

China Military standard

GJB/Z9001B -2009

Quality System Certification: 07JA398

BFJZ(2017) 088

# Test Report

Name: Anti-riot helmet

Type: FBK-02

Test Sort: Commission Test

Client: Kintix Limited Hong Kong

Date:



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of China Ordnance Industry

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*[Signature]*


A circular stamp with the text "SOCIETY FOR TESTING & INSPECTION" around the perimeter. The word "MEMBER" is written across the center, and "DISTRIBUTION" is written below it.

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Name	Anti-riot helmet	Type	FBK-02
Client	Kintix Limited Hong Kong	Client Principal	Sam Watson
Address	Flat A , 7/F, China Overseas Building, 139 Hennessy Road, Wanchai, HK	Telephone	0577-65492668
Manufacturer	Kintix Limited Hong Kong	Test Sort	Commission Test
Address	Flat A , 7/F, China Overseas Building, 139 Hennessy Road, Wanchai, HK	Telephone	0577-65492668
Test Date	Apr.28, 2017	Brand	/
Lot Number	/	Sample Number	1-5
Sample Place	/	Basic Number	/
Sample Unit	/	Sample Date	/
Standard	GA 294-2012 Anti-riot helmet		
Test Item	General requirement, Appearance, Weight, Shell, Buffer layer, Liner, Visor, Wearable device, Neck guard, Antiseep, Resist concussion, Shock strength, Strike energy absorb, Stab resistance, Anti flaming performance and Temperature adaptability		
Test Conclusion	<p>Type FBK-02 Anti-riot helmet (sample), which is provided by Kintix Limited Hong Kong has got a test of General requirement, Appearance, Size, Weight, Shell, Buffer layer, Liner, Visor, Wearable device, Neck guard, Antiseep performance, Stab resistance Performance, Resist concussion Performance, Shock strength Performance, Anti flaming Performance and Temperature adaptability. The performance of test item satisfies the related requirements GA 294-2012 Anti-riot helmet.</p>		
Remarks	Date: 		
Editor: <i>Smalloying</i> Censor: <i>Tian Guojun</i> Approver: <i>penyuchun</i>			

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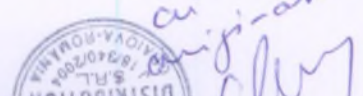
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Test place, environment ( special requirement of environment ) and test equipments	
Test place	The Test Center of Bulletproof Equipment of China Ordnance Industry
Test environment (special requirement of environment)	In the room: temperature 14°C, humidity 54%RH
Test equipments	<p>AQJL-300 drop hammer impact test equipment                      Universal standard measure                      Electro- balance                      PL-7.6 Impact testing machines                      RGM Universal test machine                      XGK-2002 Fragment velocity testing system                      MF210 High-temperature test chamber                      WD710 Low temperature testing box                      WGT-S Transmittance tester                      Dragon100 Bunsen burner                      HS-10W Electronic stopwatch                      HHZ-2 Optical distortion test device                      DK-98-1 Electric-heated thermostatic water bath                      Lead projectile launcher</p>
Description of sample character	The sample is composed of shell, buffer layer, liner, wearing device. Shell is made of engineering plastics, buffer layer is made of foam and soft energy absorbing material.



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No	Test item	Request	Samples number	Test result	Determinant
1	General requirement	The material of Anti-riot helmet should innocuity and do harmless to person.	1-5	Meet the requirement	Eligibility
2	Appearance examination	The Anti-riot helmet shouldn't have falt such as rift, dilapidation, indentation, thrum and so on.	1	Meet the requirement	Eligibility
3	Weight	Total weight of Anti-riot helmet ought to less than 1.65kg	1	1.39kg	Eligibility
4	Buffer layer	Anti-riot helmet should have a buffer layer effectively absorbs collision energy	1	Meet the requirement	Eligibility
5	Shell inspection	The surface of the shell should not have obvious dents, sharp corner spines and other defects. The connecting parts of other parts such as lace should not exceed the 3mm of the outer and inner surface of the shell, and there should be no burr. A sound hole should be set in the helmet shell at the corresponding part of the human ear	1	Meet the requirement	Eligibility
6	Wearable device inspection	The helmet's tie should be fixed to the shell. Buckle should be convenient, reliable and adjustable. The tie should be able to bear the tensile load of 900N, the length of the tie should be less than 25mm. The helmet mounted suspension system should be ventilated for easy adjustment	2	Meet the requirement	Eligibility



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No	Test item	Request	Samples number	Test result	Determinant
7	Size test	Standard Specification for helmets according to GB/T 10000-1988 in the provisions of the head size, divided into L, M, S.	1	Meet the requirement	Eligibility
8	Liner inspection	The liner of Anti-riot helmet could be unpicked and washable	1	Meet the requirement	Eligibility
9	Neck guard test	Neck protection should be removalbe and be made of soft material. The extending part length 120mm + 20mm.	1	Meet the requirement	Eligibility
10	Antiseep performance test	Anti-riot helmet should be able to withstand the spray of the test liquid, and the helmet should not be coloured.	1	Meet the requirement	Eligibility
11	Visor inspection	The visor should not have faults such as bump, sharp angle, burr, bubble and so on. The edge should be smooth.	1	Meet the requirement	Eligibility
		During the opening and closing of the visor, visor should be able to maintain the position without human force.	1	Meet the requirement	Eligibility
		Diameter of any spot in the visor should be less than 1mm and the number should be less than 4.	1	Meet the requirement	Eligibility
		Transmittance of visor should be more than 85%.	1	Meet the requirement	Eligibility
		The maximum amount of optical distortion of the visor should be less than equal to 6'.	1	Meet the requirement	Eligibility
		The inner surface of the visor should be antifogging.	1	Meet the requirement	Eligibility

