



SHINE INSPECTION SERVICES PVT LTD

PRODUCT CATALOG

SHINE INSPECTION SERVICES is a trusted manufacturer and supplier in the nondestructive testing (NDT) industry. We specialize in high-quality calibration blocks and a range of testing aids to support accurate and reliable inspections.



ABOUT US



SHINE INSPECTION SERVICES is a trusted manufacturer and supplier in the nondestructive testing (NDT) industry. We specialize in high-quality calibration blocks and a range of testing aids to support accurate and reliable inspections.

NDT Calibration Blocks: We design and produce precision calibration blocks to meet industry standards.

Welding Flaw Samples: We provide realistic welding flaw samples to help validate inspection techniques.

Plastic Visual Samples: We offer visual samples for plastic components to assist in quality assurance.

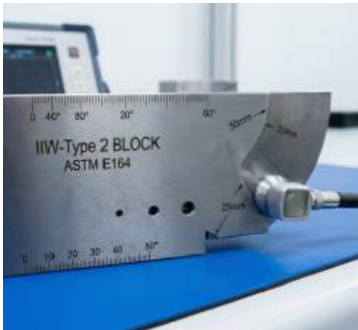
Additional Testing Aids: PT (Penetrant Testing), MT (Magnetic Testing), RT (Radiography), UT (Ultrasonic Testing), Paut, and ect. (and other relevant NDT samples) to support comprehensive training and benchmarking.



IIW-TYPE 1 BLOCK

Used for calibration of shear and longitudinal transducers, and verification of shear wedge exit point and refracted angle. Can also be used for resolution and sensitivity checking. Includes a 4.0" radius on one end and a 1.0" radius by .060" deep. Also includes a .060" diameter and a 2.0" diameter hole.

In accordance with International Institute of Welding and ASTM E164 specifications. Dimensions: 12.0" x 4.0" x 1.0". Metric version available.



IIW-Type 2 Block

This is a modified version of the original IIW-Type 1 design. Includes a 2.0" radius x .250" deep cut-out superposed on the 4.0" radius for distance calibration. Also includes numbers 3, 5 and 8 through holes (3/64", 5/64" and 8/64" diameter) and distance calibration marks to the 2.0" hole. In accordance with International Institute of Welding, ASTM E164, and U.S. Air Force NDI Manual T.O. 33B-1-1 specifications. Dimensions: 12.0" x 4.0" x 1.0". NSN is 6635-00-415-9225. Metric version available.



DC Block

AWS-type block used for shear wave distance calibration. Contains a 1.0" radius overlaying a 2.0" radius on a 180° segment. In accordance with ASTM E164 and BRR/AWS X-1 specifications.

Dimensions: 2.0" radius section is .5" thick, 1.0" radius section is 1.0" thick. Metric version available.



SC Block

AWS-type block used for shear wave sensitivity calibration. Contains two .062" diameter through holes. In accordance with ASTM E164 and BRR/AWS requirements. Dimensions: 3.00" x 1.25" x .905". Metric version available.



DSC Block

AWS-type block used for shear wave distance and sensitivity calibration. Contains a 1.0" radius opposite a 3.0" radius. The 3.0" radius includes a .375" deep x .032" wide radiused slot. Also contains a 0° reference point for checking exit point on wedge, and a .125" diameter through hole and corresponding markings at 45°, 60° and 70° for measuring actual refracted angle. In accordance with ASTM E164 and AWS 6.16.1B.

Dimensions: 1.0" thick. Metric version available.

DS Block

AWS-type block used for longitudinal distance and sensitivity calibration. Contains a 2.0" high section between two 4.0" sections. In accordance with AWS requirements. Dimensions: 6.0" x 4.0" x 2.0".



4-Step Block

Thickness and linearity calibration. This 4-Step block comes in thicknesses of .250", .500", .750", and 1.000". Step face measures .750" x .750". In accordance with ASTM E797. Two metric versions available. (4A and 4B)

NOTE: Variations of this block and the 5-Step block below are available if additional steps are preferred. Also, larger step faces are offered for use with large diameter transducers.



5-Step Block

Thickness and linearity calibration. This 5-Step block comes in thicknesses of .100", .200", .300", .400" and .500". Step face measures .750" x .750". In accordance with ASTM E797. Two metric versions available. (5A and 5B)



Type MAB Miniature Angle-Beam Calibration Block

Also known as a "Rompas" block, this ASTM and U.S. Air Force miniature angle beam block is a substitute for the DSC block for distance, beam index, refracted angle and sensitivity calibration. Contains a 1.0" radius opposite a 2.0" radius, and a 5/64" diameter x .750" deep flat-bottom hole. In accordance with ASTM E164 and U.S. Bureau of Public Roads, Type B specifications. Dimensions: 1.0" thick. Metric version available.



