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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 2550-2016

**Gas welding equipment -- Rubber hoses for welding, cutting
and allied processes
(English Translation)**

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Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 2550-2007 Gas welding equipment - Rubber hose for welding cutting and allied processes. Compared with GB/T 2550-2007, the 4 main technical changes are as follows.

- modified the scope; the maximum working pressure of acetylene hose was increased to 0.3 MPa (see Clause 1 of this Edition, Clause 1 of Edition 2007);
- added performance requirements for flux gas hose resistance to methanol containing trimethyl borate azeotrope (see 9.3.4 of this Edition);
- added flexible requirements for flux gas hose (see 9.3.5 of this Edition);
- modified separation test of parallel hose (see 9.3.7.2 of this Edition, 6.8 of Edition 2007);
- modified the requirements that hose color identification should be two-

color (see 10.2, line 6 in Table 4 of this Edition, 7.2 of Edition 2007);

- added type test requirements (see Annex D of this Edition).

This Standard modified on the basis of adopting ISO 3821.2008 Gas welding equipment -- Rubber hoses for welding, cutting and allied processes.

Compared with ISO 3821.2008, in structure, this Standard deleted an annex (Annex E).

The technical differences between this Standard and ISO 3821.2008 and reasons are as follows.

- on the normative references, this Standard made an adjustment on technical differences so as to meet the technical conditions of China; the adjustment is reflected in Clause 2 "Normative references" as follows.
- used GB/T 528 which equivalently used International Standard to replace ISO 37 (see 9.2.1 and 9.3.4.2);
- used GB/T 1690 which equivalently used International Standard to replace ISO 1817 (see 9.3.2 and 9.3.4.3);
- used GB/T 2941 which equivalently used International Standard to replace ISO 23529 (see 9.2.5, 9.3.2, 9.3.6 and B.1);
- used GB/T 3512 which equivalently used International Standard to replace ISO 188 (see 9.2.2);
- used GB/T 5563 which equivalently used International Standard to replace ISO 1402 (see 9.2.4);
- used GB/T 5564-2006 which equivalently used International Standard to replace ISO 4672.1997 (see 9.2.6);
- used GB/T 5565 which equivalently used International Standard to replace ISO 1746 (see 9.2.5);
- used GB/T 7528 which equivalently used International Standard to replace ISO 8330 (see Clause 3);
- used GB/T 9573 which equivalently used International Standard to

replace ISO 4671 (see 8.2);

- used GB/T 9575-2013 which equivalently used International Standard to replace ISO 1307.2006 (see Table 1 and 8.3);
- used GB/T 14905-2009 which equivalently used International Standard to replace ISO 8033.2006 (see 9.2.3 and 9.3.4.1);
- used GB/T 18422 which equivalently used International Standard to replace ISO 4080 (see 9.3.6);
- used GB/T 24134-2009 which equivalently used International Standard to replace ISO 7326.2006 (see 9.2.8).
- according to China's industry, this Standard expanded the scope so as to apply to the maximum working pressure of 0.3 MPa acetylene hose;
- this Standard added hydrostatic pressure requirements for high pressure acetylene hoses (see Table 3);
- this Standard deleted the International Standard Annex E (normative) "Alternative oxygen color code", as well as the relevant content in 10.2 so as to apply to the actual situation in China.

This Standard made the following editorial modifications.

- deleted "bar" as unit in the text and only remained "MPa" as unit.

Gas welding equipment - Rubber hoses

for welding, cutting and allied processes

1 Scope

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

This Standard specifies the requirements for medium-sized 2 MPa and light (limited to the maximum working pressure of 1 MPa, nominal diameter less than or equal to 6.3 mm) rubber hoses and acetylene hose (maximum working pressure 0.3 MPa).

This Standard is applicable to the hoses having the following uses, of which the

working temperature is -20°C ~ +60°C.

- gas welding and cutting;
- arc welding under inert or reactive gas protection;
- processed similar to welding and cutting, especially heating, brazing and metal spraying.

This Standard is not applicable to thermoplastic hoses and high pressure (higher than 0.3 MPa) acetylene hoses.

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.

GB/T 528, Determination of tensile properties of vulcanized rubber and thermoplastic rubber (GB/T 528-2009, ISO37.2005, IDT)

GB/T 1690, Rubber vulcanized or thermoplastic - Determination of the effect of liquids (GB/T 1690-2010, ISO 1817.2005, MOD)

GB/T 2941, Rubber - General procedures for preparing and conditioning test pieces for physical test methods (GB/T 2941-2006, ISO 23529.2004, IDT)

GB/T 3512, Rubber, vulcanized or thermoplastic--Accelerated ageing and heat resistance tests--Air-oven method (GB/T 3512-2014, ISO 188.2011, IDT)

GB/T 5563, Rubber and Plastics Hoses and Hose Assemblies - Hydrostatic Testing (GB/T 5563-2013, ISO1402.2009, IDT)

GB/T 5564-2006, Rubber and plastics hoses - Subambient temperature flexibility tests (ISO 4672.1997, IDT)

GB/T 5565, Rubber or plastics hoses tubing - Bending tests (GB/T 5565-2006, ISO 1746.1998, IDT)

GB/T 7528, Rubber and plastics hoses and hose assemblies - Vocabulary (GB/T 7528-2011, ISO 8330.2007, IDT)