SLOVENSKI STANDARD
SIST EN 14772:2005

01-maj-2005

Prirobnice in prirobniļ ne zveze - Nadzor zagotavljanja kakovosti in preskuğanje tesnilk, izdelanih skladno s standardoma serije EN 1514 in EN 12560

Flanges and their joints - Quality assurance inspection and testing of gaskets in accordance with the series of standards EN 1514 and EN 12560

Flansche und ihre Verbindungen - Qualitätssicherungsprüfung und Prüfung von Dichtungen nach den Normen der Reihen EN 1514 und EN 12560

Brides et leurs assemblages - Contrôle de l'assurance de la qualité et essais de joints conformément aux série de normes EN 1514 et EN 12560

Ta slovenski standard je istoveten z: **EN 14772:2005**

ICS:

23.040.60	Prirobnice, oglavki in spojni elementi	Flanges, couplings and joints
23.040.80	Tesnila za cevne zveze	Seals for pipe and hose assemblies

SIST EN 14772:2005 **en**

EUROPEAN STANDARD

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English version

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This European Standard was approved by CEN on 3 January 2005.

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COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Foreword

This document (EN 14772:2005) has been prepared by Technical Committee CEN/TC 74 “Flanges and their joints", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

This document includes a Bibliography.

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.

Introduction

This document provides a set of quality assurance procedures which is applicable to a wide range of gasket types encompassing most types of industrial applications.

1 Scope

This document specifies the quality assurance procedures that are applicable to ensure that delivered gaskets comply with the relevant product standards. This document sets down procedures by which a user can have confidence that the salient features of each batch of gaskets or gasket materials delivered to him will be constant.

The gasket types covered by this document are those that are within the scope of the series of standards EN 1514 and EN 12560 and are simultaneously within the scope of the series of standards EN 1591. An exception is those gaskets intended solely for domestic fluids (like water, waste water ...) which are based on rubber with or without reinforcement like fillers and/or inserts.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 1514-1:1997, *Flanges and their joints — Dimensions of gaskets for PN-designated flanges — Part 1: Non-metallic flat gaskets with or without inserts.*

EN 1514-2:1997, *Flanges and their joints — Dimensions of gaskets for PN-designated flanges — Part 2: Spiral wound gaskets for use with steel flanges.*

EN 1514-3:1997, *Flanges and their joints — Dimensions of gaskets for PN-designated flanges — Part 3: Non-metallic PTFE envelope gaskets.*

EN 1514-4:1997, *Flanges and their joints — Dimensions of gaskets for PN-designated flanges — Part 4: Corrugated, flat or grooved metallic and filled metallic gaskets for use with steel flanges.*

EN 1514-6:2003, *Flanges and their joints — Dimensions of gaskets for PN-designated flanges — Part 6: Covered serrated metal gaskets for use with steel flanges.*

EN 1514-7:2004, *Flanges and their joints — Gaskets for PN-designated flanges — Part 7: Covered metal jacketed gaskets for use with steel flanges.*

EN 1514-8:2004, *Flanges and their joints — Dimensions of gaskets for PN-designated flanges — Part 8: Polymeric O-Ring gaskets for grooved flanges.*

EN 12560-1:2001, *Flanges and their joints — Gaskets for Class-designated flanges — Part 1: Non-metallic flat gaskets with or without inserts.*

EN 12560-2:2001, *Flanges and their joints — Gaskets for Class-designated flanges — Part 2: Spiral wound gaskets for use with steel flanges.*

EN 12560-3:2001, *Flanges and their joints — Gaskets for Class-designated flanges — Part 3: Non-metallic PTFE envelope gaskets.*

EN 12560-4:2001, *Flanges and their joints — Gaskets for Class-designated flanges — Part 4: Corrugated, flat or grooved metallic and filled metallic gaskets for use with steel flanges.*

EN 12560-5:2001, *Flanges and their joints — Gaskets for Class-designated flanges — Part 5: Metallic ring joint gaskets for use with steel flanges.*

EN 12560-6:2003, *Flanges and their joints — Gaskets for Class-designated flanges — Part 6: Covered serrated metal gaskets for use with steel flanges.*

EN 12560-7:2004, *Flanges and their joints — Gaskets for Class-designated flanges — Part 7: Covered metal jacketed gaskets for use with steel flanges.*

3 Definitions

For the purposes of this document, the terms and definitions given in the series of standards EN 1514 and EN 12560 apply.

