

P-scan System 4 Application



ROV with P-scan 4 and AUS-4 subsea scanner mounted on tool skid

Description

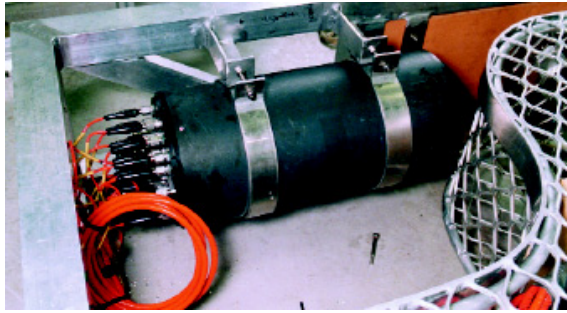
The subsea inspection option allows the **P-scan System 4** ultrasonic inspection equipment to be used subsea, either operated by a diver or remotely by a ROV (Remote Operated Vehicle).

When operated by a diver, the PSP-4 is contained in an "electronics bottle" which is placed subsea, close to the examination object. The scanner is placed on the object by the diver. The system is controlled from a PC located topside.

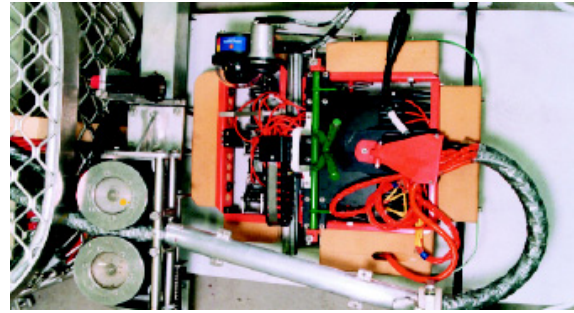
When the system is operated from a ROV, a tool skid is placed under the ROV, containing PSP-4 and power supply in an "electronics bottle", cables and the subsea scanner. The scanner is placed on the object by the ROV.

Features

- Equipment operation down to 1 000 metres depth
- Based on standard P-scan 4 components contained in an "electronics bottle" (pressure tested to 150 bar)
- Matching subsea scanner (see separate data sheet for AUS-4 Subsea Scanner)
- Simple and rugged system configuration ensures safe handling
- Subsea operation of system by ROV or diver, depending on the actual inspection depth and/or environment
- ROV main umbilical used for power and data transmission when operated by ROV (the system can be interfaced with any ROV)
- P-scan System 4 compatible (P-scan, T-scan, Through Transmission, TOFD and A-scan recording. Concurrent operation supported).



Electronics bottle with PSP-4 mounted in tool skid



AUS-4 subsea scanner parked on base plate

General System specifications

Subsea operation	ROV operated	Operated by robot and powered from ROV, communication to topside control via ROV main umbilical (optical fibre)
	Diver operated	Operated by diver. Direct cable connection for power and communication to topside control.
Subsea units	Tool skid (ROV operation)	Tool skid attached to ROV. Electronics bottle, scanner and cables are placed on tool skid. Scanner is operated by robot mounted on tool skid
	Electronics bottle	All P-scan components are contained in bottle (see separate data sheets for P-scan 4)
	Scanner	AUS-4 Subsea Scanner (see separate data sheet)
	Camera, pan/tilt	Miscellaneous cameras and pan/tilt units for monitoring (numbers and position may vary).
Subsea cables	ROV umbilical (ROV operation)	Maximum total length: 2 km Optical fibre type: 50/125 µm or 62.5/125 µm multi-mode Data rate: 10 Mbps Half-duplex
	P-scan umbilical (diver operation)	Single, Kevlar reinforced cable, max 100 metres in length, breaking strength approximately 8.5 kN
	Scanner cable	Single, Kevlar reinforced cable, max 20 metres in length, breaking strength approximately 4 kN
	Probe cables	Up to 16 double screened RG 174 coax cables, max 20 m.

Technical specifications: Electronics bottle

Operational depth	ROV operated	Down to 1 000 metres (test pressure 150 bar)
	Diver operated	Determined by cable length. Standard cables: 100 m
Physical specifications	Dimensions	Length: 630 mm, diameter: Ø 300 mm
	Weight	35 kg, incl. P-scan components
	I/O connections	1 Power/communication connector, 1 Scanner connector, 16 Probe connectors
Power requirements	ROV operated	100 - 240 VAC, 50 - 60 Hz, 250 Watt
	Diver operated	30 VDC, 5 A



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