer to the accessories section on page 18.

#### WATER PUMP

Refer to the accessories section on page 17.

#### LASER GUIDE KIT

Battery-operated laser-guiding device for easier weld tracking.

**Part number:** HSMT-A-Laser

#### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

**Part number:** C1-DE15F-BXM-0.30M

#### STANDARD PROBE HOLDER KIT

Set of two spring-loaded arms (SLA) mounted on 90° brackets, to allow more than four probes on pipes larger than 12 in. OD.

**Part number:** OPTX666

#### PIVOTING PROBE HOLDER KIT

Set of two spring-loaded arms (SLA) mounted on 90° pivoting brackets, to allow more than four probes on pipes smaller than 12 in. OD.

**Part number:** OPTX0717

#### YOKES

Refer to the accessories section on page 23.

#### REPLACEMENT ENCODER

**Part number:** ADIX1255

### FEATURES

- Folding frame to optimize probe contact on pipes
- 4 plastic-covered magnetic wheels hold the unit against a ferromagnetic inspection surface.
- Compact and versatile. The provided frame bars allow size customization.
- Can support up to 4 conventional UT or phased array probes on pipes
- Can support up to 8 conventional UT or phased array probes on pipes bigger than 12 in. OD using optional standard probe holder kit or on pipes from 4.5 in. to 12 in. OD using optional pivoting probe holder kit
- Light aluminum frame
- Independently positioned and spring-loaded probe holders
- Waterproof spring-loaded encoder with 12 steps/mm resolution
- Removable handles for lower profile
- Eyelet for umbilical attachment
- Integrated water manifold simplifies couplant distribution
- Metric/US Customary unit rulers on the scanner frame for easy probe separation measurement

### STANDARD INCLUSIONS

- Scanner frame with handles, and:
  - Two 200 mm (8 in.) frame bars
  - Two 500 mm (20 in.) frame bars
- OmniScan-compatible waterproof spring-loaded wheel encoder with 5 m cable
- Four 90° probe holder brackets
- 4 spring-loaded arms (SLA)
- 4 TOFD-P/E yokes (31.75 mm wide)
- 2 phased array yokes (40 mm wide)
- Irrigation tubing and accessories
- Hard carrying case

**Note:** Umbilical cable, probes, and wedges are not included with the scanner.

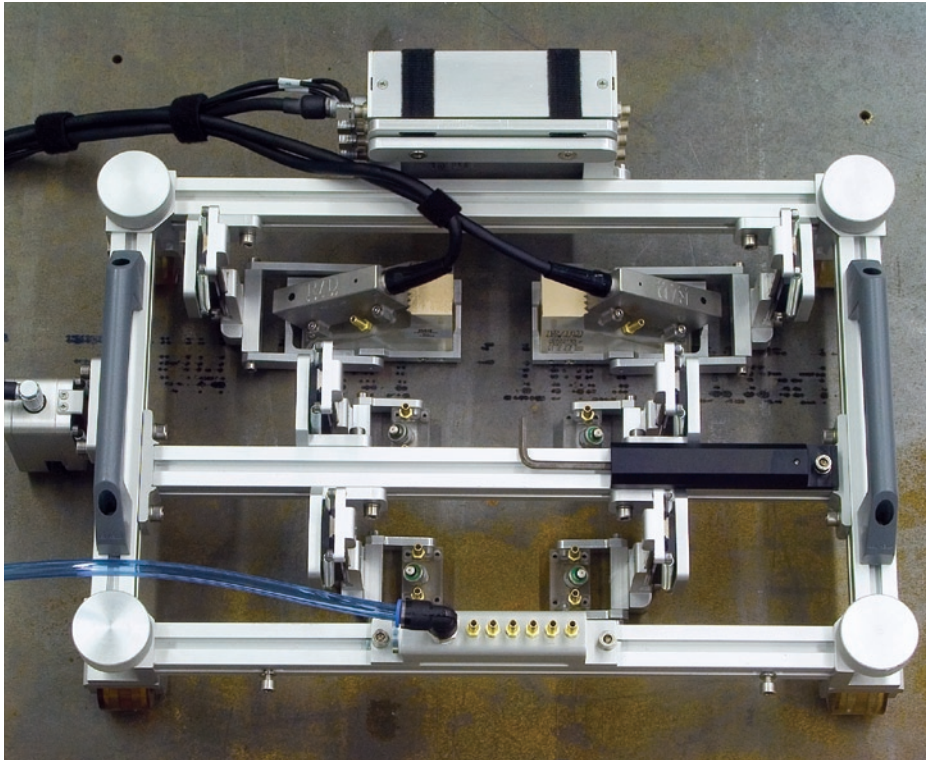
### SPECIFICATIONS

Length in scan axis (mm)	Width (mm)	Height (mm)	Weight (kg)
263	466	147	4.4



# Manual One-Axis Scanner

## HSMT-X03 – Weld Inspection



The HSMT-X03 is the construction weld scanner offering the most probe-holding capacity. In fact, the scanner can hold up to 10 probes for either phased array or conventional UT, in order to obtain optimal coverage of the entire weld volume.

It's solid construction guarantee the stability needed for precise data acquisition. The frame width can also be reconfigured to fit restrained spaces using the shorter supplied frame bars.

### OPTIONS

#### UMBILICAL

Refer to the accessories section on page 20.

#### REMOTE PULSER/PREAMPLIFIER

Refer to the accessories section on page 18.

#### WATER PUMP

Refer to the accessories section on page 17.

#### LASER GUIDE KIT

Battery-operated, laser-guiding device for easier weld tracking.

**Part number:** HSMT-A-Laser

#### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

**Part number:** C1-DE15F-BXM-0.30M

#### FRAME EXTENSIONS

A pair of side-mounted frame bars allows greater probe separation for inspecting thicker welds.

**Part number:** OPTX684

#### STANDARD PROBE HOLDER KIT

Set of two spring-loaded arms (SLA) mounted on 90° brackets, to allow more than four probes on pipes larger than 12 in. OD

**Part number:** OPTX666

#### YOKES

Refer to the accessories section on page 23.

#### REPLACEMENT ENCODER

**Part number:** ADIX1255

### FEATURES

- Can support up to 10 phased array or conventional UT probes
- The provided frame bars allow size customization.
- 4 plastic-covered magnetic wheels that rotate 90° to allow scans in both directions, and to hold the unit against a ferromagnetic inspection surface
- Light, aluminum frame
- Independently positioned and spring-loaded probe holders
- Waterproof spring-loaded encoder with 12 steps/mm resolution
- Eyelet for umbilical attachment
- Integrated water manifold simplifies couplant distribution
- Metric/US Customary unit rulers on the scanner frame for easy probe-separation measurement

### STANDARD INCLUSIONS

- Scanner frame with handles, and:
  - Three 300 mm (12 in.) frame bars
  - Two 200 mm (8 in.) frame bars
- 3 additional 200 mm (8 in.) frame bars, and two additional 125 mm (5 in.) frame bars allow smaller footprint configuration
- OmniScan-compatible waterproof spring-loaded wheel encoder with 5 m cable
- Water manifold
- Six 90° probe holder brackets
- 6 spring-loaded arms (SLA)
- 6 TOFD-P/E yokes (31.75 mm wide)
- 2 phased array yokes (40 mm wide)
- Irrigation tubing and accessories
- Hard carrying case

**Note:** Umbilical cable, probes, and wedges are not included with the scanner.

### SPECIFICATIONS

Length in scan axis (mm)	Width (mm)	Height (mm)	Weight (kg)
279	413	131	3.2

# Manual One or Two-Axes Scanner

## CHAIN Scanner - Pipe Inspection



The CHAIN™ scanner is the optimum, manual pipe-inspection solution for a pipe range with outside diameter of 45 mm to 965 mm (1.75 in. to 38 in.) and the possibility of two encoded axes. The scanner, which is held by chain links instead of magnetic wheels, is able to inspect ferromagnetic or nonferromagnetic surfaces. The chain links also help ensure a straight displacement of the scanner as it eliminates steering problems. Finally, it is useful when the area around the pipe is not entirely accessible as the scanner can be rotated around the pipe using the chain links.

