



Refresher Outlines:

Online Refresher TOFD

Our TOFD Level II Refresher is based on ASNT and ISO Standards topical outlines. The refresher is divided in 3 sections: Self-evaluation test, theory and interactive exercises. The refresher covers manual TOFD as well as automated and semi-automated TOFD.

SECTION 1: SELF-EVALUATION TEST

- 40-question test
- Link to an explanatory video for each question
- Grade

SECTION 2: THEORY

- Instrument, digitizers, filters
- Probes, frequency spectrum, signal waveform, pitch and catch
- B-Scan, gray scale
- Whisker effect, parabolic cursors
- Non-parallel and parallel scans
- Huygens' principal, diffraction
- Snell's law, incident and refracted waves
- RF signals, phase shift, averaging
- PCS, depth calculation, position uncertainty
- Beam spread, lateral wave, backwall, mode-converted backwall
- Limitations, dead zones, accuracy, resolution
- Indications, top-surface breaking, bottom-surface breaking, embedded
- Geometrical indications, double-V welds, pipe misalignment, double thicknesses
- Settings, filters, averaging, time window, sensitivity, scan resolution, PRF
- Velocity calibration, lateral wave straightening
- Analysis, signal start, grouping, point-like
- Analysis, basic analysis, detailed analysis
- Analysis, height and depth, length and position

SECTION 3: INTERACTIVE EXERCISES

- Defect viewer, top-surface breaking, bottom-surface breaking, embedded
- Setup, beam index point calibration, velocity calibration
- Scanning, wedge delay calibration, Lateral wave straightening
- Data analysis