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Gas welding equipment - Pressure gauges used in welding, cutting and allied processes (ISO 5171:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/19

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EUROPEAN STANDARD

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English Version

**Gas welding equipment - Pressure gauges used in welding,
cutting and allied processes (ISO 5171:2019)**

Matériel de soudage au gaz - Manomètres utilisés pour
le soudage, le coupage et les techniques connexes (ISO
5171:2019)

Gasschweißgeräte - Manometer für Schweißen,
Schneiden und verwandte Prozesse (ISO 5171:2019)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 5171:2019 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 5171:2019) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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Endorsement notice

The text of ISO 5171:2019 has been approved by CEN as EN ISO 5171:2019 without any modification.

INTERNATIONAL STANDARD

ISO 5171

Fourth edition
2019-05

Gas welding equipment — Pressure gauges used in welding, cutting and allied processes

*Matériels de soudage au gaz — Manomètres utilisés pour le soudage,
le coupage et les techniques connexes*



Reference number
ISO 5171:2019(E)

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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Pressure	2
4.1 Unit of pressure.....	2
4.2 Maximum scale reading.....	2
4.3 Maximum pressure mark.....	2
5 Manufacturing requirements	3
5.1 Materials.....	3
5.1.1 General.....	3
5.1.2 Oxygen pressure gauges.....	3
5.2 Design and dimensions.....	4
5.2.1 Operational equipment.....	4
5.2.2 Dimensions.....	4
5.2.3 Dial and pointer.....	8
6 Safety	8
7 Marking	8
8 Tests	9
8.1 General.....	9
8.2 Accuracy.....	10
8.3 Torsion test.....	10
8.4 Bend test.....	11
8.5 Case vent test.....	12
8.6 Overpressure and leakage test.....	13
8.6.1 Test A.....	13
8.6.2 Test B.....	14
8.7 Flammability test.....	14
Bibliography	15

ISO 5171:2019(E)

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 8, *Equipment for gas welding, cutting and allied processes*.

This fourth edition cancels and replaces the third edition (ISO 5171:2009) which has been technically revised.

The main changes compared to the previous edition are as follows:

- [Clause 7](#) has been revised;
- [Clause 8](#) has been clarified regarding the amount of test samples to be used;
- editorial changes have been made;
- test B has been added in [5.2.1.2.3](#) for supplementary leakage rate under the testing conditions of 8.7.2.

Any feedback, question or request for official interpretation related to any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 8 via your national standards body. A complete listing of these bodies can be found at www.iso.org/members.html. Official interpretations, where they exist, are available from this page: <https://committee.iso.org/sites/tc44/home/interpretation.html>.

Gas welding equipment — Pressure gauges used in welding, cutting and allied processes

1 Scope

This document specifies requirements for Bourdon-tube pressure gauges normally used with compressed gas systems at pressures up to 30 MPa (300 bar) in welding, cutting and allied processes. It also covers use for dissolved acetylene and for liquefied gases under pressure.

It does not cover gauges for acetylene in acetylene-manufacturing plants.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 497, *Guide to the choice of series of preferred numbers and of series containing more rounded values of preferred numbers*

ISO 4589-2:2017, *Plastics — Determination of burning behaviour by oxygen index — Part 2: Ambient-temperature test*

ISO 9539, *Gas welding equipment — Materials for equipment used in gas welding, cutting and allied processes*

ISO 10102, *Assembly tools for screws and nuts — Double-headed open-ended engineers' wrenches — Outside dimensions*

ISO 14114, *Gas welding equipment — Acetylene manifold systems for welding, cutting and allied processes — General requirements*

ISO 15296, *Gas welding equipment — Vocabulary*

ANSI/ASME B1.20.1¹⁾, *Pipe threads, general purpose (inch)*

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