

Declaration of Conformity

In Accordance with ANSI/ISEA 125-2014 and ANSI/ASSP Z359.7-2019

Declaration #: DOC-UFC408100

Declaration Date: 09/05/2020

Item #: UFC408100

Description: KStrong® Large Forged Rebar Hook 2.63" Gate Opening (ANSI)

Brand Name: KStrong

Manufacturer: KStrong

Address: 18505 Intercontinental Crossing, Houston, TX 77073

Additional Items Conforming
Under this Declaration (If Applicable):

KStrong declares that the product(s) listed above is in conformity with the requirements of the following performance standard(s):

ANSI Z359.12-2009

Conformity Assessment Method in accordance with ANSI/ISEA 125-2014



Level 1:

KStrong Lab Outside the Scope of ISO/IEC Standard 17025:2017



Level 2:

KStrong Lab Within the Scope of ISO/IEC Standard 17025:2017



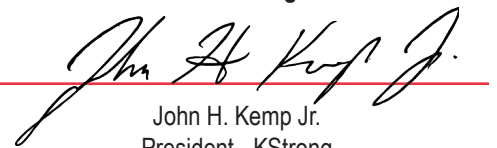
Level 3:

Independent 3rd Party Lab accredited to ISO/IEC Standard 17025:2017

Supporting Documentation: KS-Test-UFC408100.pdf

This Certificate is a guarantee that the above standard(s) was met by the requirements of such standard. Testing was performed under normal operation mode. The results of testing apply only to the particular sample tested and the specific test carried out. This Certificate is only issued for products which have passed the testing requirements of listed standard(s).

Authorized Signature:



John H. Kemp Jr.
President - KStrong

ISO 17025 Accredited Test Laboratory



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Accrediting Agency

ANSI National Accreditation Board
1899 L Street NW,
Suite 1100-A
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Test Report

Personal Fall Arrest Equipment ANSI Z359.12-2009 : Hardware

Report no: 2.19.08.34

Client: KSTRONG LLC
17330 Preston Road
#200 D Dallas
TX 7525
U.S.A

Manufacturer: KSTRONG LLC

Client orders: T/0278 (11 February 2016)
T/0609 (22 July 2019)

Model: UFC408100

Dates of tests: 28 February 2016 to 2 March 2016, and 5 September 2019

Signed:

Steven Sum, Laboratory Manager

Issued: 5 September 2019

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Conditions

This report may be reproduced and distributed to your clients, provided that it is reproduced and distributed in full.

Specimens will be disposed of four weeks from the date of this report, unless otherwise instructed.

Opinions, comments and interpretations expressed in this report are shown in italics.

Copies of INSPEC interpretations referenced in this report are available upon request.

Tests marked ☒ are not included in our ANAB Scope of Accreditation.

This report has been provided in accordance with our standard Terms of Business, which can be viewed at, and printed from:

<http://inspec-international.com/ToB.pdf>

If you have difficulty accessing the Terms of Business, you may contact us for a copy.

Summary of assessment*

Clause	Requirement	Assessment (See Key)
3.1.1.1	Surface finish	Pass
3.1.1.2	New and unused	Pass
3.1.1.3	Carabiners & snaphooks ①	Pass
3.1.1.4	D, O and oval rings	
3.1.1.5	Buckles and adjusters	
3.1.1.6	Proof load testing	
3.1.1.7	Drop test	Pass
5.1 / 5.2	Marking	Pass
5.3	Instructions	NAP

① INSPEC Interpretation applies

Key

	Shading shows the clauses requested. Any other clauses were not requested.
Pass	Requirement satisfied.
Ltd	Testing requested was insufficient completely to verify compliance with the clause. Refer to the “Result details” section for more information.
Fail	Requirement not satisfied. Refer to the “Result details” section for more information.
NAs	Assessment not carried out.
NAP	Requirement not applicable.
NT	Requested but not tested due to early termination following failure.

* Assessment relates only to those specimens which were tested and are the subject of this report.

Submission details

Product	Quantity	Date received	INSPEC specimen no. (2D021+)
Snaphook, model UFC408100	15	16 February 2016	01 to 15

Procedures

The specimens detailed within the submissions above were used for the tests covered by this report.

Testing was performed in accordance with ANSI Z359.12-2009 unless otherwise specified below. Reference should be made to the standard when reading this report.

Unless stated otherwise, specimens were tested in the condition as received by INSPEC.

Testing was performed at INSPEC's laboratory in Kunshan, China.

5 Labels were provided electronically and used for marking assessment

Result details**3.1 Component and Element Requirements****3.1.1 Connector (Hardware) Components and Elements****3.1.1.1 Surface Finish of Hardware**

Specimens 2D02113, 2D02114 and 2D02115 were assessed.

