



NSAI
Standards

Irish Standard
I.S. EN ISO 2503:2009&A1:2015

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 2503:2009)

I.S. EN ISO 2503:2009&A1:2015

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 2503:2009/A1

April 2015

ICS 25.160.30

English Version

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 2503:2009/Amd 1:2015)

Matériel de soudage aux gaz - Détendeurs et détendeurs débitmètres intégrés pour bouteilles de gaz utilisés pour le soudage, le coupage et les techniques connexes jusqu'à 300 bar (30 MPa) (ISO 2503:2009/Amd 1:2015)

Gasschweißgeräte - Druckregler und Druckregler mit Durchflussmessgeräten für Gasflaschen für Schweißen, Schneiden und verwandte Prozesse bis 300 bar (30 MPa) (ISO 2503:2009/Amd 1:2015)

This amendment A1 modifies the European Standard EN ISO 2503:2009; it was approved by CEN on 5 March 2015.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 2503:2009/A1:2015 (E)

Contents	Page
Foreword.....	3

Foreword

This document (EN ISO 2503:2009/A1:2015) 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 Amendment to the European Standard EN ISO 2503:2009 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2015, and conflicting national standards shall be withdrawn at the latest by October 2015.

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Endorsement notice

The text of ISO 2503:2009/Amd 1:2015 has been approved by CEN as EN ISO 2503:2009/A1:2015 without any modification.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 2503

July 2009

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Supersedes EN 13918:2003, EN ISO 2503:1998

English Version

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 2503:2009)

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This European Standard was approved by CEN on 17 June 2009.

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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 Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 2503:2009 (E)

Contents

Page

Foreword.....	3
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Foreword

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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 January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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Endorsement notice

The text of ISO 2503:2009 has been approved by CEN as a EN ISO 2503:2009 without any modification.

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INTERNATIONAL STANDARD

**ISO
2503**

Third edition
2009-07-15

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)

Matériel de soudage aux gaz — Détendeurs et détendeurs débitmètres intégrés pour bouteilles de gaz utilisés pour le soudage, le coupage et les techniques connexes jusqu'à 300 bar (30 MPa)



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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Symbols and abbreviated terms	4
5 Design requirements	4
5.1 Materials	4
5.2 Design and construction	4
6 Physical performance and operating characteristics	7
6.1 Pressures	7
6.2 Flow rates for pressure regulators without flow-metering devices	7
6.3 Equipment classes for pressure regulators without flow-metering devices	7
6.4 Pressure-relief valve	9
6.5 Operating-temperature range	9
6.6 Performance and operating characteristics	9
7 Marking	11
7.1 Pressure regulators without flow-metering devices	11
7.2 Pressure regulators with flow-metering devices	11
8 Instructions for use	12
9 Type-test procedure	12
9.1 General	12
9.2 Test samples and necessary documents	13
9.3 Test conditions	13
9.4 Units	13
9.5 Test for performance and operating characteristics of pressure regulators without flow-metering devices	14
9.6 Test for performance and operating characteristics of pressure regulator with flow-metering devices	17
9.7 Tests for mechanical resistance of pressure regulators or pressure regulator with a flow-metering device	19
9.8 Test for durability of markings	23
Annex A (informative) Pressure regulators	24
Annex B (informative) Operating principles of pressure regulators with flow-metering devices	28
Bibliography	30

ISO 2503:2009(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.

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.

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ISO 2503 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 8, *Equipment for gas welding, cutting and allied processes*.

This third edition cancels and replaces the second edition (ISO 2503:1998), and also ISO 7292:1997, which have been technically revised.

Requests for official interpretations of any aspect of this International Standard 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.

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)

1 Scope

This International Standard specifies requirements for single or two-stage pressure regulators without flow-metering devices for connection to gas cylinders used for

- compressed gases up to 300 bar ¹⁾ (30 MPa),
- dissolved acetylene,
- liquefied petroleum gases (LPG),
- methylacetylene-propadiene mixtures (MPS), and
- carbon dioxide (CO₂),

for use in welding, cutting and allied processes. It does not cover pressure regulators having a nominal outlet pressure $p_2 > 20$ bar.

This International Standard also specifies requirements for single or two-stage pressure regulators with flow-metering devices for connection to gas cylinders used for

- compressed gases or mixtures up to 300 bar (30 MPa), and
- carbon dioxide (CO₂),

for use in welding, cutting and allied processes. Typical processes using this equipment are: tungsten inert-gas arc welding (TIG), metal-arc inert-gas welding (MIG), metal-arc active-gas welding (MAG), plasma arc welding, tubular-cored-wire/tubular-cored-wire welding and plasma cutting. Annex B gives examples of flow-control systems and their flow-measuring devices.

This International Standard does not cover pressure regulators intended for direct use on cylinder bundles. Such regulators comply with the safety requirements of ISO 7291, in particular with the adiabatic compression test for oxygen regulators.

NOTE In addition to terms used in English and French, two of the three official ISO languages (English, French and Russian), this document gives the equivalent terms in German; these are published under the responsibility of the member body for Germany (DIN), and are given for information only. Only the terms and definitions given in the official languages can be considered as ISO terms and definitions.

1) 300 bar relates to the maximum cylinder filling pressure at 15 °C.

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