

LYNCSTM

Weld inspection and corrosion mapping scanner



WELD INSPECTION & CORROSION MAPPING SCANNER

Modular scanner for phased array corrosion mapping and weld inspection with up to six probes.

LYNCS™ is an advanced modular ultrasonic inspection scanner that has been designed by experts to provide TFM, Phased Array corrosion mapping and weld integrity assessment. It is the first truly versatile system that allows users to interchange between weld inspection and advanced corrosion mapping in less than 1 minute.

LYNCS WI weld inspection configuration can accommodate up to 6 PA and/or TOFD probes and has a dual-bar structure for enhanced stability and probe placement accuracy. It is a toolless scanner with an interchangeable design, making it ideally suited to all weld inspection configurations.

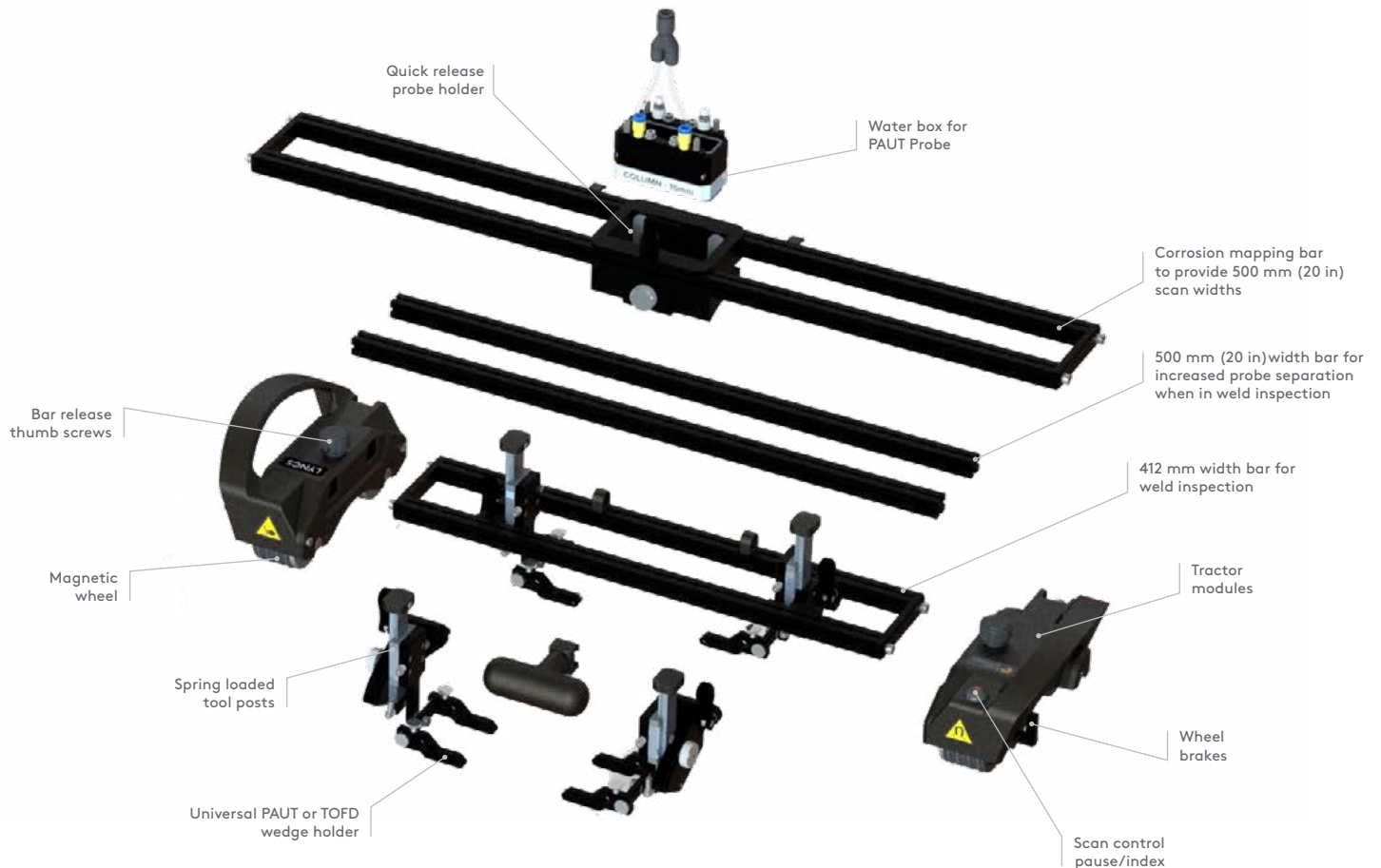
LYNCS CM corrosion mapping arrangement is ideally suited to vessel and pipework inspection. It has an extremely low profile and lightweight design, making it the most suitable option for rope access deployment and heavily congested pipework.

