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AS 2120.1—1992

Australian Standard®

Medical suction equipment

Part 1: Electrically-powered suction equipment— Safety requirements

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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.

The following interests are represented on Committee HT/4:

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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.
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Part 1: Electrically-powered suction equipment— Safety requirements

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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 first in a series of Standards for medical suction equipment, and deals only with safety requirements for electrically-powered suction equipment. Part 2 deals with manually-powered suction equipment. Part 3 deals with suction equipment powered from a vacuum or pressure source.

The clauses of this Standard supplement or modify the corresponding clauses in AS 3200.1/NZS 6150, *Approval and test specifications—Electromedical equipment—General requirements,* Part 1: *General requirements for safety.* Where the reference in the text of this Standard includes an 'addition', 'replacement', 'substitution' or 'modification' of the relevant requirements, tests or explanatory notes of AS 3200.1/NZS 6150, these changes are made to the relevant text which then become part of that Standard. It will be observed that when no such change is necessary, the words 'the requirements given in (the relevant) clause of AS 3200.1/NZS 6150 apply' are used.

Where the requirements of AS 3200.1/NZS 6150 do not apply, the words 'not used' are used. Although this Standard closely follows AS 3200.1/NZS 6150 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 10079-1:1991, *Medical suction equipment,* Part 1: *Electrically powered suction equipment—Safety requirements,* by way of additional or different requirements, such deviations are 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 10079-1.

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.

In this Standard, vacuum readings are specified as gauge (relative) pressures to assist clinical personnel. However, this is not intended to prevent engineering groups from using absolute vacuum in their design process. The specifications in this Standard assume an ambient pressure of 1 atmosphere at sea level.

Test methods other than those specified in this Standard, but of equal or greater accuracy, may be used to verify compliance with the given requirements. However, in the event of a dispute, the methods specified in this Standard are to be used as the reference methods.

This Standard requires reference to Australian and ISO Standards. These are listed in Appendix L.

A rationale for the most important requirements is given in Appendix O. It is considered that a knowledge of the reasons for the requirements will not only facilitate the proper application of the Standard, but will expedite any subsequent revision.

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