

STN	Príruby a prírubové spoje Zabezpečenie kvality kontroly a skúšania tesniacich krúžkov podľa súborov noriem EN 1514 a EN 12560	STN EN 14772
		13 1555

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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/21

Obsahuje: EN 14772:2021

Oznámením tejto normy sa ruší
STN EN 14772 (13 1555) z augusta 2005

132590

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14772

January 2021

ICS 23.040.60; 23.040.80

Supersedes EN 14772:2005

English Version

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

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

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

This European Standard was approved by CEN on 13 December 2020.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

	Page
European foreword	4
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Definitions	7
4 Structure of this document.....	7
5 Quality assurance tests and inspections	7
5.1 Quality assurance inspection and testing of gaskets as indicated in the relevant standard	7
5.1.1 General.....	7
5.1.2 Non-metallic flat gasket with or without inserts.....	8
5.1.3 Spiral wound gaskets.....	8
5.1.4 Non-metallic PTFE envelope gaskets.....	9
5.1.5 Corrugated, flat or grooved metallic and filled metallic gaskets.....	9
5.1.6 Metallic ring type gaskets	9
5.1.7 Covered serrated metal gaskets	9
5.1.8 Covered jacketed gaskets.....	10
5.1.9 Polymeric "O" Ring Gaskets.....	10
5.2 Quality assurance tests that are relevant for the components of composite gaskets.....	10
5.2.1 General.....	10
5.2.2 Exfoliated graphite	11
5.2.3 PTFE (All forms)	11
5.2.4 Plate silicate.....	11
5.2.5 Millboard.....	11
5.2.6 Rubber bound, fibre reinforced, sheet material.....	11
5.2.7 Metal	12
5.3 Functional testing of the gaskets.....	12
5.3.1 General.....	12
5.3.2 Non-metallic flat gaskets with or without inserts.....	12
5.3.3 Spiral wound gaskets.....	12
5.3.4 Non-metallic PTFE envelope gaskets.....	12
5.3.5 Corrugated, flat or grooved metallic and filled metallic gaskets.....	12
5.3.6 Metallic ring type gaskets	12

5.3.7	Covered serrated metal gaskets.....	12
5.3.8	Covered jacketed gaskets	13
5.3.9	Polymeric "O" Ring Gaskets	13
6	Recommended test procedures.....	13
6.1	Thickness determination.....	13
6.2	Density/Weight per unit area determination.....	13
6.3	Ash content/Ignition loss determination	13
6.4	Compression and recovery determination	13
6.5	Chloride content determination	13
6.6	Sulphur content determination.....	14
6.7	Comparative graphite oxidation determination	14
6.7.1	Testing equipment	14
6.7.2	Sampling	14
6.7.3	Conditioning	14
6.7.4	Procedure of measurement	14
6.7.5	Evaluation.....	14
6.7.6	Safety Limits	15
6.8	Gas permeability determination.....	15
6.9	Stress retention determination.....	15
6.10	Hardness	16
7	Reporting.....	16
	Bibliography	17

EN 14772:2021 (E)**European foreword**

This document (EN 14772:2021) 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 July 2021, and conflicting national standards shall be withdrawn at the latest by July 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14772:2005.

In comparison with the previous edition, the following technical modifications have been made:

- a) Introduction of 6.7 "Comparative graphite oxidation determination".

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the 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.

EN 14772:2021 (E)

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 them will be constant.

The gasket types covered by this document are those that are within the scope of the EN 1514 series and EN 12560 series and are simultaneously within the scope of the EN 1591 series. 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 documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1514-2:2014, *Flanges and their joints — 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 12560-2:2013, *Flanges and their joints — Dimensions of 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*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN