Government of India Ministry of Home Affairs Directorate General National Security Guard (Provisioning Branch/Ord Section) Mehram Nagar, Palam, New Delhi – 110 037 Fax No. 011-25663258/25671639

No. P/604/18(389)/40MM UBGL/Prov (Ord)/NSG

Dated, the OY Dec 2018

QUALITATIVE REQUIREMENTS (QRs) AND TRIAL DIRECTIVES (TDs) OF UNDER BARREL GRENADE LAUNCHER (UBGL) 40MM AMMUNITION

1. The QRs and TDs in respect of **Under Barrel Grenade Launcher (UBGL)** 40MM Ammunition as per Annex-I and Annex-II respectively have been approved by the competent authority are forwarded herewith.

For your information and further necessary action please.

(Rakesh Kumar) Group Commander (Proc)

Distribution:-

- 1. JS (PM), MHA, Jaisalmer House, New Delhi for information please.
- 2. IG/ Director (R&D), BPR&D, 4th Floor, Block No 11, CGO Complex, New Delhi.
- 3. DIG (Prov), CRPF, CGO Complex, New Delhi.
- 4. DIG (Prov), CISF, CGO Complex, New Delhi.
- 5. DIG (Prov), ITBP, CGO Complex, New
- 6. DIG (Prov), SSB, R.K. Puram, New Delhi.
- 7. DIG (Prov), BSF, CGO Complex, New Delhi
- 8. DIG (Prov), Assam Rifles (Through LOAR)
- 9. Ops (WE), HQ NSG

REVISED QRs OF ROUND (GRENADE) 40 MM HE

REVISED QRs OF ROUND (GRENADE) 40 MM HE				
Ser No	Parameter	Specification		
1	Caliber	40 X 46 mm.		
2	Length of Grenade (in mm)	103± 0.5.		
3	Weight of Grenade (in gms)	Minimum 230.		
4	Weight of Explosive Charge (in gms)	37±7.		
5	Muzzle Velocity (in m/s)	76+3		
6	Maximum Range (in meters)	400.		
7	Operational Temperature Range in (Degree Centigrade)	-40°C to 52°C.		
8	Non Arm Distance (in meters)	8 meters from the muzzle of the weapon.		
9	All arm Distance (in meters)	Minimum 28+2 meters from the muzzle of the weapon.		
10	Mode of Functioning	Point Detonating/ Point Detonating with Self- Destruction mechanism (To be specified by the user)		
11	Self-destruction Time (in sec)	14 to 19.		
12	Reliability	90%		
13	Accuracy at 75 meters	Grouping of 0.95 m x 0.95 m or smaller on a vertical target of steel 2000 x 2000 x 2mm.		
14	Killing Radius (in meters)	Minimum 5 meters.		
15	Shelf Life (in years)	Minimum 10		
16	UN HD	1.1		
17	Compatibility Group	E		
18	Fit for Air Drop	Ammunition should be air droppable and packed inside the boxes.		
19	Compatibility with weapon	40 mm MGL (Breech Loading) and 40 mm UBGL (Breech loading type). The model of the UBGL & MGL to be specified by the indenter.		

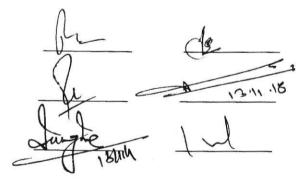
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REVISED TRIAL DIRECTIVES OF ROUND (GRENADE) 40 MM HE

Ser No	Parameter	Specification	Method	
1	Caliber	40 X 46 mm.	To be physically checked by the board of officers. Gauges and tools for the same to be provided by the OEM/ Firm.	
2	Length of Grenade (in mm)	103± 0.5.	To be physically checked by the board of officers.	
3	Weight of Grenade (in gms)	Minimum 230.	To be physically checked by the board of officers.	
4	Weight of Explosive Charge (in gms)	37±7.	Certificate in this regard to be provided by the OEM.	
5	Muzzle Velocity (in m/s)	76+3	Certificate in this regard to be provided by the OEM.	
6	Maximum Range (in meters)	400.	To be physically checked by the board of officers during firing demonstration.	
7	Operational Temperature Range in (Degree Centigrade)	-40°C to 52°C.	Certificate in this regard to be provided by the OEM.	
8	Non Arm Distance (in meters)	8 meters from the muzzle of the weapon.	Certificate in this regard to be provided by the OEM.	
9	All arm Distance (in meters)	Minimum 28+2 meters from the muzzle of the weapon.	Certificate in this regard to be provided by the OEM.	
10	Mode of Functioning	Point Detonating/ Point Detonating with Self- Destruction mechanism (To be specified by the user)	Certificate in this regard to be provided by the OEM.	
11	Self-destruction Time (in sec)	14 to 19.	Certificate in this regard to be provided by the OEM.	



