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Rubber and plastics hoses and hose assemblies — Guide for use by purchasers, assemblers, installers and operating personnel

Tuyaux et flexibles en caoutchouc et en plastique — Guide technique à l'intention des acheteurs, des assembleurs, des installateurs et des utilisateurs



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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.

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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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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.

ISO/TR 17784 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Hoses (rubber and plastics)* in collaboration with the Nederlands Normalisatie-instituut (NEN). Its aim is to promote operating security when using hoses. Technical safety, inspection, system design and fitting of hoses are considered. This may reduce or avoid the possibility of errors when working on or with hoses.

Introduction

Hoses are used in places where a rigid connection to one connecting point or between two points is impracticable or when a flexible connection is required for delivery purposes. Examples are suction and pressure hoses, loading and discharging hoses and connections between parts of moving and vibrating equipment. Hoses are used for carrying media which are generally under pressure in systems. Other applications include places where the frequent linking of one or both ends of a pipe may present problems. Users often ask hose suppliers' advice on potential uses of hoses for their applications. A hose supplier/manufacturer can give optimum advice only if he is fully informed of the specific operating circumstances. If insufficient information on envisaged use is obtained, incorrect advice may be given, so that a hose not suitable for the intended use is supplied and installed. Close consultation between user and hose manufacturer is therefore necessary. Thus, a major function of this Technical Report is to provide an information resource to assist in decision making.

The guidelines presented in this document are derived from the Nederlands Normalisatie-instituut (NEN) document SPE 5660 (Hoses and accessories, directives for the application), second edition 1999, and were prepared by a task group of ISO/TC 45/SC 1/WG 4. Metal hoses, included in SPE 5660, are excluded from this document because they fall outside the scope of ISO/TC 45/SC 1. Furthermore, the section in SPE 5660 concerning storage has been omitted as it is the subject of ISO 8331.