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No.	Test item	Request	Samples number	Test result	Determinant
12	Resist concussion performance	Anti-riot helmet should be able to withstand the impact of the 8J kinetic energy from visor, and the visor should not contact the nose of the test model, and the visor should be able to open normally	2	Uncracked	Eligibility
13	Shock strength performance	Anti-riot helmet mask should be able to withstand the impact of the 1g lead projectile at 150m/s + 10m/s speed, and the visor should not be punctured or break down.	1	PP	Eligibility
14	Strike energy absorb Performance	Anti-riot helmet should be able to withstand the impact of 90J energy. The pressure transferred to the test model should be less than 4900N and the shell should not be cracked.	2	Uncracked	Eligibility
15	Stab resistance performance	Anti-riot helmet should be able to withstand puncture of 88.2J energy, and the drop hammer should not penetrate the helmet when the puncture is punctured.	1	PP	Eligibility
16	Anti flaming performance	The continuous burning time of the surface of the helmet shell should be over than equal to 30s	1	burning time is 30s.	Eligibility



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No.	Test item	Request	Samples number	Test result	Determinant	
17	Temperature Adaptability	Low temperature	After 4 hours in the temperator(-20°C ± 2°C ), Strike energy absorb Performance and Resist concussion Performance should meet GA 294-2012 General specification for Anti-riot helmet.	3	Meet the requirement	Eligibility
		High temperature	After 4 hours in the temperator(-55°C ± 2°C ), Strike energy absorb Performance and Resist concussion Performance should meet GA 294-2012 General specification for Anti-riot helmetAnti-riot helmet.	4	Meet the requirement	Eligibility
		Rain treatment	1 hour rain treated(water spray 15l/min) under normal temperature, and place the Anti-riot helmet for 5 minutes, Strike energy absorb Performance and Resist concussion Performance should meet GA 294-2012 General specification for Anti-riot helmet.	5	Meet the requirement	Eligibility



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Type FBK-02 Anti-riot helmet Strike energy absorb Performance test result							
Model number	Test condition	Weight of drop-harmer (kg)	Hight (mm)	Sequence	Test position	Test result	Impact force value
2	Ordinary temperature	5	1000	1	Top	Uncracked	3987
				2	Front	Uncracked	3880
				3	Right	Uncracked	4001
				4	Left	Uncracked	4012
				5	Back	Uncracked	3991
3	Low temperature (-20°C ± 2°C),4h			1	Top	Uncracked	4100
				2	Front	Uncracked	4121
				3	Right	Uncracked	3904
				4	Left	Uncracked	3877
				5	Back	Uncracked	4021
4	High temperature (-20°C ± 2°C),4h			1	Top	Uncracked	4211
				2	Front	Uncracked	4220
				3	Right	Uncracked	4314
				4	Left	Uncracked	4160
				5	Back	Uncracked	4000
5	Rain treatment (water spray 15l/min),1h	1	Top	Uncracked	4310		
		2	Front	Uncracked	4462		
		3	Right	Uncracked	4277		
		4	Left	Uncracked	4158		
		5	Back	Uncracked	4280		



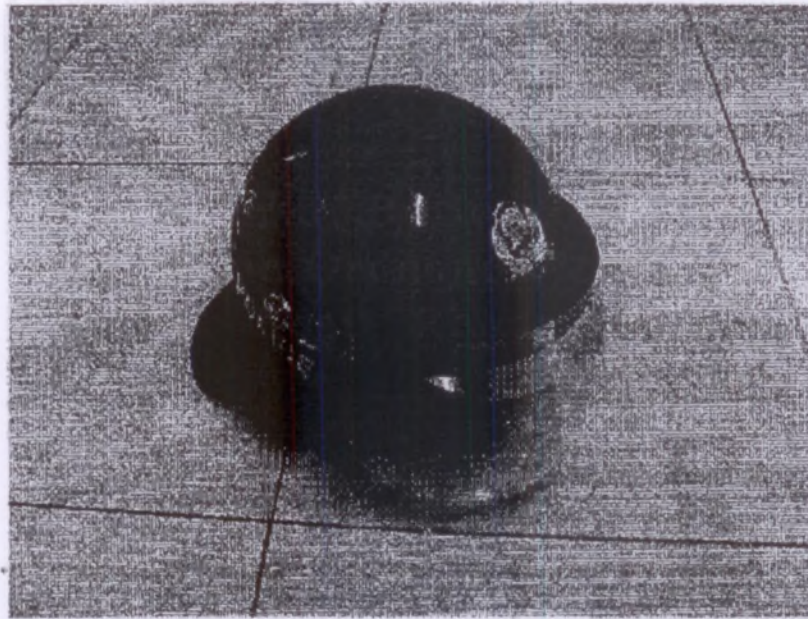
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Type FBK-02 Anti-riot helmet Complete picture

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