

Australian Standard™

**Safety valves, other valves, liquid level  
gauges and other fittings for boilers and  
unfired pressure vessels**

This Australian Standard was prepared by Committee ME-001, Pressure Equipment. It was approved on behalf of the Council of Standards Australia on 30 June 2003. This Standard was published on 18 August 2003.

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The following are represented on Committee ME-001:

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**Safety valves, other valves, liquid level  
gauges and other fittings for boilers and  
unfired pressure vessels**

Originated as AS B190—1964.  
Previous edition AS 1271—1997.  
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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-001, Pressure Equipment to supersede AS 1271—1997. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

*This Standard incorporates Amendment No. 1 (July 2004). 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 Committee's intention is to consolidate all valve requirements used for pressure equipment within the Committee's scope into one document. This has been achieved by incorporating some parts of AS 3653—1993, *Boiler—Safety, management, combustion and other ancillary equipment*, into this Standard.

The remainder of AS 3653 will be superseded by a proposed new Standard to cover the areas of unattended, limited attendance and attended boilers and on publication of the new Standard, AS 3653 will be withdrawn.

Other Australian Boiler Standards will reflect these changes as they are revised.

The objective of this Standard is to specify clear, uniform and safe requirements for the design, construction and testing of safety valves, other valves, liquid level gauges, blowdown valves and other fittings for use on boilers and unfired pressure vessels, and their associated piping.

Users of this Standard are reminded that it has no legal authority in its own right but may acquire legal standing in one or more of the following circumstances:

- (a) Adoption by a government or other authority having jurisdiction.
- (b) Adoption by a purchaser as the required standard of construction when placing a contract.
- (c) Adoption where a manufacturer states that a product is in accordance with 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.

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## STANDARDS AUSTRALIA

### Australian Standard

## Safety valves, other valves, liquid level gauges and other fittings for boilers and unfired pressure vessels

### SECTION 1 SCOPE AND GENERAL

#### 1.1 SCOPE

This Standard specifies requirements for the design, construction and testing of safety valves, other valves, liquid relief valves, liquid level gauges, blowdown valves and other fittings for use on boilers and unfired pressure vessels, and their associated piping.

#### 1.2 APPLICATION

Each fitting shall comply with the requirements of Section 2 and with the requirements of the following Sections, as appropriate:

- (a) Safety and relief valves..... Section 3.
- (b) Liquid relief valves..... Section 4.
- (c) Liquid level gauges ..... Section 5.
- (d) Blowdown valves ..... Section 6.

#### 1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

##### AS

- |        |  |
|--------|--|
| 1210   | Pressure vessels                           |
| 1722   | Pipe threads of Whitworth form             |
| 1722.1 | Part 1: Sealing pipe threads               |
| 1772.2 | Part 2: Fastening pipe threads             |
| 2129   | Flanges for pipes, valves and fittings     |
| 2593   | Boilers—Unattended and limited attendance  |
| 4037   | Pressure equipment—Examination and testing |
| 4041   | Pressure piping                            |
| 4942   | Pressure equipment —Glossary of terms      |

##### AS/NZS

- |      |                    |
|------|--------------------|
| 1200 | Pressure equipment |
|------|--------------------|

##### ANSI

- |         |  |
|---------|--|
| B1.20.1 | Pipe threads, general purpose                      |
| B16.5   | Pipe flanges and flanged fittings                  |
| B16.47  | Large-diameter steel flanges NPS 20 through NPS 60 |
| B16.104 | Control valve seat leakage                         |