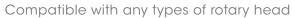


# T.Rota

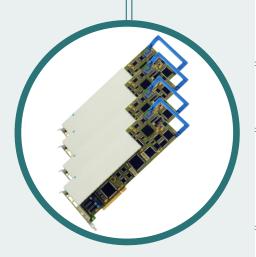
UT Electronics for Flaw detection and/or Dimensional measurement on Rotary head and Rotating tube installation.

INTERNATIONAL









Hard price to beat when retrofiting old electronics in place or when installing a new line.

Equiping your bench with T.Rota electronics is one of the best solution available on the market, in terms of price, quality and reliability.

Offers a high precision tube and bar UT inspection for in-line high speed flaw detection and/or dimensional measurement of outside and internal diameter, thickness, eccentricity and ovality, the whole in real time.

Easily adaptable to any supervisor or PLC, with analogue or digital outputs.

T.Rota has lots of references such as Vallourec, Valinox Nuclear, Sandvik, Sotep...

Socomate International has the possibility to come over with a portable T.Rota system, to perform a demonstration of performances on your inspection bench.

High resolution, up to 1µm

High Accuracy, up to  $\pm 3 \mu m$ 

20kHz PRF

Real time WT/OD/ID/ECC and Ovality

Easy integration







## MAIN SPECIFICATIONS

INTERNATIONAL

#### T.Rota TECHNICAL SPECIFICATION

High precision Tube UT testing System for in-line high speed Flaw detection and Dimensional measurements of WT/OD/ID/ECC and Ovality with rotary head or rotating tube technique.

Select UT electronics for both Flaw detection and Dimensional measurement or just one of them.

#### T.Rota 4F: ELECTRONIC FOR FLAW DETECTION\*

4 USPC7100LA single channel ultrasonic PCI cards firing in parallel at 20kHz PRF:

2 channels for longitudinal flaws Internal/External in CW and CCW
 2 channels for transversal flaws Internal/External in CW and CCW
 Flaw size:

- . Minimum of 1.5mm long
- . Depth: 5% or 10% of thickness with a minimum of 0.05mm (according to diameter range and standards to be applied)

= 16 BNC\*\* Analogue Outputs 0-5V, 2 per Flaw Gate:

- . One updated at PRF rate
- . One with adjustable time delay up to 10ms
- 8 BNC\*\* Alarm Outputs Go/No-Go, 1 per Flaw Gate

### T.Rota 3µD: ELECTRONIC FOR DIMENSIONAL MEASUREMENTS

3 USPC7100LA single channel ultrasonic PCI cards firing in parallel at 5 kHz PRF:

2 channels with transducers at 180° for water gap and tube thickness measurement
 1 channel with reference transducer-target set for water Velocity/Temperature compensations
 Real time data acquisition and calculation of WT/ OD/ ID/ ECC and Ovality
 Tube size:

- . Min Diameter 6.0mm
- . Min Thickness 0.4mm subject to transducer performance

Measurement Resolution of USPC7100LA card: better than 1µm in steel

Measurement Accuracy on ROTA25: ±3µm subject to Rotary Head performance

BNC\*\* Analogue outputs for WT/ OD/ ID/ ECC and Ovality:

- . ±5V, 12 bits
- . Output Range: 4V/mm, 2V/mm, 1V/mm

BNC\*\* Alarm outputs for WT/ OD/ ID/ ECC/ Ovality

\*Over Rota25©, more electronics might be requested

\*\*Other connectors on request

Socomate International maintains the right to modify the specification of their equipments, at any time and in whatever manner, in order to improve their performances.



