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Standards

Irish Standard
I.S. EN ISO 3821:2010

Gas welding equipment - Rubber hoses for welding, cutting and allied processes (ISO 3821:2008)

I.S. EN ISO 3821:2010

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English Version

Gas welding equipment - Rubber hoses for welding, cutting and allied processes (ISO 3821:2008)

Matériel de soudage aux gaz - Tuyaux souples en caoutchouc pour le soudage, le coupage et les techniques connexes (ISO 3821:2008)

Gasschweißgeräte - Gummischläuche für Schweißen, Schneiden und verwandte Prozesse (ISO 3821:2008)

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Foreword

The text of ISO 3821:2008 has been prepared by Technical Committee ISO/TC 44 “Welding and allied processes” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 3821:2010 by Technical Committee CEN/TC 121 “Welding” 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of an identical text or by endorsement, at the latest by September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

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Endorsement notice

The text of ISO 3821:2008 has been approved by CEN as a EN ISO 3821:2010 without any modification.

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**INTERNATIONAL
STANDARD**

**ISO
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Fourth edition
2008-10-15

**Gas welding equipment — Rubber hoses
for welding, cutting and allied processes**

*Matériel de soudage aux gaz — Tuyaux souples en caoutchouc pour le
soudage, le coupage et les techniques connexes*



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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.

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ISO 3821 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 3821:1998), which has been technically and editorially 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 — Rubber hoses for welding, cutting and allied processes

1 Scope

This International Standard specifies requirements for rubber hoses (including twin hoses) for welding, cutting and allied processes.

This International Standard specifies requirements for rubber hoses for normal duty of 2 MPa (20 bar) and light duty [limited to hoses for maximum working pressure of 1 MPa (10 bar) and with bore up to and including 6,3 mm].

This International Standard applies to hoses operated at temperatures $-20\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$ and used in:

- gas welding and cutting;
- arc welding under the protection of an inert or active gas;
- processes allied to welding and cutting, in particular, heating, brazing, and metallization.

This International Standard applies neither to thermoplastics hoses nor to hoses used for high pressure [$>0,15\text{ MPa}$ ($>1,5\text{ bar}$)] acetylene.

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 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1307:2006, *Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses*

ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

ISO 1746, *Rubber or plastics hoses and tubing — Bending tests*

ISO 1817, *Rubber, vulcanized — Determination of the effect of liquids*

ISO 4080, *Rubber and plastics hoses and hose assemblies — Determination of permeability to gas*

ISO 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 4672:1997, *Rubber and plastics hoses — Sub-ambient temperature flexibility tests*

ISO 7326:2006, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

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