

Australian Standard<sup>®</sup>

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**Medical suction equipment**

**Part 2: Manually-powered suction  
equipment**

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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.

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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.  
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## PREFACE

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 second in a series of Standards for medical suction equipment, and deals only with manually-powered suction equipment. Part 1 deals with safety requirements for electrically-powered suction equipment. Part 3 deals with suction equipment powered from a vacuum or pressure source.

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 both 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 corresponding with those needed for effective and safe treatment of the patient.

The clauses of this Standard supplement or modify the corresponding clauses in ISO 10079-2, *Medical suction equipment—Part 2: Manually-powered suction equipment*. Although this Standard closely follows ISO 10079-2 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 10079-2 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 this Standard lists the variations from ISO 10079-2.

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

Appendix B is informative; it gives a table of a typical range of volumes for collection containers for specific uses. This Appendix does not form part of the Standard.

Appendix C is informative; it gives a rationale statement for some requirements. This Appendix does not form part of the Standard.

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## STANDARDS AUSTRALIA

**Australian Standard**  
**Medical suction equipment**

**Part 2: Manually-powered suction equipment**

**1 SCOPE** This Standard specifies safety and performance requirements for manually-powered medical suction equipment intended for oropharyngeal suction to establish and maintain the patency of the airway. It covers equipment operated by foot or by hand or both (see Figure 1). Non-electrical suction equipment which may be integrated with electrical equipment is within the scope of this Standard.

This Standard does not apply to transportable electrically-powered suction equipment, whether mains or battery-powered, which is dealt with in AS 2120 Part 1, nor to suction equipment powered from a vacuum or pressure source which is dealt with in AS 2120 Part 3, 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.
- (l) 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.
- (s) Thoracic drainage.

**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
3200	Approval and test specification — Electromedical equipment — General requirements
3200.1	Part 1: General requirements for safety
ISO	
8382	Resuscitators intended for use with humans
10079	Medical suction equipment
10079-2	Part 2: Manually-powered suction equipment

**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 Collection container assembly**—collection container and its closure.

**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.