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# **Test Report**

# ANSI Z359.15-2014 Single Anchor Lifelines and Fall Arresters

Report no: 2.21.01.01

Client: Jinhua Jech Tools Co., Ltd.

No.1448 Tongxi Road, Linjiang Industrial Park

Wucheng District Jinhua City Zhejiang 321025

China

Manufacturer: Jinhua Jech Tools Co., Ltd.

Client orders and T/0744C (26 May 2020)
Dates received: T/0831 (29 September 2020)

Models: JE3213H, JE3214H, JE3215H, JE3216H and JE3217H

Dates of tests: 9 July 2020 to 13 November 2020 and 1 January 2021

Signed: Issued: 11 January 2021

Steven Sum, Laboratory Manager Page 1 of 9

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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.

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### Summary of assessment\*

Clause	Requirement	Assessment (See Key)
3.1 Single	Anchor Lifeline Components	197 I
3.1.1	Connectors	
3.1.2	Rope to meet clause 7.2.1	
3.1.3	Elastic elongation	
3.1.4	Rope minimum nominal diameter	
3.1.5	Rope fabrication	
3.1.6	Material characteristics	
3.1.7	Breaking strength - lifeline supplied with factory termination	Pass
3.1.8	Single anchor lifelines supplied with a factory termination	
3.1.9	Breaking strength - lifeline supplied without factory termination	
3.1.10	Dual purposes/descent control application	The state of the s
3.1.11	Residual static strength	
3.1.12.1	Breaking strength – wire rope lifeline	
3.1.12.2	Diameter and construction	
3.1.12.3	Factory terminations	
3.2 Fall an	rester Components	
3.2.1	Connectors	
3.2.2	Non-integral energy absorber and energy absorbing lanyards	1 10
3.2.3	Lanyards integral to fall arresters	
3.2.4	Locking	
3.2.5	Dynamic performance (Manual override)	
3.2.8	Integral rings and openings	
3.2.9	Static strength	
3.2.10	Dynamic performance - ambient	
	Dynamic performance - hot	
	Dynamic performance - cold	Jan Comment
	Dynamic performance - wet	7
3.2.11	Function test	
3.2.12	Residual static strength	
3.2.13	Corrosion resistance	
5.1 / 5.2	Marking requirements	- Allen
5.3 / 5.4	Instruction requirements	/92

#### Key

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	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.		

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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. (2H125+)
Single Anchor Lifeline, model JE3217H	03	2 June 2020	01 - 03

#### Procedures

Specimens were selected at random from the submission detailed above.

Testing was performed in accordance with ANSI Z359.15-2014 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.

The Client requested testing to clause 3.1.7 only, no other clauses were assessed.

#### The manufacturer made the following declarations:

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Single Anchor Lifeline, models JE3217H, JE3216H, JE3215H, JE3214H and JE3213H are made of the same materials (snaphook, rope and threads), same stitching patterns and same rope diameter. Only the lengths are different.

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To avoid duplicate testing, the longest length lifeline JE3217H was selected for testing.



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#### Result details

- 3 Design requirements
- 3.1 Single Anchor Lifeline Components
- 3.1.7 Lifeline with factory termination Breaking strength

Specimens 2H12501 to 2H12503 were assessed.

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The specimens withstood the tensile test of 5,000 pounds applied for 1 minute Pass without breaking.

#### Estimates of the uncertainty of measurement

Clause	Test		Uncertaint
3.1.1	Connectors		See report
3.1.2	Rope to meet dause 7.2.1		
3.1.3	Elastic elongation	± 0.4%	
3.1.4	Rope minimum nominal diameter	See Note 1	
3.1.5	Rope fabrication	-	
3.1.6	Material characteristics		
3.1.7	Breaking strength - lifeline supplied with fac	See Note 1	
3.1.8	Single anchor lifelines supplied with a factory	See Note 1	
3.1.9	Breaking strength - lifeline supplied without	See Note	
3.1.10	Dual purposes/descent control application		
3.1.11	Residual static strength	See Note	
3.1.12.1	Breaking strength – wire rope lifeline	See Note	
3.1.12.2	Diameter and construction	See Note	
3.1.12.3	Factory terminations	See Note	
3.2.1	Connectors	See report	
3.2.2	Non-integral energy absorber and energy ab	See repor	
3.2.3	Lanyards integral to fall arresters	See Note	
3.2.4	Locking	See Note 1	
3.2.5 3.2.8 3.2.9	Dynamic performance (Manual override)	Force	± 3.0%
		Fall distance	± 1mm
	Integral rings and openings		
	Static strength	See Note 1	
	D. comin and company and inst	Force	± 3.0%
3.2.10	Dynamic performance – ambient	Fall distance	± 1mm
3.2.10	Description of the second	Force	± 3.0%
	Dynamic performance – various conditions	Fall distance	± 1mm
3.2.11	Function test		See Note 1
3.2.12	Residual static strength	-	See Note
3.2.13	Corrosion resistance	See Note 1	
5.1 / 5.2	Marking requirements	-	
5.3 / 5.4	Instruction requirements	-	

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- Note 1 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.
- Note 2 The uncertainty value is based on a standard uncertainty multiplied by a coverage factor k = 2, which provides for a confidence level of approximately 95%. Values expressed as a percentage (%) are relative.
- Note 3 It should be noted that the above values have not been taken into account when making assessment to the pass/fail criteria.

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# ANNEX

This Annex comprises one section.

Photograph of the product tested.

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## Jinhua Jech Tools Co., Ltd. -Single Anchor Lifeline, JE3217H