IOW Beam Profile Block

Used for beam profile measurement of angle beam transducers and measurement of transducer angles. Contains nine 1.5mm diameter x 22mm deep side drilled holes. In accordance with British Standard 2704 requirements. Dimensions: 305mm x 75mm x 50mm (approx. 12" x 3" x 2").

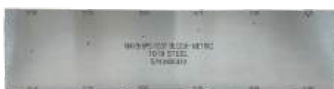




AWS Resolution Block (RC Block)

Used for checking resolution capabilities of angle beam transducers. Contains three sets of .062" diameter through holes for 45°, 60° and 70°. In accordance with AWS Welding Highway and Railway Bridges specification D1.1 and D2.0. Dimensions: 6.0" x 3.0" x 1.0"

NAVSHIPS Test Block



Used for distance amplitude correction, sensitivity levels and flaw depth information. Contains six 3/64" diameter side-drilled through holes at distances of .25" to 2.75" in .25" increments. In accordance with MILSTD-271G Figure 9, and NAVSHIPS specification 0900-006-3010/ Section 6. Also known as a "Mare Island block." Dimensions: 12.0" x 3.0" x 1.25". Metric version also available. A Navy "3020" version, containing an additional near-surface (0.125") hole and 125-250 Ra scanning surfaces, is also available.

Miniature Resolution Block



Used for checking resolution capabilities and calibrating high resolution test equipment. Contains four .188" wide x .625" long milled slots to simulate flat plate reflectors at metal travel distances of .015", .020", .025" and .030". Also contains six flat-bottom holes, three each with diameters of 1/64" and 3/64" at metal travel distances of .020", .025" and .030". Dimensions: 3.625" x 1.0" x .125".

30 FBH Resolution Block



Used for determining resolution and sensitivity capabilities and for producing area amplitude and distance amplitude plots for normal beam transducers. Contains ten flat-bottom holes at 3/64" diameter, ten at 5/64", and ten at 8/64". Metal travel distances range from .050" to 1.250". In accordance with ASTM E127 and E428. Dimensions: 11.0" x 4.0" x 1.5". Metric version also available.

ASME N-625 Reference Plate



Used for longitudinal, shear, and surface wave sensitivity calibrations. Contains six flat-bottom holes: three 4/64" diameter, one each at depths of .050", .250", and .500"; one 4/64" diameter at 1.500" deep; one 8/64" diameter at 1.625" deep; and one 16/64" diameter at 1.750" deep. In accordance with ASME 1275N Boiler and Pressure Vessel Code, Section III, Nuclear Vessels.

Miniature IIW-Type 2 Block

This small and lightweight version of the full-sized IIW-2 does everything its big brother does, at a fraction of the size and weight. The PH Tool Mini IIW-2 measures 1" thick x 2" tall x 6" long, and contains both 1" and 2" radii. An .080" wide sensitivity slot and two sensitivity holes, one at 1/16" diameter, and one at 1/8", are located .500" from each scanning surface. A large 1" diameter through-hole is included, along with a convenient step measuring .500" thick in one corner. Angle beam exit markers from 35° to 75° are machine-engraved on one face. Dimensions are 1.000" x 2.000" x 6.000". In accordance with PH Drawing. No. 10147.



V1/5 (A2) Calibration Block

For calibrating ultrasonic flaw detection equipment in both laboratory and on-site conditions. Our version of this block includes a 100mm radius, 1.5mm and 50.0mm holes, engraved reference mark scales, and two optional slots at the zero point which provide calibrating signals at intervals of 100mm range. In accordance with British Standard BS 2704 Block A2 Mod. 1, Fig.2, German Standard DIN 54-120, EN 12223, Fig. 2, and ISO 2400. This block is not to be confused with the new EN 12223 / ISO 2400 Calibration Block No. 1 (also called the K1 block) which is similar but contains a 3.0mm through-hole rather than a 1.5mm hole. See our test block store for this block. Dimensions are 300mm x 100mm x 25mm.



