

StringScan II

Manual X-Y Scanner



Applications

- Ultrasonic thickness mapping or flaw detection over a surface (C-scan)
- Low cost imaging solution
- Inspection of metal or composite aerospace components for defects.
- Production or in-field inspection of metal, carbon fiber, glass fiber, laminates and much more...

Features

- Manual x-y scanning
- Scan area: > 30in.x30in. (0.76mx0.76m)
- Magnetic or suction feet
- Liquid feed
- Lightweight and Portable



StringScan II Manual X-Y Scanner for Ultrasonic inspection of flat or slightly curved surfaces

Introduction

Ultrasonic thickness measurements and flaw detection are used across many industries including aerospace, oil and gas and power generation for quality control and in-service monitoring. Conventional systems are based on point to point measurements to inspect for sub-surface defects or measure thickness.

Full-field C-scan Imaging

By manually scanning the object surface with a conventional ultrasonic probe, a full-field image of the results can be generated in a plan view format. An image of the result is significantly easier to interpret than point to point data and can be stored as an archive for each inspection. The StringScan II allows for simple area scanning of most materials for a very low price. The aluminium scanner is robust, lightweight and exceptionally portable for field use.

Raptor Imaging Flaw Detector

Powered by the unique Raptor Imaging Flaw Detector, the StringScan II can be used to generate full-field color C-scan images of a test object. The Raptor is a fully functional thickness gauge and flaw detector and, in addition, controls the scanner. It can define the scan area, spatial resolution and displays the resulting images as they are generated. The 5000Hz pulse repetition rate enables fast manual scanning. A full suite of software functions is included for further analysis of the results, including B-scan sections, 3D images, statistical tools for defect sizing and much more.

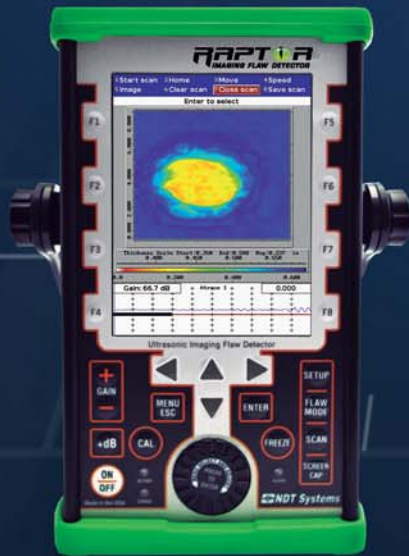
This combined imaging solution is the lowest cost C-scan imaging solution on the market. It is so intuitive that a novice inspector can be trained to generate images in almost no time.

StringScan II

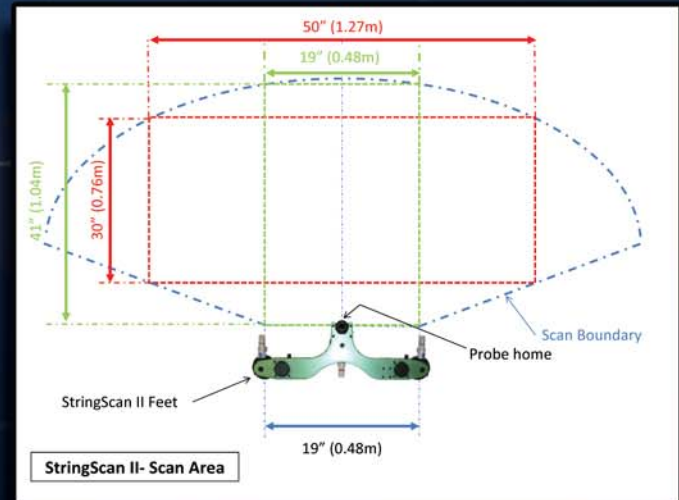
StringScan II Scanner

The scanner is a peripheral to the Raptor instrument. Built with aluminium construction, it is lightweight and can be fixed to the surface using suction cups or magnetic feet depending on the material to be inspected. Two spring loaded encoders, connected to the probe holder with metal wires, triangulate the x-y position of the probe. As the operator scans the test part, the C-scan display is updated in real-time.

The probe holder also features a liquid feed system. The scanner requires no separate power supply and the Raptor can be powered by mains power or battery for the ultimate in lightweight and portable imaging systems. The scanner can also work on curved surfaces generating a plan view result.



Raptor Imaging Flaw Detector



TECHNICAL SPECIFICATIONS	
Package Includes	StringScan II Scanner, 12ft (3.7m) cable, probe holder, suction cup feet, Pelican shipping case
Physical Dimensions (WxLxD)	22in. x 2in. x 7in. (559mm x 51mm x 178mm)
Physical Weight	2.4lb (1.1kg)
Cable Length	12ft (3.7m) standard
Scan Length	Minimum X-axis: 30in. (762mm), Y-axis: 30in (762mm)
Scan Resolution	0.02in. (0.5mm)
Scan Speed	> 30in./s (>0.76m/s) manual scanning
Minimum Radius	Flat or slightly curved surfaces
Operating Temperature	15 °F to 105 °F (-10 °C to 40 °C)
OPTIONS	Magnetic feet Various Transducers

The specifications in this document are subject to change without notice.

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