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

GB/T 39311-2020

**Thermoplastic hoses and hose assemblies. Wire or synthetic
yarn reinforced single-pressure types for hydraulic
applications. Specification**

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Foreword

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

This standard uses the translation method equivalent to ISO 23297.2017 ``Thermoplastic hose and hose assembly hydraulic steel wire or synthetic yarn

Enhancing the Single Pressure Type Specification.

The Chinese documents that have a consistent correspondence with the international documents cited in this standard are as follows.

---GB/T 1690-2010 Liquid resistance test method for vulcanized rubber or thermoplastic rubber (ISO 1817.2005, MOD);

---GB/T 5563-2013 Rubber and plastic hoses and hose assemblies hydrostatic test method (ISO 1402.2009, IDT);

---GB/T 5565.1-2017 Rubber and plastic hose and non-reinforced hose flexibility and stiffness measurement Part 1.Room temperature

Bending test (ISO 10619-1.2011, IDT);

---GB/T 5567-2013 Determination of the vacuum resistance of rubber and plastic hoses and hose assemblies (ISO 7233.2006, IDT);

---GB/T 5568-2013 rubber or plastic hose and hose assembly non-flexural hydraulic impulse test (ISO 6803.2008, IDT);

---GB/T 7528-2019 Rubber and plastic hoses and hose assemblies terminology (ISO 8330.2014, IDT);

---GB/T 9573-2013 Rubber and plastic hoses and hose assemblies hose size and hose assembly length measurement method (ISO 4671.2007, IDT);

---GB/T 9576-2019 Guidelines for the selection, storage, use and maintenance of rubber and plastic hoses and hose assemblies (ISO 8331.2016, IDT);

---GB/T 14905-2009 Determination of the adhesive strength between layers of rubber and plastic hoses (ISO 8033.2006, IDT);

---GB/T 16422 (all parts) Plastic laboratory light source exposure test method [ISO 4892 (all parts)].

This standard has made the following editorial changes.

--- Delete the "bar" unit representation in the text, and only keep the "MPa" unit representation.

This standard was proposed by the China Petroleum and Chemical Industry Federation.

This standard is under the jurisdiction of the National Rubber and Rubber Products Standardization Technical Committee (SAC/TC35).

Drafting organizations of this standard. Taizhou Changli Resin Tube Co., Ltd., Shenyang Rubber Research and Design Institute Co., Ltd., Shengli Oilfield Changlong Rubber Limited liability company.

1 Scope

This standard specifies 8 categories and 2 types (hose structure with bonding between layers and hose knots without bonding between layers.

Structure) Requirements for steel or synthetic yarn reinforced hydraulic hoses and hose assemblies with a nominal inner diameter range of 3.2 to 31.5. Each class

All types of hoses have a single maximum working pressure. These hoses are suitable for HH, HL, HM, ISO 6743-4 defined

HR and HV hydraulic fluids, the applicable temperature range of A and B hoses is -40 degrees C~100 degrees C, and the suitable temperature of C and D hoses

The applicable temperature range is -40 degrees C~120 degrees C.

This standard does not include requirements for terminal joints, and is limited to the performance of hoses and hose assemblies. Maximum working pressure of hose assembly

Depends on the lowest value in the maximum working pressure of the assembly.

Note. The user is responsible for consulting the hose manufacturer to confirm the compatibility of the hose with the liquid used.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

ISO 1402 Rubber and plastic hoses and hose assemblies hydrostatic test method)

ISO 1817 Test method for liquid resistance of vulcanized rubber or thermoplastic rubber

ISO 4671 Rubber and plastic hoses and hose assemblies, hose size and hose assembly length measurement method

ISO 4892 (all parts) Plastic laboratory light source exposure test method

ISO 6803 Rubber or plastic hose and hose assembly non-flexural hydraulic impulse test

ISO 7233 Rubber and plastic hoses and hose assemblies-Determination of vacuum resistance

ISO 7326.2016 Evaluation of the ozone resistance of rubber and plastic hoses under static conditions

ISO 8033 Determination of the adhesive strength between layers of rubber and plastic hoses

ISO 8330 Rubber and plastic hoses and hose assemblies terminology

ISO 8331 rubber and plastic hoses and hose assemblies selection, storage, use and maintenance guidelines

ISO 10619-1 Rubber and plastic hoses and non-reinforced hoses-Measurement of flexibility and stiffness-Part 1.Room temperature bending test