

Declaration of Conformity

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

Declaration #: DOC-UFS570060

Declaration Date: 04/20/2022

Item #: UFS570060

Description: KStrong® BRUTE™ Sealed 60 ft. SRL Class B with Stainless Steel Cable and Aluminum Swivel Carabiner Hook. Includes Aluminum Installation Carabiner and Tagline (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 Z359.14-2014 Class B and IP68 Level of IEC 60529

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



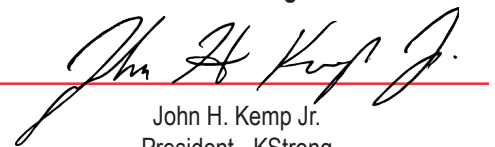
Level 3:

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

Supporting Documentation: KS-Test-UFS570060-ClassB.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
Total Quality. Assured.



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 REPORT

No: 56274

Client

Kstrong Inc
150 N Radnor Chester Road
Suite f 200
Radnor
PA19087
USA

Client contact

Mr John Kemp

Item/s tested

Retractable Fall Arresters
Models: UFS570060
Rated: IP68Sample/s tested /
Condition

One of each / Good condition

Tested to

All relevant clauses of **BS EN 60529: 1992 +A2: 2013**
(IP68) and deemed to **comply**

Date sample received

19th August 2020

Test period

7th to 10th September 2020

Date of Issue

20th April 2022

Tests carried out at

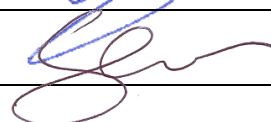
20 ± 5 °C

Testing Officer



Bunmi Phillips

Verified by



Stuart Mann**Registered Address:**
Eurofins Electrical & Electronic UK London Ltd
i54 Business Park, Valiant Way
Wolverhampton, WV9 5GB, UKRegistered in England and Wales
Company Reg. No. 03270900
VAT Reg. No. GB 887 127 683

Report No:	56274
Client:	Kstrong Inc

THIS REPORT APPLIES ONLY TO THE PARTICULAR SAMPLE UNIT(S) TESTED AND TO THE SPECIFIC TESTS CARRIED OUT AS DETAILED IN THE PROJECT FILE HELD AT EUROFINS E&E.

THIS REPORT DOES NOT COVER ELECTROMAGNETIC COMPATIBILITY.

IT SHOULD BE NOTED THAT ONLY A LIMITED NUMBER OF UNITS HAVE BEEN TESTED. IT IS THEREFORE ESSENTIAL FOR THE MANUFACTURER OR SUPPLIER OF THIS PRODUCT TO ENSURE THAT THE QUALITY OF ALL PRODUCTION UNITS IS TO THE SAME STANDARDS AS THAT OF THE SAMPLE (S) CHECKED.

UNLESS OTHERWISE DEFINED IN THIS TEST REPORT THE DECISION RULE APPLIED TO ALL TEST RESULTS IS A 'CONSTRAINED SIMPLE ACCEPTANCE' PASS/FAIL CRITERIA AS DEFINED IN IEC GUIDE 115, CLAUSE 4.4.2 PROCEDURE 1, WHICH TAKES INTO ACCOUNT A CONFIDENCE LEVEL OF 95% (K=2) AND FALSE ACCEPTANCE OF 2.5%.

SUMMARY

The sample unit submitted for testing has been checked in accordance with the relevant clauses of:

BS EN 60529: 1992 +A2: 2013

- 13 *Tests for protection against solid foreign objects indicated by the first characteristic numeral (IP6X)*
- 14 *Tests for protection against water indicated by the second characteristic numeral (IPX8)*

As a result of the above tests, the unit can be considered to comply in respect of the above Clauses

Condition / number of test sample : Good / 1 **Serial Number(s) :-** None

Notes relating to this report : - None

Project History: -

<u>Job Number</u>	<u>Sample received</u>	<u>Job Completion Date</u>	<u>Summary of work carried out</u>
54373	19 Aug-20	10-Sept-20	IP68 test only
56274	-	12-April-22	Client address change and model name change from SLBL60FT to UFS570060

----- End of Report -----

KSTRONG INC

TEST REPORT

SCOPE OF WORK

ANSI/ASSP Z359.14-2014 – SELF RETRACTING DEVICES

REPORT NUMBER

105057246CRT-003

ISSUE DATE

May 16, 2022

PAGES

11

DOCUMENT CONTROL NUMBER

GFT-OP-10a (6-March-2017)

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Address
3933 US rt. 11 Cortland, NY 13045

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

TEST REPORT FOR KSTRONG INC

Report No.: 105057246CRT-003

Date: May 16, 2022

KStrong INC
150 N. Radnor Chester Rd.
Suite F200
Radnor, PA 19087
USA

Report Number..... 105057246CRT-003

Associated Report Number. 104581650CRT-001

Signed Quote Number..... Qu-01253758-0

PO Number.....: N/A

Name of Testing Laboratory Intertek Testing Services NA Inc.
Preparing the Report

Test Specification:

Standard..... ANSI/ASSP Z359.14-2014

Date(s) of Testing..... 2/22/21 – 5/6/21

Product Description:

