



Mechanical tapping bands for waterworks purposes



AS 4793:2020

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- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Water Association
- Plastics Industry Pipe Association of Australia
- Water Services Association of Australia

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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee WS-016, Cast Iron Pressure Pipes and Fittings, to supersede AS/NZS 4793—2009.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify performance requirements for manufacturers and purchasers of mechanical tapping bands for waterworks purposes.

The major changes in this edition are as follows:

- (a) Requirements for tapping bands for compatibility with polyethylene (PE) pipe.
- (b) Clarification of plastics material design requirements for long-term performance.
- (c) Amendments to test parameters to ensure availability of test pipe.
- (d) Amendments to performance testing requirements to better align with ISO 13460-1 and AS/NZS 4129 where practicable.
- (e) Inclusion of a process verification test.

The term “normative” is used in Standards to define the application of the appendix to which it applies. A “normative” appendix is an integral part of a Standard.

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Australian Standard®

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Section 1 Scope and general

1.1 Scope

This Standard specifies requirements for design, materials, and performance in service of PN 16 mechanical tapping bands used for the connection of property service pipes to reticulation water mains.

This Standard applies to tapping bands, with and without electrical insulation, for mechanical connection to metallic and plastics standard water mains, including polyethylene. The nominal operating temperature range is 0 °C to 40 °C. Tapping bands for use with polyethylene pipes, including other PN ratings and gas applications, are included in AS/NZS 4129.

Solvent cemented PVC tapping bands are outside the scope of this Standard.

The nominal size range of tapping bands covered by this Standard is DN 50 to DN 450 with outlet sizes ranging from dn 15 to dn 50, as appropriate to the tapping band size.

A minimum sampling and testing frequency plan to demonstrate conformity with this Standard is specified in [Appendix A](#).

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents for informative purposes are listed in the Bibliography.

AS 1237.1, *Plain washers for metric bolts, screws and nuts for general purposes, Part 1: General plan*

AS 1565, *Copper and copper alloys — Ingots and castings*

AS 1627.4, *Metal finishing — Preparation and pretreatment of surfaces, Part 4: Abrasive blast cleaning of steel*

AS 1646, *Elastomeric seals for waterworks purposes*

AS 1831, *Ductile cast iron*

AS 2205.10.1, *Method for destructive testing of welds in metal, Method 10.1: Corrosion test for welded austenitic stainless steel*

AS 2345, *Dezincification resistance of copper alloys*

AS 4796, *Water supply — Metal-bodied and plastic-bodied ball valves for property service connection*

AS/NZS 1462.6, *Methods of test for plastics pipes and fittings, Method 6: Thermoplastics pipes, fittings and assemblies for the transport of fluids under pressure — Resistance to internal pressure*

AS/NZS 1462.8, *Methods of test for plastics pipes and fittings, Method 8: Method of testing the leaktightness of assemblies*

AS/NZS 1554.6, *Structural steel welding, Part 6: Welding stainless steels for structural purposes*

AS/NZS 1567, *Copper and copper alloys — Wrought rods, bars and sections*

AS/NZS 1568, *Copper and copper alloys — Forging stock and forgings*

AS/NZS 4020, *Testing of products for use in contact with drinking water*