



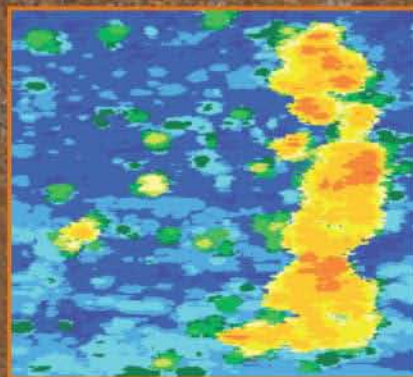
Simplifying NDT

Presents

UTSolutionPack®

Corr-O-Mate

For Real Time Ultrasonic Corrosion Mapping



Move On to Corrosion MAPPING

The issue of Corrosion is too **SERIOUS** to depend on age old **SPOT** thickness gauging method.

A Dozen Good Reasons for using Ultrasonic Corrosion Mapping .

1. Thickness **MAPPING** is highly advantageous compared to Conventional Thickness **GAUGING**.
2. It allows Detection , Sizing and Monitoring of Corrosion and Erosion in pipings and vessels
3. 100% Coverage is guaranteed.
4. Management of data generated is easier and far more rewarding.
5. Highly Efficient. Large areas can be ' mapped ' per shift .
6. Precise Sizing of Corrosion area is possible.
7. Data is directly recorded into the computer.
8. Individual **Corrosion MAPS** can be easily stitched to provide ' composite ' image of the pipe / vessel under test.
9. Colour coded Image / Map generated helps in visualization of Wall Thickness patterns using B,C and D presentations.
10. Information and data helps to establish Corrosion Rate, Equipment Longevity and Maintenance / Repair Cycles.
11. Images / maps can be archived for reference during future examination.
12. Ideal for Residual Life and Fitness for Service Assessments.

100% Indian Product @ Incredible Indian Price

Corr-O-Mate (M) Components

- 1) IMAGING Ultrasonic Flaw Detector
Model 'da Vinci delta'
- 2) Manual X-Y Scanner 'EzeeScan-1'
- 3) CscanSoft dedicated software for
Data Acquisition, Post Processing and Reporting
- 4) 4 MHz, Double Crystal (TR) Probe

Corr-O-Mate (A) Components

- 1) IMAGING Ultrasonic Flaw Detector
Model 'da Vinci delta'
- 2) Motorized /Automatic X-Y Scanner 'EzeeScan-2'
- 3) Motor Controller model MotoCon-1
- 4) CscanSoft dedicated software for Data
Acquisition, Post Processing and Reporting
- 5) 4 MHz, Double Crystal (TR) Probe

Features and Specifications of different Components of Corr-O-Mate

IMAGING Ultrasonic Flaw Detector 'da Vinci Delta'



IMAGING Ultrasonic Flaw Detector model da Vinci delta, advanced model of world-class da Vinci Series, High Performance Conventional Ultrasonic Flaw Detector capabilities, ToFD capability, Encoded and colour-coded B-Scan, Dual Axis C-Scan for Corrosion Mapping and Recordable Weld Testing, PC Interface for Real-Time Data Acquisition, colour display for excellent visibility, Auto DAC plotting, Digital thickness/distance measurements, trigonometric measurements of depth and surface distance in weld inspection, On-Board Memory of 500 A-Scan images and 50 set-up data, 10,000 thickness readings and virtually unlimited data storage on USB disk / pen drive with very advanced features like :

Motorized X-Y Scanner 'EzeeScan-2 & Motor Controller 'MotoCon-1'

Battery Operated*



* 3-4 hours operations on fully charged battery inside Motor Controller

- Suitable for 100 mm diameter to Flat Surface.
- Strong Magnetic wheels enable the scanner to scan up a vertical surface.
- X axis arm scan length 300mm or 600mm.
- Y Axis feed step 1mm to 100 mm. It is user controllable using motor controller.
- Different types of Probe holders can be mounted to enable C-Scan, TOFD or Phased array testing.
- X-axis scan arm can be easily replaced by TOFD/PA scan arm, enabling scanner to function as a TOFD/PA scanner.
- Motorised scanner is controlled using Motor controller which can control X Axis, Y Axis speed and Y Axis feed Step etc.
- Compatible with any systems which have Quadrature encoder inputs
- Motors: 12V, DC motors of 30Kg capacity.
- Encoders: Quadrature encoders for X and Y axis, resolution 15 Pulse/mm for X Axis & 6.5 Pulse/mm for Y Axis.
- Power: From Motor Controller MotoCon-1
- Material: Anodized aluminum construction
- Weight: approx. 4.5 Kg
- Dimensions(Max): 430 x 210 x 140mm (W x L x H)



