

Australian Standard<sup>®</sup>

**External field joint coatings for steel  
pipelines**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee ME-038, Petroleum Pipelines. It was approved on behalf of the Council of Standards Australia on 30 April 2008. This Standard was published on 26 August 2008.

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- 

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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**External field joint coatings for steel  
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## PREFACE

This Standard was prepared by Standards Australia Committee, ME-038, Petroleum Pipelines.

*This Standard incorporates Amendment No. 1 (April 2010). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

The objective of this Standard is to provide manufacturers, suppliers, specifier and users of oil and gas pipelines the application of and testing requirements for external field joint coatings (FJCs) of seamless or welded steel pipelines for onshore steel pipelines.

The performance of field joint coatings is a critical part of the corrosion protection of steel pipelines. This Standard makes no appraisal of the relative performance of the coating systems that are covered herein. There should be careful selection of the field joint coating chosen for each application, taking into account its importance in providing satisfactory corrosion protection for the service life under the construction and operating conditions of the pipeline.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to figures and tables are deemed to be requirements of this Standard. All other notes are for information and guidance only.

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## STANDARDS AUSTRALIA

**Australian Standard**  
**External field joint coatings for steel pipelines**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets minimum requirements for the field joint coating (FJC) of seamless or welded steel onshore pipelines. It specifies the application and testing of the corrosion protection coatings applied to steel surfaces left bare after the pipes and fittings (components) are joined by welding. Field joints and other specific points are coated on-site.

## NOTES:

- 1 Information to be supplied at the time of order is given in Appendix A.
- 2 Means for demonstrating compliance with this Standard are given in Appendix B.

**1.2 NORMATIVE REFERENCES**

The following referenced documents are indispensable for the application of this document.

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

## AS

- |        |  |
|--------|--|
| 1145   | Determination of tensile properties of plastic materials                         |
| 1145.3 | Part 3: Test conditions for films and sheets                                     |
| 1391   | Metallic materials—Tensile testing at ambient temperature                        |
| 1627   | Metal finishing—Preparation and pretreatment of surfaces                         |
| 1627.2 | Part 2: Power tool cleaning  |
| 1627.4 | Part 4: Abrasive blast cleaning of steel   |
| 1627.9 | Part 9: Pictorial surface preparation standards for painting steel surfaces      |
| 2706   | Numerical values—Rounding and interpretation of limiting values                  |
| 3894   | Site testing of protective coatings  |
| 3894.1 | Part 1: Non-conductive coatings—Continuity testing—High voltage ('brush') method |
| 3894.3 | Part 3: Determination of dry film thickness                                      |
| 3894.4 | Part 4: Assessment of degree of cure   |
| 3894.5 | Part 5: Determination of surface profile   |
| 3894.6 | Part 6: Determination of residual contaminants                                   |
| 3894.9 | Part 9: Determination of adhesion  |

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|-----|---|
| 352 | Testing for coating resistance to cathodic disbonding |
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## AS/NZS

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|------|--|
| 3862 | External fusion-bonded epoxy coating for steel pipes |
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## ASTM

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|-------|---|
| D2240 | Standard Test Method for Rubber Property—Durometer Hardness |
|-------|---|

## ISO

- |     |   |
|-----|---|
| 868 | Plastics and ebonite—Determination of indentation hardness by means of a durometer (Shore hardness) |
|-----|---|

## SSPC

Steel Structures Paint Council

## SP1

Surface preparation specification no. 1