

# DIN EN 74-2:2022-09 (E)

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

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
Introduction .....		5
1 Scope.....		6
2 Normative references.....		6
3 Terms, definitions and symbols .....		7
3.1 Terms and definitions .....		7
3.2 Symbols and abbreviations .....		9
4 Types and classes of special couplers.....		10
4.1 Types of couplers.....		10
4.2 Classes of Couplers .....		11
4.2.1 General.....		11
4.2.2 Transmissible internal forces, moments and related stiffnesses .....		11
5 Reference tubes and bar for coupler tests.....		15
6 General requirements.....		16
6.1 Materials .....		16
6.2 Design.....		16
6.3 Manufacturer's drawings .....		18
6.4 Production control .....		18
7 Tests methods and evaluation of results.....		19
7.1 General.....		19
7.2 Half couplers.....		21
7.2.1 General.....		21
7.2.2 Slipping force $F_s$ of a half coupler .....		21
7.2.3 Failure force $F_f$ of a half coupler .....		22
7.2.4 Pull apart force $F_p$ of a half coupler.....		24
7.2.5 Shear force $F_q$ of a half coupler .....		25
7.2.6 Stiffnesses and bending moments of a half coupler .....		26
7.2.7 Indentation of a half coupler .....		29
7.3 Sleeve couplers with shear studs (SS) .....		30
7.3.1 Failure force $F_f$ of sleeve couplers .....		30
7.3.2 Bending moment $M_B$ of sleeve couplers .....		31
7.4 Reduction couplers .....		33
7.4.1 General.....		33
7.4.2 Slipping and failure force of a reduction coupler (RR and RS).....		33
7.4.3 Pull apart force of a right angle reduction coupler (RR) .....		33
7.4.4 Indentation (RR and RS).....		33
8 Designation .....		33
9 Marking .....		34
10 Test report.....		34
11 Assessment.....		34

<b>12</b>	<b>Product manual</b> .....	<b>35</b>
	<b>Annex A</b> (informative) <b>Ongoing production control</b> .....	<b>36</b>
	<b>Annex B</b> (informative) <b>Information about the design of temporary works structures</b> .....	<b>38</b>
<b>B.1</b>	<b>General</b> .....	<b>38</b>
<b>B.2</b>	<b>Structural design</b> .....	<b>38</b>
<b>B.2.1</b>	<b>Stiffnesses and structural systems</b> .....	<b>38</b>
<b>B.2.2</b>	<b>Structural systems for components with half couplers</b> .....	<b>39</b>
<b>B.2.3</b>	<b>Characteristic values of resistances for design purposes</b> .....	<b>41</b>
<b>B.2.4</b>	<b>Verification of ultimate limit state — Interaction</b> .....	<b>42</b>
	<b>Bibliography</b> .....	<b>43</b>