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COMPLIANCE IS MANDATORY

JOHN C. STENNIS SPACE CENTER

FLUX CORED ARC WELDING

OF CARBON STEEL (P-NO 1, GROUP 1 OR 2)

FOR 1/8-INCH TO UNLIMITED PLATE

THICKNESS

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Responsible Office: NASA SSC Center Operations Directorate		
SUBJECT: Flux Cored Arc Welding of Carbon Steel (P-No 1, Group 1 or 2) for 1/8-inch to Unlimited Plate Thickness		

Document History Log

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Basic	04.01.2015	Doug Dike x8-2803	Initial release. 1.0 and 2.0: Revised to reflect that this standard applies to structural use only. 3.0: Updated references to include AWS D1.1 and AWS 5.36.

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1.0 PURPOSE

This John C. Stennis Space Center (SSC) standard (SSTD) provides for a qualified American Society of Mechanical Engineers (ASME) and American Welding Society (AWS) weld procedure for Flux Cored Arc Welding (FCAW) of carbon steel; designated as P-No.1, Group 1 or 2 in ASME Boiler and Pressure Vessel Code, Section IX. This weld procedure is applicable to welding of carbon steel plate of 1/8-inch to unlimited thickness and pipe of nominal 24-inch diameter and larger with wall thickness of 1/8-inch and greater for structural use at SSC.

2.0 APPLICABILITY

- a. This SSTD applies to all contractor and subcontractor personnel involved with the FCAW welding of (P No. 1, Group 1 or 2) carbon steel plate and pipe for structural use at SSC.
- b. This SSTD is also valid for welding of (P No. 1, Group 1 or 2) carbon steel to (P No. 1, Group 1 or 2) carbon steel pipe, tube, fittings, or plate used in fluid services, provided that the produced welds are not fluid pressure boundary or pressure containing welds; e.g., carbon steel pipe supports or doubler plates welded to outer walls of carbon steel pipe and fittings being an allowed application of this standard.

3.0 REFERENCES AND APPLICABLE DOCUMENTS

Applicable documents shall be the latest version unless otherwise specified.

ASME Boiler and Pressure Vessel Code, Section II, Materials, Part A, *Ferrous Material Specifications*

ASME Boiler and Pressure Vessel Code, Section IX, *Welding, Brazing, and Fusing Qualifications*

AWS D1.1, *Structural Welding Code - Steel*

AWS 5.36, *Specification for Carbon and Low-Alloy Steel Flux Cored Electrodes for Flux Cored Arc Welding and Metal Cored Electrodes for Gas Metal Arc Welding*

SPR 1440.1, *SSC Records Management Program Requirements*

SPR 8715.1, *SSC Safety and Health Program Requirements*

SSTD-8070-0005-CONFIG, *Preparation, Review, Approval and Release of SSC Standards*

SSTD-8070-0013-WELD, *Classes of Welding Inspection*

SSTD-8070-0014-WELD, *Qualifying Welders and Welding Procedures*