Bolt-on options

- **Chain** for non-ferrous pipe work.
- **Axial** for longitudinal weld inspection from 50 mm (2 in).

Features

- Inspect assets circumferentially from 100 mm (4 in) diameter.
- Inspect assets longitudinally from 50 mm (2 in) diameter.
- Quick and easy wedge setup.
- Easily switch from corrosion mapping to weld inspection.
- Low profile for tightly spaced pipe racks 110 mm (4.3 in).
- Magnetic wheel to adhere to the inspection surface.
- Seamless integration with the Gekko and Mantis.
- Easily apply brakes to stop slippages.
- Onboard scanner controls for pause and index.
- Scalable solution for a variety of applications.
- Lightweight, ideal for rope access and tight spaces.



LYNCS™ WI -Weld Inspection Configuration

Applications

- Fabrication and in-service circumferential welds from 100mm (4in) to flat plate
- Pressure vessel circumferential welds
- Pipe to elbow/feature welds
- Flange joint inspection
- Storage tank/silo welds
- Crack detection, sizing & monitoring
- Corrosion/erosion detection & sizing



LYNCS WELD SPECIFICATIONS

Dimensions (w x d x h)	Short bar	255 x 198 x 109 mm (10 x 7.8 x 4.3 in)
	Standard bar	487 x 198 x 109 mm (19.2 x 7.8 x 4.3 in)
	Medium bar	575 x 198 x 109 mm (22.6 x 7.8 x 4.3 in)
Bar width options	Short	180 mm (7 in)
	Standard	412 mm (16.2 in)
	Medium	500 mm (19.7 in)
Circumferential scanning range	External	100 mm (4 in) to flat plate
	Internal	864 mm (34 in) to flat plate

Maximum width of tool posts	65 mm (2.5 in)	
Maximum number of tool posts	6	
Tool posts compatibility	5 mm male pin wedge	
	3 mm, 5 mm, and 8 mm female wedge	
Weight: scanner with	2 x tool posts	3 kg (6.6 lb)
	4 x tool posts	3.5 kg (7.7 lb)
	6 x tool posts	4 kg (8.8 lb)

LYNCS CM -Corrosion Mapping Configuration

Applications

- Circumferential scanning from 100 mm (4 in) to flat plate
- Vessel shell
- Storage, spherical, and silo tank shell
- Marine vessel hull
- Tank floors and ship decks
- Other critical assets



LYNCS CORROSION MAPPING SPECIFICATIONS

Dimensions (w x d x h)	742 x 198 x 109 mm (29.2 x 7.8 x 4.3 in)	
Standard bar widths	180 mm (7 in), 412 mm (16.2 in), 667 mm (26.2 in)	
Maximum scan width	510 mm (20 in)	
Scanner weight:	without water box	2.7 kg (6 lb)
	with water box	3.5 kg (7.7 lb)
Circumferential scanning	100 mm (4 in) to flat plate	