### MAIN APPLICATIONS ARE:

- Circumferential-pipe weld inspections with phased array, TOFD, or conventional UT
- Corrosion mapping of small areas with phased array or conventional UT (using XY; 2 encoder models)

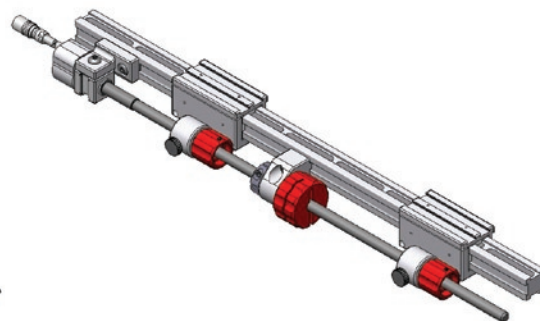
### FEATURES

- Standard configuration using one or two probes and optional configuration using four probes for TOFD, phased array, or pulse-echo inspections.
- Pipe range with outside diameters from 45 mm to 965 mm (1.75 in. to 38 in.)
- Encoded manual scan on one or two axis (depend on the model)
- Ergonomic handle to protect encoder connectors and provide cable management
- Independent chain links mounted on bearings wheels coated with urethane for smooth rolling
- Easy clamping device for quick scanner positioning
- Spring-loaded probe holders ensuring 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 optional adaptor), and other instruments using the appropriate encoder cable

### STANDARD INCLUSIONS

- Main module with a scan-axis encoder
- Chain links for 5 in., 16 in., or 38 in. pipe OD (depending on model) with quick-release adjustable buckle
- 5 m encoder cable for OmniScan
- 450 mm (17.7 in.) probe-holder bar
- Two spring-loaded probe holders with adjustable TOFD-P/E yokes
- Two spring-loaded probe holders with adjustable phased array yokes
- Probe-positioning system with lead screw adjustment
- 5 m divisible cable conduit (19 mm ID)
- Irrigation tubes and fittings
- CHAIN™ scanner tool
- Carrying case

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



Probe-positioning system with lead screw adjustment

## 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: 56.7 steps/mm

## OPTIONS

### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

Part number: C1-DE15F-BXM-0.30M

### REMOTE PULSER/PREAMPLIFIER

Refer to the accessories section on page 18.

### WATER PUMP

Refer to the accessories section on page 17.

### CHAIN LINKS

**ChainScan-A-Slink:** CHAIN™ scanner short link. Required on pipe OD less than 9.6 in.

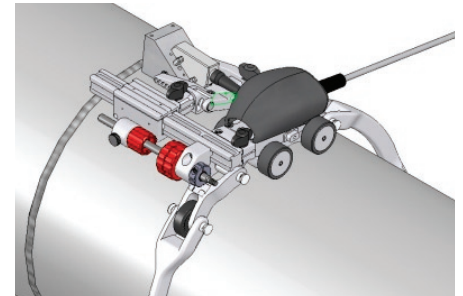
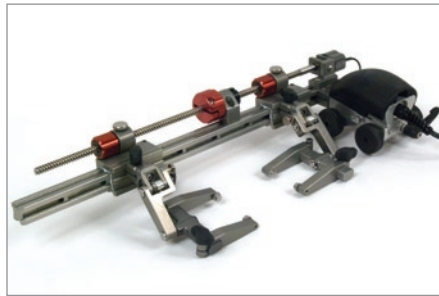
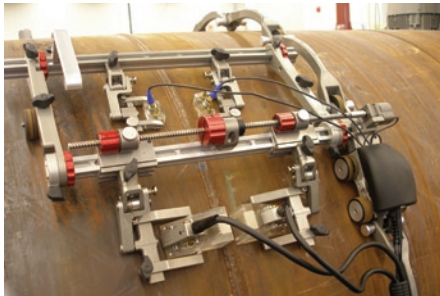
**ChainScan-A-LgLink:** CHAIN scanner long link. To be used on pipe OD greater than 9.6 in.

## OPTIONAL PACKAGES

**ChainScan-A-4Probe:** Extra part package needed to perform inspections with four probes on the CHAIN scanner

**ChainScan-A-mouse:** Extra part package needed in order to use the CHAIN scanner as a mouse scanner with magnetic-wheel holding system instead of chain links

**ChainScan-A-SBar:** 20 cm probe-holder bar and lead screw kit for confined space applications



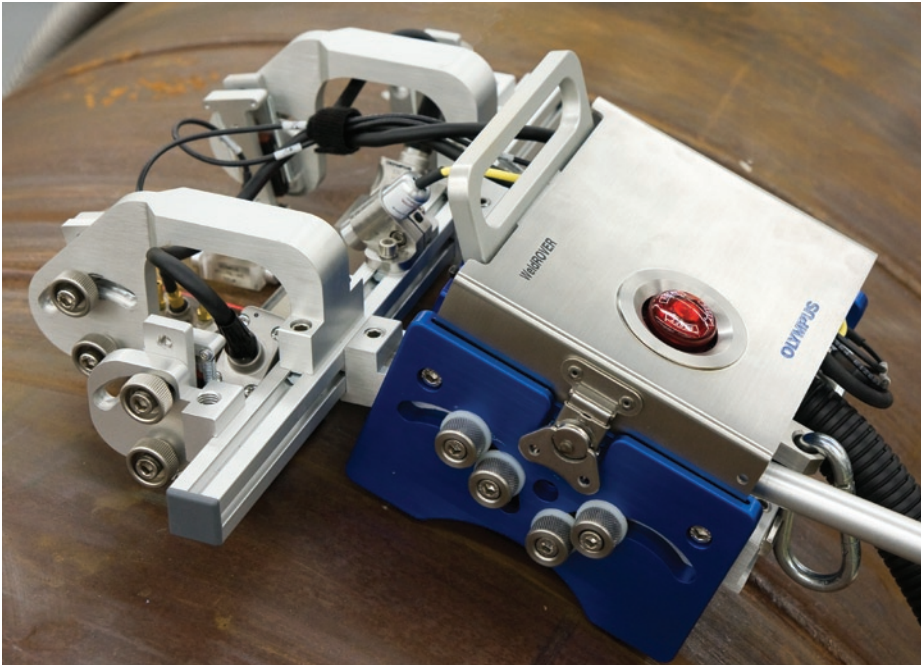
## ORDERING INFORMATION

Part number	Description
ChainScan-X5	CHAIN™ scanner for 45 mm to 125 mm OD (1.75 in. to 5 in.) pipes with 1 encoded axis
ChainScan-XY5	CHAIN scanner for 45 mm to 125 mm OD (1.75 in. to 5 in.) pipes with 2 encoded axes
ChainScan-X16	CHAIN scanner for 45 mm to 400 mm OD (1.75 in. to 16 in.) pipes with 1 encoded axis
ChainScan-XY16	CHAIN scanner for 45 mm to 400 mm OD (1.75 in. to 16 in.) pipes with 2 encoded axes
ChainScan-X38	CHAIN scanner for 45 mm to 960 mm OD (1.75 in. to 38 in.) pipes with 1 encoded axis
ChainScan-XY38	CHAIN scanner for 45 mm to 960 mm OD (1.75 in. to 38 in.) pipes with 2 encoded axes



# Motorized One-Axis Scanner

## WeldROVER – Weld Inspection



The WeldROVER™ is a perfect addition to the Olympus family of scanners for customers that require a more stable inspection than can be provided by manual scanners, and in a more economical package than the high-production zone-discrimination systems typically used in offshore pipeline construction.

