Calibration Blocks

Calibration blocks provide known targets that produce echo indications that are used for instrument setup, transducer evaluation, and reference for evaluating flaw size.

Calibration Blocks—European Standards

Block Type (Steel)	Order Code	Description
K1 EN 12223	59108	 Large angle beam calibration block, 100 mm radius Calibrate range with an angle beam transducer Measure beam index point and refracted angle
K2 EN 27963/ISO 7963	50434	 Small angle beam calibration block, 25 and 50 mm radii Calibrate range with an angle beam transducer Measure beam index point and refracted angle
vw	50441	 Step block for calibrating thickness range Eight .039 in (1 mm) steps, .039 in (1 mm) through .039 in (9 mm) to .315 in (8 mm)
N30	58474	 Ultrasonic reference standard Connect directly to flaw detector Produces multiple echoes at precise intervals in steel Check instrument gain over long time periods





Calibration Blocks—North American Standards

Block Type (Steel)	Order Code	Description
IIW Type 1	118-540-270	 Large angle beam calibration block 4.0 in (101.6 mm) radius for angle beam range calibration Measure beam index point and refracted angle Also used to check resolution and sensitivity
IIW Type 2	118-540-280	 Same as IIW Type 1 with 2 in (50.8 mm) and 4 in (101.6 mm) radii for range calibration Side drilled holes also added for resolution check
DSC	118-540-300	 Small block for angle beam distance and sensitivity calibration 1.0 in (25.4 mm) radius opposite a 3.0 in (76.2 mm) radius 0.375 in (9.5 mm) slot in the 3.0 in (76.2 mm) radius Also used to check beam index point and refracted angle
Angle Beam, Miniature	118-540-260	 Substitute for DSC block 1.0 in (25.4 mm) radius opposite a 2.0 in (50.8 mm) radius Side drilled hole to check beam index point and refracted angle
AWS Resolution	118-540-350	 Evaluate angle beam transducer resolution capability Three sets of side drilled holes for 45°, 60° and 70° angles Three 0.062 in (1.6 mm) diameter holes in each set of holes
NAVSHIPS Test Block	118-540-370	 For NAVSHIPS specification 0900-006-3010, Section 6 Distance amplitude correction, sensitivity, and flaw depth
4-Step Block	118-540-320	 Step block for calibrating thickness range Steps .250, .500, .750, 1.00 in (6.35, 12.70, 19.05, 25.40 mm)
5-Step Block	118-540-310	 Step block for calibrating thickness range Steps .100, .200, .300, .400, .500 in (2.54, 5.08, 7.62, 10.06, 12.70 mm)