

AS 2896:2021



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Medical gas systems — Installation and testing of non-flammable medical gas pipeline systems



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The following are represented on Committee HE-017:

- Australia New Zealand Industrial Gas Association
- Australian & New Zealand College of Anaesthetists
- Australian Industry Group
- Australian Society of Anaesthetists
- Engineers Australia
- Institute of Healthcare Engineering Australia
- Master Plumbers Australia and New Zealand
- NSW Health
- SA Health
- Therapeutic Goods Administration

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Preface

This Standard was prepared by the Standards Australia Committee HE-017, Medical Gas Systems, to supersede AS 2896—2011.

The objective of this Standard is to set out requirements for the safety aspects, construction, testing and certification, operation and maintenance of non-flammable medical gas pipeline systems (MGPS) used for patient care, operating surgical tools, and therapeutic and diagnostic purposes. Non-flammable medical gas pipeline systems include medical suction pipeline systems.

Some of the major changes in this Standard include:

- (a) Distinguishing Levels 1 and 2 installations, based on the complexity of the health care facility and required MGPS.
- (b) Addition of [Appendix K](#) — Roles and responsibilities, to assist healthcare facilities in determining the commissioning process for medical gas pipeline systems.
- (c) Addition of [Appendix M](#) — Commissioning plan for Levels 1 and 2 installations.
- (d) Use of non-medical gases in reticulated systems and requirements for the detection and prevention of leaks and cross connection have been considered.
- (e) Addition of a requirement to ensure that any change-over alarm signals cannot be cancelled without first replacing empty cylinders on auto change-over manifolds.
- (f) Revision of the pressure and flow performance requirements and testing.
- (g) Introduction of requirements for the testing of purity for medical and surgical tool air.
- (h) Back-up for special care locations.
- (i) Additional requirements for gas scavenging.

A high quality of workmanship and experience is essential in the installation of medical gas pipelines. For medical gases not listed in [Clause 1.2](#), special pipeline designs may be required which are not covered by this Standard. For certain situations, e.g. hyperbaric conditions, special design and performance criteria for pipelines may be required.

Requirements in this Standard may be used as a guide for piping systems for other non-flammable medical gases and anaesthetic gas scavenging systems, but variations in the requirements may be necessary.

The inclusion of roles and responsibilities in AS 2896:2021 was approved by the Standards Development Committee on 2 November 2017, as a one-off exemption to the directives of Standardization Guide 009: Preparation of Standards for Legislative Adoption.

The terms “normative” and “informative” have been used in this Standard to define the application of the Appendix to which they apply. A “normative” Appendix is an integral part of a Standard, whereas an “informative” Appendix is only for information and guidance.

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