The WeldROVER is a simple, industrial-strength, one-axis encoded scanner that provides the customer with a fully mechanized automated data acquisition. It is designed to make fast and efficient phased array inspections on ferromagnetic piping or vessel girth welds and long seams with minimum training and setup time. The scanner can be configured with up to six probes for phased array, TOFD, and conventional UT inspection.

The WeldROVER could not be easier to use. It is operated by a simple two-button remote control with variable speeds. The scanner interfaces with the OmniScan® MX or TomoScan FOCUS LT<sup>1</sup> directly without the need for complex software, motion controller electronics, or configuration. Use of the laser-guide indicator helps the operator to manually adjust the scanner direction using the steering lever. This allows acquiring precision data without the need for guide bands, complex tracking systems, or motorized steering capability. It is the perfect fit for the company offering fully mechanized, automated phased array (AUT) inspection services. Less than one hour of training is required for any customer that has completed the basic OmniScan® course.

### CONFIGURATIONS

A typical configuration is two PA probes and one or two pairs of TOFD probes to comply with the ASME codes.

#### Circumferential scan:

- Supports two probes at the back and two at the front of the scanner on pipes from 4 in. OD and up
- Supports up to four probes at the front of the scanner on pipes from 12 in. OD and up
- Supports up to six probes at the front of the scanner on pipes from 16 in. OD and up

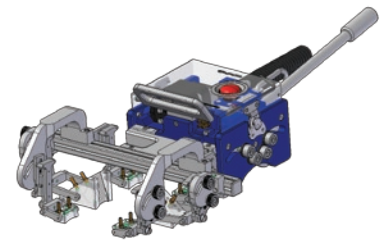
#### Longitudinal scan:

- Supports up to six probes at the front of the scanner on pipes from 30 in. OD and up

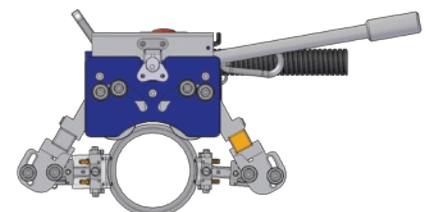
<sup>1</sup> Interface with TomoScan FOCUS LT™ can be made using the optional encoder cable adaptor

### FEATURES

- Can support up to six probes for TOFD, phased array, or pulse-echo inspections
- Constant scanning speed control for smooth data acquisition at any speeds
- Compact motion controller allowing 10 different scan speeds from 5 mm/s to 50 mm/s
- Simple two-button remote control for jog or constant encoded motion either in backwards or forward direction
- Data acquisition using OmniScan or TomoScan FOCUS LT<sup>1</sup> instrumentation with less than 5 minutes configuration time
- The four industrial-strength magnetic wheels are driven for use on ferromagnetic surface
- Integrated water manifold for simple and efficient couplant delivery
- Emergency-stop button located on the scanner
- Laser guide indicator helps the operator to follow the weld centerline or any other inspection reference
- Room to integrate a remote pulser/preamplifier for improved TOFD-P/E inspections
- Divisible cable conduit umbilical offers cable protection and configuration flexibility. Minimal time needed for probe reconfiguration.
- Waterproof (IP65)



Supports up to six probes at the front of the scanner on pipes from 16 in. OD and up for circumferential scans and from 30 in. OD and up for longitudinal scans.



Supports two probes at the back and two probes at the front of the scanner on pipes from 4 in. OD and up.

## STANDARD INCLUSIONS

- Motorized scanner with rotating probe-holder arms at the front and back of the scanner
- 2 frame bars for probe-holder fixation of 200 mm (8 in.) and one of 340 mm (13.4 in.)
- Remote control with 5 m cable
- MCDC-01: one-axis DC motion controller
- Encoder cables linking MCDC-01 to the OmniScan®
- 6 spring-loaded arms (SLA) pivoting probe holders and all brackets needed for the different configurations
- 4 TOFD–P/E 31.75 mm yokes
- 2 PA 40 mm x 55 mm yokes
- 2 PA 40 mm x 65 mm yokes for PWZ1 probes

- Irrigation tubing and fittings
- Laser guide and holder
- Two steering lever
- 5 m divisible conduit for cable protection and attachment to the scanner.
- Power supply
- Scanner and accessories hard carrying case

Note: All cables for scanner operation are 5 m.  
Probes and wedges are not included with the scanner.

## OPTIONS

### WATER PUMP

Refer to the accessories section on page 17.

### REMOTE PULSER/PREAMPLIFIER

Refer to the accessories section on page 18.

### EXTRA SPRING-LOADED PROBE HOLDER

Part number: WELDROVER-A-SLA

### EXTRA LASER GUIDE

Part number: WELDROVER-A-LASER

### INSTRUMENT CASE

Modular instrument and accessories hard-carrying case. The modules can be used to transform the scanner case into a workstation.

