



~~Designation: E1955-98~~ Designation: E 1955 - 04 (Reapproved 2009)

Standard Radiographic Examination for Soundness of Welds in Steel by Comparison to Graded ASTM E 390 Reference Radiographs¹

This standard is issued under the fixed designation E 1955; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This radiograph standard covers requirements for radiographic examination for soundness of welds in fabricated steel by comparison to selected severity levels of Reference Radiographs E 390, Vol II. The base material varies from greater than 0.25 to 3 in. (6.4–76 mm) inclusive in thickness. Volume II is applicable. This radiograph standard is not suitable for shipyard use.

NOTE 1—When coordinated through the Department of Defense (DOD), this radiograph is intended as a direct replacement for Mil-Std 1264-B.

~~1.2 The values stated in inch-pound units are to be regarded as the standard. The SI units given in parentheses are for information only.~~ 1—This standard was adopted to replace Mil-Std. 1264-B entitled “Radiographic Inspection For Soundness of Welds In Steel By Comparison To Graded ASTM E 390 Reference Radiographs,” dated 18 January, 1989. This standard is intended to be used for the same applications as the document which it replaced. Users should carefully review its requirements when considering the standard’s use for new and/or different applications.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ~~ASTM Standards:~~

~~E94 Guide for Radiographic Testing~~ ASTM Standards:²

~~E 390 Reference Radiographs for Steel Fusion Welds²~~

~~E1742 Practice for Radiographic Examination²~~ Reference Radiographs for Steel Fusion Welds

~~E 1316 Terminology for Nondestructive Examinations~~ E1955-04(2009)

2.2 ~~Military Standards:~~

~~MIL-STD-410 Nondestructive Testing Personnel Qualification and Certification~~

~~MIL-STD-453 Inspection, Radiographic³~~

~~2.3 ASNT Standards: NAS-410 Certification and Qualification of Nondestructive Test Personnel³~~

2.3 ~~ASNT Standards:⁴~~

~~SNT-TC-1A Recommended Practice for Personnel Qualification and Certification in Nondestructive Testing~~

~~ANSI/ASNT-CP-189 Standard for Qualification and Certification of Nondestructive Testing Personnel~~

~~2.4 American Welding Society Standards: AWS-B-3.0 Acceptance Criteria Porosity AWS Welding Procedure and Performance Qualification~~

~~AWS D 1.1 Structural Welding Code Steel, 1981⁵~~ Structural Welding Code Steel⁵

2.5 ~~American Petroleum Institute Standards:~~

¹ This radiograph standard is under the jurisdiction of ASTM Committee E-7 E07 on Nondestructive Testing and is the direct responsibility of Subcommittee E07.02 on Reference Radiological Images.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards, Vol 03.03 volume information, refer to the standard’s Document Summary page on the ASTM website.

³ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

⁴ Available from Aerospace Industries Association of America, Inc. (AIA), 1000 Wilson Blvd., Suite 1700, Arlington, VA 22209-3928, http://www.aia-aerospace.org.

⁵ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

⁶ Available from American Society for Nondestructive Testing (ASNT), P.O. Box 28518, 1711 Arlinggate Ln., Columbus, OH 43228-0518, http://www.asnt.org.

⁷ Available from American Welding Society, 550 N.W. Lajuene Road, Miami, FL 33135.

⁸ Available from American Welding Society (AWS), 550 NW LeJeune Rd., Miami, FL 33126, http://www.aws.org.