

**Plasttorustikusüsteemid.  
Polüetüleentorud. Katsemeetod  
sisemisele survele vastupidavuse  
kindlaksmääramiseks pärast  
kokkupressimise rakendamist**

Plastics piping systems - Polyethylene (PE) pipes -  
Test method for the resistance to internal pressure  
after application of squeeze-off

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12106:1999 sisaldab Euroopa standardi EN 12106:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12106:1999 consists of the English text of the European standard EN 12106:1997.</p> <p>This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> Käesolev standard esitab meetodi polüetüleentorude sisesurvele vastupidavuse kindlaksmääramiseks pärast kokkupigistamismenetluse rakendamist.</p>	<p><b>Scope:</b></p>
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**Võtmesõnad:** hüdrostaatiline surve, kindlaksmääramine, plasttorud, polüetüleen, purustusteimid, surveteimid, vastupidavus survele

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Descriptors: Plastics, polyethylene, pipes, hydrostatic strength, testing.

**English version**

Plastics piping systems  
**Polyethylene (PE) pipes**

Test method for the resistance to internal pressure after  
application of squeeze-off

Systèmes de canalisations en plas-  
tiques – Tubes en polyéthylène (PE) –  
Méthode d'essai de résistance à la  
pression interne après application de  
l'écrasement

Kunststoff-Rohrleitungssysteme –  
Rohre aus Polyethylen (PE) – Bestim-  
mung der Widerstandsfähigkeit  
gegen Innendruck nach Abquetschen

This European Standard was approved by CEN on 1997-03-28.

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**

## Foreword

This European standard has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems" the secretariat of which is held by NNI.

This standard is based on annex B (informative) of the International Standards ISO 4437:1988 "Buried polyethylene (PE) pipes for the supply of gaseous fuels - Metric series - Specification", published by the International Organization for Standardization (ISO).

The material-dependent parameters and/or performance requirements are incorporated in the System Standard(s) concerned.

This standard is one of a series of standards on test methods which support System Standards for plastics piping systems and ducting systems.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 1998, and conflicting national standards shall be withdrawn at the latest by February 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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## 1 Scope

This standard specifies a method for determining the resistance to internal pressure of polyethylene (PE) pipes after being subjected to a squeeze-off procedure.

## 2 Normative reference

This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter.

For dated references, subsequent amendments to, or revisions of, any of these publications apply to this standard only when incorporated in it by amendment or revision.

For undated references the latest edition of the publication referred to applies.

EN 921:1994      *Plastics piping systems - Thermoplastics pipes - Determination of resistance to internal pressure at constant temperature*

## 3 Principle

A polyethylene (PE) pipe, conditioned to 0 °C, is squeezed between two parallel circular-section bars located at right angles to the pipe centreline, at a position midway between the pipe ends. The squeeze is subsequently released after an appropriate time period. The pipe is then subjected to a hydrostatic strength test at 80 °C.

NOTE 1: In certain countries the technique of squeeze-off is used to restrict the flow of fluid in PE piping systems whilst effecting maintenance and repair operations. The test described herein may be used to assess the effect of squeeze-off on the strength of pipes.

NOTE 2: It is assumed that the following test parameters are set by the standard making reference to this standard:

- a) the diameter and series of the pipe to be tested (see 5.1);
- b) the number of test pieces (see 5.2);
- c) the parameters for the hydrostatic strength test at 80 °C (see 6.5).

## 4 Apparatus

**4.1 Squeeze-off equipment**, comprising a compressive loading device with a combination of a fixed bar and a moveable bar contained within a framework designed to withstand the forces generated by the squeeze-off action.

Each bar shall have a circular cross section having sufficient rigidity to ensure a uniform separation between and along the bars in the course of squeeze-off. Each bar shall have the same diameter which shall be not less than the applicable minimum value given in table 1.

The moveable bar may be hydraulically or mechanically operated to achieve the applicable level of squeeze-off given in table 1.