



The Test Center of Bulletproof Equipment of China Ordnance Industry

Test Report

BFJZ (2008) 263

Name:	<u>Ballistic Composite Material</u>
Type:	<u>RYB 92-07</u>
Client:	<u>Ningbo Rongyi Chemical Fiber Science & Technology Co., Ltd.</u>
Test Aim:	<u>Ballistic Resistance Function</u> <u>NIJ Standard-0101.04</u>
Standard:	<u>Ballistic Resistance of Personal Body Armor</u>
Date:	<u>Nov.24, 2008</u>



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Type:	<u>RYB 92-07</u>
Client:	<u>Ningbo Rongyi Chemical Fiber Science & Technology Co., Ltd.</u>
Manufacturer:	<u>Ningbo Rongyi Chemical Fiber Science & Technology Co., Ltd.</u>
Brand:	<u>Rongyi Science & Technology</u>
Test Date:	<u>Nov.21, 2008</u>

Test Conclusion

The firing practice test shows that Type RYB92-07 Ballistic Composite Material (sample), provided by Ningbo Rongyi Chemical Fiber Science & Technology Co., Ltd., can effectively prevent the penetration of NATO cartridge fired from 7.62mm M14 Automatic Rifle at the range of 15m. Testing Condition is normal temperature (natural temperature). The maximum deformation depth on the artificial body is 29.0mm. The ballistic resistance function meets level III requirements of NIJ Standard-0101.04 Ballistic Resistance of Personal Body Armor.

The attached chart and pictures No. 1-2 show the details.

Author: *Sun Hongyi* Censor: *Tian Qiu yi* Approved By: *Peng Yuchun*

Test Summary of Ballistic Resistance Specification of Type RYB 92-07 Ballistic Composite Material

Temperature :4℃ Air pressure :1053hPa Humidity :50% Attached Chart

Ballistic composite material weight	Ballistic composite material		Ballistic composite material structure	Testing condition	Shooting range (m)	Angle of incidence	Sequene	Muzzle velocity (m/s)	Penetration	Deforma-tion			
	Ballistic insert (kg)	Ballistic composite material protected area									Body armor material panel		
1.81	0.95	2.76	0.075	0.16	26.2	39	Normal Tempera-ture (Natural Tempera-ture)	15	0°	1	833	PP	16.5
										2	838	PP	17.0
										3	833	PP	23.5
										4	834	PP	27.0
										5	836	PP	26.0
										6	834	PP	29.0

- Remarks
1. The test conclusion only reacted to the sample.
 2. Weapon in testing : 7.62mm M14 Automatic Rifle.
 3. Ammunition in testing : NATO cartridge.
 4. Keep ammunition at temperature 20±2℃ for 2h before test.
 5. Determination of the muzzle velocity with B215/B470 Ballistic Analytic System.

Shooter: Wang Wen Operator: Song Qingqing Measure: Tian Guiyi Recorder: Song Qingqing

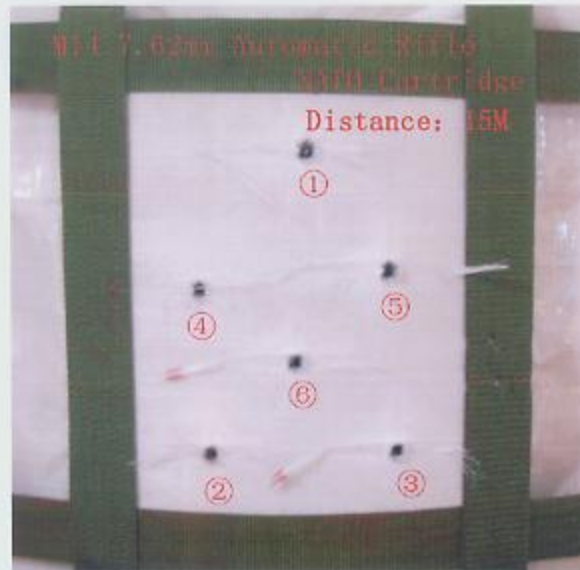


Figure 1

Shot marks of Type RYB92-07 Ballistic Composite Material from the front attack

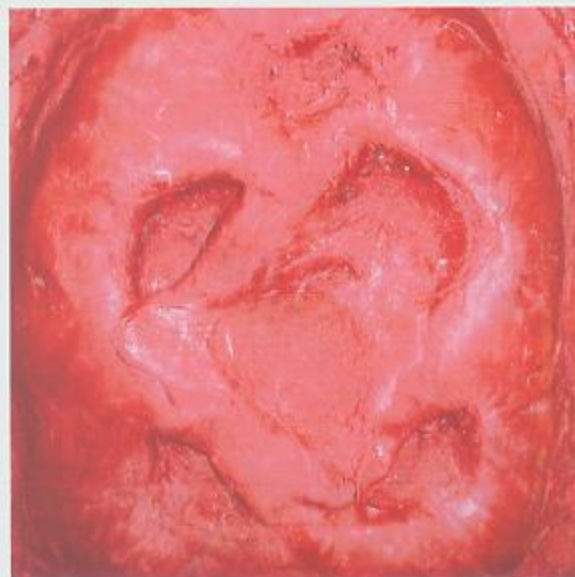


Figure 2

Deformation shape on the artificial body