



TEST REPORT

SHENZHEN POCE TECHNOLOGY CO., LTD



TEST REPORT

EN 15090: 2012

MEASUREMENT AND TEST REPORT


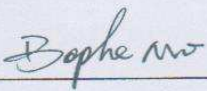
For

Jiujiang Fire Fighting Equipment Co., Ltd.

No. 1, Bridge Road, Yujiahe, Lushan District, Jiujiang City, Jiangxi Province, China

Models: Refer to page 2

Jan. 13, 2014

This Report Concerns: <input checked="" type="checkbox"/> Original Report	Equipment Type: Fire Boots
Test Engineer:	
Report Number:	POCE14011304XRS
Test Date:	Jan. 03, 2014 – Jan. 13, 2014
Reviewed By:	
Prepared By:	Shenzhen POCE Technology Co., Ltd. H Building, Hongfa science and Technology Park, Tangtou, Shiyan, Bao'an District, Shenzhen, China Tel: +86-755-2911 3252 Fax: +86-755-2911 3135

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen POCE Technology Co., Ltd.

TEST REPORT
EN 15090: 2012
Footwear for firefighters

Reference No.....: POCE14011304XRS

Compiled by (+ signature).....: Calvin Chen / Project Engineer

Approved by (+ signature).....: Bophe Mo / Manager

Date of issue.....: Jan. 13, 2014

Contents.....: 12 pages including cover page

**Testing laboratory**

Name.....: SHENZHEN POCE TECHNOLOGY CO., LTD.

Address.....: H Building, Hongfa science and Technology Park,
Tangtou, Shiyan, Bao'an District, Shenzhen, China

Testing location.....: Same as above

Client

Name.....: Jiujiang Fire Fighting Equipment Co., Ltd.

Address.....: No. 1, Bridge Road, Yujiahe, Lushan District, Jiujiang City, Jiangxi
Province, China**Test specification**

Standard.....: EN 15090: 2012

Test procedure.....: CE-PPE

Procedure deviation.....: N.A.

Non-standard test method.....: N.A.

Test item

Description.....: Fire Boots

Brand Name.....: N/A

Model and/or type reference.....: RJX25A, RJX25M, FHX-XJ, FHX-JM, FHX-D12, JA6-91

Manufacturer.....: Jiujiang Fire Fighting Equipment Co., Ltd.

Address.....: No. 1, Bridge Road, Yujiahe, Lushan District, Jiujiang City, Jiangxi
Province, China

Test case verdicts

Test case does not apply to the test object: N (A.)

Test item does meet the requirement.....: P(ass)

Test item does not meet the requirement.....: F(ail)

Testing

Date of receipt of test item: Jan. 03, 2014

Date(s) of performance of test: From Jan. 03, 2014 to Jan. 13, 2014

General remarks

This test report shall not be reproduced except in full without the written approval of the testing laboratory.

The test results presented in this report relate only to the item tested.

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

Remark :

- Models RJX25A, RJX25M, FHX-XJ, FHX-JM, FHX-D12 and JA6-91 are similar except the model name, appearance and size. They are belong to untive series all test performed to model RJX25A.

Copy of marking plate:



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Clause	Requirement-Test	Result-Remark	Verdict
4	Classification, design and type		---
4.1	Classification		P
	Footwear for firefighters shall be classified in accordance with Table 1.		P
	Classification I Footwear made from leather and or other materials, excluding		P
	Classification II All-rubber (i.e. entirely vulcanised) and all-polymeric footwear	Not All- rubber and all- polymeric footwear	N
4.2	Design		P
	Footwear shall conform to one of designs B to E of Figure 3 of EN ISO 20345:2004.	Design E: Thigh boot	P
4.3	Type		P
	The types of footwear for firefighters shall be as follows:		P
	- Type 1 Suitable for general-purpose rescue (example Type 1, HI1), fire suppression (example Type 1, HI2), firefighting suppression action involving a fire in vegetative fuels such as forest (example Type 1, HI3), crops, plantations, grass or farmland.		N
	- Type 2 Suitable for fire rescue (example Type 2, HI2), fire suppression, and property conservation in buildings, enclosed structures (example Type 2, HI3), vehicles, vessels, or like properties that are involved in a fire or emergency situation.		P
	- Type 3 Hazardous materials emergencies, involving the release or potential release of hazardous chemicals into the environment that can cause loss of life, personnel injury, or damage to property and the environment. Suitable also for fire rescue, fire suppression, and property conservation in aircraft, buildings, enclosed structures, vehicles, vessels, or like properties that are involved in a fire or emergency situation.		N
5	Sampling and conditioning		---
	The minimum number of samples shall be that specified in Clause 6 of EN ISO 20344		P
	All test pieces shall be conditioned in a standard atmosphere of (23 + 2) °C and (50 + 5) % relative humidity for a minimum of 48 h before testing, unless otherwise stated in the test method.		P
6	Requirements		---
6.1	Types and classifications		P
	The permitted combinations of types of footwear for firefighters (see 4.3) and classifications I and II (see 4.1) shall be as given in Table 3. As specified in 4.2, design A shall not be used	Footwear type 2, Classification I	P
6.2	General requirements	See appended table 6.2	P

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Clause	Requirement-Test	Result-Remark	Verdict
	Footwear for firefighters shall conform to the requirements specified in Table 4 and one of the 5 options given in Table 5.		
6.3	Thermal behaviour		P
6.3.1	Insulation against heat		P
	When tested in accordance with the method described in 7.1 the footwear shall meet at least one of the levels defined in Tables 6 and 7.	See appended table 6.3.1	P
6.3.2	Radiant heat		P
	When tested in accordance with the method described in 7.2, each material combination shall give a radiant heat transfer index (RHTI) equal to or greater than 40 s. After testing, the footwear shall conform to Annex B.	See appended table 6.3.2	P
6.3.3	Flame resistance		P
	When tested in accordance with the method described in 7.3, the footwear shall neither flame for more than 2s (after-flame time) nor glow more than 2 s (after-glow time). After testing, the footwear shall conform to Annex B. After flame testing, the closure systems shall still be closed.	See appended table 6.3.3	P
6.4	Rigidity of the toepuff		P
	When Type 1 footwear is tested in accordance with the method described in 7.4, the clearance under the toepuff at a compression load of (500 + 10) N shall be not less than the appropriate value given in Table 8.	See appended table 6.4	
6.5	Resistance to chemicals		---
	Footwear shall fulfil the requirements of prEN 13832-3:2004, 6.2, the footwear shall reach the protection index 1 for at least three of the chemicals given in Table 4 of prEN 13832-3:2004.		---
6.6	Electrical Properties		P
6.6.1	General		P
	Electrical properties shall conform to one of the following subclauses 6.6.2, 6.6.3 or 6.6.4.	Complied and see appended table 6.6.3	P
6.6.2	Electrically insulating footwear		P
	Footwear shall conform to all the requirements given in 6.2.2.3 of EN ISO 20345:2004.	Complied and see appended table 6.6.3	P
6.6.3	Antistatic footwear		P
	Footwear shall conform to all the requirements given in 6.2.2.2 of EN ISO 20345:2004.		P
6.6.4	High electrical resistance outsoles		N
	When tested in accordance with EN ISO 20344:2004, 5.10, after conditioning in a dry and wet atmosphere (EN ISO 20344:2004, 5.10.3.3 a and b) the electrical resistance shall be greater than 1000 M Ω .		N
6.7	Outsole	See appended table 6.7	P
6.7.1	Cleat design		P

