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## Scorpion Remote Inspection Technology

- NO SCAFFOLDING • NO COUPLANT • AUTOMATED REPORTING • DATABASE ARCHIVING •

The Silverwing Scorpion is a Notebook PC based, remote operated, ultrasonic crawler designed to allow cost effective thickness measurements on carbon steel structures without the need for costly scaffolding or rope access.

Ultrasonic measurements are taken through use of a wheel transducer fitted with Ro-Cee rubber. This unique rubber, manufactured under license from Imperial Marketing & Exploitation Ltd, has the same acoustic impedance as water, removing the need for couplant. Signals from the transducer pass via the UltraTech 350 interface to the notebook and are stored in a dedicated database. The on screen ultrasonic controls have been designed to resemble a standard A scan flaw detector to minimize training requirements. The system's automatic gain control and echo-to-echo monitoring functions minimize measurement errors due to varying paint thicknesses. The automated report generator produces statistical analysis of the readings and line scan images, as well as printing fully formatted tables of all results.

With a 10-hour battery pack the Scorpion system provides the inspection industry with a totally self contained, rapid, economic tool for the inspection of remote structures.



### Technical Specification

Dimensions	L 15.5"/385mm x W9.75"/222 mm x H4"/ 102 mm
Weight without cables	10.5 lbs. (4.75 Kg)
Adhesion	Neodymium iron boron magnets mounted in centre of carriage
Pull off force	30 lbs. (13.6 Kg)
Drive	four (4) independent 12-volt Dc motors
Drive wheels	coated in special non-slip synthetic rubber compound
Speed	1 inch/second (25 mm/second)
Combined Cable	length 100 feet (30 meters) weight 5.6 lbs. (2.7 Kg)
Transducer	dry coupled wheel using "Ro-Cee" rubber 5 MHz dual/twin compression
Near surface resolution	0.1 inch /2.5 mm
Power supply	28Ah sealed lead acid gel battery pack with integral charger
Test time	8 hours (complete system including notebook)
Notebook specification	Ruggedized Ultra Mobile PC Windows 95 / 98
Software	Operator friendly standard UT controls, real time 'A' scan and "B" Scan displays, Automatic Gain Control (AGC), Echo-to-Echo or First Backwall options, dedicated data base structure, automated storage, Automatic statistics function, Graphical line scan generation.

Manufactured by **SILVERWING LIMITED**