AS 2120.3—1992 Reconfirmed 2016

# Australian Standard®

## **Medical suction equipment**

Part 3: Suction equipment powered from a vacuum or pressure source

This Australian Standard was prepared by Committee HT/4, Medical Gases and Pipeline Services. It was approved on behalf of the Council of Standards Australia on 22 July 1992 and published on 16 November 1992.

The following interests are represented on Committee HT/4:

Association of Consulting Engineers, Australia

Australian Society of Anaesthetists

Confederation of Australian Industry

Department of Health, Housing and Community Services (Commonwealth)

Department of Health, N.S.W.

Health Department, W.A.

Institute of Hospital Engineering, Australia

Medical Industry Association of Australia

Metal Trades Industry Association of Australia

Public Works Department, N.S.W.

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## STANDARDS AUSTRALIA

### RECONFIRMATION

## OF

AS 2120.3—1992 Medical suction equipment Part 3: Suction equipment powered from a vacuum or pressure source

## **RECONFIRMATION NOTICE**

Technical Committee HE-017 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 22 November 2016.

The following are represented on Technical Committee HE-017:

Australia New Zealand Industrial Gas Association Australian and New Zealand College of Anaesthetists Australian Chamber of Commerce and Industry Australian Industry Group Australian Society of Anaesthetists Engineers Australia Master Plumbers Association of QLD Master Plumbers Australia Ministry of Consumer Affairs (NZ) NOTES

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## **Medical suction equipment**

Part 3: Suction equipment powered from a vacuum or pressure source

First published as part of AS 2120—1977. Revised and redesignated in part as AS 2120.3—1992.

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) 1 THE CRESCENT, HOMEBUSH, NSW 2140 This Standard was prepared by the Standards Australia Committee on Medical Gases and Pipeline Services, under the direction of the Multitechnics Standards Policy Board, to supersede, in part, AS 2120—1977, *Suction systems for medical use in hospitals*.

This Standard is the third in a series of Standards for medical suction equipment, and deals only with suction equipment powered from a vacuum or pressure source. Part 1 deals with safety requirements for electrically-powered suction equipment, and Part 2 deals with manually-powered suction equipment.

This Standard has been prepared in response to a need for a safety and performance standard for suction systems. Suction is used to clear the airway and remove unwanted material from body cavities. Suction is also used to assist drainage and decompress body cavities. Suction and vacuum systems are used widely in health care facilities such as hospitals, for domiciliary care of patients who are nursed at home, and in emergency situations both outside hospitals in field conditions and during transport in ambulances.

As far as possible, this Standard has been written specifying performance requirements for effective and safe treatment of the patient.

Some devices specified in this Standard are intended to be operated in conjunction with a pipeline complying with AS 2896—1991, *Medical gas systems*—Installation and testing of non-flammable medical gas pipeline systems.

The clauses of this Standard supplement or modify the corresponding clauses in ISO 10079-3, *Medical suction equipment* — Part 3: *Suction equipment powered from a vacuum or pressure source*. Although this Standard closely follows ISO 10079-3 in format and technical content, some of the requirements of that publication have been modified to take account of local conditions.

Where this Standard deviates technically from ISO 10079-3 by way of additional or different requirements, the deviation is indicated by a rule in the margin against the clause, or part thereof, affected. Minor changes are not indicated. An annex to the Standard lists the variations from ISO 10079-3.

Appendix A is normative; it gives test methods to be used to verify compliance with the requirements given in this Standard.

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## STANDARDS AUSTRALIA

## Australian Standard Medical suction equipment

## Part 3: Suction equipment powered from a vacuum or pressure source

**1 SCOPE** This Standard specifies safety and performance requirements for medical suction equipment powered from a vacuum or pressure source (see Figure 1). In particular it applies to connections to the terminal unit of vacuum systems.

NOTE: Suction equipment with electronic timing, controlled by electrical means, may also need to comply with AS 3200.1. This Standard does not apply to transportable electrically-powered suction equipment, whether mains or battery-powered, which is dealt with in AS 2120.1 nor to manually-powered suction equipment which is dealt with in AS 2120.2 nor to the following:

- (a) Central power source (by vacuum/compressed air generation), piping systems of vehicles and buildings, and wall connectors.
- (b) Catheter tubes, drains, curettes and suction tips.
- (c) Syringes.
- (d) Dental suction equipment complying with AS 2686.2.
- (e) Waste gas scavenging systems.
- (f) Laboratory suction.
- (g) Autotransfusion systems.
- (h) Passive urinary drainage.
- (i) Closed systems for wound drainage.
- (j) Gravity gastric drainage.
- (k) Orally-operated mucous extractors.
- (1) Suction equipment where the collection container is downstream of the vacuum pump.
- (m) Equipment marked as suction unit for permanent tracheostomy.
- (n) Ventouse (obstetric) equipment.
- (o) Neonatal mucous extractors.
- (p) Breast pumps.
- (q) Liposuction.
- (r) Uterine aspiration.

2 **REFERENCED DOCUMENTS** The following documents are referred to in this Standard:

- AS
- 2496 Breathing attachments for anaesthetic purposes for human use
- 2686 Dental equipment Suction systems
- 2686.2 Part 2: Mobile systems
- 2700 Colour standards for general purposes
- 2896 Medical gas systems—Installation and testing of non-flammable medical gas pipeline systems
- 2902 Medical gas systems Low pressure flexible connecting assemblies (hose assemblies)
- 3200 Approval and test specification Electromedical equipment General requirements
- 3200.1 Part 1: General requirements for safety
- ISO

407 Small medical gas cylinders—Yoke-type valve connections

3 **DEFINITIONS** For the purposes of this Standard, the definitions below apply.

- 3.1 Collection container container in which liquids or solid particles are collected.
- 3.2 Drainage—removal of fluids from a body cavity or wound, assisted by vacuum.
- **3.3 End piece**—that part of the suction equipment applied to the patient. The end piece starts at the site where material is drawn in and ends at the first detachable connection.
- 3.4 Exhaust opening—port or ports through which exhaust is discharged.
- 3.5 Filter—device for separation of particulate matter.