CERTOTTICA

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TEST REPORT

Client:	Leatt Corporation
Address:	12 Kiepersol Crescent, Atlas Gardens Business Park - 7550 Cape Town Caper Farms - ZA
Article:	Goggle filter
Model:	Velocity 6.5
Job no.:	C190493
Report no.:	191466
Receiving Date:	15/03/2019
Date of Test Begin:	10/04/2019
Date of Test End:	15/04/2019
Issuing Date:	06/05/2019
Standard Applied:	MIL-DTL-43511D October 2006

Note 1: This test report is valid only for the tested samples and any changes can be made only with the issuance of a new test report.
Note 2: The partial reproduction of this test report is forbidden without written permission of Certottica.
Note 3: The tests were performed on samples sent by client.
Note 4: This test report is an official document digitally signed according to the current italian law.
Note 5: If not otherwise stated, the declared uncertainty must be intended as extended uncertainty with a 95% confidence level and a cover factor k = 2.

3.5.10 Ballistic resistance

Requirements

The ballistic resistance of the lenses shall be such that they will pass a V_0 test using a 0.22 caliber, 17.0 $\pm$ 0.5 grain, T37 shaped projectile at a velocity of 550 to 560 feet per second when tested as specified in 4.3.5.

4.4.10.1 Ballistic resistance test method 1 (for Army visors)

The ballistic test at the V_0 point shall be conducted in accordance with MIL-STD-662 with the following exceptions: electronic velocity detection devices (light beam or acoustic type) may be used to determine the velocity of the projectile, such devices placed no less than 8 inches and no more than 24 inches from the target; compressed gas propulsion of the projectile may be used. The sample shall be mounted on an Alderson 50 th percentile male headform in the as worn position. The 0.0002 inch thick aluminum foil witness sheet shall be mounted within 2 inches behind the area of impact. Three valid impacts shall be made on the lens; one in the center and one in each vision area. The sample shall be considered a failure if the aluminum foil witness sheet is punctured or if the sample is cracked. An impact shall be considered valid only if it meets any of the following:

- a. The impact velocity of the projectile is between 550 feet per second and 560 feet per second.
- b. The impact velocity of the projectile is less than 550 feet per second and the impact fails to meet the requirements in 3.5.10.
- c. The impact velocity of the projectile is more than 560 feet per second and the impact meets the requirements in 3.5.10.

Testing shall be performed according to MIL-STD-662 as practical problems permit.

Outcomes

The performed tests have given the following results:

Sample	Impact point	Velocity (m/s)	Observations	Test
191466 1	Ocular - Left	562.8	Velocity and impact requirements met	Pass
191466 1	Ocular - Center	556.6	Velocity and impact requirements met	Pass
191466 1	Ocular - Right	569.4	Velocity and impact requirements met	Pass
191466 2	Ocular - Left	544.2	Low impact velocity	—
191466 2	Ocular - Center	551.0	Velocity and impact requirements met	Pass
191466 2	Ocular - Right	555.3	Velocity and impact requirements met	Pass
191466 3	Ocular - Left	550.4	Velocity and impact requirements met	Pass
191466 3	Ocular - Center	545.5	Velocity and impact requirements met	Pass
191466 3	Ocular - Right	550.1	Velocity and impact requirements met	Pass
191466 4	Ocular - Left	552.4	Velocity and impact requirements met	Pass
191466 4	Ocular - Center	554.6	Velocity and impact requirements met	Pass
191466 4	Ocular - Right	548.7	Low impact velocity	—
191466 5	Ocular - Left	563.5	Velocity and impact requirements met	Pass
191466 5	Ocular - Center	546.1	Velocity and impact requirements met	Pass
191466 5	Ocular - Right	538.6	Low impact velocity	—
191466 6	Ocular - Left	550.4	Velocity and impact requirements met	Pass
191466 6	Ocular - Center	546.1	Low impact velocity	—
191466 6	Ocular - Right	538.6	Low impact velocity	—
191466 7	Ocular - Left	550.0	Velocity and impact requirements met	Pass
191466 7	Ocular - Center	550.7	Velocity and impact requirements met	Pass
191466 7	Ocular - Right	550.4	Velocity and impact requirements met	Pass

Note: Test performed on the filters mounted on Goggle 6.5 Velocity.
Lens thickness: Outer layer 2.5 – 2.6 mm
Lens material: Polycarbonate
Lenses color: Grey
Weight of the sample: Unmounted filter 48.7 g

Figure 1: Specimen picture.

Laboratory Technical Manager: Giorgio Sommariva

Firmato digitalmente da
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