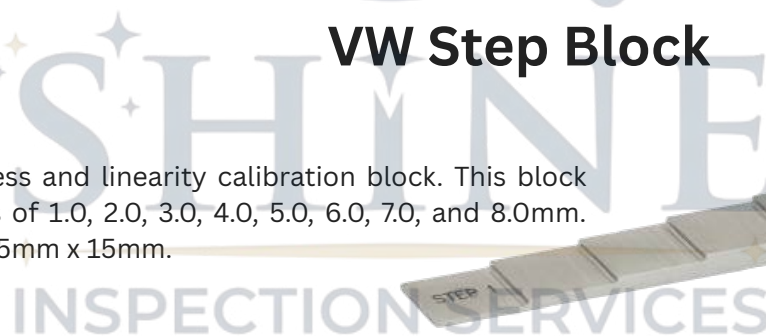
90° Curved 5-Step Block

Special curved step block for thickness and linearity calibration of curved surfaces. This 90° Curved 5-Step block is machined from solid 2" diameter bar with step thicknesses of .100", .200", .300", .400" and .500". ID radius is 0.50". In accordance with PH Tool Drawing No. 10177. Step face is 1.000" x 90° arc.



VW Step Block

Metric 8-step thickness and linearity calibration block. This block comes in thicknesses of 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, and 8.0mm. Step face measures 15mm x 15mm.



V2 (A4) Calibration Block

Small calibration block for on-site checking of miniature shear wave probe index, time base, beam angle and gain. Includes a 25mm and 50mm radius, 1.5mm hole (or 5mm), engraved reference mark scales from 35 to 75 degrees. In accordance with British Standard BS 2704 block A4, Fig. 4, and ISO 7963 Cal block No. 2, Fig. 1. Dimensions: 75mm x 43mm x 25mm (12.5 and 20mm thick blocks are also available.)



Magna-Thin Step Block



Special 5-step block for thickness and linearity calibration of thin materials. This block comes in thicknesses of 0.020", 0.040", 0.060", 0.080", and 0.100". Step face measures 0.750" x 0.750". Manufactured in accordance with PH Tool drawing no. 10183. Metric version with steps measuring 0.5, 1.0, 1.5, 2.0, and 2.5mm and face size of 20mm x 20mm is also available.

10-Step Block



Special step block for thickness and linearity calibration. There are three versions of the block available. The 10-Step Inch version is made to PH Tool drawing no. 10142 and goes from 0.100" to 1.000" in 0.100" increments. Face measures 0.750" x 0.750". The 10-Step Metric 10A version (drawing no. 10143) goes from 2.5 to 25.0mm in 2.5mm increments. The 10-Step Metric 10B version (drawing no. 10144) goes from 2.0 to 20.0mm in 2.0mm increments. Step face on both metric versions is 20mm x 20mm.

Tipsy Step Block



Special Step Block for thickness and linearity calibration. This versatile block contains eight (8) steps. Set it down on one side and get the 1.0, 2.0, 3.0 and 4.0" steps. Then "Tip" it over and get the 1.5, 2.5, 3.5, and 4.5" steps. Step faces measure 1.00" x 1.00". Manufactured in accordance with PH Tool drawing no. 10068. Step thickness tolerance is ± 0.002 ". Metric version with steps measuring 25.0, 37.5, 50.0, 62.5, 75.0, 87.5, 100.0, and 112.5mm also available. Step faces on metric block measure 25.0mm x 25.0mm. Our new Universal Tipsy Block design combines both measurement scales on one handy block. Stand it up to calibrate on the 1.0, 2.0, 3.0, and 4.0" thicknesses; then "Tip" it over to get the 25.0, 50.0, 75.0, and 100.0 mm steps.

Sizing Blocks



EDM Slot Sizing Block No. 10072 - This block contains nine EDM slots from 0.100" to .900" deep. Slot width is 0.011". Nominal depth is laser engraved on the side of the block. In accordance with PH Dwg No. 10072. Alloys: 1018 steel-nickel plated, Type 304 stainless steel, 7075-T6 aluminum anodized, and others by request. Block dimensions are 1.000" x 1.000" x 10.000". Alternative version of this block with nine 1/16" diameter through holes is called Drilled Hole Sizing Block No. 10074. In accordance with PH Dwg. No. 10074.

FAST" UT Sizing Block



This popular block contains 1/32" dia. SDHs at 0.100", 0.200", 0.300", 0.400" with corresponding beam exit marks for 70° engraved on both sides. Also contains two EDM notches at 0.050" and 0.100" deep x .011" wide x 0.500" long. Alloy: ASTM A516 Grade 70 PVQ plate. In accordance with PH Dwg. No. 10539 Rev. 01. Dimensions: 0.500" x 1.000" x 12.000". Specials with EDM slots and holes are also available.