- | | | |
|----|--|------|
| a) | The finish of the specimen was clean and free of scale, rust and deposits of foreign matter. | Pass |
| b) | Following the salt spray test, there was no evidence of either, red rust visible to the unaided eye, or corrosion of the base metal of the specimen. | Pass |
| c) | All surfaces of the specimen, which may come in contact with tearable materials, were free of burrs, pits, sharp edges and rough surfaces. | Pass |

3.1.1.2 Condition of Hardware

All specimens were new and un-used when received.

3.1.1.3 Snaphooks and Carabiners

Specimens 2D02101 to 2D02109 were assessed.

- | | | |
|----|---|------|
| a) | The connector incorporated a self-closing gate. | Pass |
| | The gate locked automatically when the gate closed. | Pass |
| | The connector was capable of being opened only by at least two consecutive, deliberate actions. | Pass |
| b) | When tested along the major axis, specimens 2D02101, 2D02102 and 2D02103 withstood the 5,000 pounds force for 1 minute without breaking and without distortion sufficient to release the gate. | Pass |
| c) | During the gate face tests, specimens 2D02104, 2D02105 and 2D02106 withstood the 3,600 pounds force for 1 minute. | Pass |
| | <p>The gate separations from the nose were:
 Specimen 2D02104 – 0.079 inches.
 Specimen 2D02105 – 0.079 inches.
 Specimen 2D02106 – 0.079 inches.</p> | |
| | These values were less than the maximum 0.125 inches permitted. | Pass |
| d) | During the gate side tests, specimens 2D02107, 2D02108 and 2D02109 withstood the 3,600 pounds force for 1 minute. | Pass |
| | <p>Following the gate side tests, the permanent deformation of the gate were:
 Specimen 2D02107 – 0.059 inches.
 Specimen 2D02108 – 0.059 inches.
 Specimen 2D02109 – 0.059 inches.</p> | |
| | These values were less than the maximum 0.125 inches permitted. | Pass |

- | | | |
|----|---|-----|
| e) | The specimens were captive eye snaphooks. Therefore testing was not performed along the minor axis. | NAp |
|----|---|-----|

3.1.1.7 Dynamic drop test

- | | |
|--|------|
| When tested to the dynamic drop test, following abrasion and cold conditioning, specimens 2D02110, 2D02111 and 2D02112 withstood the drop without breaking and without permanent deformation sufficient to release the gate. | Pass |
|--|------|

5 Marking

5.1 General Marking Requirements

- | | | |
|-------|--|------|
| 5.1.1 | Markings shall be in English. | Pass |
| 5.1.2 | No assessment was made as to whether or not the legibility and attachment of required markings shall endure for the life of the component being marked.

<i>Labels were provided electronically and use for marking assessment</i> | NAs |
| 5.1.3 | Any restrictions on the use of such connectors (hardware) shall be marked on the connectors (hardware) or component, subsystem and systems of which they are an integral part. [No restrictions were listed] | NAp |

5.2 Specific Marking Requirements

- | | | |
|-------|---|---|
| 5.2.1 | Connectors. Connectors shall be marked to identify the following:

Year of manufacture;

Manufacturer's identification; [model]

Markings for connectors shall be sufficient to provide traceability; [PT]

Load rating for the major axis of the connector stamped or otherwise permanently marked on the device, minimum 22 kN or 5000 pounds; [5000 lbs]

Load rating for gate stamped or otherwise permanently marked on the gate mechanism; [3600 lbs]

For connectors that are non-integral part (non-captive eye), then "ANSI Z359.12" is required. | Pass

Pass

Pass

Pass

NAp |
|-------|---|---|

5.3 Specific Instruction Requirements

- | | | |
|-------|---|-----|
| 5.3.1 | Connectors.

The specimen was a captive eye snaphook that will be used as an integral part of a product. | NAp |
|-------|---|-----|

Estimates of the uncertainty of measurement

Clause	Test	Uncertainty
3.1.1.1	Surface finish	*
3.1.1.2	New and unused	-
3.1.1.3	Carabiners & snaphooks	Tensile test $\pm 1.4\%$
		Gate resistance $\pm 1.4\%$
3.1.1.4	D, O and oval rings	$\pm 0.3\%$
3.1.1.5	Buckles and adjusters	$\pm 0.3\%$
3.1.1.6	Proof load testing	NAs
3.1.1.7	Drop test	*
5.1 / 5.2	Marking	-
5.3	Information	-

* The acceptance criterion for this test is a straightforward "Pass/Fail", rather than a numerical value. Consequently, as there is no value to be reported, uncertainty has not been reported either.

Values expressed as a percentage (%) are relative.

It should be noted that the above values have not been taken into account when making assessment to the pass/fail criteria.

ANNEX

This Annex comprises one section.

1. Photograph of the product tested. (1 page)

END OF REPORT

KSTRONG LLC – Snaphook, model UFC408100

