

INSPECTION REPORT

NANJING EK METALWORK CO.,LTD
NO.23 YONGNING ROAD, LUHE DISTRICT, NANJING CITY. CHINA

The following sample(s) was/ were submitted and identified on behalf of the client as:

Invoice No. : SSF-EK-20001
Completion Date : 2020-7-22
Product Name : Forged Swivel Coupler 2000pcs
Forged Putlog Coupler 4000pcs
Forged Girder Coupler Gravlock 1000pcs
Forged Board Retaining Clamp 16000pcs

Signed for EK Metalwork Limited Company



Inspection Photos : Please see the next page(s)
Test Result(s) : All products are well fabricated. Marking is correct and clear.
Plating in perfect condition.

INSPECTION REPORT

Forged Swivel Coupler

EN74-1 SW B
SSF

Marking: DF-M-CHINA

Weight: 1.14kg



Tube Fitting:



T-Bolt Length: 86.65mm



INSPECTION REPORT

Bolt Ø: 12.46mm



Nut: 20.65mm



Finish Product:



Package:



INSPECTION REPORT

SLIP AND DISTORUPTION TEST

| TEST ITEM | SLIPPING FORCE | | FAILURE FORCE | Conclusion |
|------------|------------------------------|--------------------------------------|--------------------------|------------|
| Sample No. | F _s (kN, Δ 1=7mm) | F _s (kN, 1mm ≤ Δ 2 ≤ 2mm) | F _f (kN ≥ 20) | |
| 1 | 14.3 | 20kN, Δ 2 ≤ 1mm | 32 | Pass |
| 2 | 13.6 | 20kN, Δ 2 ≤ 1mm | 28 | Pass |
| 3 | 14.0 | 20kN, Δ 2 ≤ 1mm | 30 | Pass |
| 4 | 13.8 | 20kN, Δ 2 ≤ 1mm | 36 | Pass |
| 5 | 14.1 | 20kN, Δ 2 ≤ 1mm | 34 | Pass |
| 6 | 13.7 | 20kN, Δ 2 ≤ 1mm | 29 | Pass |
| 7 | 13.5 | 20kN, Δ 2 ≤ 1mm | 35 | Pass |
| 8 | 14.0 | 20kN, Δ 2 ≤ 1mm | 27 | Pass |
| 9 | 14.3 | 20kN, Δ 2 ≤ 1mm | 31 | Pass |
| 10 | 13.5 | 20kN, Δ 2 ≤ 1mm | 33 | Pass |

