



Banc National d'Epreuve  
Saint-Etienne

# AMMUNITION MEASUREMENT REPORT N° 212-2ème présentation on 17/06/2020

## DELIVERED TO:

IMI SYSTEMS

BIALIK 64 ST.

P.O.BOX 1044

Ramat Hasharon 4711001 - Israel

**SUBJECT:** Type testing ☒

according to CIP's decisions

Manufacturing test ☐

**TESTED SAMPLE(S)**

**CALIBER:** 338 Lapua Mag.

**TYPE:** Long Range Tactical

**LOT:** 001/15

**SIZE:** ≤500000 pieces

*This report shows only the characteristics of the sample under test and is without prejudice to the characteristics of similar products. So it is not a product certification within the meaning of article L115-27 of the code of consumption and of the law of June 3, 1994.*

*To declare conformity or nonconformity, he was did not account of the uncertainty associated with the result.*

*The report contains 4 page(s).*

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## 1. Check of the basic package

The following indications appear on the basic packing unit:

- |  |   |   |
|--|---|---|
| a) Factory name or brand of the manufacturer   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |
| b) Batch identification number.  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |
| c) Quantity of ammunition contained in the basic package.  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |
| d) For proof cartridges: „Proof Ammunition“.   | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| e) A test marking certifying that the ammunition has been tested in accordance with C.I.P. specifications.   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |   |
| f) Designation following TDCC denomination.  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |
| High Performance Ammunition:   |   | <input checked="" type="checkbox"/> N/A |
| g) For ammunition loaded with either lead shot or lead free shot of types A and D, an additional inscription showing clearly that they may only be fired from weapons that have been subjected to superior proof.  | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| h) For ammunition loaded with lead free shot of types B and C, an additional inscription showing clearly that they may only be fired in weapons that have been subjected to steel shot proof.  | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| i) If the diameter of the lead free shot pellets (of types B and C) in cal. 10 and cal. 12 Cartridges is greater than 4mm and in Cal. 20 Cartridges is greater than 3.25mm, an additional inscription showing clearly that these cartridges may only be fired in weapons that have been subjected to steel shot proof with barrel(s) having a choke of less than or equal to 0.5mm | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| j) For cartridges with lead free shot of types B and C, a warning of the danger of ricochets and the need to avoid firing at hard or rigid surfaces  | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| k) In the case of re-filled cartridges, information clearly stating that they are re-filled cartridges   | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| l) For cartridges not capable of firing solid projectiles, if need be, a description of the liquid and gaseous substances discharged during firing   | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| m) For all cartridges loaded with lead free shot, the nature of the material(s) used to make the shot pellets and the type of shot; the same inscription could also be added in one of the languages used by the CIP Member States   | <input type="checkbox"/> Yes <input type="checkbox"/> No            | <input checked="" type="checkbox"/> N/A |
| n) The commercial ammunition must be packed in suitable containers   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |
| o) The basic package must be suitably closed   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |
| p) Lack of cartridges of different types in the same basic package   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |   |



## 2. Check of the existence of distinctive markings on each cartridge and, for lead free cartridges, the component parts of the cartridges

The following marks must bear on the cartridge:

Admissible number of marking defects 2,3,5,8, according to lot size (double in case of type testing)	Number of defects	Number of admissible defects
a) The identity of the cartridge manufacturer or the person who re-filled them or the person guaranteeing them (identification must be provided by a manufacturer's mark or a mark of origin applied in indelible fashion either to the base or the casing).	0	2
b) On the base of centrefire ammunition, the caliber in compliance with C.I.P. nomenclature. If it is impossible for technical reasons to show the caliber on the base, it may be marked in indelible fashion on the body of the casing.	0	2
c) The shell for the munitions intended for weapons with a smooth barrel of 20 gauge should be yellow in colour.	N/A	2

- d) For ammunition loaded with lead shot or lead free shot the diameter in mm of the shot and the length of the cartridge case if it exceeds:  
 - 65 mm for 20 bore and above  
 - 63.5 mm for 24 bore and below.