Product Type: Self-Retracting Device

Brand Name: KStrong

Model Number(s): UFS570030

Model Share: UFS570060, and UFS570100

Date(s) Samples Received 1/25/21 – 5/5/21

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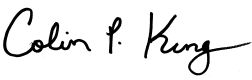
Date: May 16, 2022

SECTION 1**SUMMARY OF TESTING**

TESTS COMPLETED	TEST DATE	ANSI/ASSP Z359.14-2014 CLAUSE	STATUS
Static Strength	5/6/21	4.2.5	PASS
Retraction Tension Testing	2/23/21	4.2.6	PASS
Dynamic Strength Ambient	2/23/21	4.2.3	PASS
Dynamic Performance (ambient)	2/23/21	4.2.1	PASS
Line Constituent (Wire Rope)	2/23/21	7.5	PASS
General Requirements	2/23/21	3	PASS
Corrosion Resistance (96 hrs.)	2/22/21-2/25/21	7.4	PASS
Markings and instructions	2/23/21	5	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.

REPORT PREPARED BY:	Colin King	REVIEWED BY:	Matthew Stevens
TITLE:	Sr. Technical Writer	TITLE:	Team Leader
SIGNATURE:		SIGNATURE	
DATE	May 4, 2022	DATE:	May 16, 2022

Please see attached test data for details.

Date: May 16, 2022

SECTION 3**TESTING EQUIPMENT CALIBRATION INFORMATION**

USED FOR TEST	DESCRIPTION	MANUFACTURER	CONTROL NO.	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE
X	Load Cell	PCB	N1392	10k	-	7/1/20	7/1/21
X	Load Cell	Interface	L099	-	-	8/26/20	8/26/21
X	Tape Measure	Stanley	N1407	25'	-	10/12/20	10/12/21
X	Force Gauge	Shimpo	S120S	-	-	12/11/20	12/11/21

SECTION 4**SUPPLEMENTAL TEST DATA**

Section (Test)	Requirement	Results	Compliance								
4.2.5	Static Strength: (ambient) shall withstand 3,000 lbs. when tested to: - apply a 3,000 lbs (+60/-0 lbs) load and maintain for 1-minute to the point of SRL line connection to the SRL drum (across the device)	<table> <tr> <td></td><td>Sample: 1</td><td>Sample: 2</td><td>Sample: 3</td></tr> <tr> <td>Withstand load?</td><td>YES</td><td>YES</td><td>YES</td></tr> </table> Notes:		Sample: 1	Sample: 2	Sample: 3	Withstand load?	YES	YES	YES	PASS
	Sample: 1	Sample: 2	Sample: 3								
Withstand load?	YES	YES	YES								

Date: May 16, 2022

Section (Test)	Requirement	Results	Compliance																																				
4.2.3	Dynamic Strength: (ambient) – shall lock and remained locked until released. The test weight shall not touch the ground. The line constituent shall retain tensile strength of 1,000 lbs. after the dynamic strength test. 1. Connect 300 lb. weight. 2. extract enough line for a 4-foot (48-inch) free fall 3. release the test weight 4. evaluate the line strength of the affected area <table border="1"> <thead> <tr> <th></th><th>Sample: 1</th><th>Sample: 2</th><th>Sample: 3</th></tr> </thead> <tbody> <tr> <td>SN or ID:</td><td>#1</td><td>#2</td><td>#3</td></tr> <tr> <td>SRL Locked:</td><td>YES</td><td>YES</td><td>YES</td></tr> <tr> <td>SRL Remained Locked until released</td><td>YES</td><td>YES</td><td>YES</td></tr> <tr> <td>Test weight touch the ground</td><td>NO</td><td>NO</td><td>NO</td></tr> <tr> <td>Did SRL payload out to full extension</td><td>NO</td><td>NO</td><td>NO</td></tr> <tr> <td>Did load inductor engage</td><td>YES</td><td>YES</td><td>YES</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> <tr> <td>MAF: (lbs) Ref only:</td><td>1274</td><td>1293</td><td>1269</td></tr> </tbody> </table> Notes:		Sample: 1	Sample: 2	Sample: 3	SN or ID:	#1	#2	#3	SRL Locked:	YES	YES	YES	SRL Remained Locked until released	YES	YES	YES	Test weight touch the ground	NO	NO	NO	Did SRL payload out to full extension	NO	NO	NO	Did load inductor engage	YES	YES	YES	Retain a minimum of 1,000 lbs of residual tensile strength following the test	YES	YES	YES	MAF: (lbs) Ref only:	1274	1293	1269		PASS
	Sample: 1	Sample: 2	Sample: 3																																				
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MAF: (lbs) Ref only:	1274	1293	1269																																				

Date: May 16, 2022

Section (Test)	Requirement	Results			Compliance
4.2.1 & 4.2.6	Dynamic Performance: "AMBIENT" 1. connect 282 lb. weight 2. extract enough line for a 36-inch free fall per Fig 5 in Test Standard. 3. release the test weight				PASS

