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Test Report # T19348-02-1 Issue 1
ANSI/ISEA Z89.1 - 2014 (R2019)
Jinhua City Jinhan Safety Tools Co., Ltd.
W-1000-A – Industrial Safety Helmet
11 November 2024

A2LA ACCREDITED
Test Laboratory
Certificate: 1722.01

Approved by:

Jagdesh Sookhdeo
Head Protection, Hand Protection &
Athletic Equipment - Laboratory Manager

Prepared by:

Shelley Brady
Head Protection & Athletic Equipment -
Laboratory Administrator

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ICS Laboratories, Inc. •1072 Industrial Parkway North • Brunswick, Ohio 44212 USA
Phone: 330.220.0515 Fax: 330.220.0516

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ACCREDITED Test Laboratory Certificate: 1722.01

Issued to: Jinhua City Jinhan Safety Tools Co., Ltd.
No. 8, Chuang Ye Road, Luo Dian Industrial District
Jinhua City, Zhejiang Province
China

Date: 12 November 2024
Report: T19348-02-1
Issue: 1

Objective:

Contract testing to ANSI/ISEA Z89.1-2014 (R2019) "American National Standard for Industrial Head Protection".
-Type I, Class C

Sample(s):

W-1000-A*- Industrial Safety Helmet

Description	Qty	Date Code	Material	Date Received	Sample ID
White Shell (Cap) w/ Ratchet Suspension (12 pt.), Vented w/ Chin Strap	30	-	-	16 August 2024	8A-x
	1			21 October 2024	8A-02-x

*W-1000-A not found on product

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: 17 September 2024 & 24 September 2024 & 11 November 2024
Jagdesh Sookhdeo – Lab Manager
Test Performed By: Pete Turpin – Senior Technician

Requirements	Compliant	Non-Compliant
6 Instruction and Marking	***Excluded***	
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	Not Applicable	
7.3.2 High-Visibility		
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 or Type I, Class C.

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Results:

7.1.1 Flammability

Sample ID	Afterflame (sec)	Pass	Fail
8A-02-12	0	X	
Specification:	< 5		

7.1.2 Force Transmission

Sample ID	Conditioning (°C)	Velocity (m/s)	Force (N)	Specified Value (N)	Observations	Pass	Fail
8A-1	49 ± 2	5.48	2676	≤ 4450	-	X	
8A-2		5.49	2824		-	X	
8A-3		5.52	2654		-	X	
8A-4		5.52	2741		-	X	
8A-5		5.52	2825		-	X	
8A-6		5.52	2656		-	X	
8A-7		5.55	2657		-	X	
8A-8		5.50	3058		-	X	
8A-9		5.54	2700		-	X	
8A-10		5.48	2656		-	X	
8A-11		5.49	2635		-	X	
8A-12		5.53	2697		-	X	
Average			2732	≤ 3780		X	
8A-13	-18 ± 2	5.49	3528	≤ 4450	1	X	
8A-14		5.49	2994		1	X	
8A-15		5.52	2959		1	X	
8A-16		5.52	3067		1	X	
8A-17		5.49	2870		1	X	
8A-18		5.47	2800		1	X	
8A-19		5.49	3121		1	X	
8A-20		5.48	2828		1	X	
8A-21		5.52	3100		1	X	
8A-22		5.49	2998		1	X	
8A-23		5.53	2850		1	X	
8A-24		5.48	3018		1	X	
Average			3011	≤ 3780		X	
Specification:		5.50 ± 0.05					

Observations:
(-) No observation
1 – Shell cracked at impact site

7.1.3 Apex Penetration

Sample ID	Conditioning (°C)	Velocity (m/s)	Electrical Contact (No / Yes)	Observations	Pass	Fail
8A-25	49 ± 2	7.1	No	-	X	
8A-26		7.1	No	-	X	
8A-27		7.1	No	-	X	
8A-28	-18 ± 2	7.1	No	-	X	
8A-29		7.1	No	-	X	
8A-30		7.1	No	-	X	
Specification:		7.0 ± 0.1	No Electrical Contact Allowed			

Observations:
(-) No observation

Sample Photographs:



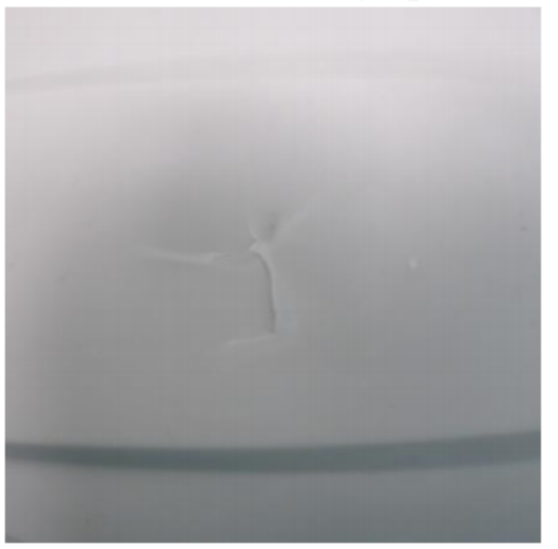
Sample Photographs (continued):

8A-02



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Observation Photograph:



Shell cracked

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12. Certain work may be subcontracted to ICS-approved laboratories as required or applicable. Client will be notified of this in advance.
13. 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.
14. Client agrees to pay all additional costs for work beyond the original scope of work, as directed and agreed to by Client.
15. 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.
16. For statements of conformity (pass/fail/"meets") regarding qualitative test results, ICS utilizes simple acceptance as its basis. For most statements of conformity relating to quantitative test results, the decision rule and associated uncertainty is inherent in the standard method. As such, simple acceptance is typically applied. Results on or near pass/fail thresholds or otherwise upon Client request or appeal will be evaluated with reference to the measurement uncertainty of relevant testing practices, equipment and other inputs/variables.
17. Client agrees, in consideration of ICS undertaking to perform the test(s) hereunder, to protect, defend and indemnify ICS from any and all claims, damages, expenses either direct or consequential for injuries to persons or property arising out of or in consequence of the performance of the testing, inspection and reporting hereunder and/or the performance of the products tested or inspected hereunder, unless caused by the negligence of ICS.
18. 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.
19. Standard quotations are valid for 30 days from date of issue. Quotations for STAT services are valid for 5 days from date of issue.
20. Standard Payment Terms: 30% Laboratory/Testing fees invoiced and payable upon acceptance of quotation. 15 days net. Any change to these terms requires written approval by the President, Executive Vice President, Counsel or Accounting Manager. ICS retains the right to require prepayment in full at any time.
21. Cancelled jobs will be invoiced for work performed and/or set-up costs incurred. All jobs will be assessed a $35 sample handling fee. Shipping costs over $25 incurred by ICS for sample returns will be invoiced at cost +10%.
22. ICS hereby objects to any conflicting terms contained in any order, acceptance or other subsequent correspondence submitted by Client.
23. 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.
24. 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.