PACS™ Block

New Phased Array calibration block used for angle beam verification, probe angle exit point, calibration for wedge delay, sensitivity, DAC/TCG for thicknesses up to 2", and crack sizing. The three radii (0.500", 1.000", and 2.000") allow for velocity and sound path calculations. Block contains five holes at 3/64" diameter drilled through the 1.000" width, located at .100, .200, .400, .600, .800, 1.200, 1.400, 1.600, 1.800, and 1.900" from the respective scanning surface. Generous hole spacing eliminates "ghost" images from adjacent holes. Also includes an engraved scale from 30° to 70° associated with the .800" hole. Dimensions: 18.0" x 2.0" x 1.0".



Mini PACS™ Block

Mini PACS™ Block is a smaller, portable version of the original PACS™ Block. The block includes a total of four holes at 3/64" diameter drilled through the 1.000" width, located at .200, .400, .600, .700, .800, .900, 1.100, and 1.300" from the respective scanning surface. Dimensions: 1.500" tall x 1.000" wide x 10.00" long.



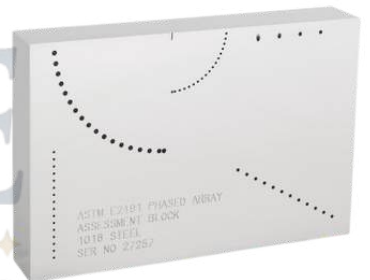
PACS™ Notch Block

The PACS™ Notch Block has been specially designed for use with Phased Array instruments used for sizing of OD and ID-connected cracks. The block contains four EDM slots at depths of 20, 40, 60, and 80% and a width of 0.031". Standard thickness is 1.000"; however, other sizes can be ordered. Dimensions: 1.000" thick x 2.000" wide x 7.00" long.



ASTM E2491 PA Assessment Block

The PH Tool ASTM E2491 Phased Array Assessment Block is a general purpose Phased Array calibration block used for beam characterization and evaluation of system performance characteristics. Use it as baseline block to determine long-term instrument performance changes, generate DAC curves, and evaluate linear/angular resolution, focusing ability and beam steering capability. With a variety of targets, this small, lightweight block is also perfect for customer demonstrations of phased array ultrasonics capabilities. This block is also referred to as a "Type B" block. Dimensions: 150mm x 100mm x 25mm.



Phased Array Type A Block (IIW-Type)

The Phased Array "Type A" Calibration Block is used during the initial setup and calibration of a phased array ultrasonic unit. This block can be used to perform tasks such as beam angle verification, calibration for wedge delay, sensitivity calibration, performing DAC/TCG, and more. This block has similar dimensions to an IIW-Type Block, but has been specially engineered for phased array applications. Blocks include both 50.0mm and 25.0mm radii, (19) through holes at 1.0mm diameter, (1) through hole at 2.0mm diameter, (4) FBHs at 2.0mm diameter x 2.0, 4.0, 6.0, and 8.0mm deep, (4) FBHs at 4.0mm diameter x 1.0, 3.0, 5.0, and 7.0mm deep, (3) FBHs at 2.0mm diameter x 3.0mm deep machined into the 25mm radius, and (4) EDM notches at 0.1, 0.2, 0.3, and 0.4mm deep x 0.5mm wide x 25.0mm long. Block dimensions are 25.0mm thick x 100.0mm tall x 300.0mm long.





Phased Array Calibration Block No. 2

This new Phased Array calibration block design by PH Tool contains all of the required features on the ASME Section V, Article 4 Basic Calibration Block yet spaces the holes out on a longer, narrower block. The block contains three holes at 3/32" diameter drilled through the 1.500" width, located at 1/4T, 1/2T, and 3/4T. It also contains two EDM notches at 2% deep x .010" wide x 1.500" long on opposite surfaces of one end. Dimensions: 14.0" x 1.5" x .75" thick.



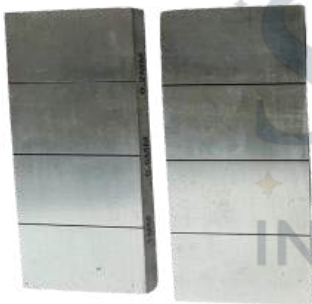
Ketos Ring

The Ketos Ring is used to check overall performance of the magnetic particle examination system. The Ketos Ring is 5" in diameter and .875" thick, with a 1-1/4" diameter center hole. The block includes (12) thruholes at .070" diameter and distances of .070, .140, .210, .280, .350, .420, .490, .560, .630, .700, .770, and .840" from the OD surface. Made from O-1 Tool Steel, and dimensionally certified to MIL-STD-1949A, ASTM E1444, McDonnell Douglas P.S. 21201, DPS 4.704, and SAE-AS5282.