☐ Yes ☐ No ☒ N/A

- e) The proof ammunition are identified either by a serrated rim, or by the colour red on the rear face of the rim, or by the whole cartridge case being red in colour, or by the words „Proof Ammunition“ coupled with the proof pressure for that caliber on the body of the cartridge case in one of the languages used by C.I.P. Member States;

☐ Yes ☐ No ☒ N/A

- f) The high performance ammunition for smooth bore weapons are identified either by a different color on the rear face of the rim, or by the words „Max. 1050 bar“ or „For a weapon proofed by 1320 bar“ on the body of the cartridge case in one of the languages used by C.I.P. Member States.

☐ Yes ☐ No ☒ N/A

- g) Ammunition meant to be fired from dust shot weapons must have different dimensions in order that such rounds may not be inserted into alarm weapons.

☐ Yes ☐ No ☒ N/A

- h) In the case of cartridges loaded with lead free shot, a factory marking giving the nature of the main shot material must be printed on the cartridge tube. The same inscription could also be added in one of the languages used by the CIP Member States.

☐ Yes ☐ No ☒ N/A

## 3. Check of the absence of defects of the cartridges before firing

Admissible number of marking defects 2,3,5,8, according to lot size (double in case of type testing)	Number of defects	Number of admissible defects
a) Longitudinal fissures at the mouth, over 3 mm	0	2

Lack of the following defects:

- b) Wrong caliber  
 c) Longitudinal fissures at the mouth, over 3 mm  
 d) All other longitudinal and/or transverse fissures  
 e) Rupture of the base

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No

☒ Yes ☐ No



#### 4. Check of the dimensions

- a) Conformity of the important dimensions from the point of view of safety : ☒ Yes ☐ No  
All ammunition sampled must conform to fixed dimension limits considered important from the point of view of safety.
- b) Conformity of the dimensions which define the type : ☒ Yes ☐ No  
Fixed dimension limits for type definition are checked by means of a general gauge, taking into account minimum dimensions of chambers as referred to in Addendum A. All ammunition sampled must enter smoothly into the gauge
- c) In the case of cartridges for alarm weapons, the total length after firing (L3) is also measured for those cartridges which were used to determine the gas pressure or energy. ☐ Yes ☐ No ☒ N/A
- d) The primer is checked to verify if it does not protrude above the level of the base of the ammunition ☒ Yes ☐ No
- e) The lead free shot of types B and C contained in standard cartridges must have:
- Cartridges cal.12 shot diameter  $\leq 3.25\text{mm}$  (+2%) ☐ Yes ☐ No ☒ N/A
  - Cartridges cal.16 shot diameter  $\leq 3.00\text{ mm}$  (+2%) ☐ Yes ☐ No ☒ N/A
  - Cartridges cal. 20 shot diameter  $\leq 3.00\text{ mm}$  (+2%) ☐ Yes ☐ No ☒ N/A

#### 5. Check of the mean pressure, the equivalent parameters in the case of a special ammunition and, for the lead-free cartridges types B and C, of the mean velocity and the momentum.

See the herewith measurement report n° 212-2ème présentation

All the results are conform ☒ Yes ☐ No

#### 6. Check of the operating safety

During the shots in the pressure barrel, lack of the following defects:

- a) Escape of gases towards the rear, beyond the lock ☒ Yes ☐ No
- b) Seizing of the projectile, or parts thereof, within the barrel ☒ Yes ☐ No
- c) Tearing of the cartridge case, which remains completely or partially within the barrel ☒ Yes ☐ No
- d) Total stripping of the cartridge case ☒ Yes ☐ No
- e) Bursting of the cartridge case base ☒ Yes ☐ No
- f) in addition, in the case of cartridges for alarm weapons, any discharge of fragments or particles of propellant, wad, etc. from the cartridge case, which have penetrated a sheet of A2 size paper of quality 100-115 g/m<sup>2</sup> and thickness of  $0.12 \pm 0.02\text{ mm}$  mounted on a support at a distance of 1.5 m from the muzzle of the pressure measurement barrel. ☐ Yes ☐ No ☒ N/A

DECISION: ☒ ACCEPTED ☐ REFUSED

#### COMMENTS:

Add CIP marking for production.



