Declaration of Conformity

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

Declaration #: DOC-UFS310050L
Declaration Date: 12/08/2023

Item #: UFS310050L

Description: KStrong® BRUTE™ LE 50 ft. Cable SRL with swivel snap hook. Includes installation carabiner and tagline (ANSI)

Brand Name: KStrong

Manufacturer: KStrong

Address: 150 N. Radnor Chester Road, Suite F200, Radnor, PA 19087

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 Z359.14-2021 Class 2

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-UFS310050L.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

Intertek Testing Services NA, Inc.
3933 US Rt. 11
Cortland, NY 13045
Tel: 1 607-753-6711
www.intertek.com

Accrediting Agency

A2LA
5202 Presidents Court, Ste 220
Frederick, MD 21703
Tel: 301.644.3248
info@A2LA.org

Test Verification of Conformity

Verification Number: 105663091CRT-004

On the basis of the referenced test report(s), sample(s) of the below product have been found to comply with the harmonized standards and Directives listed on this verification at the time the tests were carried out. Other standards and Directives may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it(them).

Applicant Name & Address:	KStrong INC 150 N. Radnor Chester Rd. Suite F200 Radnor, PA 19087 USA
Product Description:	Self-Retracting Device
Models/Type References:	UFS310025L, UFS310050L, UFS310018L, UFS310080L, UFS480020L, UFS480050L, UFS480025L, UFS480018L
Brand Name:	KStrong INC
Relevant Standards:	ANSI/ASSP Z359.14-2021
Verification Issuing Office Name & Address:	Intertek Testing Services NA, Inc. 3933 US Rt-11 Cortland, NY 13045 USA
Date of Tests:	10/24/22 – 10/28/22
Test Report Number(s):	105663091CRT-003

Signature:

Name: **Matthew Stevens**
Position: **Team Leader**
Date: **12/08/2023**

intertek
Total Quality. Assured.

KSTRONG INC
TEST REPORT

SCOPE OF WORKs
ANSI/ASSP Z359.14-2021 – SELF RETRACTING DEVICES

REPORT NUMBER
105663091CRT-003

ORIGINAL REPORT NUMBER
105376372CRT-009

ISSUE DATE
December 21, 2023

PAGES
9

DOCUMENT CONTROL NUMBER
GFT-OP-10a (6-March-2017)

Address
3933 US rt. 11 Cortland, NY
13045

Telephone: 607-758-6246
www.intertek.com

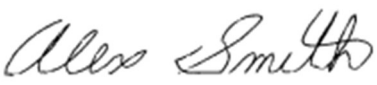
TEST REPORT FOR KSTRONG INC
Report No.: 105663091CRT-003
Date: December 21, 2023

KSTRONG Inc. 150 N. Radnor Chester RD. Suite F200 Radnor, PA 19087 USA	
Report Number. ..... :	105663091CRT-003
Signed Quote Number. ..... :	Qu-01405542
PO Number.....:	N/A
Name of Testing Laboratory Preparing the Report..... :	Intertek Testing Services NA Inc.
Test Specification:	
Standard..... :	ANSI/ASSP Z359.14-2021
Date(s) of Testing..... :	10/24/2022-10/28/2022
Product Description:	
Product Type: ..... :	Self-Retracting Lanyard
Brand Name:..... :	KSTRONG INC
Model Number(s):..... :	UFS310025L, UFS310050L, UFS310018L, UFS310080L, UFS480020L, UFS480050L, UFS480025L, UFS480018L
Model Share:.....:	N/A
Dates Samples Received:	9/26/2022

SECTION 1
SUMMARY OF TESTING

TESTS COMPLETED	ANSI/ASSP Z359.14-2021 CLAUSE	STATUS
General Requirements	3.1	**PASS**
Markings and instructions/User inspection, Maintenance	5.1, 5.2/6	**PASS**
Static Strength Testing of SRD's	3.2.1/4.2.1	**PASS**
Dynamic Performance (ambient)	3.3/4.3.1	**PASS**
Dynamic Performance (LE) (ambient)	3.3.3/4.3.3	**PASS**

SECTION 2
This test report concludes the work anticipated in the testing phase of your project. If there are any questions regarding this report please contact the undersigned at 607-753-6711.

