

Test Report

Personal fall protection equipment EN 354 : 2010 Lanyards

Report no: 2.13.09.06

Client: INSPEC Certification Services
56 Leslie Hough Way,
Salford,
Greater Manchester,
M6 6AJ,
United Kingdom

(on behalf of): Jinhua Jech Tools Co., Ltd

Client order: TA13/0086

Order received: 30 August 2013

Model: JE3007B

Dates of tests: 18 September 2013 to 19 September 2013

Signed:



Steven Sum, Laboratory Manager

Issued: 24 September 2013

Page 1 of 9

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 ACLASS 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)
4.1	Design & ergonomics ①	Ltd
4.2	Materials	Ltd
4.3	Terminations	Fail
4.4	Slippage - adjustable length lanyards ①	NAp
4.5	Static strength ①	Pass
4.6	Dynamic strength - adjustable length lanyards	NAp
4.6	Static strength after dynamic strength - adjustable length lanyards	NAp
4.7	Corrosion resistance	NAp
4.8	Marking and information	See 6 & 7 below
6	Marking	Fail
7	Information supplied by the manufacturer	
8	Packaging	NAs

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. (job 2A083 +)
Non-adjustable lanyard with no metallic components, model JE3007B	05	30 August 2013	01 to 05

Procedures

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

Testing was performed in accordance with EN 354:2010 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.

Result details**4.1 Design and ergonomics**

Specimen 2A08301 was assessed.

- | | | |
|-------|--|------|
| 4.1.1 | The materials of construction were smoothly finished and did not have sharp edges or burrs that may cause injury or may cut, abrade or otherwise cause damage to the lanyard itself. | Pass |
| 4.1.2 | The specimen did not incorporate a length adjustment device. Therefore, this clause is not applicable. | NAp |
| 4.1.3 | The specimen is a non-adjustable lanyard. Therefore this clause is not applicable to the type of lanyard tested. | NAp |
| 4.1.4 | The specimen is a non-adjustable lanyard. Therefore this clause is not applicable to the type of lanyard tested. | NAp |
| 4.1.5 | There were no connectors incorporated into the lanyard. Therefore, this clause is not applicable. | NAp |
| 4.1.6 | The length of the specimen, measured to the nearest 1 mm between load bearing points, was 1460 mm. | |
| | The length of lanyard was not marked on the specimen. | NAs |

4.2 Materials

Specimen 2A08302 was assessed.

- | | | |
|-------|---|------|
| 4.2.1 | Possible effects of contact by materials of the lanyard with the skin of the user were not assessed. Manufacturer to certify. | NAs |
| 4.2.2 | The materials used for fibre rope, webbing and threads and their characteristics were not assessed. Manufacturer to certify. | NAs |
| | As the lanyard passed clause 4.5 (where clause 4.4 and 4.6 are not applicable), the materials used in the specimen may be deemed to be suitable for their intended use. | Pass |
| 4.2.3 | The specimen is not a wire rope. Therefore this clause is not applicable to the type of lanyard tested. | NAp |

4.3 Terminations

Specimen 2A08301 was assessed.

- | | | |
|-------|---|------|
| 4.3.3 | Threads used for sewing the lanyard were white colour. This did not contrast with the white colour of the lanyard material. | Fail |
| 4.3.4 | Knots were not used in the terminations, so this clause is not applicable. | NAp |
| 4.3.5 | The ends of the specimen were prevented from unravelling, by means of sewn eye terminations. | Pass |
| 4.3.6 | The specimen is not a wire rope. Therefore this clause is not applicable. | NAp |

4.4 Slippage – adjustable length lanyards

This clause is not applicable to the type of lanyard tested.

NAp

4.5 Static strength – single lanyard (fixed or adjustable length)**4.5.1 Specimen 2A08302 was assessed.**

When tested in accordance with 5.7, the specimen withstood the 22 kN force applied for 3 minutes without separating, tearing or rupturing.

Pass

4.6 Dynamic strength – adjustable length lanyards

This clause is not applicable to the type of lanyard tested.

NAp

4.7 Corrosion resistance

There were no metallic elements incorporated into the lanyard.

NAp

4.8 Marking and information - see clauses 6 and 7 below.**6 Marking**

Specimen 2A08301 was assessed against the specific requirements of EN 354 and the results are detailed below.

Results of the assessment of the same specimen against the requirements specified in clause 4.8 of EN 365:2004 are given on page 7.

Pass

a) The lanyard was not marked with its maximum length.

Fail

b) The lanyard was only marked with year of manufacture, thus "2013".

Fail

8 Packaging

Not assessed. Manufacturer to certify.

NAs

EN 365:2004, Clause 4.8, Marking

- 4.8.1** Each item of PPE or other equipment shall be clearly, indelibly and permanently marked by the manufacturer in the official language of the country of destination, by any suitable method not having a harmful effect on the materials so marked, and shall include at least:

The markings were printed on a label secured by a clear plastic sleeve on to the lanyard.

The language assessed was English.

- a) means of identification, e.g. manufacturer's name, supplier's name, or trademark; Yes

Note 1. When PPE is marked with the supplier's name this should be with the approval of the Notified Body.

- b) manufacturer's production batch or serial number or other means of traceability; Yes
c) model and type/identification; Yes
d) number and year of the document to which the equipment conforms; Yes
e) pictogram or other method to indicate the necessity for users to read the instructions for use; Yes

Note 2: Any additional relevant marking specific to the item of equipment should also be included

- 4.8.2** The characters in the markings shall be legible and unambiguous. Yes

Estimates of the uncertainty of measurement

Clause	Test	Uncertainty
4.1	Design & ergonomics	-
4.1.6	Materials and construction – length of lanyard	Length ± 2.9 mm
4.2	Materials	-
4.3	Terminations	-
4.3.4	Terminations – length of knot tail	Length ± 1.8 mm
4.4	Slippage	$\pm 1.1\%$
4.5	Static strength	*
4.6	Dynamic strength	*
4.7	Corrosion	*
4.8	Marking and information	-
6	Marking	-
7	Information	-
8	Packaging	-

* 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)

Jinhua Jech Tools Co., Ltd – Non-adjustable lanyard with no metallic components, model JE3007B



INSPEC Testing Services' sample 2A08301

05 September 2013