**MotoCon-2
Controls and Powers EzeeScan-2**

- User controllable X Axis & Y Axis speed and Y Axis feed.
- X Axis Span/stroke is adjustable using limit switches.
- Runs on Mains 230V AC using 12 Vdc adaptor or using built-in battery.
- Motor Controller provides power to the scanner from built-in battery or from the Mains through 12 vdc adaptor.
- Built in battery is Li-Ion, 14.8 vdc, 4AH Capacity.
- Power requirement at 12Vdc maximum 4 Amps nominal current < 800mA.
- Dimensions: 152 x 255 x 70mm (H x W x D)
- Weight: 1.5 Kg.

Manual X-Y Scanner 'EzeeScan-1'

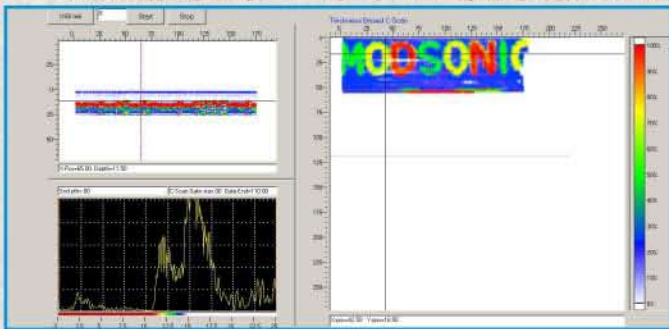
Knob for indexing in 1 mm step



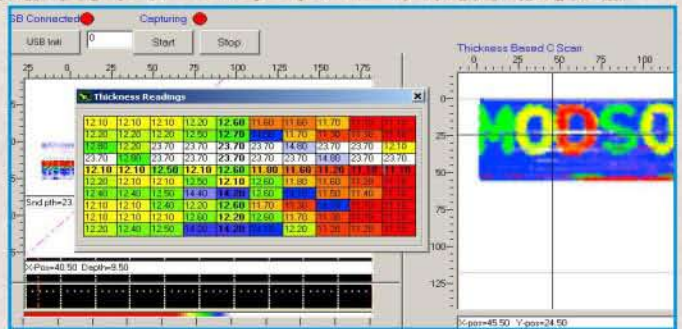
Y Axis Arm of 300 mm or 600 mm

- Compact with four Magnetic wheels for stable and drift free scanning.
- Possible to use many different types of probe holders.
- Travel length of 300mm or 600 mm available. (Y axis Arm)
- Indexing mechanism of 1 mm for X Axis.
- Suitable for 50mm diameter to flat surface.
- Incorporates a unique rack & pinion and "V" rail design
- Quadrature encoders for X and Y axis, +5Vdc A and B phase o/p which is suitable for most of the systems.
- Weight: approx. 1.5 kgs
- Dimensions(Max): 310 x 135 x 90 (mm)

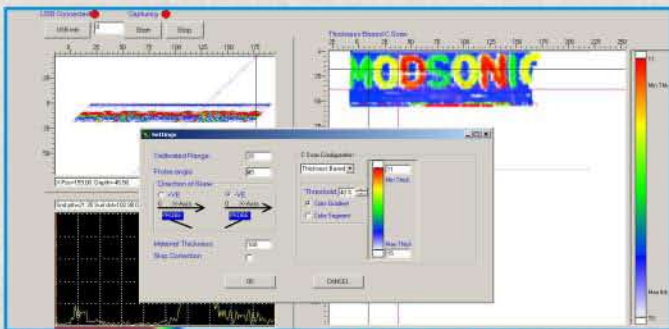
'CScanSoft' Software (for Data Acquisition , Off-Line Analysis and Reporting)



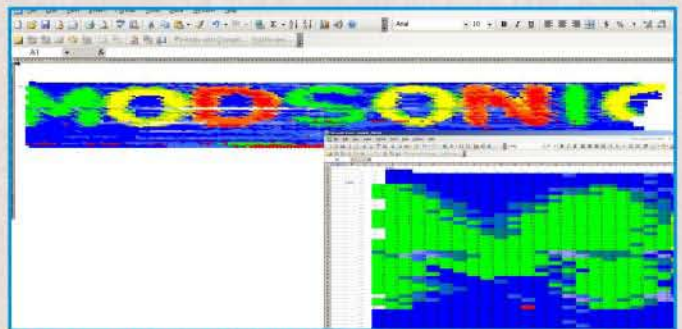
Colour Coded Topographic (C-Scan) Image Generation



