

RMS

Rapid Motion Scanner

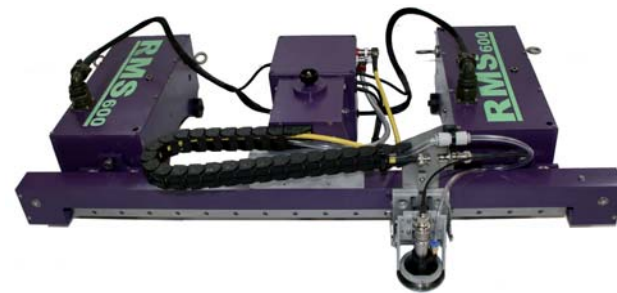
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High Speed Remote Access C-Scan Imaging System.

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

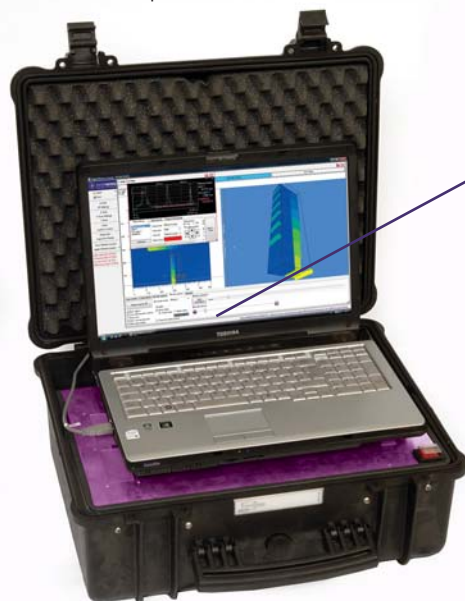
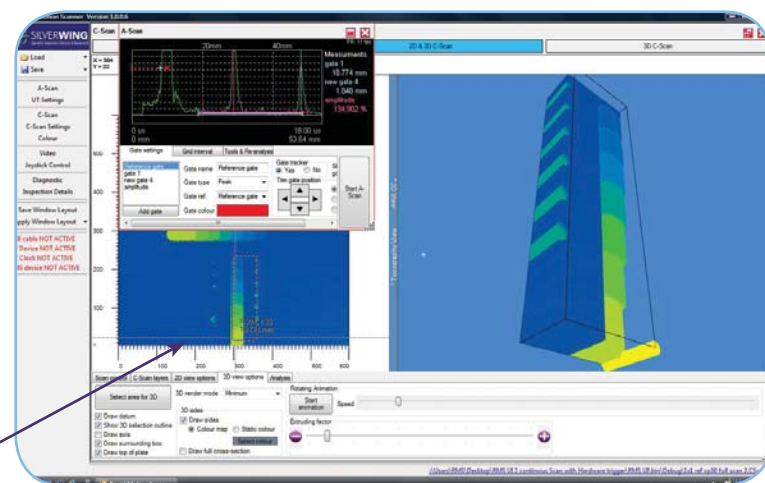
The RMS is a remote access C-scan imaging system. Utilising a combination ultrasonic pulser/receiver with a built in high speed A/D converter, sampling at 50MHz, the RMS is capable of operating at a scanning speed of 500mm per second. The control software has been written especially for the latest generation dual core notebooks and is a true multi layered programme which fully utilises the Microsoft Vista 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 features

- Adjustable Scanning resolution in both X & Y axis
- View A-scan and C-scan images in real time
- Multiple gate functions
- X & Y positional accuracy to +/-1mm
- 3D C-Scan presentation



Minimum RMS Computer Specification

- Windows Vista Home Premium
- 2GHz Dual Core
- 2GB RAM
- 400GB Hard drive
- NVidia Geforce 7600 Graphics card with 256 Mb RAM
- 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, RMS300 and the RMS300P. 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 gimbaled probe holder, ensuring it remains perpendicular to the surface,

A 110v water pump is supplied as part of the system and a 15 metre combination umbilical cable is used for data transfer, control instructions and couplant supply. For taller structures or large diameter vessels additional umbilical cables can be connected using an extension adaptor to give a maximum umbilical length of 30 metres.



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

- 500mm / second scanning speed
- RMS 600 - Large Area Scanner
- RMS 300 - General Purpose
- RMS 300P - Pipework
- Manual joystick control as well as computer programmable control
- Scans 10" pipework to flat plate

Technical Specification

| | |
|-----------------------|---|
| Dimensions 300 & 600 | Length 365mm x Width 780mm x Height 190mm |
| Weight without cables | 20Kg |
| Adhesion | Rubber coated magnetic wheels |
| Pull off force | 100Kg |
| Drive | 1 off stepper motor per tractor unit |
| Scan Width | 600mm / 300mm |
| Umbilical Cable | 15 metre extendable to 30 metres |
| Transducer | Single short pulse 5MHz |
| Power supply | 220/110 vac input |