

Australian Standard[®]

**INDUSTRIAL VACUUM
CLEANERS FOR PARTICULATES
HAZARDOUS TO HEALTH**

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Australian Assembly of Fire Authorities
Australian Mines and Metals Association
Confederation of Australian Industry
Country Fire Authority, Victoria
Department of Defence
Department of Industrial Relations and Employment, N.S.W.
Department of Labour, Victoria
Electricity Supply Association of Australia
Metal Trades Industry Association of Australia
Safety Institute of Australia
Water Board, Sydney

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Manufacturing interests

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PREFACE

This Standard was prepared by the Association's Committee on Industrial Respiratory Protection.

The Standard was prepared following requests by Statutory Authorities and testing authorities who were anxious to—

- (a) ensure that vacuum cleaners used in industry for collection of particulates hazardous to health do not permit particulates to be recirculated to the immediate atmosphere; and
- (b) have a safety Standard against which industrial vacuum cleaners could be tested and approved.

Electrical requirements are included and generally require compliance with AS 3308, *Approval and test specifications for particular requirements for vacuum cleaners and water suction cleaning appliances*. Requirements for filtering efficiency of the vacuum cleaners are based on those specified in BS 5415: *Specification for safety of electrical motor-operated industrial cleaning appliances*, Part 2, *Particular requirements*, Section 2.2, *Vacuum cleaners wet and/or dry*.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

INDUSTRIAL VACUUM CLEANERS FOR PARTICULATES HAZARDOUS TO HEALTH

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard specifies the requirements for industrial vacuum cleaners designed for the collection of particulates defined as hazardous to health (see Clause 1.4.2).

The Standard is not applicable to fixed systems for dust extraction or to systems containing their own propulsion system.

1.2 REFERENCED DOCUMENTS. The documents below are referred to in this Standard:

AS	
1217	Acoustics—Determination of sound power levels of noise sources
1319	Safety signs for the occupational environment
1715	Selection, use and maintenance of respiratory protective devices
3133	Approval and test specification for air break switches
3308	Approval and test specifications for particular requirements for vacuum cleaners and water suction appliances
	Part 1: Vacuum cleaners Dry suction (AS 3308.1)
	Part 2: Water suction cleaning appliances (AS 3308.2)
BS	
3928	Method for sodium flame test for air filters (other than for air supply to I.C. engines and compressors)
Attention is drawn to the following related Standards:	
AS	
1939	Classification of degrees of protection provided by enclosures of electrical equipment
3300	Approval and test specification—General requirements for household and similar electrical appliances
BS	
5415	Specification for safety of electrical motor-operated industrial cleaning appliances
	Part 2: Particular requirements
	Section 2.2, Vacuum cleaners wet and/or dry

1.3 CLASSIFICATION. Industrial vacuum cleaners designed for the collection of particulates defined as hazardous to health, and complying with this Standard, shall be classified as 'Type H' (high efficiency filtration) Industrial Vacuum Cleaners (see Clause 1.4.1).

1.4 DEFINITIONS. For the purpose of this Standard, the definitions given in AS 1715, AS 3308 and those below apply.

1.4.1 Type H industrial vacuum cleaner—an appliance which—

- is specifically designed for industrial or commercial use, and intended to exhaust into the working environment;
- is suitable for the collection of particulates defined as hazardous to health (see Clause 1.4.2); and
- is designed to collect particulates and other material by means of wet suction, dry suction, or both.

NOTE: Throughout this Standard, Type H industrial vacuum cleaners are referred to as vacuum cleaners.

1.4.2 Particulates hazardous to health—particulates classified by the relevant Regulatory Authority as hazardous to health (e.g. asbestos, finely divided silica, carcinogens, highly active pharmaceutical products).

1.4.3 Particulate—the generic name for dusts, mists, smokes and fumes.

NOTES:

- For guidance on classification of hazardous particulates and relevant exposure limits, contact should be made with the National Occupational Health and Safety Commission or State Regulatory Authorities (see Appendix E).
- A range of particulates may prove explosive under certain circumstances. For guidance on the removal of explosive particulates, contact should be made with the National Occupational Health and Safety Commission, and with mining and fire authorities.
- Particulates of relevance to collection by vacuum cleaners will usually have been deposited on surfaces.



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