WATER BOX SPECIFICATIONS

Water box mount external dimensions (w x d x h)	100 x 80 x 47 mm (3.9 x 3.1 x 1.8 in)
Water box mount internal dimensions (w x d x h)	82 x 42 x 47 mm (3.2 x 1.6 x 1.8 in)
Water box external dimensions (w x d x h)	81 x 41 x 57 mm (3.2 x 1.6 x 2.2 in)
Water box internal dimensions (w x d x h)	78 x 24 x 25 mm (3 x 0.9 x 1 in)

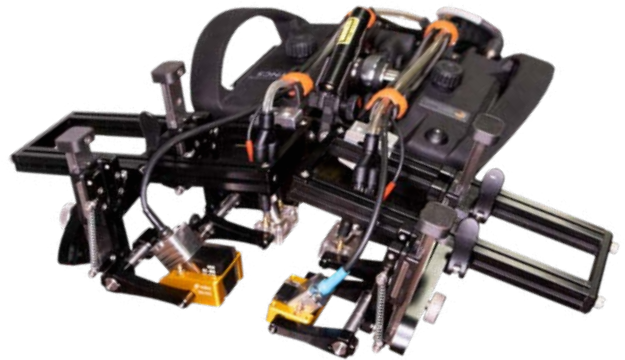
COMMON ENVIRONMENTAL SPECIFICATIONS

Min/Max surface temperature	-30°C (-22°F) / +80°C (176°F)
Min/Max ambient temperature	-20°C (-4°F) / +50°C (122°F)
Min/Max storage temperature	-10°C (14°F) / +40°C (104°F)

LYNCS™ AXIAL Configuration

LYNCS CORROSION MAPPING SPECIFICATIONS

Dimensions (w x d x h)	436 x 288 x 132 mm (17.1 x 11.3 x 5.2 in)	
External longitudinal diameter range	50 mm (2 in) - flat	
Internal longitudinal diameter range	355 mm (14 in) - flat	
Compatible configurations	LYNCS-WI	
Scanner weight:	No toolposts	3.4 kg (7.5 lb)
	2 x toolposts	3.9 kg (8.5 lb)
	4 x toolposts	4.6 kg (10 lb)



LYNCS CHAIN Configuration

LYNCS CORROSION MAPPING SPECIFICATIONS

Diameter range	100 - 812 mm (4 - 32 in)	
Compatible configurations	LYNCS-WI, LYNCS-CM	
Minimum width 1 x Electronic tractor, 1 x Chain assembly block, 1 x slimline stabiliser mounted	140 mm (5.5 in)	
Chain weight:	12 in	1.4 kg (3 lb)
	32 in	2.75 kg (6 lb)



LYNCS Packages

LYNCS FULL	LYNCS WI (WELD INSPECTION)	LYNCS CM (CORROSION MAPPING)
Scanner frame with 412 mm (16 in) rails	Scanner frame with 412 mm (16 in) rails	Scanner Frame with 412 mm (16 in) rails
2 x tractor units	2 x tractor units	2 x tractor units
4 toolposts with integrated wedge mount	4 toolposts with integrated wedge mount	667 mm (26.2 in) metric rails with 50 mm drilled holes for increment step
500 mm (20 in) extended rails	500 mm (20 in) extended rails	676 mm (26.6 in) imperial rails with 2 in drilled holes for increment step
180 mm (7 in) short rails	180 mm (7 in) short rails	
Accessories Irrigation kit Removable central handle Spare spring set Spare 3 mm wedge mount pins 8 x cable/hose guides 25 replacement seals	Accessories Irrigation kit Removable central handle Spare spring set Spare 3 mm wedge mount pins 8 x cable/hose guides	Accessories 8 x cable/hose guides 25 replacement seals 180 mm (7 in) short rails
667 mm (26.2 in) metric rails with 50 mm drilled holes for increment step	Transit case	Water box mount and water box
676 mm (26.6 in) imperial rails with 2 in drilled holes for increment step		Transit case and portable site case
Water box mount and water box		
Transit case and portable site case		

Note: Umbilical available in 5 m (16 ft) or 15 m (48 ft)