C-Scan thickness reading matrix can be viewed



C-Scan Based on Amplitude or Thickness (with color gradient or color segment)



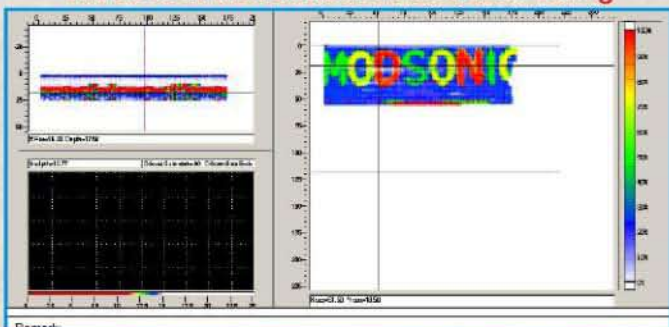
C-Scan thickness readings can be directly exported to MS Excel with color background as per thickness value



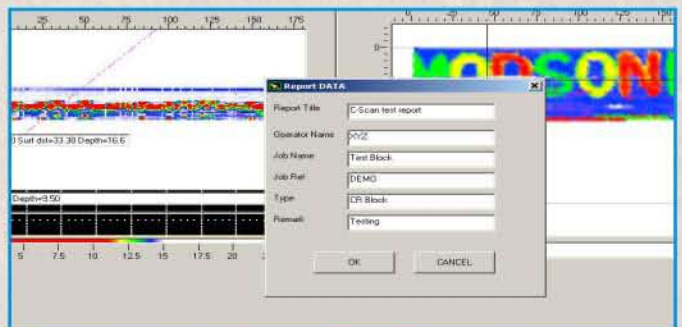
C-Scan ,Side view and bottom view can be seen with thickness based color coding



C-Scan can be generated for 'selectable' thickness range.



C-Scan printable Report can be generated in A4 format.



C-Scan report heading and data fields can be customized.

Coverage is guaranteed as uninspected Areas get highlighted.

It is possible to generate Colour composite images and then joining (stitching) individual scan areas to show overall condition of the plant or equipment.

Probe and Probe Holder

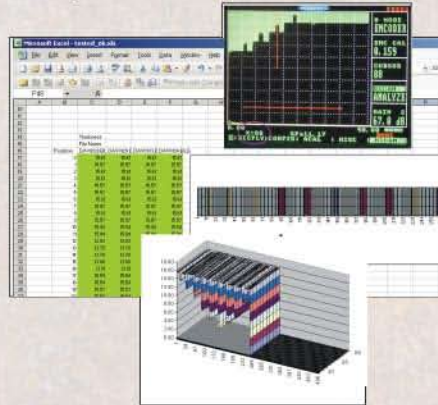


Probe of any type as per your requirement can be supplied along with suitable Probe Holder. Normally Double Crystal (TR) probe of 4/5 MHz frequency and crystal size 10/20 mm dia is ideal, for Corrosion survey. Option of Dry-Couple wheel probe is available.

Features and Specifications of Corr-O-Mate (B)

How does Corr-O-Mate (B) work ?

It consists of 'da Vinci delta' Ultrasonic Flaw Detector and a String Encoder which is attached to the suitable probe. Line scanning is done manually. The thickness measurement data collected for each line is saved in files. When these files (containing B-Scan data) are transferred to spread sheet like MS Excel then a developed topographic (C-Scan) view is generated. Thus, B-Scan images are converted into C-Scan image. **Corr-O-Mate (B)** is very useful when Corrosion Mapping is to be performed on elbows, nozzles etc where scanning by a scanning device is very cumbersome.



Several B-Scan data files can be converted to form a single C-Scan image.

String Encoder With Probe



String Encoder with Magnetic Mount



String Encoder with Probe attached to the end of string

String Encoder comes with 1.25 meter long string. It has a magnetic base for convenience of mounting it on ferro-magnetic test piece. The end of the string terminates into a steel ring which can be slipped around the probe. When the probe is moved for scanning the string gets pulled out or retracted.

Designed , Developed and Manufactured by :



Modsonic Instruments Mfg. Co. Pvt. Ltd.

Plot No.33,Phase III, GIDC Naroda,Ahmedabad-382330

Tele : (079)22811217,22813131,22841294 Fax:(079)22820012

Email : modsonic@modsonic.com Website : www.modsonic.com