



Test Report # T16907-01-2 Issue 1  
ANSI/ISEA Z89.1 – 2014 (R2019)  
Jiyuan City Jinxing Mining Rubber Plastics Co., Ltd.  
JXSFHEM M091 – Industrial Safety Helmet  
23 March 2022



Approved by:

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Head Protection, Hand Protection &  
Athletic Equipment - Laboratory Manager

Prepared by:

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 North of Tiantan Office  
 Jiyuan City, Henan Province  
 China

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**Objective:**

Contract testing to ANSI/ISEA Z89.1-2014 (R2019) “American National Standard for Industrial Head Protection”.

-Type I, Class C

**Sample(s):**

JXS FHEM M091- Industrial Safety Helmet

Description	Qty	Date Code	Material	Date Received	Sample ID
White Shell (Full Brim) Ratchet Suspension (6 pt.), Vented w/ Chin Strap/Cup	16	3/22	HDPE	11 March 2022	7A-x
	16			14 March 2022	

**Procedures:**

Testing protocols in accord with good laboratory practice were employed unless otherwise specified, for all tests.

Testing procedures as specified within Section 10 of ANSI/ISEA Z89.1-2014 (R2019) were followed.

Testing was performed at room temperature 23°C ± 3°C (73.4°F ± 5.4°F) per ANSI/ISEA Z89.1 – 2014 (R2019).

**Equipment:**

Cadex Twin Wire Test Platform  
 Environmental Conditioning Chambers  
 Cadex Impact Software V6.9U

**Assessment Summary:**

Date Tested: 22 March 2022  
 Test Performed By: Joe McGreal – Engineering Technician

Requirements	Compliant	Non-Compliant
6 Instruction and Marking	<i>Excluded</i>	
7 Performance Requirements		
7.1 Requirements for Type I Helmets		
7.1.1 Flammability	X	
7.1.2 Force Transmission	X	
7.1.3 Apex Penetration	X	
7.3 Requirements for Optional Testing		
7.3.1 Reverse Wearing		
-Force Transmission		
7.3.2 High-Visibility	Not Applicable	
7.3.3 Higher Temperature		
7.3.4 Lower Temperature		

Samples as assessed meet the mechanical performance requirements of ANSI/ISEA Z89.1 2014 (R2019) for Type I, Class C.

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**Results:**

**7.1.1 Flammability**

Sample ID	Afterflame (sec)	Pass	Fail
7A-12	0		
Specification:	< 5		

**7.1.2 Force Transmission**

Sample ID	Conditioning (°C)	Velocity (m/s)	Force (N)	Specified Value (N)	Observations	Pass	Fail
7A-1	49 ± 2	5.50	2070	≤ 4450	-	X	
7A-2		5.52	2047		-	X	
7A-3		5.51	2086		-	X	
7A-4		5.52	2087		-	X	
7A-5		5.51	2108		-	X	
7A-6		5.52	2153		-	X	
7A-7		5.51	2093		-	X	
7A-8		5.52	2055		-	X	
7A-9		5.51	2103		-	X	
7A-10		5.50	2152		-	X	
7A-11		5.51	2069		-	X	
7A-12		5.51	2115		-	X	
Average			2095	≤ 3780		X	
7A-13	-18 ± 2	5.50	2756	≤ 4450	-	X	
7A-14		5.52	2755		1	X	
7A-15		5.52	2608		1	X	
7A-16		5.52	2741		1	X	
7A-17		5.50	2669		1	X	
7A-18		5.52	2589		-	X	
7A-19		5.50	2636		1	X	
7A-20		5.52	2551		1	X	
7A-21		5.53	2528		1	X	
7A-22		5.51	2535		1	X	
7A-23		5.52	2613		1	X	
7A-24		5.52	2567		1	X	
Average			2629	≤ 3780		X	
Specification:		5.50 ± 0.05					

Observations:

(-) No observation

1 – Suspension tab/tabs released

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**7.1.3 Apex Penetration**

Sample ID	Conditioning (°C)	Velocity (m/s)	Electrical Contact (Yes/ No)	Observations	Pass	Fail
7A-25	49 ± 2	7.1	No	-	X	
7A-26		7.0	No	-	X	
7A-27		7.0	No	-	X	
7A-28	-18 ± 2	7.1	No	-	X	
7A-29		7.0	No	-	X	
7A-30		7.0	No	-	X	
Specification:		7.0 ± 0.1	No Electrical Contact Allowed			

Observations:  
(-) No observation

**Sample Photographs:**



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**Observation Photograph:**



Suspension tab released

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14. Client agrees to pay any and all additional costs associated with unexpected or above-standard communications and/or consultations with Client or third parties as designated by Client.
15. Client agrees to pay any and all additional costs for work additional to the original scope of work as agreed to by Client.
16. Client understands and agrees that ICS, in entering into this Contract and by performing services hereunder, does not assume, abridge, abrogate or undertake to discharge any duty or responsibility of Client to any other party or parties. No one other than Client shall have any right to rely on any Report or other representation or conduct of ICS and ICS disclaims any obligations of any nature whatsoever with respect to such third parties.
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19. It is agreed that if ICS should be found liable for any losses or damages attributable to the services hereunder in any respect, its liability shall not exceed the amount of the fee paid by Client for services rendered and Client's sole remedy at law or in equity shall be the right to recover that sum.
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21. ICS hereby objects to any conflicting terms contained in any order, acceptance or other subsequent correspondence submitted by Client.
22. In the event that payment is not received within 15 days of invoice date, Client agrees to pay a late payment charge on the unpaid balance equal to 1-1/2% per month or the maximum charge allowed by law, whichever is less, and all costs and expenses, including attorney's fees where recovery of the same is not prohibited by law, incurred by ICS in collecting such invoices.
23. All costs associated with compliance with any subpoena (s) for documents, testimony in a court of law, or for any other purpose relating to work performed by ICS in connection with work performed for that Client, shall be paid by Client. Client shall also pay costs related to deposition and trial testimony.
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