AS 2638.2—2006

Australian Standard®

Gate valves for waterworks purposes

Part 2: Resilient seated

This Australian Standard® was prepared by Committee WS-022, Valves for Waterworks Purposes. It was approved on behalf of the Council of Standards Australia on 28 August 2006.
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The following are represented on Committee WS-022:

- Association of Consulting Engineers Australia
- AUSTAP
- Australian Chamber of Commerce and Industry
- Australian Electrical and Electronic Manufacturers Association
- Australian Industry Group
- Business New Zealand
- Casting Technology New Zealand
- Department of Contract and Management Services WA
- Engineers Australia
- Local Government New Zealand
- Master Plumbers Australia
- New Zealand Water & Waste Association
- Plastics Industry Pipe Association of Australia
- Society of Mechanical Engineers of Australasia
- Victorian Employers' Chamber of Commerce
- Water Industry Alliance
- Water Services Association of Australia

This Standard was issued in draft form for comment as DR 05255.

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 public comment period.

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PREFACE

This Standard was prepared by the Joint Standard Australia/Standards New Zealand Committee WS-022, Valves for Waterworks Purposes, to supersede AS 2638.2—2002, *Gate valves for waterworks purposes—Resilient seated*.

The objective of this Standard is to specify requirements for PN 16 and PN 25 metal-bodied resilient-seated gate valves for waterworks purposes.

This revision includes the following changes:

(a) Incorporation of PN 25 gate valves.

(b) Incorporation of integral by-pass arrangement for sizes DN 450 to DN 750.

(c) Clarification of allowable test pressure.

(d) Correction of requirements for testing to AS/NZS 4020.

(e) Inclusion of alternative materials.

(f) Alignment of terminology with other waterworks product standards.

Attention is drawn to the proposed publication of SAI/SNZ Rul PL/2, Rulings to the Australia Standard, Gate valves for waterworks purposes. Where rulings of public significance are issued, they will be available from Standards Australia through a subscription service. When rulings are included in an amendment or revision, the specific ruling will be withdrawn at the time of publication of the amendment. Enquiries should be directed to Standards Australia.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

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.

Support and contribution is acknowledged from the Water Services Association of Australia (WSAA).

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for PN 16 and PN 25 metal-bodied resilient-seated gate valves for waterworks purposes, with a maximum operating temperature of 40°C. This Standard is applicable to the following versions:

(a) Valves of nominal sizes DN 80 to DN 750 with inside screw and non-rising spindle design, operated by a removable key, with or without a gearbox, for buried applications.

(b) Valves of nominal size DN 80 to DN 750 with inside screw and non-rising spindle design, operated by a hand wheel, with or without a gearbox, for aboveground applications.

(c) Valves of nominal size DN 80 to DN 300 with outside screw and rising spindle design, operated by a hand wheel, for aboveground applications where the position of the gate is required to be visible.

(d) Valves of nominal sizes DN 450 to DN 750 with an integral bypass arrangement.

The design criteria of the valve and fasteners should be based on a minimum life expectancy of 50 years.

Means for demonstrating compliance with this Standard are given in Appendix A.

NOTE: Purchasing guidelines are given in Appendix B.

1.2 REFERENCED DOCUMENTS

The documents referred to in this Standard are listed in Appendix C.

1.3 DEFINITIONS

For the purpose of this Standard, the definitions below apply:

1.3.1 Allowable operating pressure (AOP)

The allowable internal pressure, excluding surge, that a component can safely withstand in service.

1.3.2 Allowable site test pressure (ASTP)

The maximum internal hydrostatic pressure that can be applied on site to a component in a newly installed pipeline.

1.3.3 Bulkhead test

A test where the testing machine provides external restraint to make a watertight joint at each end of the valve.