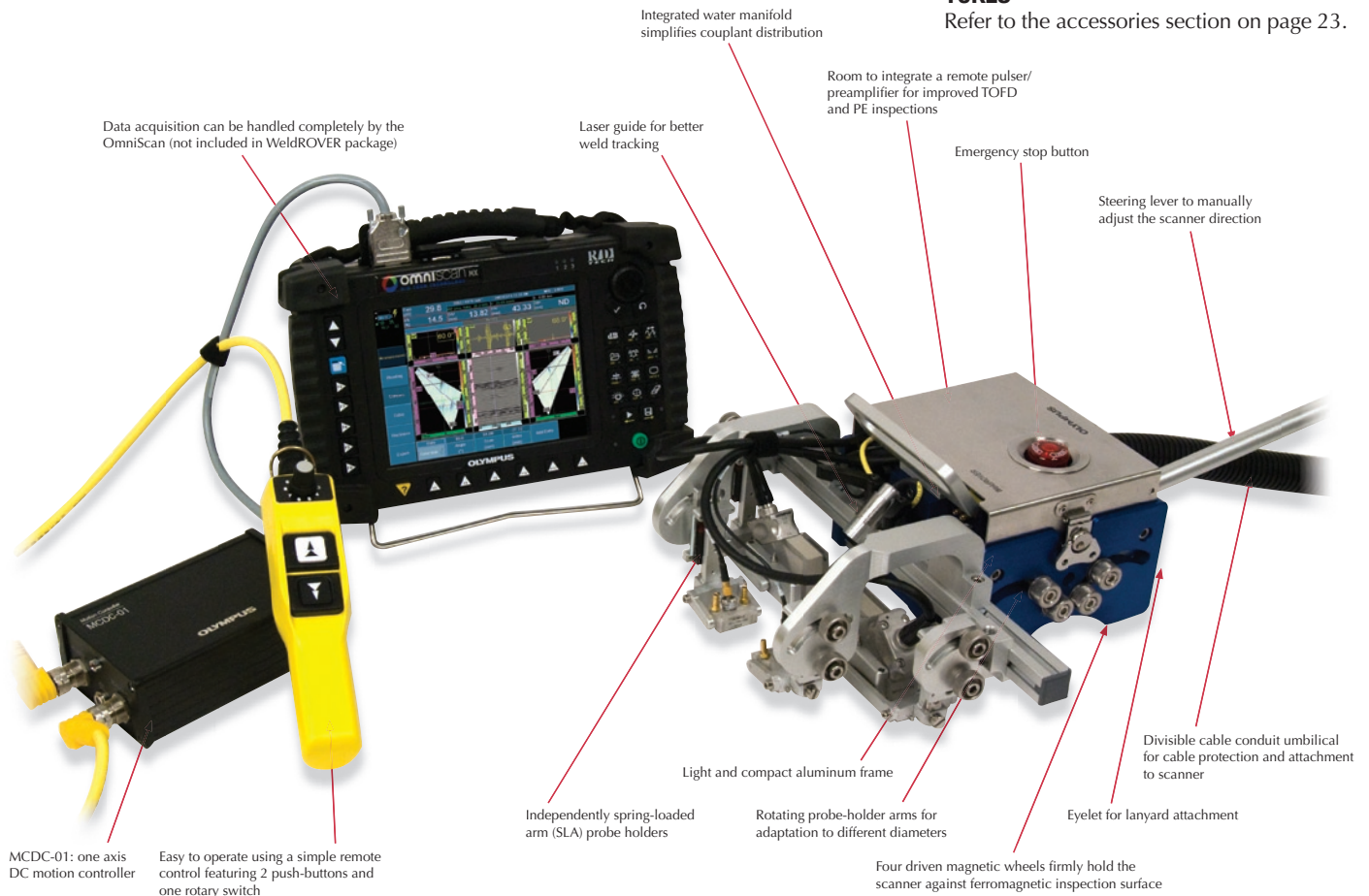
Part number: WELDROVER-A-ICASE

### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

Part number: C1-DE15F-BXM-0.30M

### YOKES

Refer to the accessories section on page 23.



## SPECIFICATIONS

**Scanner speed:** 5 mm to 50 mm per second

**Encoder resolution:** 2100 steps/mm (typical)

**Power consumption:** 90 W

**Maximum input current:** 4 A

**Voltage:** 24 VDC

**Power supply input voltage:** 100 VAC to 240 VAC, autoswitching

Component	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Scanner with long bar and 6 probes	430	340	175	12.0
Scanner with small bars and 4 probes	380	200	175	11.0
MCDC-01 motion controller	175	110	60	1.5
Power supply	200	85	50	1.0
Remote control	230	50	90	0.8

# Manual Two-Axis Scanner

## GLIDER – Composites Inspection



The GLIDER™ X-Y scanner is a two-axis encoding scanner for the manual inspection of slightly curved or flat composite surfaces. The scanner is well-suited for raster scanning with the following technologies:

- Conventional ultrasonics (UT)
- Phased array ultrasonics (PA)
- Eddy current (EC)
- Eddy current array (ECA)

Commonly inspected materials include composites and aluminum, using suction-cup pods; and carbon steel, using optional magnetic pods.

### APPLICATIONS

- Inspection of composites
- Inspection of airplane fuselages for delamination and cracking
- Inspection of ferromagnetic plates for corrosion
- Inspection of friction stir welds (FSW) on aluminum

### DESIGN CHARACTERISTICS

The X-axis is attached to two mounting pods. Depending on the material to be inspected, one of the following models can be used:

- Suction-cup mounting pod (included)
- Magnetic mounting pod (optional)

There are two encoder modules (one on each axis) to measure the probe position. The displacement of these modules can be in 3.27 mm steps, free running, or locked.

The scanner comes in three formats (18 in., 24 in., and 36 in.), depending on the scan coverage needed:

- GLIDER 18×18
- GLIDER 24×24
- GLIDER 36×36

### FEATURES

- Well-suited for phased array UT, conventional UT, and eddy current inspection techniques using one probe
- Compatible with the OmniScan®, the TomoScan FOCUS LT™ (with optional adaptor), and other instruments using the appropriate encoder cable.
- 2 axes with waterproof encoders for position-encoded X-Y scans
- Axis positioning with minimal backlash
- Both modules are mounted on bearings for precise and smooth displacement
- 2 pivot-equipped mounting pods enable surface following
- Locking devices allow each axis to be locked
- Module displacement can be in increments of 3.27 mm or in free-running mode
- The probe holder is mounted on a bearing-arm system that can be spring loaded if needed.
- Aluminum frame is used for lightweight and rust-free components
- The Y axis can be easily shortened for smaller surface radius inspection, or be removed for easier transportation

### STANDARD INCLUSIONS

- 2 tracks for desired stroke (18 in., 24 in., or 36 in., depending on the model)
- 2 displacement-encoding modules
- 2 suction-cup mounting pods
- 2 OmniScan-compatible encoder with 5 m cable
- 1 phased array yoke (40 mm wide)
- 1 TOFD-P/E yoke (31.75 mm wide)
- 90° probe holder mounting bracket
- 180° probe holder mounting bracket
- 45°, 90°, 180° adjustable probe holder mounting bracket
- Probe holder bearing arm with springs
- Irrigation tubing and fitting
- Hard carrying case

**Note:** Umbilical cable, probes, and wedges are not included with the scanner.



## SPECIFICATIONS

**Weight:** 5 kg to 8 kg, depending on the configuration

**Suction-cup pod holding force:** 7 kg per cup

**Magnetic-pod holding force:** 81 kg per base

**Encoder resolution:** 13 steps/mm ( $\pm 0.15$  step/mm), 330 steps/in. ( $\pm 0.006$  step/in.)

**Minimum curvature for partial scans:** 50 cm (20 in.), OD

Model	Length (X) (mm)	Width (Y) (mm)	Height (mm)
GLIDER-18X18	700	690	152
GLIDER-24X24	900	845	152
GLIDER-36X36	1200	1150	152

## ORDERING INFORMATION

Part number	Description
GLIDER-18X18	GLIDER™ scanner with X-Y 457 mm × 457 mm stroke (18 in. × 18 in.)
GLIDER-24X24	GLIDER scanner with X-Y 610 mm × 610 mm stroke (24 in. × 24 in.)
GLIDER-36X36	GLIDER scanner with X-Y 914 mm × 914 mm stroke (36 in. × 36 in.)

## OPTIONS

### MAGNETIC ACCESSORIES PACKAGE

Magnetic mounting pods and y-axis support enable use on ferromagnetic surfaces.

**Part number :** GLIDER-A-01

### TRACKS

457 mm, 610 mm, 914 mm, (18 in., 24 in., or 36 in.) tracks are available as options.

Stroke mm (in.)	Part number	
	X- Axis	Y-Axis
457 (18)	GLIDER-A-X18	GLIDER-A-Y18
610 (24)	GLIDER-A-X24	GLIDER-A-Y24
914 (36)	GLIDER-A-X36	GLIDER-A-Y36

### ENCODER CABLES

Y-Axis stroke mm (in.)	Part number
457 (18)	GLIDER-18X18-C-5M
610 (24)	GLIDER-24X24-C-5M
914 (36)	GLIDER-36X36-C-5M

Note: If the scanner is modified with an Y-axis track longer than the original one, the encoder cable must be changed as well in order to benefit from the maximum stroke.

