

Automatic Subsea Scanner

AUS-4

The **AUS-4** is a rugged, guideable, magnetic wheel XY scanner primarily designed for subsea inspection of ferritic structures.



ROV version of AUS-4 performing weld inspection on platform leg

Features

- Operational depth 1 000 m
- Integrated scanner body with three motors, angle sensor and control electronics with interface to P-scan system 4 UT system
- ROV or diver operation versions available
- Free movement on structures with diameter larger than OD 2 m
- Scanning of pipes with diameter down to OD 200 mm.

Applications

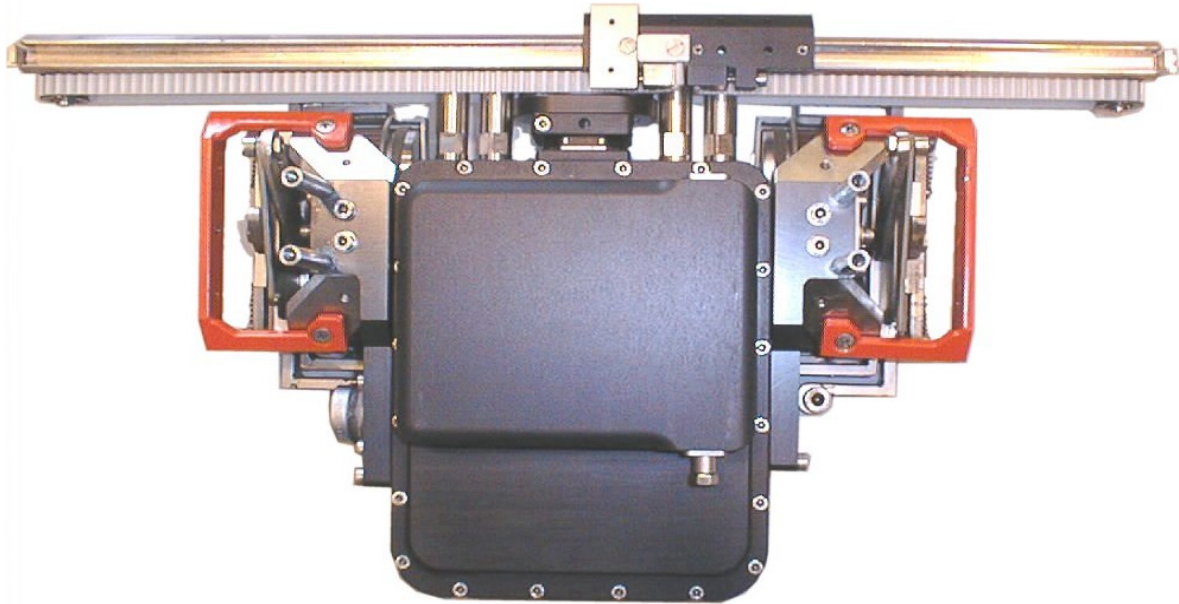
These features make the scanner ideal for subsea inspection of critical areas where automated inspection is required, or ROV based inspection at large water depth, e.g.

- Key area corrosion mapping and weld inspection of large subsea ferritic structures
- Weld inspection of pipes
- TOFD defect sizing.

Mechanical Design

The AUS-4 is built using a compact, general purpose, sealed scanner body with three integrated gear motors, angle sensor, motor driver and control electronics for interface to P-scan System 4.

The Y-module and the magnetic wheels are attached to the standard output coupling on the front and sides of the scanner body. For diver operation the scanner has a sealed emergency stop push button.



Scanner body mounted with Y-module and set of magnetic wheels

Technical Specifications

Motors and Motor control

Scanner interfaces to P-Scan System 4 without additional electronics.

Integrated emergency push button and 360° angle sensor.

Y-module

Standard modular scanner Y-module with 500 mm rail and timing belt driven slide with integrated tilt adapter.

Pipe diameter

Circumferential drive direction: from OD 200 mm
Longitudinal drive direction: from OD 2 000 mm
Free operation: from OD 2 500 mm

Stroke

Y-stroke 5 - 410 mm
(with standard Y-module rail)

Velocities (with standard gear)

X-direction 2 - 25 mm/s
Y-direction 5 - 100 mm/s

Physical Specifications

Weight Diver version 16 kg
ROV version (immersed) 20 kg

W x L x H (Diver version) 125 x 510 x 280 mm
W x L x H (ROV version) 330 x 510 x 360 mm

Options

Y-modules in different lengths
1000 m operational water depth