AS 1375-1985

# Australian Standard®

## SAA INDUSTRIAL FUEL-FIRED APPLIANCES CODE

This Australian standard was prepared by Committee ME/21, Industrial Fuel-fired Equipment. It was approved on behalf of the Council of the Standards Association of Australia on 10 September 1984 and published on 4 April 1985.

The following interests are represented on Committee ME/21:

Australian Gas Association

Australian Institute of Energy

Australian Institute of Petroleum Ltd

Bureau of Steel Manufacturers of Australia

Confederation of Australian Industry

Department of Labour and Industry, Vic.

Department of Mines and Energy, N.T.

Department of Transport and Construction

Heating and Cooling Industry Association of Victoria

Insurance Council of Australian Ltd

Metal Trades Industry Association of Australia

University of Melbourne

This standard was issued in draft form for comment as DR 83129.

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### SAA INDUSTRIAL FUEL-FIRED APPLIANCES CODE

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#### PREFACE

This edition of this standard was prepared by the Association's Committee on Industrial Fuel-fired Equipment, to supersede AS 1375—1979.

The standard was first issued in 1973, and was revised in 1979 to incorporate amendments and to update it generally; it has now been completely reviewed to expand it in detail and make it generally more comprehensive.

In the main the amendments in preceding years had concentrated on the appendices which are a vital feature of this standard because of the importance of the design guidance which they provide. In a succession of amendments, the appendices dealing with explosion relief, with ventilation rates for ovens, and with data tables were clarified, adjusted, and modified.

The 1979 edition was fundamentally a reprinting to bring a degree of order to these various amendments, and did not constitute a general review.

This edition represents a general revision, the main features of which are as follows:

- (a) Broadly, the alterations represent the result of further experience with the standard, developments in thinking arising from the publication and revision of AS 1853, Automotive Oil and Gas Burners—Mechanical Draught, and input from Committee ME/1, Boilers and Unfired Pressure Vessels.
- (b) More attention is paid to the appliance management system, as distinct from the burner management system.
- (c) The general subject of shutdown in the event of malfunction has received more detailed attention.
- (d) It is made clearer in a number of places that the link between critical time and supervision response time applies only at the ignition phase.
- (e) The treatment of flame failure during operation is expanded, to explain exemptions more clearly.
- (f) A number of adjustments and clarifications have been made to the clauses on purging, without making any fundamental change of direction.
- (g) Installation requirements have been expanded in detail, with the assistance of Committee ME/1.
- (h) The commissioning clauses have been supported by a new appendix recommending a procedure.
- (j) Flues and chimneys have been expanded considerably to cater mainly for the needs of very large appliances, boilers, and the like. No attempt has been made to touch on structural design, this being a specialist subject well covered in standards available elsewhere. The variable usage of words such as flue, chimney, stack, smokestack or funnel to mean the same thing, or sometimes different things, has caused an as yet unresolved difficulty. This edition uses the language of the industrial appliance industry, i.e. flue is used as a generic term to mean the same as the alternative words.
- (k) Appendix B and Appendix C have been made more comprehensive.
- Appendix D has been expanded, mainly to include an additional option, i.e. using excess air to achieve infinity critical time. This technique has many attractions, notably it avoids the need to depend on very fast-reacting protective systems. Appendix D therefore reflects some change of emphasis.
- (m) Appendix E and Appendix F remain unchanged, both being in regular use, and satisfactory, so there is no need for alteration.
- (n) Appendix H has been added to give guidelines for a procedure for commissioning new equipment.

In addition, there has been considerable editorial change.

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