

TEST REPORT

No. : SHIN2007045865CM-01

Date : Sep 07, 2020

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SHIN2007045865CM-01

CUSTOMER NAME: NANJING TUOPENG CONSTRUCTION TECHNOLOGY CO., LTD.
ADDRESS: NO.21, CHENLV ROAD, XIONGZHOU STREET, LUHE DISTRICT,
NANJING, JIANGSU, CHINA

This Report supersedes the Report No. SHIN2007045865CM dated: Aug. 04, 2020 issued by SGS, original report will be invalid from today.

Sample Name : DROP FORGED SEIVEL COUPLER

Product Specification : 48.3 x 48.3mm

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.

Test Required : Please see the next page(s)
Ref. Standard : Please see the next page(s)
Date of Receipt : Jul 27, 2020
Testing Start Date : Jul 27, 2020
Testing End Date : Aug 04, 2020
Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical
Service (Shanghai)Co., Ltd.

Tiffany Liu
Authorized signatory



SGS-CSTC Standards Technical Service (Shanghai) Co., Ltd.
Testing Center Commune 201319 Pudong District Shanghai Laboratory

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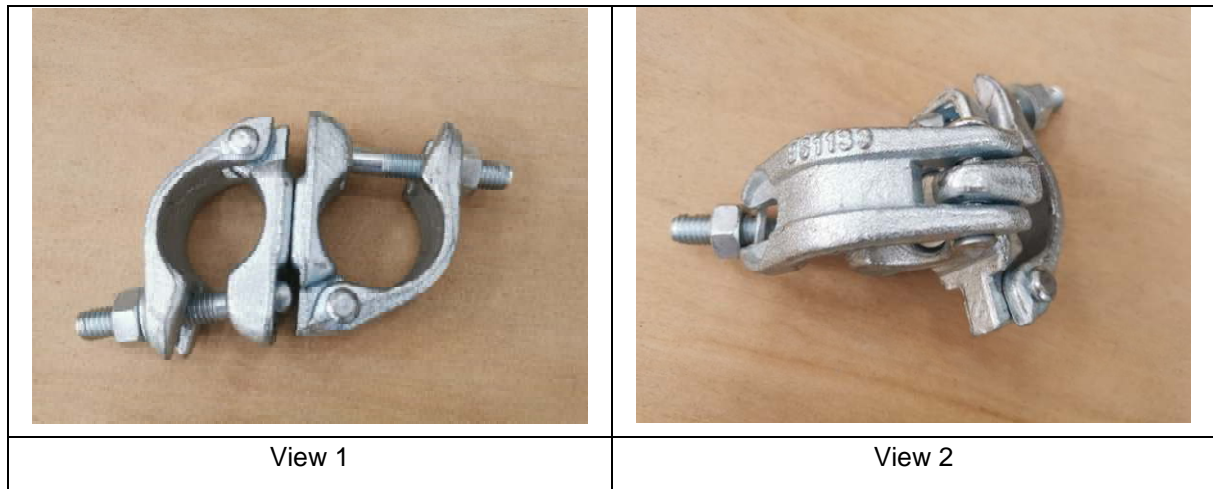
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Summary of Results:

No.	Test Item	Test Method	Result	Conclusion
1	Slipping force	EN 74-1:2005 Clause 7.2.1	See result	Pass
2	Failure force	EN 74-1:2005 Clause 7.2.2	See result	Pass
3	Indentation	EN 74-1:2005 Clause 7.5	See result	Pass

Note: Pass : Meet the requirements;
 Fail : Does not meet the requirements;
 / : Not Apply to the judgment.

Original Sample Photo:



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Test Item: Slipping force, Failure force, Indentation

Test Method: EN 74-1:2005

Sample Description: See photos

Test Condition:

Specimen: Swivel coupler, Class A, 20pcs

Test Results:

Test Clause	Test Item	Test Requirement (Swivel coupler, Class A)	Test Result	Conclusion
7.2.1	Slipping force	$\Delta_1 \leq 7\text{mm}$, $F_{s,5\%} \geq 7.0$	$\Delta_1 \leq 7\text{mm}$, $F_{s,5\%} = 10.9\text{kN}$	Pass
		$1\text{mm} \leq \Delta_2 \leq 2\text{mm}$, $F_{s,5\%} \geq 10.0\text{kN}$	See Annex A section 1	
7.2.2	Failure force	$F_{f,5\%}/\gamma R2 \geq 14.0\text{kN}$	$F_{f,5\%}/\gamma R2 = 24.4\text{kN}$	Pass
7.5	Indentation	$F = 4.70\text{kN}$, $\Delta_{10} \leq 1.5\text{mm}$	$F = 4.70\text{kN}$, $\Delta_{10} < 1.5\text{mm}$	Pass

Note:

- $F_{f,5\%}$: 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 $\Phi 48.3\text{mm} \times 3.2\text{mm}$ (wall thickness)
Specification of steel bar for failure force: Steel bar of $\Phi 48.3\text{mm}$.
Specification of tube for indentation: Steel tube of $\Phi 48.3\text{mm} \times 2.8\text{mm}$ (wall thickness)
- Please see Annex A for details of test results.



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Annex A Details of test results

1. Slipping force

Sample No.	F_s (kN, $\Delta_1=7\text{mm}$)	F_s (kN, $1\text{mm}\leq\Delta_2\leq 2\text{mm}$)
1	13.31	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
2	13.01	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
3	14.87	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
4	13.29	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
5	12.95	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
6	11.18	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
7	13.44	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
8	12.95	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
9	12.06	$F_s=20.0\text{kN}$, $\Delta_2<1\text{mm}$
10	11.98	$F_s=19.76\text{kN}$, $\Delta_2<1\text{mm}$, failure occurs
$F_{s,5\%}$	10.9	/

Note: In accordance with EN 74-1:2005, the test can be ended when the test load reached twice the specified F_s given in Table 8; or test load reaches a value after which the load cannot be usefully increased.

2. Failure force

Sample No.	F_f (kN)
11	35.94
12	38.91
13	33.39
14	39.60
15	41.75
$F_{f,5\%}/YR2$	24.4



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3. Indentation

Sample No.	Δ_{10} (mm, F=4.70kN)
16	F=4.70kN, $\Delta_{10} < 1.5\text{mm}$
17	F=4.70kN, $\Delta_{10} < 1.5\text{mm}$
18	F=4.70kN, $\Delta_{10} < 1.5\text{mm}$
19	F=4.70kN, $\Delta_{10} < 1.5\text{mm}$
20	F=4.70kN, $\Delta_{10} < 1.5\text{mm}$

***** End of report*****



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