AS 1391—2005

Australian Standard™

Metallic materials—Tensile testing at ambient temperature

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee MT-006, Mechanical Testing of Metals. It was approved on behalf of the Council of Standards Australia on 30 May 2005. This Standard was published on 21 June 2005.

The following are represented on Committee MT-006:

Australian Railway Association
Bureau of Steel Manufacturers of Australia
CSIRO National Measurement Laboratory
CSIRO Telecommunications and Industrial Physics
Institute of Materials Engineering Australia
National Association of Testing Authorities Australia

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Metallic materials—Tensile testing at ambient temperature

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PREFACE

This Standard was prepared by Standards Australia Committee MT-006, Mechanical Testing of Metals to supersede AS 1391—1991, *Methods for tensile testing of metals*. The Committee decided to change the title of the Standard to indicate the testing temperature at the time of test. The title was changed to *Metallic materials—Tensile testing at ambient temperature*.

The objective of this edition is to align more closely with ISO 6892:1998, *Metallic materials—Tensile testing at ambient temperature*.

During the preparation of this Standard, cognisance was taken of the following Standards:

AS
1545 Methods for the calibration and grading of extensometers

ISO
377 Steel and steel products—Location and preparation of samples and test pieces for mechanical testing

3785 Steel—Designation of test piece axes

6892 Metallic materials—Tensile testing at ambient temperature

9513 Metallic materials—Calibration of extensometers used in uniaxial testing

This Standard is one of a series of Standards covering the range of tensile testing methods. The series comprises the following:

AS
1391 Metallic materials—Tensile testing at ambient temperature (this Standard)

1545 Methods for the calibration and grading of extensometers

1855 Methods for the determination of transverse tensile properties of round steel pipes

2291 Methods for tensile testing of metals at elevated temperatures

2403 Method for the measurement of the plastic strain ‘r’ of sheet and strip metals

2346 Methods for the determination of uniform elongation in sheet and strip metals

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.

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