

H.P. WHITE LABORATORY, INC.

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16 January 2014
(HPWLI 000002140B)

Kloeckner Metals Corporation
2465 West Houston Ave.
Apache Junction, AZ 85220

Attention: Jim Beck

In accordance with your Purchase Order AZ1455JB, H.P. White Laboratory, Inc. conducted Ballistic Resistance Testing of two (2) steel armor samples received 14 January 2014 via United Parcel Service.

Testing was conducted in accordance with the provisions of ANSI/UL752-2005, STANDARD FOR BULLET RESISTING EQUIPMENT, Eleventh Edition, dated 9 September 2005, Level 8, Paragraphs 17.1.4 and 17.5.1, using caliber 7.62x51mm, 150 grain, M80, Ball ammunition. The test samples were mounted on an indoor range 15.0 feet from the muzzle of a test barrel to produce zero (0) degree obliquity impacts. Photoelectric infrared screens were positioned at 5.0 and 10.0 feet which, in conjunction with dual elapsed time counters (chronographs), were used to compute projectile velocities 7.5 feet from the muzzle. Penetrations were determined by visual examination of a 1/8 inch thick sheet of corrugated cardboard positioned 18.0 inches behind and parallel to the test samples. Table I provides a summary of the enclosed data records.

TABLE I.

| SUMMARY OF RESULTS | | | | | | | | | |
|--------------------|-------------|--------------------|------------------|-----------|-----------------------------|------|--------------|-------|-------------|
| Test Sample | | | Ballistic Threat | | | | Results | | |
| Number | Weight (lb) | Thickness (in) (a) | Caliber | Shots (b) | Velocity (fps) Max. Min. | | Penetrations | Spall | Muzzle Hole |
| RS1354 | 12.91 | 0.320 | 7.62, M80 | 5 | 2884 | 2852 | 0 | 0 | 0 |
| RS1369 | 12.83 | 0.315 | 7.62, M80 | 5 | 2874 | 2849 | 0 | 0 | 0 |

(a) Average of four corner thicknesses.
(b) Four impacts on 4.5 inch square, one impact in center.

This conclusion is based on data obtained from having tested only the samples submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test samples will be discarded. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Respectfully,

H.P. White Laboratory, Inc.

Kevin Black

KB/sz
Enclosures



TEST PANEL

Manufacturer : KLOECKNER
Size : 12 X 12 in.
Thicknesses : 0.314, 0.314, 0.317, 0.316 in.
Avg. Thick : 0.315 in.
Description : 0.315" AR500 ARMOR PLATE
HEAT# RS1369

Sample No. : RS1369 (UL8)
Weight : 12.83 lbs.
Hardness : NA
Plies/Laminates :

Date Rec'd. : 1/14/14
Via : UPS
Returned : N/A

SET-UP

Shot Spacing : 4 ON 4.5" SQUARE, 1 IN CENTER
Witness Panel : 1/8" CORRUGATED CARDBOARD
Obliquity : 0 deg.
Backing Material : NA
Conditioning : Ambient (+72 F)

Primary Vel. Screens : 5.0 ft., 10.0 ft.
Primary Vel. Location : 7.5 ft. From Muzzle
Residual Vel. Screens : NA
Residual Vel. Location : NA
Range to Target : 15.0 ft.
Target to Wit. : 18.0 in.

Range No. : 3
Temp. : 66 F
BP : 29.98 in. Hg
RH : 38%
Barrel No./Gun : R3/.308
Gunner : WOLFE
Recorder : BONSALL

AMMUNITION

(1) : 7.62x51mm, M80, Ball, 150 gr.
(2) :
(3) :
(4) :

Lot No. : UNKNOWN
Lot No. :
Lot No. :
Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

- (1) : Bullet Resistant Equipment, ANSI/UL 752-2005
- (2) : Metallic, Protection Level 8 (7.62mm M80, 2750-3025 fps.)
- (3) :

| Shot No. | Ammo. | Time 1 (usec) | Velocity 1 (ft/s) | Time 2 (usec) | Velocity 2 (ft/s) | Avg. Vel. (ft/s) | Penetration | Footnotes |
|----------|-------|---------------|-------------------|---------------|-------------------|------------------|-------------|-----------|
| 1 | 1 | 1749 | 2859 | 1753 | 2852 | 2856 | None | |
| 2 | 1 | 1754 | 2851 | 1756 | 2847 | 2849 | None | |
| 3 | 1 | 1751 | 2856 | 1754 | 2851 | 2853 | None | |
| 4 | 1 | 1740 | 2874 | 1744 | 2867 | 2870 | None | |
| 5 | 1 | 1740 | 2874 | 1740 | 2874 | 2874 | None | |

| | |
|------------------|--------------------|
| REMARKS : | FOOTNOTES : |
| | |