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**Terminal units for medical gas pipeline  
systems —**

Part 2:

**Terminal units for anaesthetic gas  
scavenging systems**

*Prises murales pour systèmes de distribution de gaz médicaux —*

*Partie 2: Prises murales pour systèmes d'évacuation des gaz  
d'anesthésie*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 9170-2 was prepared by Technical Committee ISO/TC 121, *Anaesthetic and respiratory equipment*, Subcommittee SC 6, *Medical gas systems*.

This second edition cancels and replaces the first edition (ISO 9170-2:1999) which has been technically revised.

ISO 9170 consists of the following parts, under the general title *Terminal units for medical gas pipeline systems*:

- *Part 1: Terminal units for use with compressed medical gases and vacuum*
- *Part 2: Terminal units for anaesthetic gas scavenging systems*

## Introduction

Anaesthetic gas scavenging system (AGSS) terminal units are the points in an anaesthetic gas scavenging system where the operator makes connections and disconnections for the disposal of medical gases and anaesthetic vapours from anaesthetic machines or other items of medical equipment, and where a wrong connection may create a hazard to the patient. It is important that terminal units and their components be designed, manufactured, installed and maintained in such a way as to meet the basic requirements specified in this part of ISO 9170.

This part of ISO 9170 pays particular attention to:

- suitability of materials;
- type specificity;
- dimensions of probes and type-specific connection points;
- cleanliness;
- testing;
- identification;
- information supplied.

This part of ISO 9170 specifies the provision of information for the installation and subsequent testing of terminal units. Testing of terminal units prior to use is critical to patient safety and it is essential that terminal units are not used until full testing in accordance with ISO 7396-2 has been completed.

Annex A contains rationale statements for some of the requirements of this part of ISO 9170. The clauses and subclauses marked with an asterisk (\*) after their number have corresponding rationale contained in Annex A, included to provide additional insight into the reasoning that led to the requirements and recommendations that have been incorporated in this part of ISO 9170. It is considered that knowledge of the reasons for the requirements will not only facilitate the proper application of this part of ISO 9170, but will expedite any subsequent revisions.

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# Terminal units for medical gas pipeline systems —

## Part 2:

## Terminal units for anaesthetic gas scavenging systems

### 1 Scope

**1.1** This part of ISO 9170 specifies the requirements and dimensions for terminal units intended for use in anaesthetic gas scavenging disposal systems in accordance with ISO 7396-2.

**1.2** This part of ISO 9170 specifies two types of terminal unit according to whether the power device is upstream or downstream of the terminal unit.

**1.3** This part of ISO 9170 also specifies requirements and dimensions for the mating counterpart (probe) of the type-specific connection point which is part of the terminal unit.

**1.4** This part of ISO 9170 does not specify the ranges of nominal operating pressure for terminal units, which are defined in ISO 7396-2.

**1.5** This part of ISO 9170 does not specify requirements for terminal units for use with compressed medical gases and vacuum, which are covered in ISO 9170-1.

### 2 \* Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6506-1:2005, *Metallic materials — Brinell hardness test — Part 1: Test method*

ISO 7396-2:2007, *Medical gas pipeline systems — Part 2: Anaesthetic gas scavenging disposal systems*

ISO 8835-3:2007, *Inhalational anaesthesia systems — Part 3: Transfer and receiving systems of active anaesthetic gas scavenging systems*

ISO 14971:2007, *Medical devices — Application of risk management to medical devices*

ISO 15001:2003, *Anaesthetic and respiratory equipment — Compatibility with oxygen*