INSPECTION REPORT

Test Photos

Test 1



Test 2



Test 3



INSPECTION REPORT

ZINC COATING THICKNESS TEST

| Sample No. | μm |
|------------|---------------|
| 1 | 23.10 |
| 2 | 21.40 |

Test Photos

Test 1



Test 2



***** End of Swivel Coupler Report *****

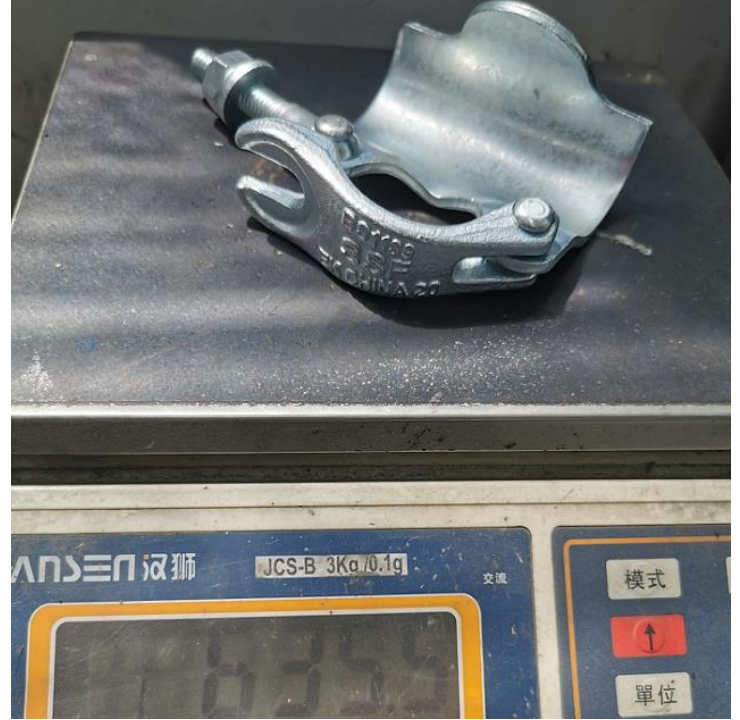
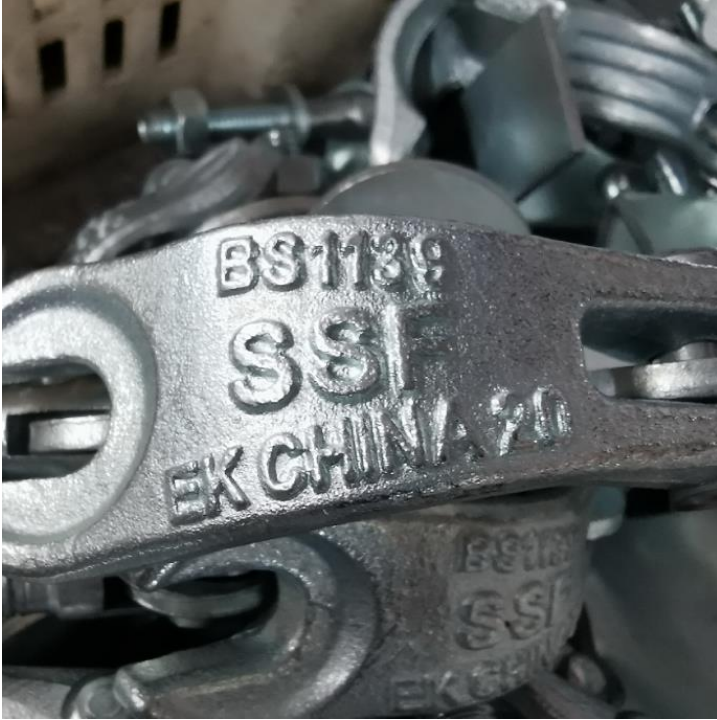
INSPECTION REPORT

Forged Putlog Coupler

BS 1139
SSF

Marking: EK CHINA 20

Weight: 0.635 kg



Tube Fitting:



T-Bolt Length: 83.95mm



INSPECTION REPORT

Bolt Ø: 12.35mm



Nut: 20.66mm



Finish Product:



Package:



INSPECTION REPORT

SLIP AND DISTORUPTION TEST

| TEST ITEM | SLIPPING FORCE | FAILURE FORCE | Conclusion |
|------------|---|---|------------|
| Sample No. | F_s (kN, $1\text{mm} \leq \Delta \leq 2\text{mm}$) | <p style="text-align: center;">There is no such requirement in the standard. To satisfy the customer, tests can be performed.</p> | |
| 1 | 1.50kN | 6.0 | Pass |
| 2 | 1.81kN | 5.8 | Pass |
| 3 | 1.38kN | 7.2 | Pass |
| 4 | 1.76kN | 6.3 | Pass |
| 5 | 1.68kN | 6.5 | Pass |
| 6 | 1.76kN | 6.3 | Pass |
| 7 | 1.43kN | 5.9 | Pass |
| 8 | 1.58kN | 6.6 | Pass |
| 9 | 1.66kN | 7.0 | Pass |
| 10 | 1.65kN | 6.8 | Pass |

INSPECTION REPORT

Test Photos

Test 1



Test 2



Test 3



INSPECTION REPORT

ZINC COATING THICKNESS TEST

| Sample No. | μm |
|------------|---------------|
| 1 | 24.00 |
| 2 | 18.20 |

Test Photos

Test 1



Test 2



***** End of Putlog Coupler Report *****

INSPECTION REPORT

Forged Girder Coupler Gravlock

USE IN PAIRS

AS 1576

SSF

Marking: EK CHINA 20

Weight: 1.45 kg



Tube Fitting:

T-Bolt Length: 94.62mm



INSPECTION REPORT

Bolt Ø: 12.44mm



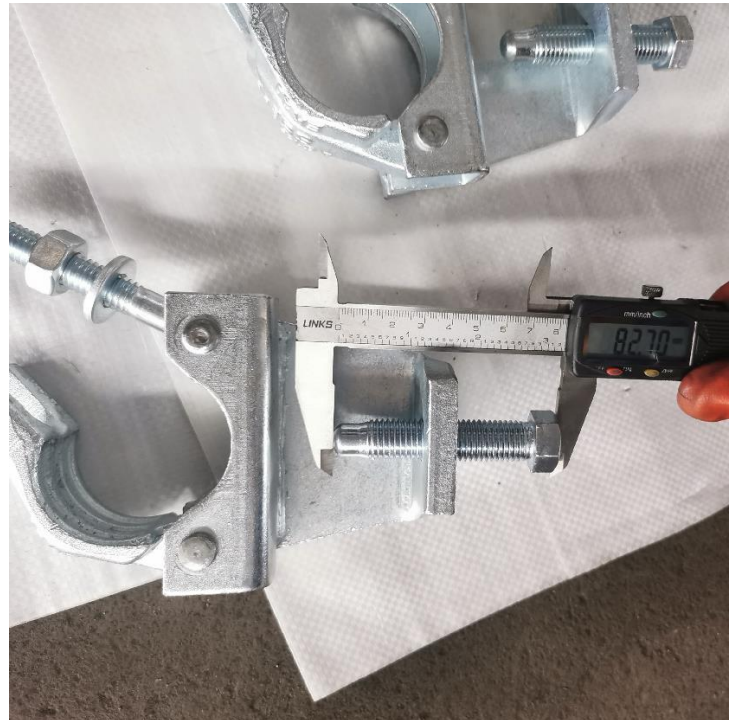
Nut 1: 20.57mm



Nut 2: 20.78mm



Bolt Length: 82.70mm



INSPECTION REPORT

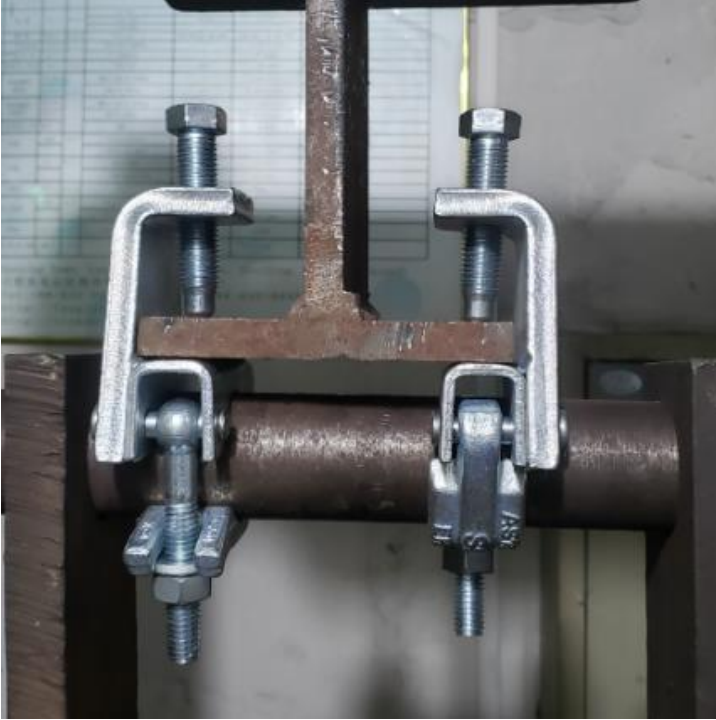
SLIP AND DISTORUPTION TEST

| TEST ITEM | SLIP OF TUBE THROUGH A PAIR OF FLANGE CLAMPS | SLIP OF FLANGE CLAMPS ALONG THE FLANGE OF THE BEAM | STRENGTH TEST | Conclusion |
|------------|--|--|---|------------|
| Sample No. | P=12.5kN, Slippage ≤ 6 mm | P=12.5kN, Slippage ≤ 6 mm | P=30kN, neither flange clamp shall show any permanent set | |
| 1 | 0.39 | 0.03 | OK | Pass |
| 2 | 0.57 | 0.01 | OK | Pass |
| 3 | 0.34 | 0.03 | OK | Pass |
| 4 | 1.74 | 0.07 | OK | Pass |
| 5 | 0.36 | 0.04 | OK | Pass |
| 6 | 0.59 | 0.05 | OK | Pass |
| 7 | 0.48 | 0.06 | OK | Pass |
| 8 | 0.50 | 0.03 | OK | Pass |
| 9 | 1.21 | 0.02 | OK | Pass |
| 10 | 0.42 | 0.11 | OK | Pass |