Flat Ketos" Block

Capable of indicating smaller subsurface discontinuities than its "ringshaped" cousin, the "Flat Ketos" Block includes (12) thru-holes at .040" diameter, at distances of .060, .080, .100, .120, .160, and .200" from the upper indication surface, and at .240, .310, .390, .470, .550, and .630" from the lower indication surface. Also known as "Test Block with Artificial subsurface Discontinuities."



3-Notch Surface Defect Calibration Std.

This common standard contains three (3) surface notches at depths of 0.008", 0.020", and 0.040". Notch width typically 0.004" to 0.005", with other widths possible. Optional notch #4 is a 0.030" by 0.030" 45° corner notch. (not pictured on sketch) Materials offered include 7075-T6 Aluminum, AISI 4340 Steel, Type 304 Stainless Steel, 6Al-4V Titanium, Inconel 600, Inconel 625, Inconel 690, and others. Notch depths are machine engraved on one edge; serial number and alloy on the other

ASTM E709 Magnetic Particle System Performance Verification Plate

Used to check the overall performance of wet or dry techniques using probes and yokes. This test plate contains ten (10) EDM notches 0.125" long x 0.005" through 0.050" deep x 0.005" wide. Material should be the same alloy as the material to be tested.

Plate measures 1" thick x 10" x 10". Notches are filled flush with a nonconducting material, such as epoxy, to prevent mechanical holding of the indicating medium.



NDT Training PIPE Weld FLAWED SPECIMENS



we manufactures high-quality Pipe Weld Flawed Specimens specifically designed for ASNT & ISO NDT Level-II practical training, skill assessment, and certification examinations as per ASNT SNT-TC-1A, ISO 9712, schemes.

Tubular Nodes Flaw SPECIMENS



The Ketos Ring is used to check overall performance of the magnetic particle examination system. The Ketos Ring is 5" in diameter and .875" thick, with a 1-1/4" diameter center hole. The block includes (12) thruholes at .070" diameter and distances of .070, .140, .210, .280, .350, .420, .490, .560, .630, .700, .770, and .840" from the OD surface. Made from O-1 Tool Steel, and dimensionally certified to MIL-STD-1949A, ASTM E1444, McDonnell Douglas P.S. 21201, DPS 4.704, and SAE-AS5282.

Nozzle Flawed Specimens



We manufactures precision Tubular Node Weld Flaw Specimens designed for advanced NDT training, weld inspector qualification, and practical skill assessment in offshore structural, subsea, and heavy fabrication inspection environments.

CASTING AND FORGING FLAW SPECIMENS



We manufactures high-quality Casting and Forging Flaw Specimens engineered for NDT practical training, technician qualification, and hands-on skill development in the inspection of cast and forged components across heavy engineering, power, petrochemical, and aerospace industries.

NDT TRAINING ULTRASONIC PLATE FLAW SPECIMENS



manufactures high-quality Ultrasonic Plate Flaw Specimens purpose-built for ASNT /ISO 9712 NDT Level I, II & III practical training, technician qualification, and hands-on skill assessment in the ultrasonic inspection of plates, structural welds, and pressure vessel shell sections as per internationally recognised NDT certification schemes.



SHINE INSPECTION SERVICES

PVT LTD

Your Partner in Success

Our Service

- Calibration & Reference Blocks
- High accuracy and traceability
- Various materials and configurations
- Custom sizes available on request
- Welding Flaw Simulations
- Realistic defect representations
- Plastic Visual Samples
- PT, MT, RT, UT sample sets
- Comprehensive kits for hands-on learning

Why Us?

- Years of experience in NDT materials and training aids.
- Quality & Consistency, Rigorous quality control to ensure reliable performance.
- Custom Solutions, Tailored samples and blocks to fit your specific testing needs.
- Fast Turnaround Efficient production and delivery to keep your projects on schedule.



Contact us

**SHINE INSPECTION SERVICES
PVT LTD**

 3rd Floor, No: 78, 3rd St, Karambakkam,
Samayapuram Nagar, Porur, Chennai, Tamil
Nadu 600116

 +91-9363322534 | +91-9025722534

 admin@shineinspectionsservices.com

 www.shineinspectionsservices.com