

TEST REPORT

No. : TJIN1711016347ML
 Date : Dec 05, 2017
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CUSTOMER NAME: TIANJIN WELLMACED SCAFFOLD CO., LTD.
 ADDRESS: NO.1 GUANGYUANRD, TANGGUANTUN INDUSTRIAL&LOGISTIC ZONE,JINGHAI,TIANJIN,China

Sample Name : Drop Forged Swivel Coupler
 Product Specification : CO48.3*48.3mm
 Manufacturer : Tianjin Wellmade Scaffold Co., Ltd

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Quantity : 1
 Date of Receipt : Nov 21, 2017
 Testing Start Date : Nov 21, 2017
 Testing End Date : Dec 05, 2017

Test result(s) : For further details, please refer to the following pages) (Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
 SGS-CSTC Standards Technical
 Services(Tianjin) Co., Ltd

Kevin Zhou
 Authorized signatory



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

Test Results:

Test Clause	Test Item	Test Requirement (Swivel coupler, Class B)	Test Result	Conclusion
7.2.1	Slipping force	$\Delta s \leq 7\text{mm}$, $F_{slip} \geq 210.0\text{kN}$ $1\text{mm} \leq \Delta s \leq 2\text{mm}$, $F_{slip} \geq 15.0\text{kN}$	$\Delta s \leq 7\text{mm}$, $F_{slip} \geq 110.0\text{kN}$ $F_{slip} \geq 18.0\text{kN}$	Pass
7.2.2	Failure force	$F_{fail} \geq 220.0\text{kN}$	$F_{fail} \geq 220.0\text{kN}$	Pass

- Note:
- F_{slip} , F_{fail} the 5% quantile for the 75% level of confidence.
 - $\gamma R2=1.25$ according to EN 74-1.
 - Specification of tube for slipping force: steel tube of 48.3mm x 3.2mm (wall thickness)
 - Specification of steel bar for failure force: steel bar of 48.3mm
 - Please see Annex A for details of test results.
 - The above test was carried out by a SGS internal laboratory.



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Annex A Details of test results

1. Slipping force

Sample No.	F_{slip} (kN, $\Delta s \leq 7\text{mm}$)	F_{slip} (kN, $1\text{mm} \leq \Delta s \leq 2\text{mm}$)
1 [#]	11.06	19.20
2 [#]	11.42	27.62
3 [#]	11.89	26.50
4 [#]	11.72	27.85
5 [#]	11.94	21.26
6 [#]	12.18	24.52
7 [#]	12.44	28.34
8 [#]	11.89	22.01
9 [#]	11.72	25.57
10 [#]	11.47	21.26
F_{slip}	11.0	19.2

2. Failure force

Sample No.	F_{fail} (kN)
11 [#]	52.98
12 [#]	50.90
13 [#]	51.75
14 [#]	51.31
15 [#]	52.12
$F_{fail}/\gamma R2$	39.3



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Sample photos:



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