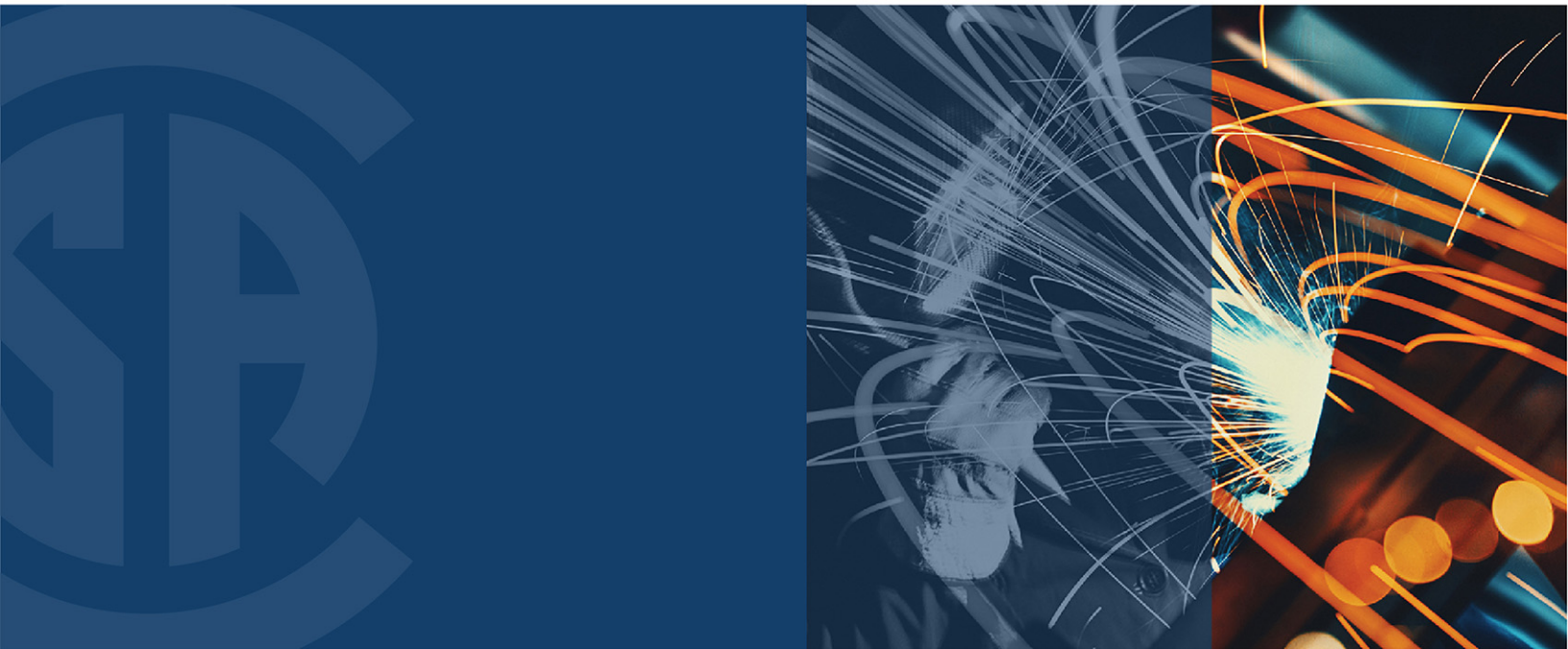




Filler metals and allied materials for metal arc welding



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Contents

Technical Committee on Welding Filler Metals 4

Preface 6

0 Introduction 8

1 Scope 10

- 1.1 Specifications 10
- 1.2 Exceptions 11
- 1.3 Compliance 12
- 1.4 Safety 12
- 1.5 Terminology 12
- 1.6 SI units 13
- 1.7 Metric consumable classification 13

2 Reference publications 13

3 Definitions and abbreviations 15

- 3.1 Definitions 15
- 3.2 Abbreviations 16

4 Quality system 16

- 4.1 Quality control 16
- 4.2 Repackaging control 16
- 4.3 Registered quality system 16
- 4.4 Approval agency 17
- 4.5 Unregistered quality system 17

5 Diameter tolerances 17

6 Test requirements 18

- 6.1 Required tests 18
- 6.2 Retests 18

7 Test procedures 19

- 7.1 Electrodes 19
 - 7.1.1 General 19
 - 7.1.2 SMAW electrodes 19
 - 7.1.3 GMAW electrodes 19
 - 7.1.4 Sizes for testing 19
 - 7.1.5 Qualification sizes 20
- 7.2 Material for test assemblies 20
- 7.3 Shielding gases 20
 - 7.3.1 GMAW filler metals for fine-grain and non-alloy steel 21
 - 7.3.2 Carbon and low-alloy steel electrodes for FCAW and MCAW 21
 - 7.3.3 Chromium and chromium-nickel steel electrodes for FCAW and MCAW 22
 - 7.3.4 Carbon and low-alloy steel rods for GTAW and PAW 22

