




WiFi



Wireless

TOFD MAN™

system

CEN/TS 14751

EN 583-6

compliant

www.okondt.com



TOFD MAN™ System

TOFD MAN™ is the latest solution for easy testing of the long welded joints of pipelines, oil and gas tanks, vessels, cisterns, ship hulls, bridges, etc. using TOFD technique.

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- ✓ The System is wireless (WiFi channel)
- ✓ The best signal to noise ratio
- ✓ Easy testing at rope access
- ✓ Laptop or tablet PC online data analysis
- ✓ Touchscreen friendly software
- ✓ Easy probes setup & replacement

The TOFD (time-of-flight diffraction) is a primary method for fast and reliable testing of long welds.

To find out more:

www.okondt.com/tofd-method



Use any Windows PC or Tablet as acquisition unit

You can: setup, calibrate, acquire and analyse data using any Windows laptop or Tablet.
The required TOFD MAN™ software can be provided or preinstalled on your PC.



Data acquisition

A screenshot of the TOFD MAN software interface during data acquisition. The interface features a control panel on the left with various settings and buttons. The main display area is divided into two sections: the top section shows a waveform plot, and the bottom section shows a TOFD scan image. The software is running on a Windows operating system, as indicated by the taskbar at the bottom.

Data analysis

A screenshot of the TOFD MAN software interface during data analysis. The interface shows a control panel on the left and a main display area with a TOFD scan image and a waveform plot. A red line is drawn across the scan image, indicating a specific feature or measurement. The software is running on a Windows operating system, as indicated by the taskbar at the bottom.

TOFD MAN™

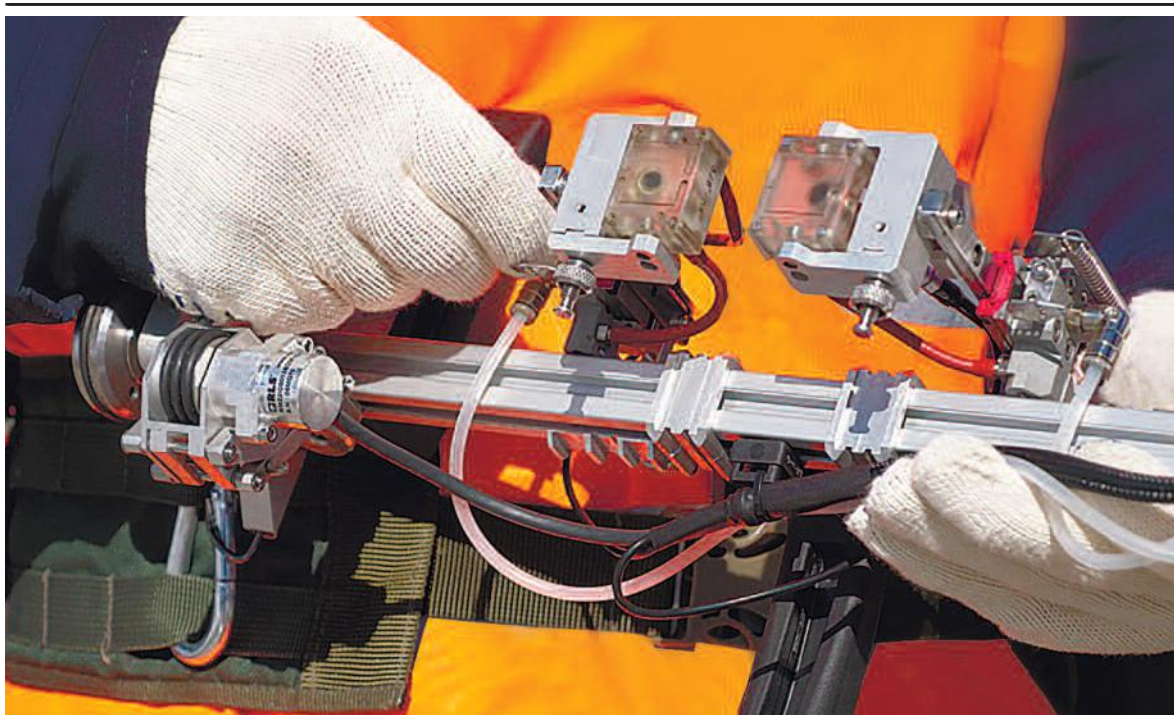
System overview

The system is designed for testing long welded joints of pipes, tanks, vessels, cisterns, ship hulls, bridges, etc. using TOFD technique.

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Circumferential welds with a diameter from 12 in (300 mm) can be inspected on cylindrical objects. On cylindrical, spherical, as well as complexshaped objects with a radius of surface curvature from 16 ft (5 m) to flatness, the system is capable of testing long welds in any direction. Objects with wall thickness from .25 to 12 in (from 6 to 300 mm) can be examined with the help of appropriate probes. Depending on the inspection task, TOFD MAN™ system can be completed with another scanner. For best result we advised to use coupling, an external liquid coupling supply system recommended. In this case, a water hose will come to the scanner. Configuration of the system is maximally optimized for placement on the operator's jacket, which does not impede the movement, also when performing an inspection at height (climbing, rope access). Standard delivery set of the system features an 8- hour battery to be put in the jacket. The scanner is light-weighted and easy to guide. It ensures handy probes setup. In the course of testing, all obtained data are transferred to a remote PC (laptop or tablet) via Wi-Fi. The system for protection of the data integrity transferred to the PC is provided- the data is securely stored in the TOFD module as well. If necessary you can use a cable connection instead of Wi-Fi.



TOFD UNIT SPECIFICATION

- Ultrasonic transducers connector _____ 2 (BNC)
- A/D converter _____ 10 bit (100 MHz)
- Initial pulse amplitude _____ 20 – 300 V
- Gain _____ 110 dB
- Bandwidth _____ 0.2 - 27 MHz
- Encoder _____ up to 2 axis encoder
- PRF _____ 15 - 2000 Hz
- Realtime averaging _____ 1, 2, 4, 8, 16, 32
- Operating temperature range _____ from +20 °C to - 50 °C
- Protection level _____ IP65

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Couplant-Feed Unit (optionally)

The motorized-pump unit offers an affordable and efficient way to supply couplant (water) to working surfaces of the wedges during automated inspection.



Reservoir capacity
3,52 Gal/16 L

•
Pump pressure:
(2-4,5Bar)

•
Tube diameter:
.30 in (8 mm)

•
Easy transport
(wheels and sling)



**TO WATCH THE VIDEO,
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www.okondt.com/tofd-man**





WiFi
connection

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