TEST REPORT FOR KSTRONG INC

Report No.: 105057246CRT-003

Date: May 16, 2022

Section (Test)	Requirement	Results			Compliance
	(1) Force (lbs) @ 1 ft	1'	2.3	2.2	2.4
	Retracted length < 24-inches		N/A	N/A	N/A
	(2) Force (lbs) @ 20%	6'	3.6	3.8	3.6
	Retracted length < 24-inches		N/A	N/A	N/A
	(3) Force (lbs) @ 40%	12'	4.3	4.5	4.6
	Retracted length < 24-inches		N/A	N/A	N/A
	(4) Force (lbs) @ 60%	18'	5.5	5.3	5.4
	Retracted length < 24-inches		N/A	N/A	N/A
	(5) Force (lbs) @ 80%	24'	6.3	6.2	6.2
	Retracted length < 24-inches		N/A	N/A	N/A
	(6) Force (lbs) @ 100%	30'	7.1	6.9	7.0
	Retracted length < 24-inches		N/A	N/A	N/A

Date: May 16, 2022

Section (Test)	Requirement	Results	Compliance																				
7.4	<u>Corrosion Resistance</u> Subject the samples to 96 hours of salt spray per ASTM B117 <table><tr><td></td><td>Sample: 3.1.5 Salt (-1)</td><td>Sample: 3.1.5 Salt (-2)</td><td>Sample: 3.1.5 Salt (-3)</td></tr><tr><td>SN or ID</td><td>1</td><td>2</td><td>3</td></tr><tr><td>Operate as intended:</td><td>YES</td><td>YES</td><td>YES</td></tr><tr><td>Signs of corrosion (visual only):</td><td>NO</td><td>NO</td><td>NO</td></tr><tr><td>Line pay out, retract, and lock:</td><td>YES</td><td>YES</td><td>YES</td></tr></table>		Sample: 3.1.5 Salt (-1)	Sample: 3.1.5 Salt (-2)	Sample: 3.1.5 Salt (-3)	SN or ID	1	2	3	Operate as intended:	YES	YES	YES	Signs of corrosion (visual only):	NO	NO	NO	Line pay out, retract, and lock:	YES	YES	YES	PASS	
	Sample: 3.1.5 Salt (-1)	Sample: 3.1.5 Salt (-2)	Sample: 3.1.5 Salt (-3)																				
SN or ID	1	2	3																				
Operate as intended:	YES	YES	YES																				
Signs of corrosion (visual only):	NO	NO	NO																				
Line pay out, retract, and lock:	YES	YES	YES																				
7.5	<u>Wire Rope (Line Constituent)</u>	<table><tr><td>Made of Synthetic materials?</td><td>YES</td><td>PASS</td></tr><tr><td>Any Restrictions?</td><td>NO</td><td>PASS</td></tr></table> <table><tr><td>Section 7.1</td><td>Sample: 3.3.3 (-1)</td><td>Sample: 3.3.3 (-2)</td><td>Sample: 3.3.3 (-3)</td><td>Sample: 3.3.3 (-4)</td><td>Sample: 3.3.3 (-5)</td><td>AVG.</td></tr><tr><td>Tensile Load (lbs.)</td><td>>3400</td><td>>3400</td><td>>3400</td><td>>3400</td><td>>3400</td><td>>3400</td></tr></table> Minimum breaking strength of 3,400 lbs when tested to Section 7.1 (FED-STD-191/4108)	Made of Synthetic materials?	YES	PASS	Any Restrictions?	NO	PASS	Section 7.1	Sample: 3.3.3 (-1)	Sample: 3.3.3 (-2)	Sample: 3.3.3 (-3)	Sample: 3.3.3 (-4)	Sample: 3.3.3 (-5)	AVG.	Tensile Load (lbs.)	>3400	>3400	>3400	>3400	>3400	>3400	PASS
Made of Synthetic materials?	YES	PASS																					
Any Restrictions?	NO	PASS																					
Section 7.1	Sample: 3.3.3 (-1)	Sample: 3.3.3 (-2)	Sample: 3.3.3 (-3)	Sample: 3.3.3 (-4)	Sample: 3.3.3 (-5)	AVG.																	
Tensile Load (lbs.)	>3400	>3400	>3400	>3400	>3400	>3400																	

Section (Test)	Requirement	Results	Compliance
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Date: May 16, 2022

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

Date: May 16, 2022

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

Date: May 16, 2022

Section (Test)	Requirement	Results				Compliance
5.2.6	Instructions shall provide warnings regarding:					PASS
	Warnings	Comments	YES	NO	NA	
	Altering the equipment		X			
	Misusing the equipment		X			
	Using combinations of components or sub-systems, or both, which may affect or interfere with the safe function of each other		X			
	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		X			
	Using the equipment around moving machinery and electrical hazards		X			
	Using the equipment near sharp edges or abrasive surfaces		X			
	Risk of striking an object or obstruction during a swing fall		X			
	That the consequences of improperly using the device, not following instructions or markings may cause serious injury or death		X			

SECTION 5

REVISION HISTORY

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
105057246CRT-003	5/5/2022	Report Extension	Steve Morey	Matthew Stevens
105057246CRT-003	5/16/2022	Revised Address and LLC changed to INC	Steve Morey	Matthew Stevens