

DACON Automated Corrosion Mapping Instructions

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DACON AUTOMATED CORROSION MAPPING

FOR ALL YOUR INSPECTION NEEDS



DACON automated corrosion mapping uses a high-performance Ultrasonic Flaw Detector with a Full Imaging System built in. The system is capable of fully automated high accuracy defect mapping and recording. Ideal for tasks from corrosion mapping to aerospace inspections on composites.

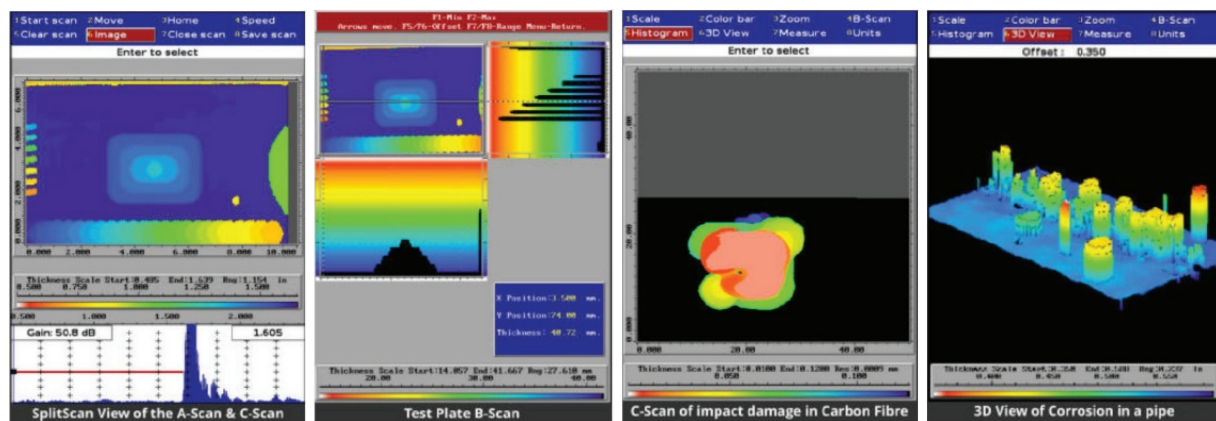
DACON uses the RAPTOR flaw detector which is an all-in-one high resolution ultrasonic thickness gauge, ultrasonic flaw detector and imaging flaw detector capable of driving a range of manual and automatic scanners.

DACON uses the RCA-10 & RCA-18 scanners which are capable to automatically scan large surfaces on pressure vessels, tank or piping of all diameters at high speed.



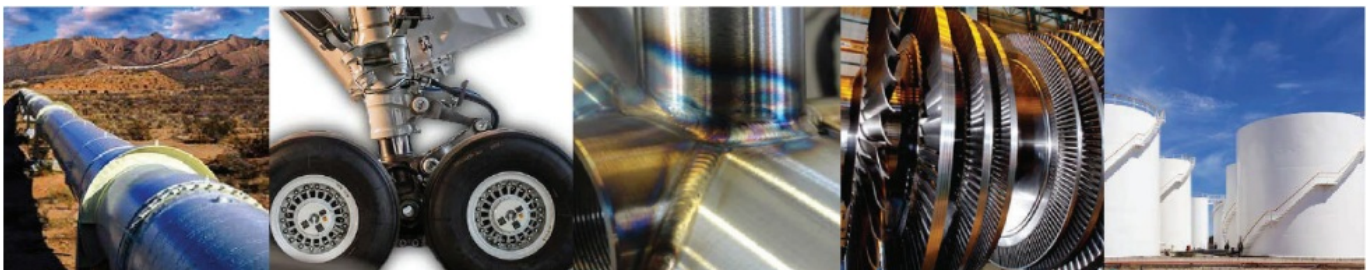
Advanced Imaging Capability

The system comes with a full suite of software functions for further analysis of the results, including B-Scan sections, 3D images, statistical tools for defect sizing and much more.