### TOMOSCAN FOCUS LT ENCODER CABLE ADAPTOR

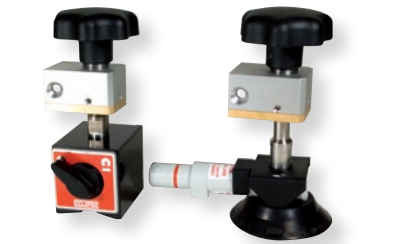
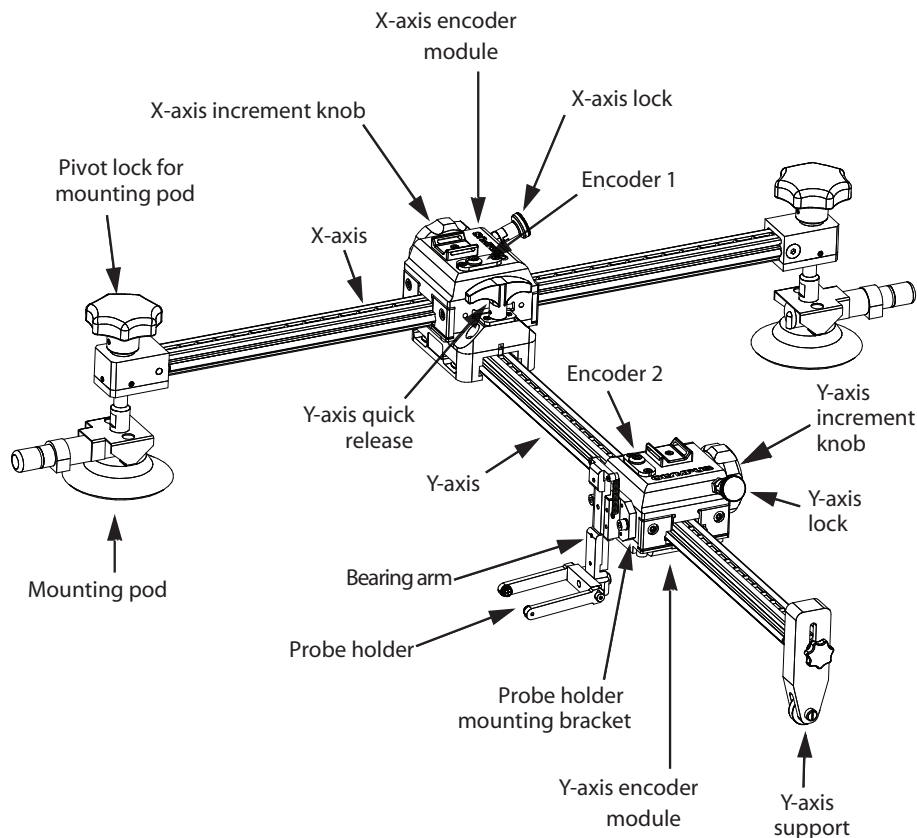
**Part number:** C1-DE15F-BXM-0.30M

### YOKES

Refer to the accessories section on page 23.

### WATER PUMP

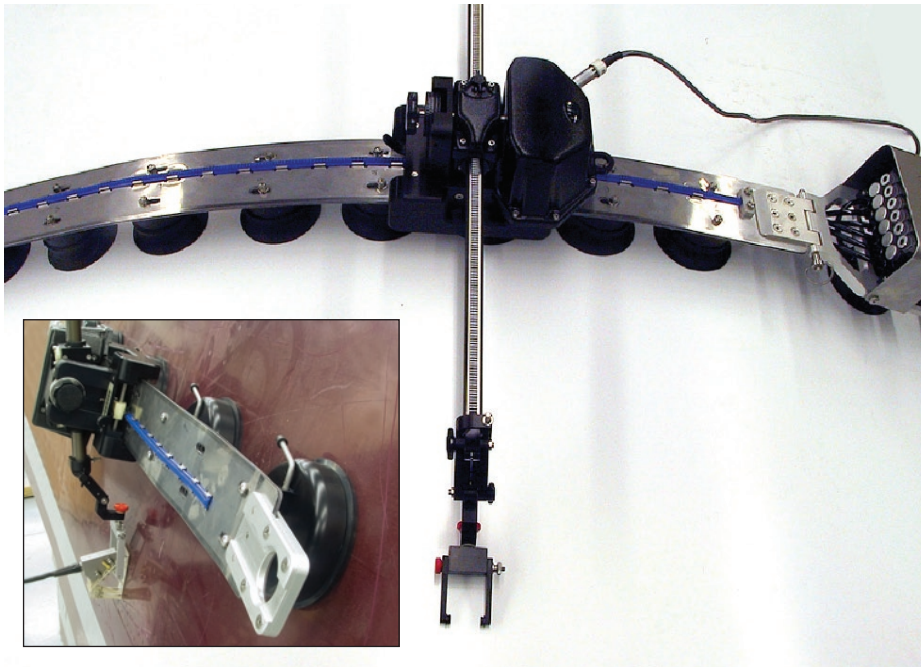
Refer to the accessories section on page 17.



Interchangeable mounting pods (magnetic pods are optional)

# Manual Two-Axis Scanner

## WING Scanner – Composite Inspection of Curved Surface



The WING™ scanner is a two-axis scanner for manual ultrasonic inspections. One scanning axis is flexible and conforms to the contour of the part being inspected. Vacuum cups make the WING scanner well-suited for nonferromagnetic surface inspections.

Typical applications include the inspection of friction stir welding (FSW) and the inspection to detect delamination, cracks, and corrosion on plates and airplane fuselage.

### SPECIFICATIONS AND ORDERING INFORMATION

Specifications	Part number	Wing-scanner-V1	Wing-scanner-V2	Wing-scanner-H1
X-axis stroke (mm)		940	1940	940
Y-axis stroke (mm)		510	510	510
Vacuum generation *		Venturi with air supply	Venturi with air supply	Manually activated levers
Minimum external radius (mm)		360	380	450
Minimum internal radius (mm)		360	460	360
Holding force (kg/cup)		30	30	11
Number of cups		10	19	8
Total weight (kg)		6.3	8.8	7
Overall scanner length (X-axis) (mm)		1395	2395	1120
Overall scanner length (Y-axis) (mm)		790	790	790
Total height (mm)		157	157	165

\* For "V" models, compressed air characteristics must correspond to the following specifications:  
 Required pressure: 490 kPa to 690 kPa (71 psi to 100 psi)  
 Flow rate: 566 nl/min (20 SCFM) minimum

### OPTIONS

#### WATER PUMP

Refer to the accessories section on page 17.

### FEATURES

- Two encoded axes for X-Y scans
  - Axis positioning with minimal backlash
  - Vacuum cups mounted on the flexible axis ease installation on both concave and convex nonferromagnetic surfaces.
  - Scanner can be used vertically or upsidedown using Venturi vacuum cups (WING™ scanner "V" models only).
- NOTE:** The scanner must always be secured with a lanyard when used on vertical or upsidedown surfaces.
- Suitable for phased array and conventional UT inspection techniques using one probe
  - Can operate with an OmniScan® or TomoScan FOCUS LT™ acquisition unit.
  - Also available in a manually activated vacuum-cup version that eliminates the need for air supply (WING scanner H1 model)

### FLEXIBLE X-AXIS

- Very flexible contour-following track
- Encoder module follows the flexible track (resolution: 39.7 steps/mm).
- Locking lever on the encoder module
- Integrated loop on one end to secure the scanner against accidental falls.

