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John C. Stennis Space Center
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**SSTD-8070-0041-WELD Rev. Basic
SEPTEMBER 2014**

COMPLIANCE IS MANDATORY

John C. Stennis Space Center ASME WELD PROCEDURE FOR JOINING STAINLESS STEEL BY GAS TUNGSTEN ARC WELDING (GTAW) WIRE

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	Effective Date:	September 5, 2014
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SUBJECT: ASME Weld Procedure for Joining Stainless Steel By GTAW Wire		

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1.0 PURPOSE

This John C. Stennis Space Center (SSC) standard (SSTD) outlines the qualified American Society of Mechanical Engineers (ASME) welding procedure for joining stainless steel by Gas Tungsten Arc Welding (GTAW) wire at SSC.

2.0 APPLICABILITY

This SSTD applies to all contractor and subcontractor personnel involved with the welding of stainless steel by GTAW wire.

3.0 REFERENCES

All references are assumed to be the latest version unless otherwise indicated.

ASME Boiler and Pressure Vessel Code, Section II, *Materials*

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

SPR 1440.1, *SSC Records Management Program Requirements*

SSTD-8070-0005-CONFIG, *SSC 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*

4.0 RESPONSIBILITIES

- a. Users of this SSTD shall comply with its requirements, ensure use of the correct version of this standard and the documents it references, and inform the appropriate organization of needed changes in accordance with SSTD-8070-0005-CONFIG.
- b. Responsibilities for the use and control of this SSTD and for the review and approval of revisions or cancellation of this standard shall be as specified in SSTD-8070-0005-CONFIG and the applicable documents referenced therein.

5.0 REQUIREMENTS AND PROCEDURES

- a. Items denoted as essential variables in the attached weld procedure specifications (WPS) shall not be altered when using the WPS. An alternate WPS may be used only if approved prior to use by the NASA SSC Center Operations Directorate Design and Construction Project Management Division (PMD), the NASA SSC Center Operations Directorate Operations and Maintenance Division (OMD), the NASA SSC Engineering

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and Test Directorate (E&TD), and the NASA SSC Safety and Mission Assurance (S&MA) Office.

- b. The attached Procedure Qualification Record (PQR) and Welder Performance Qualification (WPQ) are the PQRs and WPQs for the original WPSs in this SSTD. When performing new qualifications, a new, approved PQR and WPQ shall be completed showing all pertinent data and results of the weld procedure qualification.
- c. Welders shall be qualified in accordance with SSTD-8070-0014-WELD.
- d. Inspection methods for welds shall be in accordance with SSTD-8070-0013-WELD.

6.0 RECORDS AND FORMS

Records and forms required by the procedures of this standard shall be maintained in accordance with SPR 1440.1. All records and forms are assumed to be the latest edition unless otherwise indicated. Forms may be obtained from the SSC Electronic Forms repository or from the NASA SSC Forms Management Officer. Quality Records are identified in the SSC Master Records Index.

7.0 ACRONYMS AND ABBREVIATIONS

ASME	American Society of Mechanical Engineers
E&TD	NASA SSC Engineering and Test Directorate
GTAW	Gas Tungsten Arc Welding
NASA	National Aeronautics and Space Administration
OMD	Operations and Maintenance Directorate
PMD	Project Management Division
PQR	Procedure Qualification Record
S&MA	NASA SSC Safety and Mission Assurance Office
SSC	John C. Stennis Space Center
SSTD	John C. Stennis Space Center Standard
SPR	Stennis Procedural Requirements
WPQ	Welder Performance Qualification
WPS	Weld Procedure Specification

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