Couplers, spigot pins and baseplates for use in ds st production of the state o falsework and scaffolds - Part 2: Special couplers -Requirements and test procedures



### EESTI STANDARDI EESSÕNA

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 74-2:2008 sisaldab Euroopa standardi EN 74-2:2008 ingliskeelset teksti.

This Estonian standard EVS-EN 74-2:2008 consists of the English text of the European standard EN 74-2:2008.

Standard on kinnitatud Eesti Standardikeskuse 27.10.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 27.10.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.09.2008.

Date of Availability of the European standard text 17.09.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 91,220

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## EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

**EN 74-2** 

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ICS 91,220

### **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 - Spezialkupplungen - Teil 2: Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 9 August 2008.

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 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 Management Centre has the same status as the official versions.

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



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

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### **Foreword**

This document (EN 74-2:2008) 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 March 2009, and conflicting national standards shall be withdrawn at the latest by March 2009.

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

The couplers specified in this European Standard 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.

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

### Introduction

This is the second of three parts of a standard for couplers.

EN 74-1 deals with common types of friction couplers.

EN 74-2 deals with other less common types of friction couplers and other couplers.

EN 74-3 deals with non-adjustable base plates and loose spigot pins.

EN 74-2 is not intended to prevent the development of other types of couplers; for example couplers may be manufactured in aluminium or other materials or be designed for use with steel or aluminium tubes with outside diameters different from those specified in this standard.

Whilst such couplers cannot conform to this standard, it is recommended that the principles of this standard are considered in their design and assessment.

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

### 1 Scope

EN 74-2 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 on-going 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 standard specifies requirements for the diameter and wall thickness of tubes.

For testing, screw couplers are tightened with a torque of 50 Nm and wedge couplers are tightened with a 500 g hammer until the jarring blow.

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

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

### 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 74-1:2005, Couplers, spigot pins and baseplates for use in falsework and scaffolds — Part 1: Couplers for tubes — Requirements and test procedures

EN 1090-2:2008, Execution of steel structures and aluminium structures — Part 2: Technical requirements for steel structures

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 ISO 898-1:1999, Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs (ISO 898-1:1999)