S.M.S. TESTING

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BALLISTIC R&D TEST SHEET
V-0

Client: Dayton Armor
Date: 3/24/2022
Project: R&D

PANEL IDENTIFICATION

Manufacturer: Dayton Armor
Size: MD
Apex Thk.: .91 inch
Description: Hard armor sample

Sample No: DA-RF3-100-3
Weight: 5.79 lbs
Layer count: NA
Technician: Murray

TEST METHOD

Shot Spacing: PER CUSTOMER
Witness Panel: CLAY
Backing Material: 5.5" CLAY/PLYWOOD
Obliquity 0°
Conditioning: DRY

TEST DISTANCE

Muzzle to Target: 17.0 FT
Target to Witness: NA
VS Screens 5
Midpoint to Target: 8.2
VR Screens

Temp: 65.3° F.
BP: 28.79
RH: 45%

AMMUNITION

1) 7.62 x 63 M2 AP
2)
3)

LOT # & MANUFACTURER

1) MILITARY
2)
3)

POWDER

1) N133
2)
3)

TEST STANDARD OR PROCEDURE

1) 2850+50 fps
2)
3)

Shot No.	Charge Wt.	Time 1	Velocity 1 (ft/s)	Time 2	Velocity 2 (ft/s)	Velocity Average	Results P / C		Shot Location	Deformation (mm)
1	46.4	0.00174	2870	0.001742	2870	2870	P		APEX	31.9

REMARKS:

SHOT AS STAND ALONE

MISC. TEST INFORMATION:

Clay Block ID: 5
Clay Drops: 24.0 mm, 24.9 mm, 25.1 mm
Clay Temp.: 102.5° F.

S.M.S. TESTING

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BALLISTIC R&D TEST SHEET
V-0

Client: Dayton Armor
Date: 3/17/2022
Project: R&D

PANEL IDENTIFICATION

Manufacturer: Dayton Armor
Size: MD
Apex Thk.: .91 inch
Description: Hard armor sample

Sample No: DA-RF3-100-2
Weight: 5.69 lbs
Layer count: NA
Technician: Murray

TEST METHOD

Shot Spacing: PER CUSTOMER
Witness Panel: CLAY
Backing Material: 5.5" CLAY/PLYWOOD
Obliquity 0°
Conditioning: DRY

TEST DISTANCE

Muzzle to Target: 17.0 FT
Target to Witness: NA
VS Screens 5
Midpoint to Target: 8.2
VR Screens

Temp: 65.3° F.
BP: 28.79
RH: 45%

AMMUNITION

1) 7.62 x63 M2 AP
2)
3)

LOT # & MANUFACTURER

1) MILITARY
2)
3)

POWDER

1) N133
2)
3)

TEST STANDARD OR PROCEDURE

1) 2850+50 fps
2)
3)

Shot No.	Charge Wt.	Time 1	Velocity 1 (ft/s)	Time 2	Velocity 2 (ft/s)	Velocity Average	Results P / C		Shot Location	Deformation (mm)
1	46.4	0.00173	2885	0.001733	2885	2885	P		APEX	33.6

REMARKS:

SHOT AS STAND ALONE

MISC. TEST INFORMATION:

Clay Block ID: 2
Clay Drops: 24.3 mm, 25.0 mm, 23.8 mm
Clay Temp.: 102.7° F.

S.M.S. TESTING

S.M.S. TESTING
BALLISTIC R&D TEST SHEET
V-0

Client: Dayton Armor
Date: 3/11/2022
Project: R&D

PANEL IDENTIFICATION

Manufacturer: Dayton Armor
Size: MD
Apex Thk.: NA
Description: Hard armor sample

Sample No: DA-RF3-100-1
Weight: 5.78 lbs
Layer count: NA
Technician: Murray

TEST METHOD

Shot Spacing: PER CUSTOMER
Witness Panel: CLAY
Backing Material: 5.5" CLAY/PLYWOOD
Obliquity 0°
Conditioning: DRY

TEST DISTANCE

Muzzle to Target: 17.0 FT
Target to Witness: NA
VS Screens 5
Midpoint to Target: 8.2
VR Screens

Temp: 65.3° F.
BP: 28.79
RH: 45%

AMMUNITION

1) 7.62 x 63 M2 AP
2)
3)

LOT # & MANUFACTURER

1) MILITARY
2)
3)

POWDER

1) N133
2)
3)

TEST STANDARD OR PROCEDURE

1) 2850+50 fps
2)
3)

Shot No.	Charge Wt.	Time 1	Velocity 1 (ft/s)	Time 2	Velocity 2 (ft/s)	Velocity Average	Results P / C		Shot Location	Deformation (mm)
1	46.4	0.00173	2887	0.001732	2887	2887	P		APEX	34.9

REMARKS:

SHOT AS STAND ALONE

MISC. TEST INFORMATION:

Clay Block ID: 5
Clay Drops: 24.0 mm, 23.8 mm, 24.0 mm
Clay Temp.: 102.7° F.