COMPLETED BY:	Alex Smith	**REVIEWED BY:**	Matthew Stevens
TITLE:	Technician	**TITLE:**	Team Leader
SIGNATURE:		**SIGNATURE**	
DATE	12/21/2023	**DATE:**	12/21/2023

Please see attached test data for details.

SECTION 3

TESTING EQUIPMENT CALIBRATION INFORMATION

USED FOR TEST	DESCRIPTION	MANUFACTURER	CONTROL NO.	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE
X	Test Weight	NA	NA	310 lbs	-	VBU	VBU
X	Load Cell	PCB	N1392	-	-	8/30/22	8/23/2023
X	Tape Measure	Kobalt	H422	25'	-	5/13/2022	5/13/2023
X	Load Cell	Interface	L099	-	-	11/11/2021	11/11/2022

SECTION 4

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>3</td><td>"Marking and Instructions"</td><td></td><td></td></tr>
<tr><td>5.1.1</td><td>Shall be in English</td><td></td><td>PASS</td></tr>
<tr><td>5.1.3</td><td>Self-Retracting Devices shall be marked with the following:
<table>
<tr><th>Marking</th><th>Comments</th><th>YES</th><th>NO</th><th>NA</th></tr>
<tr><td>Part number and model designation</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Year of manufacture</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Manufacturer's name or logo</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Capacity Range</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Unique ID Number</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Standard Number (Z359.14)</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>How to inspect the visual indicator</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning to follow the manufacturer's instructions included with the equipment at time of shipment from the manufacturer</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning of the need for inspection in accordance with the manufacturer's instructions</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The fiber or other materials used in the lanyard construction</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The lanyard working length</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Average arresting force for the SRD class</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Arresting distance</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Proper installation means</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning on the need for testing the device for locking and retraction before each use</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>SRD class and arrest distance</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Warning of the need to avoid lanyard contact with sharp edges and abrasive surfaces (not required for LE devices)</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Free fall limit</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Suitability for use with horizontal lifelines</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Suitability for horizontal use</td><td></td><td></td><td></td><td>X</td></tr>
<tr><td>Suitability for Leading Edge capability</td><td></td><td>X</td><td></td><td></td></tr>
</table></td><td></td><td>PASS</td></tr>
<tr><td>5.2.1</td><td>Instructions shall be in English, and affixed to the equipment at time of shipment from the manufacturer</td><td></td><td>PASS</td></tr>
</table>

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>5.2.2</td><td>Instructions shall contain the following information:
<table>
<tr><th>Instructions</th><th>Comments</th><th>YES</th><th>NO</th><th>NA</th></tr>
<tr><td>A statement that the manufacturer’s instructions shall be provided to the users</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Manufacturers name, address, and telephone number</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Manufacturer’s part number and model designation for the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Intended use and purpose of the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Proper method of use and limitations on use of the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Illustrations showing locations of markings on the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Reproduction of printed information on all markings</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Inspection procedures required to assure the equipment is in serviceable condition and operating correctly</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Anchorage requirements</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Criteria for discarding equipment which fails inspection</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Procedures for cleaning. maintenance, and storage</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Reference to Z359 standards</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Proper installation means and limitations on the type of anchorage connectors used</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The fiber or other materials used in the lanyard construction</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The lanyard length</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>The average arresting force when dynamically tested in accordance with the requirements of the standard</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>SRD class and arrest distance when dynamically tested in accordance with the requirements of the standard</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>How to determine fall clearance</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Testing the device for locking before each use</td><td></td><td>X</td><td></td><td></td></tr>
</table></td><td>PASS</td></tr>
<tr><td>5.2.3</td><td>Instructions shall require that only the equipment manufacturer, or persons or entities authorized in writing by the manufacturer, shall make repairs to the equipment</td><td></td><td>PASS</td></tr>
<tr><td>5.2.4</td><td>Instructions shall require the user to remove equipment from service if it has been subjected to the forces of arresting a fall or affecting a rescue</td><td></td><td>PASS</td></tr>
<tr><td>5.2.5</td><td>Instructions shall require the user to have a written rescue plan and the means at hand to implement it when using the equipment</td><td></td><td>PASS</td></tr>
</table>