7.3.5	Aluminum electrodes and rods for GMAW, GTAW, and PAW	22
7.4	Weld metal test assemblies	22
7.4.1	All-weld-metal test assembly	22
7.4.2	Transverse tensile and longitudinal guided bend test assembly	23
7.4.3	Heat treatment condition	23
7.5	Radiographic test	23
7.5.1	Test preparation	23
7.5.2	Pass/fail criteria	24
7.6	All-weld-metal tensile test	24
7.6.1	Test preparation	24
7.6.2	Machining	24
7.6.3	Aging	24
7.6.4	Test method	24
7.6.5	Pass/fail criteria	24
7.7	Impact test	25
7.7.1	Test preparation	25
7.7.2	Machining	25
7.7.3	Test method	25
7.7.4	Test temperature	25
7.7.5	Pass/fail criteria	25
7.8	Transverse tensile test	25
7.8.1	Conditions	25
7.8.2	Pass/fail criteria	25
7.9	Longitudinal guided bend test	25
7.9.1	Conditions	25
7.9.2	Aging	25
7.10	Fillet weld test	26
7.10.1	General conditions	26
7.10.2	FCAW carbon and low-alloy steel	26
7.10.3	MCAW carbon and low-alloy steel	26
7.10.4	Measurement of maximum fillet weld dimensions	26
7.10.5	Pass/fail criteria	26
7.11	Chemical analysis — Deposit	26
7.11.1	General conditions	26
7.11.2	Samples of the deposited weld metal	26
7.11.3	Weld pad	27
7.11.4	Chemical analysis	27
7.11.5	Pass/fail criteria	27
7.12	Chemical analysis — Solid electrode	27
7.12.1	Samples	27
7.12.2	Method	27
7.12.3	Pass/fail criteria	27
7.13	Diffusible hydrogen test	27
7.13.1	General	27
7.13.2	Applicable designator	27
7.13.3	Pass/fail criteria	28

8 Marking 28**9 Packaging 28****10 Certification 28**

10.1 Test witnessing 28

10.2 Technical data sheets 29

Annex A (normative) — Equivalency of classifications for GMAW electrodes 30

Annex B (informative) — Packaging, storage, and conditioning of welding filler metals and allied materials 32

Annex C (informative) — Method of classification 36

Annex D (informative) — Description and intended use of electrodes for carbon steel GMAW and GTAW 42

Annex E (informative) — Description and intended use of fluxes and electrodes for carbon steel, low-alloy steel, stainless steel, and nickel-alloy SAW 49

Annex F (informative) — Diffusible hydrogen 54

Annex G (informative) — Certification 56

Annex H (informative) — SI (metric) and non-SI equivalents 59

Annex I (normative) — Electrode classifications with fixed requirements within AWS A5.36/A5.36M 63

Annex J (informative) — Bibliography 65

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Preface

This is the fifth edition of CSA W48, *Filler metals and allied materials for metal arc welding*. It supersedes the previous editions published in 2018, 2014, 2006, and 2001.

Filler metals standards are intended to provide a generic method of classification and evaluation that allows the end user to select appropriate welding consumables for a given welding process and product or application. The procedures and tests set out in this Standard, when correctly followed, are designed to produce a consistent product with test results that are as reproducible as possible.

The following are the major changes to this edition:

- a) the reference to AWS A5.10/A5.10M has been added for the classification of aluminum GTAW and GMAW electrodes;
- b) all specifications and classifications related to carbon and low-alloy steel SMAW electrodes have been replaced by references to AWS A5.1/A5.1M and A5.5/A5.5M;
- c) all specifications and classifications related to SAW carbon and low-alloy electrodes/fluxes have been replaced by references to AWS A5.17/A5.17M and AWS A5.23/A5.23M;
- d) updates to Clauses regarding packaging and marking have been made and two new Clauses added, one for technical data sheets (TDS) and the second for decertified products; and
- e) Annexes have been updated and consolidated, providing information on packaging, storage, and conditioning of electrodes (Annex B); general information and an explanation of the classification system (Annex C); descriptions and intended uses of the welding filler metals and allied materials (Annexes D and E); information on diffusible hydrogen (Annex F); and information on certification (Annex G).

The Standard has also been rewritten in such a manner to facilitate ease of use and future revisions with respect to adoption of other regional and international standards. During preparation of this revision, close liaison was maintained between AWS and ISO to create a robust Canadian Standard supporting global efforts towards standard harmonization while satisfying the specific and unique technical requirements of Canadian industry.

This Standard was prepared by the Technical Committee on Welding Filler Metals, under the jurisdiction of the Strategic Steering Committee on Construction and Infrastructure, and has been formally approved by the Technical Committee.

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
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