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Clause	Requirement-Test	Result-Remark	Verdict
	The cleat design (excluding waist area) shall be such that there are no continuous linear transverse valleys across the sole.		P
6.7.2	Cleat height		
	When tested in accordance with EN ISO 20344:2004, 8.1, the cleat height d2 shall be not less than 3 mm.		
6.7.3	Cleat height in the waist area		
	The outsole shall have transverse cleat with a height of at least 1,5 mm in the waist area.		
6.7.4	Heel breast		
	The outsole shall have an inclined-breast heel. Distance 'a' (the waist area) shall be at least 35 mm, angle α shall be between 90° and 120° and dimension 'b' shall be at least 10 mm (See Figure 1).		
6.8	Zipper	No zipper	N
6.8.1	Zipper construction		N
	The zipper shall have an interlocking mechanism.		N
6.8.2	Zipper (slide fastener) puller attachment strength		N
	Zipper (slide fastener) puller attachment strength		N
6.8.3	Zipper (slide fastener) lateral strength		N
	When tested in accordance with the methods described in 7.5.2; each recorded value of the lateral strength shall be greater than 500 N.		N
8	Marking		---
	Each item of footwear for firefighters shall be clearly and permanently marked, for example by embossing or branding, with the following:		P
	a) size;	43	P
	b) manufacturer's identification mark;	Jiujiang Fire Fighting Equipment Co., Ltd.	P
	c) manufacturer's type designation;		P
	d) year and, at least the quarter of manufacture;	2014-01	P
	e) number and year of this standard, i.e. EN 15090;	EN 15090: 2012	P
	f) marking symbol(s) from Table 4 appropriate to the protection provided which is not covered by the symbol(s) of the pictogram (see Figure 4);	See marking	P
	g) pictogram shown in Figure 4, at a size of at least 30 mm x 30 mm, attached in a visible position on the outside of the footwear. One of the symbols given in Table 9 shall be marked in the bottom right hand corner of the pictogram	See foot wear marking	P

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Clause	Requirement-Test	Result-Remark	Verdict
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9	Manufacturer's information		---
	Footwear for firefighters shall be supplied to the customer with information written at least in the official language(s) of the state/country of destination. All information shall be unambiguous. The following information shall be given:	See Instructions	P
	a) name and full address of the manufacturer and/or the manufacturer's authorized representative;	Jiujiang Fire Fighting Equipment Co., Ltd., No. 1, Bridge Road, Yujiahe, Lushan District, Jiujiang City, Jiangxi Province, China	P
	b) number of the standard;	EN 15090: 2012	P
	c) explanation of any pictograms, markings and levels of performance. A basic explanation of the tests that have been applied to the footwear, if applicable;		P
	d) instructions for use:		P
	- checks to be carried out by the wearer before use, if required;		P
	- fitting; how to put on and take off the footwear, if relevant;		P
	- application; basic information on possible uses and, where detailed information is available, the source;		P
	- limitations of use (e.g. temperature range, etc.);		P
	- instructions for storage and maintenance, with maximum periods between maintenance checks (if important, drying procedures to be stated);		P
	- instructions for cleaning and/or decontamination;		P
	- obsolescence deadline or period of obsolescence;		P
	- if appropriate, warnings against problems likely to be encountered (modifications can invalidate the type approval, e.g. orthopaedic footwear);		P
	- if helpful, additional illustrations, part numbers etc.		P
	e) reference to accessories and spare parts, if relevant;		P
	f) the type of packaging suitable for transport, if relevant;		P
	g) suggestion to assess the obsolescence of footwear during used by the wearer (for example see Annex C);		P
	h) information on electrical properties in accordance with EN ISO 20345: 2004, 8.2;		P
	i) information on insoles in accordance with EN ISO 20345: 2004, 8.3;		P
	j) information on chemical resistance of footwear in accordance with prEN 13832-3:2004, 9.3;		P
	k) information on assessment of the state of footwear for the wearer.		P

