

Australian Standard

**SPLIT COTTER PINS
(METRIC SERIES)**

The following scientific, industrial and governmental organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Associated Chambers of Manufactures of Australia
Australian Institute of Steel Construction
Australian and New Zealand Railways Conferences
Bureau of Steel Manufacturers of Australia
Department of Defence
Department of Supply
Electricity Supply Association of Australia
Fasteners Institute of Australia
Metal Trades Industry Association of Australia
Metropolitan Water Sewerage and Drainage Board
Petroleum Refinery Engineers Advisory Committee
Postmaster-General's Department
Society of Automotive Engineers—Australasia
The Institution of Production Engineers
Tractor Farm Machinery and Construction Equipment Association of Australia
University of Sydney

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(METRIC SERIES)**

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PREFACE

This standard was prepared by the Association's Committee on Threaded Fasteners, in order to provide information on a series of metric split cotter pins.

The preliminary draft was submitted by the Fasteners Institute of Australia, and this standard, along with other drafts and published standards is part of a programme intended to provide a rational range of standards for metric series fasteners and accessories.

The first Australian standard for split cotter pins (inch series) (AS B175—1963) contained an appendix covering details of ISO metric draft proposals for split cotter pins, defined in ISO Draft Recommendation 502 issued in 1962, which was subsequently published as ISO Recommendation R1234 in November 1971. ISO/R1234 incorporated several additions which Australia has supported including, particularly, the adoption of preferred series of diameters.

The range of standard sizes in this Australian standard includes a rational selection of those given in ISO/R1234, the range having been modified to suit Australian requirements.

The definition of the nominal length first adopted in AS B175—1963 as the length under the eye rather than the overall length is now accepted as Australian practice and has been retained.

Information relevant to the application of metric series split cotter pins is provided in Appendix A.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard Specification

for

SPLIT COTTER PINS (METRIC SERIES)

1 SCOPE. This specification applies to ferrous and non-ferrous split cotter pins in the metric series, in diameters from 1 mm to 13 mm inclusive and lengths from 4 mm to 125 mm inclusive, suitable for general engineering purposes.

For the benefit of users, Appendix A sets out recommended combinations of split cotter pins with ISO metric bolts, screws and clevis pins. Associated hole sizes and tolerances are also given.

Recommended acceptance gauges and gauge parameters for all types of split cotter pins, except humpback split cotter pins, are given in Appendix B.

Similarly, Appendix C gives the requirements of humpback split cotter pins used in insulator and conductor fittings of overhead power lines which are suitable locking devices for pins or bolts specified in AS 1154, Part 2*.

2 MATERIALS.

2.1 Composition and Physical Properties. Steel split cotter pins shall be manufactured from low carbon steel (0.15 per cent carbon max.) in a ductile condition suitable for forming and final setting of the legs. The tensile strength should not exceed 540 MPa.

Brass split cotter pins shall be manufactured from brass with a copper content of not less than 61 per cent. The tensile strength should not exceed 540 MPa.

The material for stainless steel split cotter pins shall be subject to agreement between the purchaser and the supplier.

NOTE: 1 MPa = 1 N/mm².

2.2 Dimensions. The material shall be rolled or drawn to the required half-round section as defined in Fig. 1 and Table 1.

Variation from the specified section profile is acceptable provided that the material when bent through 180 degrees to simulate the closed legs of the split pin, is accepted by the GO and NOT GO gauges, as defined in Appendix B.

The section shall be free from 'flash' at the junction of flat and radius and from twists along its length.

* AS 1154, Insulator and Conductor Fittings for Overhead Power Lines—Part 2, Dimensions.



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