### RIGID Y-AXIS

- 16 mm diameter hard-anodized aluminum shaft with stainless steel toothed rack
- Shaft is mounted on a pivot, allowing constant contact between the probe and the part.
- Shaft does not move under its own weight when the indexing dial is engaged.
- Fully adjustable and tool-free, probe-alignment device
- Indexing increments: 0.5 mm and 1 mm
- Axis-locking thumb screw

### STANDARD INCLUSIONS

- Two integrated encoders for X and Y axes
- 5 m cable compatible with TomoScan FOCUS LT™, and OmniScan® using supplied adaptor
- Adjustable probe holder
- 1 phased array yoke (40 mm wide)
- 1 TOFD–P/E yoke (31.75 mm wide)
- Irrigation tubing and fitting

**Note:** Umbilical cable, probes, and wedges are not included with the scanner.

# Accessories

## CFU03 and CFU05 – Electric Couplant-Feed Units



CFU05

CFU03

The CFU03 and CFU05 are portable electric-pump units used to supply couplant to wedges during ultrasonic inspections. Both units are equipped with a diaphragm pump that has a bypass to ensure a constant flow and to avoid any pump priming issues. The pump units also have a valve to control the outlet flow. The CFU05 features water-suction capability to reduce water loss when used with water delay line wedges.

## WTR-SPRAYER-8L – Manual Couplant-Feed Unit



The manual-pump unit offers a cheap and efficient way to supply couplant to wedges during automated inspections.

### FEATURES

- Reservoir capacity of 8 L
- Flow valve
- Supplied tubes: 8 mm OD and 5 mm ID
- Sling for easy transportation

### ORDERING INFORMATION

Part number	Description
CFU03	Electric couplant-feed unit
CFU05	Electric couplant-feed unit with suction capability
WTR-SPRAYER-8L	Manual couplant-feed unit

### CFU03 FEATURES

- Diaphragm pump with a flow of 3.78 l/min (1 GPM ) at 60 psi
- Internal bypass ensures that the pump is always primed.
- Works on 100 VAC and 240 VAC
- Start/Stop button
- Outlet flow control valve
- Pump inlet tube is equipped with a filter and a check valve to ensure that the tube is always filled.
- Inlet and outlet quick-connect fittings
- Rugged plastic case
- CE certified

### CFU05 FEATURES

The CFU05 has the same features as the CFU03 plus:

- Water suction generated by a Venturi vacuum using an external compressed air supply

### STANDARD INCLUSIONS

- 3.3 m (10 ft), 9.5 mm (3/8 in.) ID tube for pump inlet with filter and check valve
- 3.3 m (10 ft), 9.5 mm (3/8 in.) ID tube for vacuum outlet (CFU05 only)
- 3.3 m (10 ft), 5 mm (3/16 in.) ID tube and Y-adaptor for pump outlet
- 3.3 m (10 ft), 5 mm (3/16 in.) ID tube and Y-adaptor for vacuum inlet (CFU05 only)
- Power supply, 100 VAC to 240 VAC input to 24 VDC output



# Accessories

## TRPP 5810 – Remote Pulser/Preamplifier for TOFD Inspection



The TRPP 5810™ unit is a high-performance remote pulser/preamplifier dedicated to TOFD inspections and compatible with the Olympus scanner line as well as PV-100 and PV-200 weld-inspection systems.

This remote pulser/preamplifier provides an optimum signal-to-noise ratio for TOFD inspections by combining a 40 dB preamplifier with a remote high-voltage (200 V) pulse repeater in a single, small enclosure. The TRPP 5810 supports two UT channels, enabling simultaneous inspection with one or two pairs of TOFD probes.

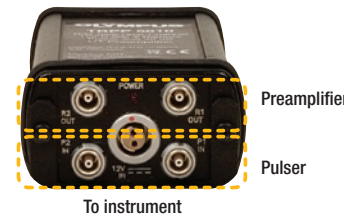
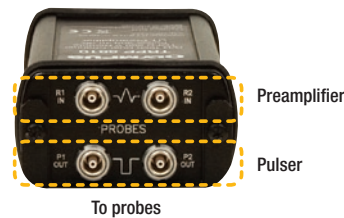
The TRPP 5810 can be used as a pulser and/or preamplifier.

### TRPP 5810 AS A PULSER

- Provides an additional pulse gain in order to generate a stronger signal when needed to reveal difficult-to-detect flaws.

### TRPP 5810 AS A PREAMPLIFIER

- Provides the additional gain or broadband signal-to-noise enhancement necessary for optimum signal acquisition on thick sections of material exhibiting high ultrasonic attenuation.
- Allows driving of long cables from remotely located sensors.



### ORDERING INFORMATION

Part number	Package content
TRPP-5810	Pulser/Preamplifier, 5 m power supply cable (120 VAC to 240 VAC input to 12 VDC output) and 5 m power supply cable linking to an OmniScan®; all packaged in hard carrying case
TRPP-5810-KIT01	Same content as TRPP-5810 plus: 4 × 0.6 m RG174 UT probe cables (LEMO® 00 to Microdot) and brackets to attach TRPP 5810 to HSMT-type scanner (P/N: HSMT-A-BRK5810)
TRPP-5810-INST	Same content as TRPP-5810-KIT01 plus: 4 × 5 m RG174 UT cables (LEMO 00 to LEMO 00) linking TRPP 5810 to instrument
TRPP-5810-UMB	Same content as TRPP-5810-KIT01 plus: 4 × 0.6 m RG174 UT cables (LEMO 00 to LEMO 00) linking TRPP 5810 to umbilical

### FEATURES

- Withstands pulsed voltages up to 300 V for pulse widths in excess of 500 ns at PRF up to 10 kHz.
- Dimensions (W × H × L): 57 mm × 32 mm × 90 mm
- Weight: 300 g
- UT connectors: 8 × LEMO® 00 female
- Water/moisture resistance: NEMA 4-IP66. Rustproof.
- Powered by an external 12 VDC source or from the instrument.
- Power connector: Compatible with standard Olympus umbilical cables (male Fisher™ 103 type)
- Red power-on LED indicator
- Operating temperature range: -10°C to 60°C

### SPECIFICATIONS

#### PULSER

- Remote, high-voltage (200 V) pulse repeater
- PRF of up to 10 kHz at 100 ns per channel and up to 20 kHz at 50 ns for a single channel
- Pulser-side outputs protected against misuse and improper connection from the instrument outputs.

#### PREAMPLIFIER (RECEIVER)

- 40 dB preamplifier
- Accommodates probe frequency range from 1 MHz to 15 MHz.
- Preamplifier-side inputs and outputs protected against misuse and improper connection from the instrument outputs.

### CABLE OPTIONS

**POWER CABLE (FROM TOMOSCAN FOCUS LT)**  
5 m power supply cable linking to TomoScan FOCUS LT™

**Part number:** TRPP-5810-A-01

**POWER CABLE (FROM OMNISCAN)**

10 m power supply cable linking to OmniScan®

**Part number:** TRPP-A-PWRC-OM-10M

# Accessories

## Panametrics 5682 Preamplifier for TOFD Inspection

The Panametrics® 5682 ultrasonic preamplifier provides low-noise amplification of ultrasonic signals (for one probe) ranging from 500 kHz to 25 MHz. The preamplifier, housed in a rugged splashproof enclosure, is very small and lightweight making it ideally suited for remote applications. The preamplifier can be powered with either a single 9 V battery (included) for up to 50 hours of continuous operation or an optional 9 V to 13 V DC supply. When battery operated, a multicolored LED provides feedback on battery status. This preamplifier is ideal for TOFD inspections.

