Rubber and plastics hose assemblies - Flexing combined with hydraulic impulse test (half-omega test)

Rubber and plastics hose assemblies - Flexing combined with hydraulic impulse test (half-omega test)

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 8032:2001 sisaldab Euroopa standardi EN ISO 8032:1999 ingliskeelset teksti. Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 8032:2001 consists of the English text of the European standard EN ISO 8032:1999. This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard specifies a method of flexing, in an arrangement known as a "halfomega", hydraulic hose assemblies during impulse testing.	**Scope:** This standard specifies a method of flexing, in an arrangement known as a "halfomega", hydraulic hose assemblies during impulse testing.

ICS 23.040.70

Võtmesõnad: bend tests, hoses, plastics hoses, plastics products, pressure tests, pulsating flow, rubber hoses, rubber products, tests

EUROPEAN STANDARD
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English version

Rubber and plastics hose assemblies

Flexing combined with hydraulic impulse test (half-omega test)
(ISO 8032 : 1997)

Flexibles hydrauliques en caoutchouc et en plastique – Essai de flexion combiné avec des impulsions de pression (essai demi-oméga) (ISO 8032 : 1997)

Gummi- und Kunststoffschlauchleitungen – Biegung kombiniert mit hydraulischer Impulsprüfung (Halb-Omega-Prüfung) (ISO 8032 : 1997)

This European Standard was approved by CEN on 1999-03-03.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Ref. No. EN ISO 8032 : 1999 E

Foreword

International Standard

ISO 8032 : 1997 Rubber and plastics hose assemblies – Flexing combined with hydraulic impulse test (half-omega test),

which was prepared by ISO/TC 45 'Rubber and rubber products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 218 'Rubber and plastics hoses and hose assemblies', the Secretariat of which is held by BSI, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 8032 : 1997 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in Annex ZA (normative).

Introduction

Hydraulic hose assemblies are frequently flexed in service, especially when used on mobile equipment. This test is designed to accelerate the same type of failure of the test pieces as that which may occur in service.

This International Standard is an alternative method to ISO 6802, which also specifies a method of flexing during impulse testing. ISO 8032 provides a method including more severe bending and higher impulse pressures to accelerate failure results.

NOTE - It shall be clearly understood that this test method uses pressure and bend radius conditions considerably more severe than those specified in the hose product specifications and does not imply that the assemblies may be used in service under these conditions.

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies a method of flexing, in an arrangement known as a 'half-omega', hydraulic hose assemblies during impulse testing.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6802 : 1991, Rubber and plastics hose and hose assemblies with wire reinforcements - Hydraulic impulse test with flexing.

ISO 6803 : 1994, Rubber or plastics hoses and hose assemblies - Hydraulic-pressure impulse test without flexing.

3 Apparatus and materials

3.1 **Flex test rig**, on which the test pieces can be installed, capable of producing flexing as shown in figure 1, according to the test parameters specified in clause 5.

The test rig comprises a manifold mounted on a revolving arm, and a stationary manifold.

The manifold on the revolving arm is geared so that it stays perpendicular to the stationary manifold at all times (see figure 1).