

AWS G2.4/G2.4M:2014
An American National Standard

Guide for the Fusion Welding of Titanium and Titanium Alloys



American Welding Society®



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Guide for the Fusion Welding of Titanium and Titanium Alloys

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Prepared by the
American Welding Society (AWS) G2 Committee on the Joining of Metals and Alloys

Under the Direction of the
AWS Technical Activities Committee

Approved by the
AWS Board of Directors

Abstract

The standard *Guide for the Fusion Welding of Titanium and Titanium Alloys* provides instructional guidance for the welding of titanium and titanium alloys. This guide explains processes, equipment, materials, workshop practices, joint preparation, welding technique, tests, and the repair of defects.

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Personnel

AWS G2 Committee on the Joining of Metals and Alloys

F. S. Babish, Chair	<i>Sandvik Materials Technology</i>
G. Dunn, Vice Chair	<i>ExxonMobil Development Company</i>
A. L. Diaz, Secretary	<i>American Welding Society</i>
R. E. Avery	<i>Consultant to Nickel Institute</i>
S. O. Luke	<i>Black & Veatch</i>
R. C. Sutherlin	<i>ATI Wah Chang</i>
D. J. Tillack	<i>Consultant to Nickel Institute</i>

AWS G2D Subcommittee on Reactive Alloys

R. C. Sutherlin, Chair	<i>ATI Wah Chang</i>
A. L. Diaz, Secretary	<i>American Welding Society</i>
S. S. Delmore	<i>CK Worldwide, Incorporated</i>
B. Krueger	<i>Los Alamos National Laboratory</i>
K. T. Tran	<i>Naval Surface Warfare Center</i>
G. E. Trepus	<i>Boeing Commercial Airplanes</i>

Advisors to the G2D Subcommittee on Reactive Alloys

R. D. Kellum	<i>Williamette Welding Supply Company</i>
H. Kotaki	<i>Consultant to The Japan Titanium Society</i>
S. L. Luckowski	<i>United States Department of the Army</i>
J. A. McMaster	<i>MC Consulting</i>
J. Simpson	<i>International Titanium Association</i>
S. D. Sparkowich	<i>Nerac, Incorporated</i>

Foreword

This foreword is not part of AWS G2.4/G2.4M:2014, *Guide for the Fusion Welding of Titanium and Titanium Alloys*, but is included for informational purposes only.

This specification makes use of both U.S. Customary Units and the International System of Units (SI). The measurements are not exact equivalents; therefore each system must be used independently of the other, without combining values in any way when referring to filler metal properties. In selecting rational metric units, the AWS A1.1, *Metric Practice Guide for the Welding Industry*, and the International Standard ISO 544, *Welding consumables — Technical delivery conditions for welding filler metals — Type of product, dimensions, tolerances and markings*, are used where suitable. Tables and figures make use of both U.S. Customary and SI Units, which, with the application of the specified tolerances, provide for interchangeability of products in both the U.S. Customary and SI Units.

A vertical line in the margin or underlined text in clauses, tables, or figures indicates an editorial or technical change from the 2007 edition.

Comments and suggestions for the improvement of this standard are welcome. They should be sent to the Secretary, AWS G2 Committee on Joining Metals and Alloys, American Welding Society, 8669 NW 36 St, # 130, Miami, FL 33166.

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