

Table of Contents

| | Page No. |
|---|-----------------|
| <i>Personnel</i> | v |
| <i>Foreword</i> | vii |
| <i>List of Figures</i> | x |
| 1. Scope | 1 |
| 2. Normative references | 1 |
| 3. General requirements | 1 |
| 4. Test plate material | 1 |
| 5. Preparation of the test piece | 2 |
| 6. Examination of the test piece | 3 |
| 7. Test report | 3 |
| Annex A (Informative)—Guidelines for the Preparation of Technical Inquiries | 7 |
| Annex B (Informative)—List of Deviations from ISO 15792-3:2011 | 9 |
| AWS Filler Metal Specifications by Material and Welding Process | 11 |
| AWS Filler Metal Specifications and Related Documents | 13 |

List of Figures

| Figure | | Page No. |
|---------------|---|-----------------|
| 1 | Preparation of fillet weld test piece | 2 |
| 2 | Dimensions of fillet welds | 4 |
| 3 | Alternative methods for facilitating fillet weld fracture | 4 |

Standard methods for classification testing of positional capacity and root penetration of welding consumables in a fillet weld

1 Scope

This standard specifies the preparation and assessment of fillet weld test pieces for conformity assessment of positional usability and root penetration requirements for consumables classification standards for welding non-alloy and fine grain steels, low alloy steels, stainless steels, and nickel base alloys.

This standard does not specify acceptance requirements.

Safety and Health issues and concerns are beyond the scope of this standard and are, therefore, not fully addressed herein. Safety and health information is available from other sources, including, but not limited to, ANSI Z49.1, Safety in Welding, Cutting, and Allied Processes, and applicable federal and state regulations.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AWS¹ A3.0, *Standard Welding Terms and Definitions*

3 General requirements

Samples of welding consumables (electrodes or wires) to be tested shall be representative of the manufacturer's products being classified. Test pieces shall be prepared and tested as specified in Clauses 5 and 6, as well as in the consumable classification standard. The test results shall fulfil the requirements of the classification standard.

4 Test plate material

The plate material shall be selected from the range of materials and material thicknesses prescribed by the consumable classification standard. The surfaces to be welded shall be free of scale, rust, and other contaminants.

¹ AWS standards are published by the American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.