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REVISED QRs OF ROUND (GRENADE) 40 MM HE

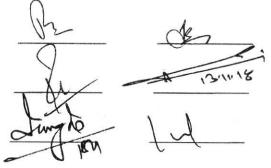
Ser No	Parameter	Specification
20	The following minimum information will be supplied in English language by the manufacturer :-	
	(a) Frequency of Inspection be clearly mentioned.	
	(b) Parameters for Visual Inspection, Static Proof & Dynamic Proof.	
	(c) Parameters for declaring the ammunition as serviceable, unserviceable and repairable.	ý
	(d) Instructions for breakdown of ammunition (if any) & method of disposal.	
	(e) Instructions for storage of ammunition.	
	(f) Instructions for safe transportation of ammunition by rail, road, sea and by air.	10 Sets.
	(g) Safety feature of ammunition be clearly explained in the manual.	
	(h) Illustrated/ detailed diagrams identifying/ depicting all the parts of the ammunition.	

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REVISED TRIAL DIRECTIVES OF ROUND (GRENADE) 40 MM HE

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Ser No	Parameter	Specification	Method	
12	Reliability	90%	 10 Rounds will be fired at Max Distance and the acceptance criteria will be as under:- (a) Premature burst at barrel bore-Not allowed. (b) Premature burst along the grenade trajectory - not allotted. (c) Primer blowback - Not allowed. (d) Round stuck up - Not allowed. (e) Failure to extract cartridge case - None allowed. (f) Incomplete burst/ Misfire - 1 out of 10 allowed. 	
13	Accuracy at 75 meters	Grouping of 0.95 m x 0.95 m or smaller on a vertical target of steel 2000 x 2000 x 2mm.	25 out of 30 rds when fired with mechanical mount shall have a grouping of 0.95 x 0.95 meters or smaller at a distance of 75 meters on a vertical target of steel plate with dimensions 2000x2000x2mm.	
14	Killing Radius (in meters)	Minimum 5 meters.	Certificate in this regard to be provided by the OEM.	
15	Shelf Life (in years)	Minimum 10	Certificate in this regard to be provided by the OEM.	
16	UN HD	1.1	Certificate in this regard to be provided by the OEM.	
17	Compatibility Group	E	Certificate in this regard to be provided by the OEM.	
18	Fit for Air Drop	Ammunition should be air droppable and packed inside the boxes.	Certificate in this regard to be provided by the OEM.	
19	Compatibility with weapon	40 mm MGL (Breech Loading) and 40 mm UBGL (Breech loading type). The model of the UBGL & MGL to be specified by the indenter.	To be physically checked by the board of officers during demonstration.	



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3 REVISED TRIAL DIRECTIVES OF ROUND (GRENADE) 40 MM HE

No The following minimum information will be supplied in English language by the manufacturer :-	10 Sets.	To be provided by the OEM/
 (a) Frequency of Inspection be clearly mentioned. (b) Parameters for Visual Inspection, Static Proof & Dynamic Proof. (c) Parameters for declaring the ammunition as serviceable, unserviceable and repairable. (d) Instructions for breakdown of ammunition (if any) & method of disposal. (e) Instructions for storage of ammunition. (f) Instructions for safe transportation of ammunition by rail, road, sea and by air. (g) Safety feature of ammunition be clearly explained in the manual. (h) Illustrated/ detailed diagrams identifying/ depicting all the parts of the ammunition. 		Firm and the same to be checked by the Board o Officers.
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