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**Rubber hoses and hose assemblies  
for underground mining — Wire-  
reinforced hydraulic types for coal  
mining — Specification**

*Tuyaux et flexibles en caoutchouc pour les mines souterraines —  
Types hydrauliques avec armature de fils métalliques pour mines de  
charbon — Spécifications*



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# Contents

Page

<b>Foreword</b>	<b>iv</b>
<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 Classification</b>	<b>1</b>
4.1 Classes	1
4.2 Grades and types	2
<b>5 Materials and construction</b>	<b>2</b>
5.1 Hoses	2
5.2 Hose assemblies	2
<b>6 Requirements</b>	<b>2</b>
6.1 General	2
6.2 Electrical resistance	2
6.3 Flame resistance	2
6.4 Abrasion resistance	2
<b>7 Frequency of testing</b>	<b>3</b>
<b>8 Marking</b>	<b>3</b>
8.1 Hoses	3
8.2 Hoses assemblies	3
<b>Bibliography</b>	<b>4</b>

## 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 of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies*.

This third edition cancels and replaces the second edition (ISO 6805:1994), which has been technically revised. The main changes compared to the previous edition are as follows:

- the six types of hoses previously listed and replaced by specifying wire reinforced hydraulic rubber hoses in accordance with ISO 18752 have been eliminated while maintaining the special requirements for electrical resistance and flame resistance;
- the fluids and temperature ranges in [Clause 1](#) have been revised;
- a new subclause, [6.4](#), for abrasion resistance has been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Rubber hoses and hose assemblies for underground mining — Wire-reinforced hydraulic types for coal mining — Specification

## 1 Scope

This document specifies requirements for wire-reinforced hoses and hose assemblies for underground coal mining applications of nominal sizes 6,3 to 51 for use with:

- oil-based hydraulic fluids HH, HL, HM, HR and HV as defined in ISO 6743-4 at temperatures ranging from  $-40\text{ }^{\circ}\text{C}$  to  $+120\text{ }^{\circ}\text{C}$ ;
- water-based fluids HFC, HFAE, HFAS and HFB as defined in ISO 6743-4 at temperatures ranging from  $-40\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$ ;
- water at temperatures ranging from  $0\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$ .

There is a possibility that operation at the extremes of or outside these temperature ranges materially reduce the life of the hose. These hoses are not suitable for use with fluids that have a castor oil or ester base.

## 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 8030, *Rubber and plastics hoses — Method of test for flammability*

ISO 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity*

ISO 8330, *Rubber and plastics hoses and hose assemblies — Vocabulary*

ISO 18752, *Rubber hoses and hose assemblies — Wire- or textile-reinforced single-pressure types for hydraulic applications — Specification*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8330 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

## 4 Classification

### 4.1 Classes

Hoses shall be selected from the classes of hose listed in ISO 18752, distinguished by their maximum working pressure.