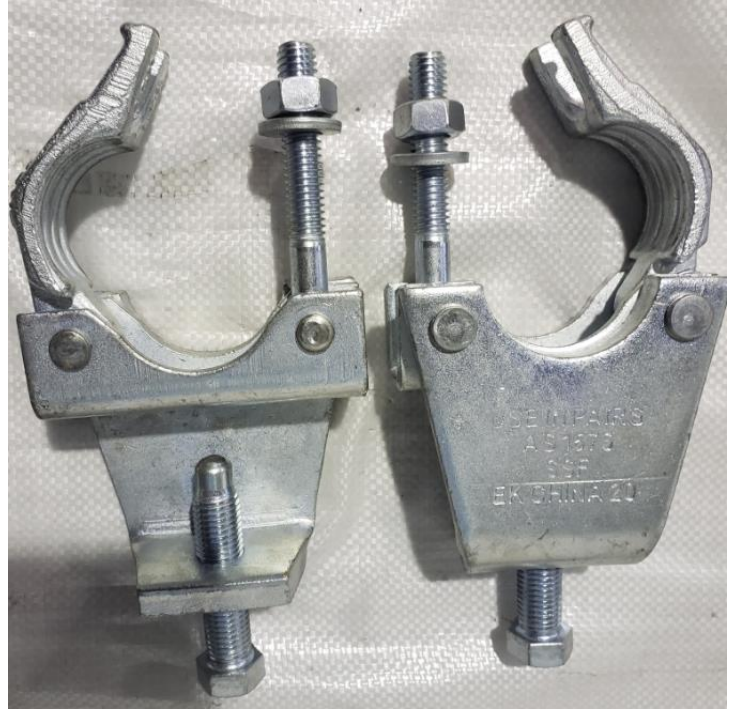
INSPECTION REPORT

Test Photos

Test 1



Test 2



Test 3



INSPECTION REPORT

ZINC COATING THICKNESS TEST

| Sample No. | μ m |
|------------|-------|
| 1 | 19.00 |
| 2 | 18.00 |

Test Photos

Test 1



Test 2



***** End of Girder Coupler Report *****

INSPECTION REPORT

Forged Board Retaining Clamp

BS 1139

SSF

Marking: **EK CHINA 20**

Weight: 0.62kg



BS1139 CLASS A
L B E

Marking: **CX 17 03**

Weight: 0.61kg



INSPECTION REPORT

Tube Fitting:

Height: 35.37mm



Nut Ø: 20.63mm

Bolt Length: 83.98mm



INSPECTION REPORT

Finish Product:



Package:



SLIP AND DISTORUPTION TEST

| TEST ITEM | SLIPPING FORCE | FAILURE FORCE | Conclusion |
|------------|---|---|------------|
| Sample No. | F_s (kN, $1\text{mm} \leq \Delta \leq 2\text{mm}$) | There is no such requirement in the standard. To satisfy the customer, tests can be performed. | |
| 1 | 1.7 | 8.5 | Pass |
| 2 | 1.9 | 8.0 | Pass |
| 3 | 1.8 | 7.8 | Pass |
| 4 | 1.7 | 7.6 | Pass |

INSPECTION REPORT

| | | | |
|----|-----|-----|------|
| 5 | 1.9 | 8.1 | Pass |
| 6 | 2.0 | 8.3 | Pass |
| 7 | 2.1 | 7.7 | Pass |
| 8 | 1.8 | 7.9 | Pass |
| 9 | 1.7 | 8.1 | Pass |
| 10 | 1.8 | 8.0 | Pass |

Test Photos

Test 1



Test 2



INSPECTION REPORT

Test 3



ZINC COATING THICKNESS TEST

| Sample No. | μm |
|------------|---------------|
| 1 | 24.40 |
| 2 | 25.30 |

INSPECTION REPORT

Test Photos

Test 1



Test 2



***** End of Board Retaining Clamp Report *****

***** End of the full Inspection Report *****