Couplers, spigot pins and baseplates for use in falsework and scaffolds - Part 2: Special couplers - Requirements and test procedures



# EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 74-2:2022 sisaldab Euroopa standardi EN 74-2:2022 ingliskeelset teksti.

This Estonian standard EVS-EN 74-2:2022 consists of the English text of the European standard EN 74-2:2022.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.03.2022.

Date of Availability of the European standard is 30.03.2022.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

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#### ICS 91.220

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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Supersedes EN 74-2:2008

## **English Version**

# Couplers, spigot pins and baseplates for use in falsework and scaffolds - Part 2: Special couplers - Requirements and test procedures

Raccords, goujons d'assemblage et semelles pour étaiements et échafaudages - Partie 2 : Raccords spéciaux - Exigences et modes opératoires d'essai Kupplungen, Zentrierbolzen und Fußplatten für Arbeitsgerüste und Traggerüste - Teil 2: Spezialkupplungen - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 14 February 2022.

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

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# **European foreword**

This document (EN 74-2:2022) has been prepared by Technical Committee CEN/TC 53 "Temporary works equipment", 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 September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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 74-2:2008.

Compared to EN 74-2:2008, the following changes have been made:

- 1) alignment with the new EN 74-1;
- 2) requirement for welded half coupler HW class B changed;
- 3) in addition, editorial changes are made.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, Lealand, 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 is the second of three parts of a standard for couplers.

The first part, EN 74-1 covers common types of friction couplers.

This second part, EN 74-2 deals with other less common types couplers.

The third part, EN 74-3 deals with plain base plates and loose spigot pins.

This document is not intended to prevent the development of other types of couplers. For example, couplers can be manufactured in aluminium alloys or other materials or be designed for use with steel or aluminium tubes with outside diameters different from those specified in this document. Whilst such couplers cannot comply with this document, it is recommended that the principles of this document are considered in their design and assessment.

The couplers specified in this document are intended for use in temporary works, for example, scaffolds erected in accordance with EN 12811-1 and falsework erected in accordance with EN 12812.

at, the NOTE In the text of this document, the term "loose spigot" is used instead of the "spigot pin" in the title.

# 1 Scope

This document specifies:

- materials;
- design requirements;
- specified values for resistances and stiffnesses which a coupler has to achieve under test;
- test procedures and assessment;

for the following special couplers:

 screw or wedge half couplers, sleeve couplers with shear studs, right angle reduction couplers and swivel reduction couplers.

It gives recommendations for ongoing production control.

These couplers are for use principally in temporary works. Each coupler is able to be fixed to at least one side to one 48,3 mm diameter steel or aluminium tube. For the other side of reduction couplers, this document specifies requirements for the diameter and wall thickness of tubes.

Other special half couplers such as half couplers attached by riveting, used mainly for prefabricated members of scaffolds, are outside the scope of this document.

NOTE Information on design using special couplers is given in Annex B.

### 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 74-1:2022, Couplers, spigot pins and baseplates for use in falsework and scaffolds - Part 1: Couplers for tubes - Requirements and test procedures

EN 12811-1:2003, Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design

EN 12811-2:2004, Temporary works equipment - Part 2: Information on materials

EN 12811-3:2002, Temporary works equipment - Part 3: Load testing

EN 17293, Temporary works equipment - Execution - Requirements for manufacturing

EN ISO 898-1, Mechanical properties of fasteners made of carbon steel and alloy steel - Part 1: Bolts, screws and studs with specified property classes - Coarse thread and fine pitch thread (ISO 898-1)