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>5.2.6</td><td>Instructions shall provide warnings regarding:
<table>
<tr><th>Warnings</th><th>Comments</th><th>YES</th><th>NO</th><th>NA</th></tr>
<tr><td>Altering the equipment</td><td></td><td>X</td><td>X</td><td></td></tr>
<tr><td>Misusing the equipment</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Using combinations of components or sub-systems, or both, which may affect or interfere with the safe function of each other</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Exposing the equipment to chemicals, high heat, severe cold, or other harsh environments which may produce a harmful effect and to consult the manufacturer in case of doubt</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Using the equipment around moving machinery and electrical hazards</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Using the equipment near sharp edges or abrasive surfaces</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>Risk of striking an object or obstruction during a swing fall</td><td></td><td>X</td><td></td><td></td></tr>
<tr><td>That the consequences of improperly using the device, not following instructions or markings may cause serious injury or death</td><td></td><td>X</td><td></td><td></td></tr>
</table></td><td>PASS</td></tr>
<tr><td>6</td><td>User Inspection, Maintenance and Storage of Equipment</td><td></td><td>PASS</td></tr>
</table>

SUPPLEMENTAL TEST DATA

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>3.2.1/4.2.1</td><td><u>Static Strength:</u> (ambient) shall withstand 3,600 lbs. when tested to:
- apply a 3,600 lbs ,(+60/-0 lbs) load and maintain for 1-minute to the point of SRL line connection to the SRL drum (across the device)</td><td>
<table>
<tr><th></th><th>Sample: 1</th><th>Sample: 2</th><th>Sample: 3</th></tr>
<tr><td>Withstand load?</td><td>YES</td><td>YES</td><td>YES</td></tr>
</table></td><td>PASS</td></tr>
</table>

<table>
<tr><th>Section (Test)</th><th>Requirement</th><th>Results</th><th>Compliance</th></tr>
<tr><td>3.3/4.3.1</td><td>
<u>Dynamic Performance</u>: “AMBIENT”

1. connect 310 lb. weight
2. extract enough line for a 36-inch free fall per Fig 5 in Test Standard.
3. release the test weight
4. Max Arrest distance shall not exceed 42 inches.

<table>
<tr><th></th><th>Sample:
1</th><th>Sample:
2</th><th>Sample:
3</th></tr>
<tr><td>Conditioning in: (Ambient)</td><td></td><td></td><td></td></tr>
<tr><td>SN or ID:</td><td>4</td><td>5</td><td>6</td></tr>
<tr><td>Payout and retract the line per 3.3.1.2 following test</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Lock function shall operate per 3.3.1.1</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Visual indicator shall activate</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Max. Arrest Force: (lbs.)
Class 1 & 2 < 1,800 lbs.</td><td>897</td><td>569</td><td>807</td></tr>
<tr><td>Avg Arrest Force (lbs.):
Class 1 & 2 < 1,350 lbs.</td><td>615</td><td>532</td><td>623</td></tr>
<tr><td>Distance Initial (in): D1</td><td>83 ¼</td><td>83 ¼</td><td>83 ¼</td></tr>
<tr><td>Distance Final (in): D2</td><td>113 ½</td><td>108 ½</td><td>114</td></tr>
<tr><td>Arrest Distance (in): D2-D1
Class 1&2 < 42-inches</td><td>30 ¼</td><td>25 ¼</td><td>30 ¾</td></tr>
</table>

Retraction Strength: The weight of the line constituent, shall not be less than 1.25 lbs. (5.55N) or more than 25 lbs. (111.1N) at any point in the of range of motion provided by the line constituent when tested in accordance with 4.5.1.

