



# SLOVENSKI STANDARD SIST EN ISO 5175-2:2018

01-februar-2018

Nadomešča:  
SIST EN 730-2:2003

---

**Oprema za plamensko varjenje - Varnostne naprave - 2. del: Naprave brez vgrajene varovalke proti povratnemu udaru (ISO 5175-2:2017)**

Gas welding equipment - Safety devices - Part 2: Not incorporating a flame (flashback) arrestor (ISO 5175-2:2017)

Gasschweißgeräte - Sicherheitseinrichtungen - Teil 2: Ohne integrierte Flammensperre (ISO 5175-2:2017)

Matériel de soudage au gaz - Dispositifs de sécurité - Partie 2: Sans arrêt de flamme (ISO 5175-2:2017) <https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90b41a027dc/sist-en-iso-5175-2-2018>

**Ta slovenski standard je istoveten z: EN ISO 5175-2:2017**

---

**ICS:**

25.160.30 Varilna oprema Welding equipment

**SIST EN ISO 5175-2:2018 en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 5175-2:2018](https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018)

<https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018>

EUROPEAN STANDARD

EN ISO 5175-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2017

ICS 25.160.30

Supersedes EN 730-2:2002

English Version

## Gas welding equipment - Safety devices - Part 2: Not incorporating a flame (flashback) arrestor (ISO 5175-2:2017)

Matériel de soudage au gaz - Dispositifs de sécurité -  
Partie 2: Sans arrêt de flamme (ISO 5175-2:2017)

Gasschweißgeräte - Sicherheitseinrichtungen - Teil 2:  
Ohne integrierte Flammensperre (ISO 5175-2:2017)

This European Standard was approved by CEN on 20 November 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 5175-2:2018](https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018)  
<https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018>

## European foreword

This document (EN ISO 5175-2:2017) 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 May 2018, and conflicting national standards shall be withdrawn at the latest by May 2018.

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

This document supersedes EN 730-2:2002.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**iTeh STANDARD PREVIEW**  
**Endorsement notice**  
**(standards.iteh.ai)**

The text of ISO 5175-2:2017 has been approved by CEN as EN ISO 5175-2:2017 without any modification.

<https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 5175-2:2018](https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018)

<https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018>

INTERNATIONAL  
STANDARD

ISO  
5175-2

First edition  
2017-09

---

---

**Gas welding equipment — Safety  
devices —**

**Part 2:  
Devices not incorporating a flame  
(flashback) arrestor**

**iTeh STANDARD PREVIEW**  
*Matériel de soudage au gaz — Dispositifs de sécurité —  
Partie 2: Dispositifs sans arrêt de flamme*  
**(standards.iteh.ai)**

[SIST EN ISO 5175-2:2018](https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018)

<https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018>



Reference number  
ISO 5175-2:2017(E)

© ISO 2017

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 5175-2:2018

<https://standards.iteh.ai/catalog/standards/sist/eb649d0e-5c20-4984-903b-90bf41a027dc/sist-en-iso-5175-2-2018>



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org



# Contents

	Page
Foreword .....	iv
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Design and materials</b> .....	<b>3</b>
4.1 Connections .....	3
4.2 Materials .....	3
<b>5 Requirements</b> .....	<b>4</b>
5.1 General .....	4
5.2 Gas tightness .....	4
5.3 Pressure resistance .....	4
5.4 Non-return valve .....	4
5.5 Pressure relief valves .....	5
5.6 Excess flow cut-off valves .....	5
5.7 Flashback resistance .....	5
<b>6 Methods for type testing</b> .....	<b>5</b>
6.1 General .....	5
6.2 Accuracy of pressure and flow measurements .....	5
6.3 Test gases .....	5
6.4 Gas tightness test .....	6
6.5 Pressure resistance test .....	6
6.6 Non-return valve test .....	6
6.7 Pressure relief valves .....	6
6.8 Excess flow cut-off valve .....	6
6.9 Internal leakage test for cut-off valves .....	7
<b>7 Manufacturer's instructions</b> .....	<b>7</b>
<b>8 Marking</b> .....	<b>7</b>
<b>Annex A (informative) Gas flow measurement</b> .....	<b>9</b>
<b>Annex B (informative) Third party testing information</b> .....	<b>11</b>

## ISO 5175-2:2017(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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html). (standards.iteh.ai)

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 first edition of ISO 5175-2, together with ISO 5175-1, cancels and replaces ISO 5175:1987, which has been technically revised. It also incorporates the Amendment ISO 5175:1987/Amd 1:2015.

A list of all parts in the ISO 5175 series can be found on the ISO website.

Requests for official interpretations of 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](http://www.iso.org).

# Gas welding equipment — Safety devices —

## Part 2:

## Devices not incorporating a flame (flashback) arrestor

### 1 Scope

This document specifies the general requirements and tests for safety devices for fuel gases and oxygen or compressed air which do not incorporate a flame (flashback) arrestor used downstream of manifold, cylinder and/or pipeline outlet regulators, and upstream of blowpipes for welding, cutting and allied processes.

This document does not specify the location of these devices in the gas system.

This document is not applicable to safety devices which incorporate a flame arrestor, covered by ISO 5175-1.

### 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 554, *Standard atmospheres for conditioning and/or testing* — Specifications

ISO 2503, *Gas welding equipment — Pressure regulators and pressure regulators with flow-metering devices for gas cylinders used in welding, cutting and allied processes up to 300 bar (30 MPa)*

ISO 5175-1:2017, *Gas welding equipment — Safety devices — Part 1: Incorporating a flame (flashback) arrestor*

ISO 7289, *Gas welding equipment — Quick-action couplings with shut-off valves for welding, cutting and allied processes*

ISO 7291, *Gas welding equipment — Pressure regulators for manifold systems used in welding, cutting and allied processes up to 30 MPa (300 bar)*

ISO 9090, *Gas tightness of equipment for gas welding and allied processes*

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

ISO 10225, *Gas welding equipment — Marking for equipment used for gas welding, cutting and allied processes*

ISO 15296, *Gas welding equipment — Vocabulary*

EN 560, *Gas welding equipment — Hose connections for equipment for welding, cutting and allied processes*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15296 and the following apply.