



SLOVENSKI STANDARD

SIST EN 764-1:2004

01-september-2004

Nadomegl' a:
SIST EN 764:1997

Tla' na oprema - 1. del: Terminologija - Tlak, temperatura, prostornina, imenska vrednost

Pressure equipment - Part 1: Terminology - Pressure, temperature, volume, nominal size

Druckgeräte - Terminologie - Teil 1: Druck, Temperatur, Volumen, Nennweite
iTeh STANDARD PREVIEW
(standards.iteh.ai)

Équipement sous pression - Partie 1: Terminologie - Pression, température, volume, dimension nominale
<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>

Ta slovenski standard je istoveten z: EN 764-1:2004

ICS:

01.040.23	Tekol'inski sistemi in sestavni deli za splošno rabo (Slovarji)	Fluid systems and components for general use (Vocabularies)
23.020.30	Tla'ne posode, plinske jeklenke	Pressure vessels, gas cylinders

SIST EN 764-1:2004

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 764-1:2004

<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 764-1

June 2004

ICS 23.020.30

Supersedes EN 764:1994

English version

**Pressure equipment - Part 1: Terminology - Pressure,
temperature, volume, nominal size**

Équipement sous pression - Terminologie - Partie 1 :
Pression, température, volume, dimension nominale

Druckgeräte - Terminologie - Teil 1: Druck, Temperatur,
Volumen, Nennweite

This European Standard was approved by CEN on 2 March 2004.

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.

This European Standard exists 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms, definitions and symbols	4
Annex A (informative) Glossary	7
Bibliography	14

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 764-1:2004](https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004)

<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>

Foreword

This document (EN 764-1:2004) has been prepared by Technical Committee CEN/TC 54 “Unfired pressure vessels”, the secretariat of which is held by BSI.

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 December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. This European Standard is considered to be a supporting standard to those application and product standards which in themselves support an essential safety requirement of a New Approach Directive and which make reference to this European Standard.

This European Standard with the general title ‘*Pressure equipment*’ consists of seven parts which are:

Part 1: Pressure, temperature, volume, nominal size;

Part 2: Quantities, symbols and units;

Part 3: Definition of parties involved;

Part 4: Establishment of technical delivery conditions for metallic materials;

Part 5: Compliance and inspection documentation of materials;

Part 6: Operating instructions;

Part 7: Safety systems for unfired pressure equipment;

Annex A of this European Standard is informative.

This document includes a Bibliography.

This document supersedes EN 764:1994.

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

EN 764-1:2004 (E)**1 Scope**

This part of the European Standard defines the basic terminology and symbols to be used for pressure equipment addressed by the European Directive 97/23/EC with regard to pressure, temperature, volume and nominal size.

For the purpose of this standard "pressure equipment" means vessel, piping, pressure accessory and safety accessory.

Relations between pressure quantities defined in this standard are shown in Figures 4 and 5 of EN 764-7. These figures also illustrate relations between these pressures and those related to the safety accessory.

NOTE 1 In addition to terms used in the three official CEN languages (English, French and German), this European Standard gives in annex A the equivalent terms in the Danish, Dutch, Finnish, Greek, Icelandic, Italian, Norwegian, Portuguese, Spanish, and Swedish languages; these are published under the responsibility of the respective member bodies for those countries. However, only the terms and definitions given in the official languages can be considered as EN terms and definitions.

NOTE 2 This part of the European Standard does not stipulate the units to be used for the quantities defined. These are to be taken from the other parts of the standard.

2 Normative references

This European 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 European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

ISO 31-0:1992, *Quantities and units - Part 0: General principles*.
<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>

3 Terms, definitions and symbols

For the purposes of this European Standard, the terms and definitions given in ISO 31-0:1992 and the following apply.

NOTE 1 All fluid pressures referred to (except 3.5 and 3.12) are relative to atmospheric pressure (also called gauge pressures). As a consequence, vacuum is designated by a negative value.

NOTE 2 Upper case letters may also be used. Additional suffixes, such as min or max, may be necessary.

3.1**chamber**

fluid space within a unit of pressure equipment

NOTE The chambers are not intended to communicate between each other.

3.2**component**

part of pressure equipment which can be considered as an individual item for the calculation

3.3**pressure**

pressure relative to atmospheric pressure, i.e. gauge pressure. As a consequence, vacuum is designated by a negative value

3.4**absolute pressure**

pressure for which the zero value is associated with absolute vacuum

3.5**differential pressure**

pressure which algebraic value is equal to the pressure difference on either side of a separation wall

NOTE The gauge pressure (3.3) is a particular case of the differential pressure.

3.6**operating pressure** PO, p_o

fluid pressure occurring during specified operating conditions

3.7**operating temperature** TO, t_o

fluid temperature occurring during specified operating conditions

3.8**maximum allowable pressure** PS, p_s

maximum pressure for which the equipment is designed, as specified by the manufacturer

NOTE The subscript "max" is added to the symbol for maximum values.

3.9**maximum/minimum allowable temperature** TS, t_s

maximum/minimum temperatures for which the equipment is designed, as specified by the manufacturer

NOTE 1 The subscript "max" is added to the symbol for maximum values.

NOTE 2 The subscript "min" is added to the symbol for minimum values.

3.10**design pressure** PD, p_d

pressure at the top¹⁾ of each chamber of the pressure equipment chosen for the derivation of the calculation pressure of each component ²⁾

3.11**design temperature** TD, t_d

temperature chosen for the derivation of the calculation temperature of each component ²⁾

3.12**calculation pressure** PC, p_c ³⁾

differential pressure used for the purpose of the design calculations for a component ⁴⁾

¹⁾ This location is specified as a reference point to account for the effects of static head of the contained fluid. There may be cases where another location needs to be specified.

²⁾ During the life of the pressure equipment the loadings are time dependent and determined by the combined effects of pressure, temperature and other factors. For complex equipment many such loadings may need consideration, governing loadings are not necessarily those which act at the same time and the same location. When cumulative damage may occur, e. g. in the creep range, the choice of design conditions may be affected.

³⁾ In formulas for calculations the suffix "c" may be omitted.

⁴⁾ Depending on the component and the operating conditions the design process may be governed by one or more sets of calculation pressures/temperatures.

EN 764-1:2004 (E)

3.13**calculation temperature** TC, $t_c^{3)}$ temperature used for the purpose of the design calculations for a component ⁴⁾**3.14****test pressure** PT, p_t

pressure to which the equipment is subjected for test purposes

3.15**test temperature** TT, t_t

temperature at which the pressure test of the pressure equipment is carried out

3.16**accumulation**

temporary maximum amount by which the pressure may exceed the maximum allowable pressure PS, while a safety device is operating

3.17**volume** V, V

internal volume of a chamber, including the volume of nozzles to the first connection (flange, coupling, weld) and excluding the volume of internal permanent parts (e.g. baffles, agitators)

3.18**nominal size** DN, DN

numerical designation of size which is common to all components in a piping system other than components indicated by outside diameters or by thread size. It is a convenient round number for reference purposes and is only loosely related to manufacturing dimensions

SIST EN 764-1:2004
<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>

Annex A (informative)

Glossary

The language symbols are according to ISO 639:

da:	Danish
de:	German
el:	Greek
en:	English
es:	Spanish
fi:	Finnish
fr:	French
is:	Icelandic
it:	Italian
nl:	Dutch
no:	Norwegian
pt:	Portuguese
sv:	Swedish

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 764-1:2004](https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004)
<https://standards.iteh.ai/catalog/standards/sist/89d1fa65-76a7-49d3-bbdf-8980ca8c0a9e/sist-en-764-1-2004>