Advantages

- The software functions and data presentations will allow for easy analysis, resulting in precise and repeatable inspection for monitoring of critical locations.
- Being fully automated, accessibility to remote locations can be achieved from the ground without the requirement for scaffolding.
- Large areas area's can be scanned at high speed and with high accuracy and repeatability.



General	Package	Raptor unit, Li-Ion battery, AC charger (110-240V), User manual, COC, P elican Case
	Display	Sun readable VGA 60Hz 640 x 480 pixels 3.4in x 4.55in (86mm x 116 mm)
	Dimensions	5.75in x 9.5in x 3.0in, 5.6lbs 146mm x 241mm x 76mm, 2.54kg
	Power source	Field-replaceable Li-ion battery (autonomy of 8 hours) or AC power
	Operating temp	32 F – 122 F (0 °C to 50 °C)
	Storage temp	-4 F – 140 F (-20 °C to 60 °C)
	Connector type	Dual BNC
Transducer	Type	Single and dual element Contact, Delay, Immersion, Shear, Through-tran smission
	Frequency	0.5 MHz – 30 MHz
Performance	Resolution	0.0001 in (0.0025mm)
	Velocity	0.0010 in/us – 1.0000 in/us
	Thickness gates	IP-1st, 1st-2nd, 2nd-3rd IP blocking, IF blocking, IF-1st blocking, 1st-2nd bl ocking

Gates	Linear flaw gates	2 independent linear gates +- dB from gate, % of FSH, % of gate level		
	DAC flaw gates	DAC curve (20-point) +-3dB lines (JIS) +-6dB lines (ASME) -6/-14dB (ASME 3)		
	Alarm types	Auditable and visual Thickness high, low, both Amplitude higher, lower		
Modes	TCG mode	TCG (Time Corrected Gain) available in all modes automatic or manual setup		
	Shear wave mode	Flat plate or pipe (CSC – Curved Surface Correction) All gate types available		
	AWS-code mode	AWS D1.1/1.5 calculations (A, B, C, D values automatically calculated)		
Pulser / Receiver	Pulse type	Spike or Square tunable wave pulser		
	Pulse width	20ns – 10.000ns (square pulse mode only)		
	Pulse volts	50 to 450V		
	PRF	10Hz – 5000Hz		
Receiver	Gain	0 – 100dB (up to 0.1 increments)		
	Damping	25Ω – 375Ω (8 damping levels)		
	Tuning	BB, 0.5 MHz, 1 MHz, 2.5 MHz, 5 MHz, 10 MHz, 15 MHz		
	Bandwidth	Narrow or Wide		
	Display modes	RF, +HW, -HW, FW		
Storage	Internal	2GB		
	External	2GB SD Card (included)		
Connectivity	PC Software	Windows based RAPWIN software for imaging analysis (included)		
Imaging	Scan type	Time or position encoded B-Scan, position encoded C-Scan		
Scanners	Manual scanners	Armadillo (1-D)	Motorized Scanners	CrosScan
		StringScan 18×18, 24×24		RCA-10, 18
		SlideScan		Tunnel Scan I, II, III
	Customized scanners	NDT Systems has been involved in many one-off customized scanning solutions		



RCA-10 & RCA-18 scanner

- Automatic Magnetic attached cantilever arm Scanner
- 360 degrees pipe inspection
- Magnetic wheels
- Liquid feed

- Battery operated
- Low profile for use between pipes
- Scan length :
 - RCA-10 = 10in. (0.25m)
 - RCA-18 = 18in.(0.46m)
- Resolution : X = 0.040in.(1.0mm), Y = 0.020in.(0.5mm)

Works with : Raptor Imaging flaw detector

www.dacon-inspection.com

Documents / Resources



[DAICON Automated Corrosion Mapping](#) [pdf] Instructions
Automated Corrosion Mapping, Corrosion Mapping, Mapping

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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