

**National Institute
of Justice (NIJ)**

Approved Test Laboratory
For Personal Body Armor

Expiration Date:

April 30, 2022

National Technical Systems

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NVLAP LAB CODE: 200818-0

Approved Signatory: Jake Crawford

HARD ARMOR STAND-ALONE PLATE:

Date Received: 12/6/2020
Via: DHL
Returned Via: DHL

P-BFS TEST

Record No.: VTG20004-1
Test Date: 12/6/2020
Customer: Merc Tactical Gear Co. Ltd

Test Conditions

Temperature: 21.9 °C
Humidity: 49 %
Clay Block No.: 7
Clay Block Size: 24" x 24" x 5.5"
Clay Temp.: 37.3 °C
Drop Average: 19.85 mm
Test Standard: IAW Modified / Abbreviated NIJ 0101.06, July 2008
Threat Level: Special Threat
Conditioning: Ambient / Dry

Range 3

Muzzle to Screen 1: 11.98 m
Screen 1 - 4: 1.52 m
Screen 4 - Target: 1.74 m
Midpoint to Target: 2.50 m
Target to Witness: 0 m
Barrel Length: 50.80 cm

Sample Tested	Shot / Projectile Description				Chronograph		Test Results	
	Shot No.	Shot Location	Degree Obliquity	Caliber	Bullet Weight (gr.) / Type	TIME sx-5	VELOCITY m/s	Perforation BFS (mm)
Plate Manufacturer: VT Garment Co. Ltd Model No.: GMGB3+MSSHMUB01M Lot No.: N/A Size (cm): 24 x 31 Curve / Cut: Multi-Curved / Shooter's Cut DoM: N/A Weight (kg): 2.1475 Protection Level: N/A	1	Top Left	0°	7.62x39mm	123 / MSC	208.2	732.0	9.09
	2	Bottom Right	0°			210.4	724.3	9.45
	3	Top Right	0°			209.5	727.4	13.10
	4	Middle Right	0°			208.8	729.9	16.59
	5	Middle Left	0°			210.2	725.0	13.40
	6	Bottom Left	0°			211.9	719.2	15.35
Plate Carrier Manufacturer: Merc Tactical Gear Model No.: ETO Plate Carrier Lot No.: N/A Size (cm): N/A DoM: N/A Weight (kg): 0.3505 Protection Level: N/A								

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Test Remarks/Notes:

- Plate tested non-planar (with clay build-up/mound)
- Plate tested ICW plate carrier.
- Customer requested BFS to be measured for ALL Shots

Test Round Description:

Test Round: Russian 7.62x39mm 123 gr. MSC (M43)
Test Velocity: 725.4 m/s +/- 9.1 (2380 +/- 30 ft/s)

Shot Spacing Requirements:

- Shot Pattern: NIJ 0101.06 6-Shot Die Pattern
- Shot-to-Edge: 2.0" Minimum
- Shot-to-Shot: 2.0" Minimum

Sample Description:

- Customer Proprietary

Project Manager: Zerger
Range Tech(s): Nguyen