<table>
<tr><th>Retraction</th><th>Sample 1</th><th>Sample 2</th><th>Sample 3</th></tr>
<tr><td>Weight in lbs. at 1 ft</td><td>5.8</td><td>5.9</td><td>6.2</td></tr>
<tr><td>Weight in lbs at 50%</td><td>10.3</td><td>10</td><td>11.8</td></tr>
<tr><td>Weight in lbs at 100%</td><td>14.3</td><td>15.6</td><td>15.9</td></tr>
</table>
</td><td>PASS</td></tr>
</table>

<table>
<tr><th>SECTION (TEST)</th><th>REQUIREMENT</th><th colspan="4">RESULTS</th><th>Compliance</th></tr>
<tr><td>3.3.3/
4.3.3</td><td colspan="5"><u>DYNAMIC PERFORMANCE</u>: “AMBIENT”
5. Connect 310 lb. weight
6. Drop test weight from a level 5 feet +/- 1 inch
7. Allow weight to swing unrestrained for a period of not less than 10 seconds
8. Record the maximum and average arresting forces
9. Line must retain 1,000 lb. static load after drops

<table>
<tr><th>SRL Line Orientation: Perpendicular</th><th>SAMPLE: 4</th><th>SAMPLE: 5</th><th>SAMPLE: 6</th></tr>
<tr><td>Conditioning in: (4 hrs min)</td><td>24 Hr.</td><td>24 Hr.</td><td>24 Hr.</td></tr>
<tr><td>Lock function shall operate per 3.1.2</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Visual indicator shall activate</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Max. Arrest Force: (lbs.)
Class A & B < 1,800 lbs.</td><td>1332</td><td>1114</td><td>1242</td></tr>
<tr><td>Avg Arrest Force (lbs.):
Class A <1,350 lbs.
Class B < 900 lbs.</td><td>839</td><td>797</td><td>918</td></tr>
<tr><td>Arrest Distance (in):</td><td>157 ½</td><td>157 ½</td><td>157 ½</td></tr>
<tr><td>Retain a minimum of 1,000 lbs of residual tensile strength following the test</td><td>YES</td><td>YES</td><td>YES</td></tr>
</table>

<table>
<tr><th>SRL LINE ORIENTATION: 5’ OFFSET</th><th>SAMPLE: 7</th><th>SAMPLE: 8</th><th>SAMPLE: 9</th></tr>
<tr><td>Conditioning in: (4 hrs min)</td><td>24 Hr.</td><td>24 Hr.</td><td>24 Hr.</td></tr>
<tr><td>Lock function shall operate per 3.1.2</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Visual indicator shall activate</td><td>YES</td><td>YES</td><td>YES</td></tr>
<tr><td>Max. Arrest Force: (lbs.)
Class A & B < 1,800 lbs.</td><td>1131</td><td>1202</td><td>1108</td></tr>
<tr><td>Avg Arrest Force (lbs.):
Class A <1,350 lbs.
Class B < 900 lbs.</td><td>849</td><td>796</td><td>819</td></tr>
<tr><td>Arrest Distance (in):</td><td>157 ½</td><td>157 ½</td><td>157 ½</td></tr>
<tr><td>Retain a minimum of 1,000 lbs of residual tensile strength following the test</td><td>YES</td><td>YES</td><td>YES</td></tr>
</table>
</td><td>PASS</td></tr>
</table>

SECTION 5
REVISION HISTORY

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
105209482CRT-001	10/28/2022	Original Report	Steve Morey	Matthew Stevens
105376372CRT-009	3/27/2023	Report Revision	Alex Smith	Matthew Stevens
105663091CRT-003	12/08/2023	Report Revision: Added Model & Picture	Alex Smith	Matthew Stevens
105663091CRT-003	12/08/2023	Updated Page 4: (Yes) suitable for LE	Alex Smith	Matthew Stevens

SECTION 6
PHOTOGRAPH

UFS480018L