The Director of the Banc National d'Épreuve  
**J-M BERTHEL**





212-2ème  
Présentation

Banc National d'Epreuve  
Saint-Etienne

RAYE Homologation

Calibre: 338 Lapua Mag.	Canon: .338 Lapua Magnum (76)	Température: 21.3 °C
Type cartouche:	Longueur canon: 650.0 mm	Humidité rel.: 50 %
Fabricant: I.M.I.	Capteurs: 6215(1) (SN5269056) - 1.38 - KISTLER 5015	Pression atm: 963 mBar
Importateur:		Bulletin n°: 4296
Num Lot: 001-15		Date de tir: 2020-06-16
Date charg.: 2020-06-16		Technicien: LEFORT P.

CONTROLE: VITESSE-PRESSION

CLIENT: I.M.I.

CARTOUCHE

Marque culot: IMI .338 LAPUA 12  
Hauteur: 91.2 mm  
Type d'amorce:  
Nature tube:  
Couleur tube:  
Hauteur culot:  
Sertissage:  
Bourre:

POUDRE

Type:  
Lot:  
Masse:

PROJECTILE

Type: SIERRA MATCH King  
Masse: 250.0 gr  
N° imprimé:  
Diamètre:  
Dureté:  
Ecrasement:

Nr	V2.5	PMax1	Remarque							
1	871.2	3 689								
2	882.2	3 931								
3	883.2	4 004								
4	883.2	3 956								
5	868.7	3 794								
6	878.0	3 912								
7	885.7	4 008								
8	882.1	3 967								
9	886.8	4 050								
10	879.0	3 970								
11	884.5	3 994								
12	867.4	3 788								
13	889.7	4 121								
14	885.5	4 050								
15	875.5	3 842								
16	869.1	3 800								
17	889.6	4 127								
18	885.7	3 993								
19	879.3	3 973								
20	879.3	3 939								
21	882.8	3 977								
22	875.2	3 871								
23	885.0	4 055								
24	879.6	3 959								
25	877.1	3 887								

Commentaires:

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212-2ème  
Présentation

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CONTROLE:	VITESSE-PRESSION	CLIENT:	I.M.I.
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<b>CARTOUCHE</b>	<b>POUDRE</b>	<b>PROJECTILE</b>
Marque culot: IMI .338 LAPUA 12	Type:	Type: SIERRA MATCH King
Hauteur: 91.2 mm	Lot:	Masse: 250.0 gr
Type d'amorce:	Masse:	N° imprimé:
Nature tube:		Diamètre:
Couleur tube:		Dureté:
Hauteur culot:		Ecrasement:
Sertissage:		
Bourre:		

Nr	V2.5	PMax1	Remarque							
26	876.7	3 892								
27	875.4	3 899								
28	875.8	3 884								
29	880.9	3 958								
30	881.3	4 016								
31	881.8	3 987								
32	876.1	3 970								
33	891.7	4 166								
34	867.5	3 802								
35	877.2	3 905								
36	876.5	3 882								
37	883.9	4 014								
38	873.2	3 864								
39	882.8	4 019								
40	885.6	4 060								
Moy	879.8	3 949								
EcType	6.1	100								
Max	891.7	4 166								
Min	867.4	3 689								
EcTot	24.3	477								

Nbr tirs: 40	Kxn: 2.94	P Moy. stat CIP: 4 830	P Moy. stat obtenue: 4 243
Critère 1: PMax1_Pn <= PMax		3 949.0 <= 4 200.0	Conforme
Critère 2: PMax1_Pn+(K1n*PMAX1_Sn) <= PK		4 243.0 <= 4 830.0	Conforme
Critère 3:			
Critère 4:			
Critère 5:			
Critère 6:			
Critère 7:			

Conclusion CIP: Conforme

Commentaires:

Signature:

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