

ISO 16823:2025-01 (E)

Non-destructive testing - Ultrasonic testing - Through-transmission technique

Contents		Page
Foreword		iv
Introduction		v
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 NDT personnel		2
5 Test equipment		2
5.1 Instrument		2
5.2 Probes		2
5.2.1 General		2
5.2.2 Probe selection		2
5.2.3 Frequency and dimensions of transducer		2
5.2.4 Dead zone		3
5.2.5 Damping		3
5.2.6 Focusing probes		3
5.3 Coupling media		3
5.4 Standard blocks		3
5.5 Reference blocks		4
5.6 Specific test blocks		4
6 Principles of testing		4
6.1 Basic techniques and setup		4
6.2 Capability of detection of discontinuities		6
6.3 Requirements for geometry and access		6
6.4 Effects of variations in coupling, angulation and alignment of probes		6
7 Test technique		7
7.1 General		7
7.2 Sensitivity setting		7
7.3 Scanning		7
7.4 Evaluation of discontinuities		7
7.5 Determination of the attenuation coefficient		7
7.5.1 General		7
7.5.2 Comparative technique using a reference block		8
7.5.3 Technique using the test object only		9
Bibliography		12