### SPECIFICATIONS

- 30 dB gain
- 50 hours of battery life (continuous discharge)
- Continuous power-level indicator
- 67 dB signal-to-noise ratio
- Weight: 180 g with battery

### ORDERING INFORMATION



Part number	Package content
5682	Panametrics 5682 preamplifier and 9 V battery
5682-KIT01	Panametrics 5682 preamplifier, one 2.5 m RG174 UT probe cable LEMO® 00 to LEMO 00, 2.5 m power supply cable linking to OmniScan® and belt case
5682-KIT02	Same content as 5682-KIT01 plus: Bracket to attach the Panametrics 5682 to an HSMT-type scanners (P/N: HSMT-A-BRK5682)
5682-A-PWRC-OM-5M	5 m power supply cable linking to OmniScan
5682-A-PWRC-UMB-0.15M	Power cable adaptor linking Panametrics 5682 preamplifier to umbilical cable

## PR-06-04 Remote Pulser/Preamplifier for Pulse-Echo Inspection

The PR-06-04 is a four-channel pulser/preamplifier for pulse-echo. Each channel can drive a conventional UT probe for a higher gain pulse as well as boosting the return signal, therefore improving detection and signal-to-noise ratio.

The PR-06-04 can also be used as a pulser or a receiver only.

### SPECIFICATIONS

#### PULSER

- -45 V to -220 V input level (min-max)
- -160 V to -190 V output amplitude (pulser at 100 ns)
- 4 ns to 10 ns rise time and fall time

#### RECEIVER

- 40 dB gain
- 8 dBm to 12 dBm input level (max.)
- 8 dBm to 12 dBm output level operation
- 550 kHz to 30 MHz bandwidth at -3 dB



### ORDERING INFORMATION

Part number	Package content
PR-06-04	PR-06-04 pulser/preamplifier
OPTX667	PR-06-04 pulser/preamplifier, 4 x 0.6 m RG174 UT probe cable (LEMO® 00 to 90° Microdot), bracket to attached the unit to an HSMT-type scanner (P/N: HSMT-A-BRKEX)

Note: Packages have been assembled to be used with an umbilical cable with an incorporated power cable. If no such umbilical is used, an optional power cable must be ordered.

### CABLE OPTIONS

#### TRANSFORMER

Transformer (120 VAC to 240 VAC input to 12 VDC output) with 5 m power supply cable

Part number: TRPP-5810-A-03

#### POWER CABLES (FROM OMNISCAN)

5 m power supply cable linking to OmniScan

Part number: TRPP-5810-A-04

10 m power supply cable linking to OmniScan

Part number: TRPP-A-PWRC-OM-10M

# Accessories

## Umbilical Cables

Umbilical cables are used to make all the connections between the scanner and the acquisition unit. They can be of two types:

- Closed umbilical
- Divisible conduit



### CLOSED UMBILICAL

The closed-type umbilical offers the best rugged protection. It covers the cable with a resistant, waterproof and dust proof conduit. It is also always fitted with a safety hook on both ends. It comes in different models according to applications and scanners for which it is intended to be used. The configuration of the cables is fixed and cannot be changed afterwards.

Note: Encoder cable for UMB1 and UMB2 type interfaces to OmniScan instrument. For TomoScan FOCUS LT™ interface, the optional adaptor must be ordered (P/N: C1-DE15F-BXM-0.30M).

## ORDERING INFORMATION

# UMB-UTPA0202-10-RO

Umbilical cable type

UT and PA cables

Cable length

Power cables

### Umbilical cable type

- UMB1 = Umbilical for HSMT scanners
- UMB2 = Umbilical for Chain™ scanner
- UMB3 = Umbilical for GPS-1000 scanner

### UT and PA cables

UT = RG174 coaxial cables for conventional UT probes

PA or

- PA0000 = 128 elements PA probe extension
- PA0202 = 124 elements PA probe extension with 4 LEMO® 00 at pin 63–64 and 127–128

IBTx = Interbox with 2 PA probe OmniScan connectors, TRPP 5810™, and x (0, 4, or 8) extra UT channels

IBx = Interbox with 2 PA probe OmniScan connectors, and x (0, 4, or 8) UT channels

### Cable length

- 5 = 5 m
- 10 = 10 m
- 20 = 20 m

### Power cables

- R = Remote pulser/receiver or Interbox power cable with transformer (120 V to 240 V)
- RO = Remote pulser/receiver or Interbox power cable linking to OmniScan® or AC-using adaptor
- C = Power control cable for GPS-1000 scanner



### DIVISIBLE CONDUIT

The divisible type is composed of two split shells that protect the cables entirely. Even if it is not as rugged as the closed-type umbilical, it offers other advantages. In fact, since the cables can be changed inside at any time, there is no need to have connection boxes often needed for PA probes on the scanners. The probes must have the proper cable length to reach the acquisition unit.

## ORDERING INFORMATION

Part number	Description
60BA5028	0.3 m divisible cable conduit with 16 mm ID. Well-suited for 2 x PA, irrigation tube, and encoder cable.
60BA0109	0.3 m divisible cable conduit with 19.2 mm ID. Well-suited for 2 x PA, 2 x conventional UT, irrigation tube, and encoder cable.
60BA0131	0.3 m divisible cable conduit with 24.2 mm ID. Well-suited for 2 x PA, 4 x conventional UT, irrigation tube, encoder, and preamplifier's power supply cables.
OPTX0719	5 m divisible cable conduit with 24.2 mm ID. Well-suited for 2 x PA, 4 x conventional UT, irrigation tube, encoder and preamplifier's power supply cables. Standard equipment of WeldROVER™ scanner.



# Accessories

## Adaptors and Extension Cables

Part number		Description
<b>ADAPTORS</b>		
OMNI-A-ADP03		Adaptor for Hypertronics™ PA probe to instrument with an OmniScan® connector
OMNI-A-ADP05		Y-adaptor with OmniScan connectors to support 2 PA probes with a maximum of 64 elements each. Connector layout: 1 female output and 2 male inputs.
OMNI-A-ADP11		Adaptor for up to 8 conventional UT probes with LEMO® 00 connectors to an instrument with an OmniScan connector. Enables the use of conventional UT probes with a PA instrument.
OMNI-A-ADP12		Adaptor for up to 16 conventional UT probes with LEMO 00 connectors to an instrument with an OmniScan connector. Supplied with a 1 m cable. Enables the use of conventional UT probes with a PA instrument.
<b>PHASED ARRAY EXTENSION CABLES</b>		
<p><b>Common models:</b> E128P5-0004-OM E128P5-0202-OM E128P10-0004-OM E128P10-0202-OM</p>		<p>Extension cable with an OmniScan connector at both ends. If equipped with 4 conventional UT probe LEMO® 00 connectors, 124 elements out of 128 are available for phased array use.</p> <p>Enables the simultaneous use of conventional UT and PA probes with a PA instrument.</p> <p><b>Option</b> Bracket to mount OmniScan PA extension on HSMT scanners</p> <p><b>Part number:</b> HSMT-A-BRKEX</p>

Combining extension cables with adaptors offers numerous connection possibilities.

