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Test report *

The test has been carried out according to **NIJ 0101.06**
class **IV****Subject**

Ballistic experiments

Date

06-11-2014

Reference

14MB03445

Contact

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Experiment date 31-10-2014

Project Body armour plate

Sample identification VG-A4ENJSA

For details see page 2 upto page 4.

The sample was tested with a .30 AP M2 projectile and an impact velocity of 885 m/s. The sample fulfills the ballistic requirements according to 'NIJ 0101.06' level 'IV'

The General Terms and Conditions for commissions to TNO, as filed with the Registry of the District Court in the Hague and with the Chamber of Commerce and Industry in The Hague, shall apply to all commissions to TNO.

K. Breeman

Project leader

* This report is based on data obtained from having tested only the samples submitted and should not be interpreted as an endorsement by TNO of the continuing quality or performance of any other items of the same or similar design

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Test results**Description of testmethod**

Establishing the ballistic protection capacity of bulletproof materials according to the requirements specified in the NIJ standard 0101.06. To this end the bulletproof sample was attached to a plastilina block and tested to determine to what extent the requirements concerning the ballistic protection and the indentation in the plastilina (so called trauma) are met. The depth of the indentation in the plastilina is then determined.

Results

VG-A4ENJSA (14MB03445) : NIJ 0101.06 - IV - .30 AP M2				
Shot number	Impact velocity [m/s]	Stop / Perforation	Indent depth [mm]	Valid (Yes/No)
KKW1 14SN05611	885	Stopped in plate	42	Yes

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Sample specifications

Assignor identification : VG-A4ENJSA
TNO identification : 14MB03445
Date of arrival : 15-10-2014
Size : 300 x 250 mm²
Thickness : 22 mm
Weight : 2729 gram
Composition of sample in direction as encountered by projectile (Specification assignor) : Sample code VG-A4ENJSA (Al203+PE) stand alone
Remarks : None

Test specifications

Experimental facility : TNO, LBR, Small Calibre Firing Range KKW 1
- temperature : 20 °C
- relative humidity : 57 %

Conditioning of sample material

- duration at least : 24 - hours
- temperature : 18 - 24 °C
- relative humidity : 30 - 70 %

Ballistic specifications

Weapon : SVB
- barrel length : 665 mm
- rifling twist : 1 : 254 mm

Projectile : .30 AP M2
- weight : 10.65 gram
- calibre : 7.62 mm
- manufacturer : Lake City Army Ammunition Plant

Distance muzzle to target : 9 m
Target obliquity : 0 °NATO

Other specifications

Contract number : 060.13342
Backing : Roma No 1

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Figure 1 : Strike face, Sample 14MB03445 after the test.



Figure 2 : Body Side, Sample 14MB03445 after the test.