

# **Guide for Root Pass Welding of Pipe Without Backing**



**American Welding Society**



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**AWS D10.11M/D10.11:2007**  
**An American National Standard**

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**October 13, 2006**

# **Guide for** **Root Pass Welding of** **Pipe Without Backing**

**3rd Edition**

**Supersedes AWS D10.11-87**

Prepared by the  
American Welding Society (AWS) D10 Committee on Piping and Tubing

Under the Direction of the  
AWS Technical Activities Committee

Approved by the  
AWS Board of Directors

## **Abstract**

This standard presents guidelines for welding the root pass of metal pipe butt joints with an open root or a consumable insert. Joint designs, assembly, consumable insert configurations, base metals, filler metals, and purging are discussed. Applicable arc welding processes and techniques are described.



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## Foreword

This foreword is not part of [AWS D10.11M/D10.11:2007](#), *Guide for Root Pass Welding of Pipe Without Backing*, but is included for informational purposes only.

The AWS D10 Committee on Piping and Tubing has been in existence since 1958, during which time a great deal of information on many aspects of pipe welding has been published. The first document on root pass welding and gas purging was approved in February 1980 and published as AWS D10.11-80, *Recommended Practices for Root Pass Welding and Gas Purging*.

This publication was intended to be a “how to” guide in the use of open root and consumable insert welding techniques for root pass welding of groove welds joining metal pipe. Joint designs, fitting techniques, consumable insert configurations, filler and base metal combinations, purging, and welding processes were discussed. This publication made no provision for joints which include backing rings.

The first edition of D10.11, published in 1980, was extensively revised and updated for the second edition which was published in 1987. The 1987 edition was reaffirmed in 1992. This latest edition, AWS D10.11M/D10.11:2006 *Guide for Root Pass Welding of Pipe Without Backing*, has been extensively revised and updated to provide the user with the latest available information.

Comments and suggestions for the improvement of this standard are welcome. They should be sent to the Secretary, AWS D10 Committee on Piping and Tubing, American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.

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