

RMS

Rapid Motion Scanner

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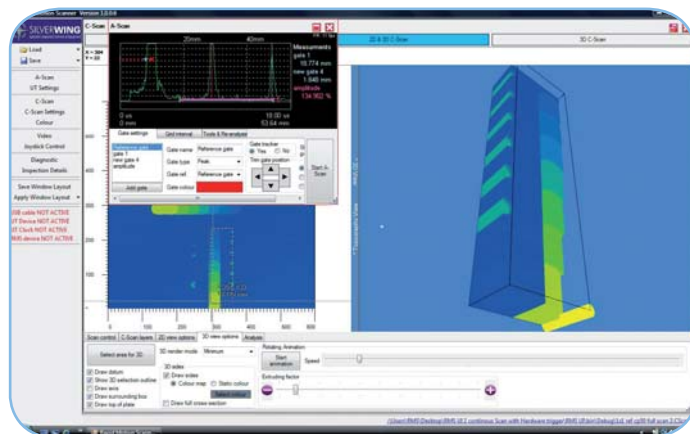
Rapid Motion Scanner

High Speed Remote Access C-Scan Imaging System.

Silverwing UK Ltd are pleased to present the latest addition to their range of corrosion detection and sizing systems the RMS (Rapid Motion Scanner).

The RMS is a remote access C-scan imaging system. Utilising a combination ultrasonic pulser/receiver with a built in high speed A/D converter, sampling at 50MHz, the RMS is capable of operating at a scanning speed of 730mm per second. The control software has been written especially for the latest generation dual core notebooks and is a true multi layered programme which fully utilises the Microsoft windows 7 operating platform.

The data acquisition, analysis and reporting software comes as a combined suite and automatically stores the A-scan image, C-scan image and thickness measurement. Production rate of 1.7 sq metres per hour whilst scanning with a 2mm x 2mm resolution are standard making the RMS one of the fastest high resolution C-scan imaging system on the market today.



Software Screen Shot - Test plate with 3D image



Software features

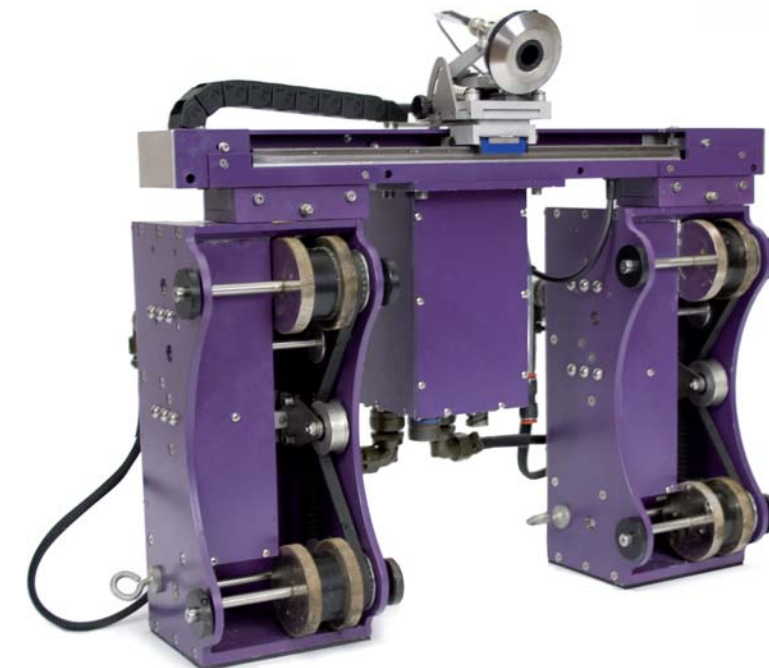
- Adjustable Scanning resolution in both X & Y axis
- View A-scan and C-scan images in real time
- Interface triggering or Echo to Echo measurement options
- Multiple gate functions
- Max X & Y Resolution at 1mm
- 3D C-Scan presentation

RMS Min Computer Specification

Windows 7 Home Premium
2GHz Dual Core
2GB RAM
400GB Hard drive
Direct X capable graphic card
17 inch Wide Screen display
Full sized Qwerty Keyboard

One scanning head comes with the RMS as standard and the purchaser can choose from 3 options, the RMS600, RMS450P and the RMS300. Ultrasonic data is captured via a single crystal immersion transducer which has a stainless steel wear plate to prevent damage when scanning over rough surfaces. The transducer is mounted in a gimballed probe holder, ensuring it remains perpendicular to the surface.

A 110v or 240v water pump is supplied as part of the system and a 15 metre umbilical cable is used for UT, digital control and couplant supply. For taller structures or large diameter vessels an additional 30 metre umbilical cable can be purchased as an optional extra.



The low profile tractor units utilise high torque stepper motors combined with magnetic drive wheels. The combined magnetic pull is 100Kg, which is 5 times the unit weight of 20Kg, ensuring that it remains attached to the structure no matter what angle it is driven at.

Mechanical features

- 730mm / second scanning speed
- RMS 600 - Large Area Scanner
- RMS 450P - Pipework & Pressure Vessels
- RMS 300 - General Purpose
- Manual joystick control as well as computer programmable control
- Scans 10" pipework to flat plate

Technical Specification

Dimensions 600	Length 446 mm x Width 795 mm x Height 220 mm
Dimensions 450P	Length 505 mm x Width 976 mm x Height 220 mm
Dimensions 300	Length 446 mm x Width 503 mm x Height 220 mm
Weight without cables	20Kg
Adhesion	Magnetic wheels
Pull off force	100Kg
Drive	1 stepper motor per tractor unit
Scan Width	600mm / 450mm / 300mm
Umbilical Cable	15 metre or 30 metres
Transducer	Single short pulse - 2.5, 5 or 10MHz
Power supply	220/110 vac input
Water Pump	220/110 vac input