### ORDERING INFORMATION FOR PA EXTENSION CABLES

# E128P10-0202-OM



#### Number of elements in extension

128 = 128 elements

#### Cable type

P = Flexible PVC cable  
M = Metal armor outer cover

#### Cable length

0 = 0.5 m  
5 = 5 m  
10 = 10 m

#### Connector on the probe side

0000 = OmniScan connector and 0 LEMO®  
0004 = OmniScan connector and 4 LEMO at pins 125–128  
0202 = OmniScan connector and 4 LEMO at pins 63–64 and 127–128  
HY = Hypertronics™ connector

#### Connector on the instrument side

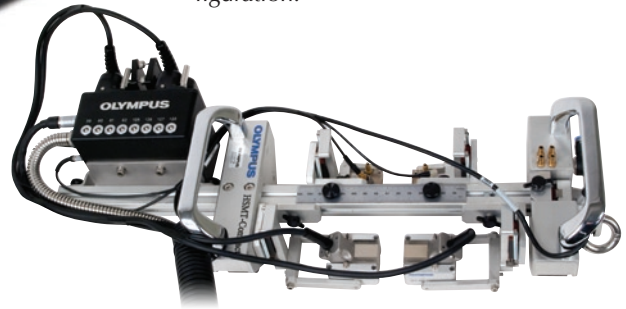
OM = OmniScan Connector  
HY = Hypertronics connector

# Accessories

## Interbox

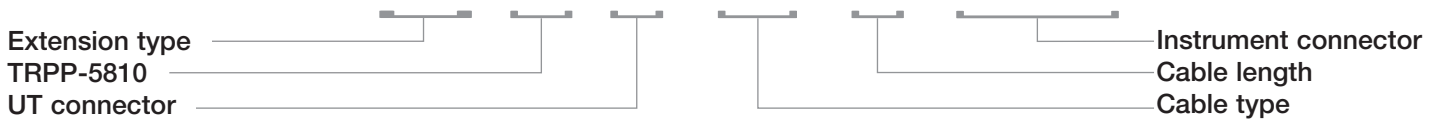


The Interbox is an ergonomic solution for a common problem associated with scanner accessories and connection buildup. On only one small box, 2 phased array probes, 2 amplified TOFD channels, as well as 8 conventional UT channels can be connected and driven by a phased array acquisition unit. The Interbox can integrate a PA splitter, a TRPP-5810 TOFD pulser/receiver and up to 8 conventional UT connections, depending of the configuration.



### ORDERING INFORMATION

# EIB-T-8-M-5-OM



#### Extension type

IB = Interbox

#### TRPP 5810™

T = TRPP 5810 Included

NT = TRPP 5810 Not included

#### UT connector

Number of conventional UT connections (LEMO® 00)

0 = 0 connector

4 = 4 connectors

8 = 8 connectors

#### Cable type

P = Flexible PVC cable

M = Metal armor outer cover

#### Cable length

5 = 5 m

10 = 10 m

20 = 20 m

#### Instrument connector

OM = OmniScan® connector

HY = Hypertronics™ connector

# Accessories

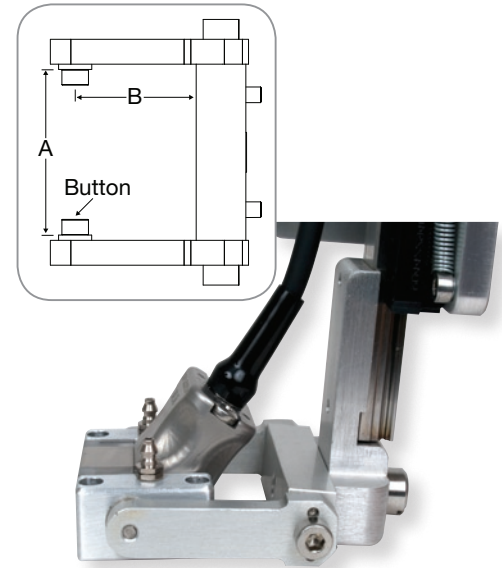
## Yokes

Yokes are used to attach the wedges to the spring-loaded arms (SLA) used on most scanners. Depending of the wedge model used, the yoke model changes. The yokes below are compatible with HSMT scanners, WeldROVER™, and GLIDER™.

### ORDERING INFORMATION

Part number	Wedge compliance	Button OD (mm)	A (mm)	B (mm)
ADIX689 <sup>1</sup>	ST1, ST2, SP1, SP2 and SPE3	5	31.75	23.5
ADIX612	SA10 and SA11	8	40	38
ADIX655 <sup>2</sup>	SA1, SA2, SA10, SA11, SA12, SPWZ3	8	40	55
ADIX1082	SPWZ1	8	40	65
ADIX853	SA1-L (lateral)	8	45	60
ADIX846	SA3	8	50	55
ADIX893	SA4 and SA5	8	55	55
ADIX908	Water wedge	8	55	65
ADIX870	Creeping wave probe holder (ADIX1129)	5	40	28

<sup>1</sup> Standard TOFD–P/E yoke  
<sup>2</sup> Standard phased array yoke



## Aqualene Elastomer Couplant

Aqualene™ is an elastomer designed specifically for ultrasonic inspection applications. Acoustic impedance of the material is nearly the same as water and its attenuation coefficient is lower than many documented elastomers and plastics.

Applications for nondestructive testing include:

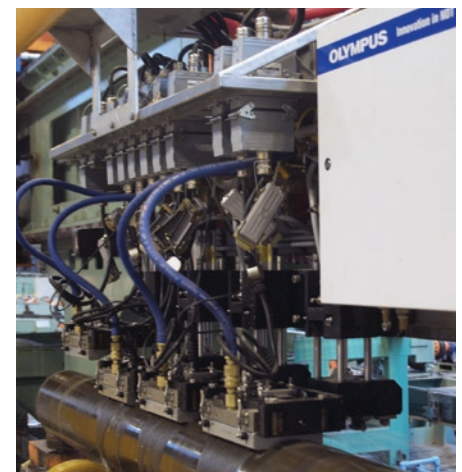
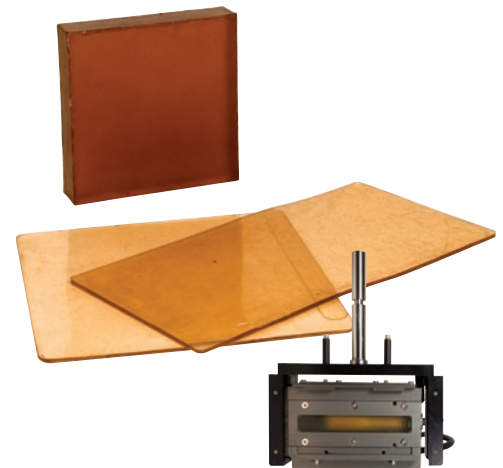
- Flexible couplant pads with minimal water addition
- Low-velocity delay lines
- Water-box membrane

Aqualene elastomer couplant reduces the drawbacks of wet coupling when used on porous or refractory surfaces. It allows a minimal amount of couplant to be used while protecting the probe when in direct contact with the part. Furthermore, Aqualene can serve as a thermic insulator.

Aqualene couplant products are available in many sizes and thicknesses, and custom designs are also available.

### ORDERING INFORMATION

Part number	Description
29HD0002	Aqualene plate 146 × 146 × 2 mm (5.75 × 5.75 × 0.08 in.)
29HD0004	Aqualene plate 152 × 152 × 6.4 mm (6 × 6 × 0.25 in.)
29HD0005	Aqualene plate 102 × 102 × 25.4 mm (4 × 4 × 1 in.)
29HD0009	Aqualene plate 102 × 203 × 2.3 mm (4 × 8 × 0.09 in.)
29HD0010	Aqualene plate 200 × 100 × 0.5 mm (7.9 × 3.9 × 0.02 in.)
29HD0011	Aqualene plate 127 × 127 × 25.4 mm (5 × 5 × 1 in.)



One of the many uses of Aqualene: phased array probe cluster used in an Olympus industrial pipe inspection system.



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