

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

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

EESTI STANDARDI EESSÖNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 74-1:2005 sisaldb Euroopa standardi EN 74-1:2005 ingliskeelset teksti.	This Estonian standard EVS-EN 74-1:2005 consists of the English text of the European standard EN 74-1:2005.
Käesolev dokument on jõustatud 25.11.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 25.11.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kätesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: EN 74-1 specifies for right angle couplers, swivel couplers, sleeve couplers and parallel couplers working by friction - materials, - design requirements, - strength classes with different structural parameters including specified values for resistances and stiffnesses which a coupler has to achieve. - test procedures, - assessment, - recommendations for on-going production control	Scope: EN 74-1 specifies for right angle couplers, swivel couplers, sleeve couplers and parallel couplers working by friction - materials, - design requirements, - strength classes with different structural parameters including specified values for resistances and stiffnesses which a coupler has to achieve. - test procedures, - assessment, - recommendations for on-going production control
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Couplers, spigot pins and baseplates for use in falsework and scaffolds - Part 1: Couplers for tubes - Requirements and test procedures

Raccords, goujons d'assemblages et semelles pour étalement et échaffaudages de service - Partie 1: Raccords pour tubes - Exigences de performance et méthodes d'essai

Kupplungen, Zentrierbolzen und Fußplatten für Arbeitsgerüste und Traggerüste - Teil 1: Rohrkupplungen - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 26 August 2005.

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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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

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Foreword

This European Standard (EN 74-1:2005) 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 April 2006, and conflicting national standards shall be withdrawn at the latest by April 2006.

When published this European Standard supersedes the requirements for couplers specified in EN 74:1988. There are additional requirements for some couplers.

The couplers specified in this European Standard are intended for use in scaffolds erected in accordance with EN 12811-1 and falsework erected in accordance with EN 12812.

This European Standard is not mandated at the time of publication.

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 is the first of three parts of a European Standard which supersedes EN 74:1988.

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

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

The third part, EN 74-3, deals with plain base plates and loose spigot pins. Until this part is available the respective clauses of EN 74:1988 remain valid.

EN 74-1 defines a set of steel and aluminium reference tubes for the required tests.

EN 74-1 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 other than the normally used 48,3 mm nominal outside diameter. Whilst such couplers cannot comply with this European Standard, it is recommended that the principles of this European Standard are considered in their design and assessment.

The couplers in this European Standard are intended for use in scaffolds and falsework for connecting 48,3 mm outside diameter steel and aluminium tubes which fulfil in other respects (e.g. material grade, thickness and tolerances) the requirements given in EN 12811-1, EN 12811-2 and EN 12810-1.

1 Scope

This European Standard specifies, for right angle couplers, swivel couplers, sleeve couplers and parallel couplers working by friction:

- materials;
- design requirements;
- strength classes with different structural parameters including values for resistance and stiffness;
- test procedures;
- assessment;

and gives

- recommendations for ongoing production control.

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

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature*

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

EN 20898-2, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load value -; Coarse thread (ISO 898-2:1992)*

EN 12812, *Falsework — Performance requirements and general design*

3 Terms, definitions and symbols

For the purposes of this European Standard, the terms and definitions given in EN 12811-1:2003 and the following apply.