



CETA 2016

UT WALL CRAWLER FOR THICKNESS MEASUREMENT



INTRODUCTION

CETA 2016 is the latest of the generation of wall crawlers supplied by TecniTest Ingenieros S.L. The system is suitable for scanning steel walls of large storage tanks, using Ultrasonic inspection to map the thickness profile of the tank wall from the outside.

The all new CETA 2016 combines all the functionality of a flaw detector together with a laptop for data collection and a control box to remotely control the crawler. The system, therefore, meets the requirements of API 653.

Furthermore, the design is such that it can be manoeuvred around obstacles easily using the controller, not just a straight line scanner but the front wheel can be locked to facilitate straight line scanning.

CLIENT BENEFITS

- **Reliable manual inspection of storage tank walls for corrosion degradation.**
- **Software functionality gives thickness readings every 1 mm throughout the inspection.**
- **Software performs automatic data capture and positioning.**
- **Complete Scan 'A' scans are automatically stored in a database for recording and re-call.**
- **The system has the flexibility to use either a single element dry coupled transducer or a dry coupled array with up to 6 transducers.**
- **Outstanding maneuverability at speeds of up to 200mm/s.**
- **Independent drives on each main wheel.**

TRANSDUCER OPTIONS

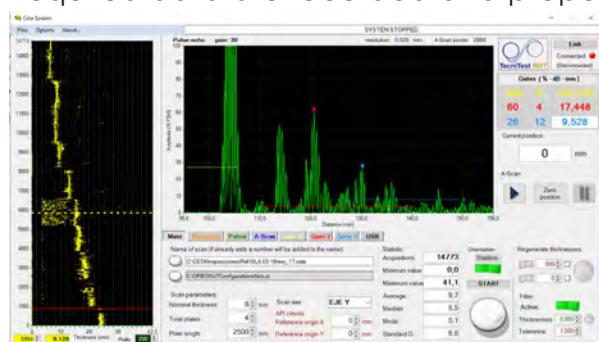
CETA 2016: Operates with a single crystal wheel probe transducer having a frequency of 5 or 10 MHz. The wheel probe is virtually dry contact, there is a water reservoir on the carriage, which feeds a sponge, to dampen the wheel as it moves over the inspection area. A Multi-element Transducer is also available with up to 6 probes in a larger wheel.



SOFTWARE OPTIONS

The data acquisition system allows high speed movement measuring thicknesses every 1 mm with accurate control of position and measurement accuracy better than 0.1 mm. All A-scans are stored for future analysis and a B Scan presentation is provided from the A scan data.

Acquired data are recorded and properly presented on the system PC with automatic evaluation; specifically, the series of thickness values is shown in a two axis graphic format (distance to the reference position versus thickness or thickness loss) and referenced to the input nominal value of each plate and the 20%, 40% and 60% remaining thickness, allowing image scrolling, zoom.



Post scanning data processing is available with a full suite of post processing tools including adjustment and addition of gates. Post inspection report generation in Excel, Word or PDF.

The dedicated software of the system allows as well signal filtering and data processing to erase false or deviated measurements (user defines thresholds), calculation of average values within a user defined range and, according to **API-653** Specification for the inspection of oil storage tanks, the calculation of actual minimum acceptable thickness and maximum allowable tank capacity.

A Re-gate option is provided to allow re-called 'A' scans to be re-interpreted by a supervisor without repeating the inspection.

CETA 2016 GENERAL CHARACTERISTICS

| Item | CETA 2016 | |
|----------------|--|------------------------------|
| | Weight (kgs) | Dimensions (cm) L x W x H |
| Crawler | 12 | 51 x 21 x 17 |
| Cable | 5 | 25 metres |
| Console | 11 | 55 x 45 x 22 |
| Battery | 11 | 28 x 23 x 15 |
| Transport Box | 6 | 58 x 36 x 30 |
| Power Supplies | Battery Pack 24 VDC 12 A Supplied (Option: 220VAC 5Amp 50/60 Hz) | |
| Cable Option | 25 metres is the standard cable length, longer cables can be supplied. | |

For full Specification and details please visit www.tecnitestNDT.com

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