Table 6.2	Footwear for firefighters shall conform to the requirements specified in Table 4 and one of the 5 options given in Table 5.	P
Test	Result	
EN ISO 20345 Clause 5.2 Design	Pass	
Clause 5.3 Whole Footwear	Pass	
EN ISO 20345 Clause 6.2 Additional requirements	Pass	
EN ISO 20345 Clause 6.3 Additional requirements	Pass	
EN ISO 20345 Clause 6.4 Additional requirements	Pass	

Table 6.3.1.1	Insulation against heat test			P
Sandbath temperature (°C)	requirements Inside temperature of the footwear (°C)	Test	Pass/Fail	
250	<42 after 10 min	<42 (°C)	Pass	

Table 6.3.1.2	Insulation against heat test			P
Sandbath temperature (°C)	Total duration of the test	Request	Pass/Fail	
250	40 min	After testing, the footwear shall conform to Annex B	Pass	

Table 6.3.2	Radiant heat	P
Specification requirements	Request	Pass/Fail
each material combination shall give a radiant heat transfer index (RHTI) equal to or greater than 40 s	the footwear shall conform to Annex B	Pass

Table 6.3.3	Flame resistance	P
Specification requirements	Request	Pass/Fail
The footwear shall neither flame for more than 2s (after-flame time) nor glow more than 2 s (after-glow time)	the closure systems shall still be closed.	Pass

6.4	Rigidity of toepuff			P
Specification requirements	compress with a load	Minimum internal clearance mm	Pass/Fail	
14.0	500 N	18	Pass	

6.6.3	electrical resistance			P
Test method	electrical resistance	Requirement	Pass/Fail	
Dry	Left: 765 mega-ohms	*	Pass	
	Right: 897 mega-ohms	*	Pass	
Wet	Left: 72.7 mega-ohms	*	Pass	
	Right: 86.5 mega-ohms	*	Pass	

6.7	Outsoles			P
Test method	Specification requirements	Sample result	Pass/Fail	
Cleat height	$\geq 4\text{mm}$	8.0mm	Pass	
Cleat height in the waist area	$\geq 2.5\text{mm}$	4.3 mm	Pass	
The waist area	$\geq 35\text{ mm}$	50 mm	Pass	
Angle α	90-120°	110°	Pass	
Dimension 'b'	≥ 10	14 mm	Pass	

EUT Photos



Photo 1



Photo 2

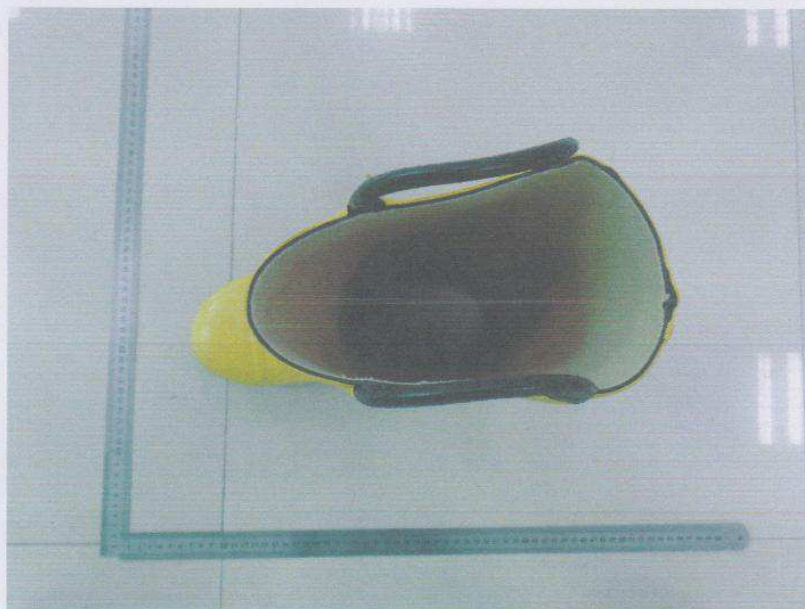


Photo 3

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