4 Structure of this document

This document is in three main sections that are to be found in Clause 5.

The first section deals with the quality assurance inspection and testing of gaskets to the requirements of the relevant standard in the series of standards EN 1514 and EN 12560. 5.1 lists the clauses of the relevant standard(s). Beyond that some basic quality inspections are indicated where relevant.

The second section indicates the quality assurance testing or inspection that is appropriate for the separate materials which are combined without any mixing or processing other than slitting, cutting to shape or machining, to form the composite gaskets of the series of standards EN 1514 and EN 12560. 5.2 lists the properties that are important and provides the test method and/or a reference to a proven test.

The third section indicates what simple functional testing can be carried out on each of the gasket types.

All of the tests included have been selected for their simplicity, many also have the advantage that the test equipment required is widely available in the relevant laboratories either in the laboratories of the gasket manufacturers or in commercial test houses.

5 Quality assurance tests and inspections

5.1 Quality assurance inspection and testing of gaskets as indicated in the relevant standard

5.1.1 General

In the following the relevant clauses are simply listed with a brief description of the feature of the gasket or gasket material that is the subject of the inspection or test.

5.1.2 Non-metallic flat gasket with or without inserts

The relevant standards are EN 1514-1:1997 and EN 12560-1:2001.

Clause 8.1	Thickness
Clause 8.2	Diameters
Clause 8.3 (EN 12560-1:2001 only)	Tolerances
Clause 9 (EN 12560-1:2001) or 10 (EN 1514-1:1997)	Marking

The gaskets should be inspected for freedom from surface blemishes and other such defects that are likely to influence their functionality.

The packaging of the gaskets should be sufficient to ensure that they are protected from damage during transit.

NOTE The current edition of the EN 1514-1:1997 does not contain tolerance information, this will be corrected when the standard is revised but meanwhile the tolerances of EN 12560-1 should be used.

5.1.3 Spiral wound gaskets

The relevant standards are EN 1514-2:1997 and EN 12560-2:2001.

For EN 12560-2:2001:

Clause 5.2	Materials
Clause 6	Construction
Clause 7	Gasket compression
Clause 8	Gasket types
Clause 9	Dimensions
Clause 10.1	Marking
Clause 10.2	Colour coding

For EN 1514-2:1997:

Clause 4.1 series	Essential Features and Dimensions
Clause 4.4	Gasket Types

For gaskets to either series of standards:

The sealing face of the gaskets shall be in good condition and be free of damage.

The sealing material in the sealing element shall be free of contamination.

The inner ring, where specified, shall be securely fitted in the sealing element and the sealing element in to the guide ring. The degree of fit shall be as required by the relevant standard with rotation of one part relative to the others being satisfactory provide that the location of one in the other is secure where no particular guidance is given in the specification.

The packaging of the gaskets should be sufficient to ensure that they are protected from damage during transit.

5.1.4 Non-metallic PTFE envelope gaskets

The relevant standards are EN 1514-3:1997 and EN 12560-3:2001.

Clause 7	Dimensions and Tolerances
Clause 8	Marking

The packaging of the gaskets should be sufficient to ensure that they are protected from damage during transit.

NOTE The current edition of the EN 1514-3:1997 does not contain tolerance information, this will be corrected when the standard is revised but meanwhile the tolerances of EN 12560-3 should be used.

5.1.5 Corrugated, flat or grooved metallic and filled metallic gaskets

The relevant standards are EN 1514-4:1997 and EN 12560-4:2001.

Clause 7.1	Diameters