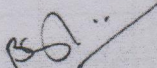


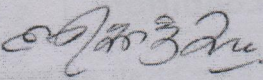
Date:- 06/05/2026

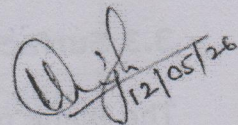
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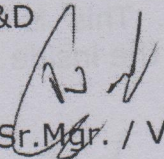
**Acceptance Test Procedure
For Inspection
Of
Fin 751 Assembly For
84 mm HEAT 751 Ammunition**


OIC / R&D

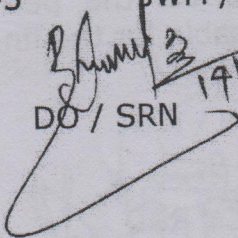

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1. Description of product

The fin assembly HEAT 751 is a part of the warhead for Carl Gustaf Ammunition 84mm HEAT 751. The fin assembly HEAT stabilizes the shell after muzzle exit. The fin assembly is made of light alloy. During production each item is tested according to its internal inspection plan.

Before firing the fins are folded inside the cartridge case. They unfold when the shell leaves the barrel and are wrapped-off when hitting. When the shell travels in the bore, the propellant gases create overpressure in the cartridge case. When the shell leaves the muzzle, the overpressure built up in the case forces the plunger forwards, unfolding the fins.

2. Description of Store for which Fin is required

- FIN 751 ASSEMBLY FOR 84 MM HEAT 751.

3. Product Requirement

3.1 Hardness

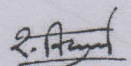
Hardness for the surface of the finished Blank for Fin shall be HV5 = 40-60. Testing is conducted on the tubular jacket surface. Hardness in section shall be HV5 = 40-68. Testing is conducted on the future hinge and directly under the fin. Testing is conducted in both cases on a minimum of 10 blanks per lot.

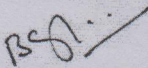
3.2 Mass

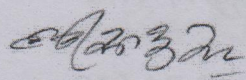
Mass of Fin must be 0.208 Kg approx.

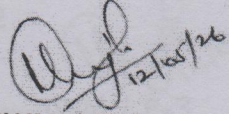
3.3 Surface condition

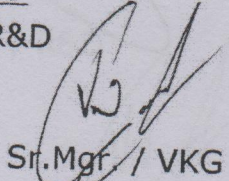
The Blank for Fins shall be free from cracks and other surface defects that can affect the performance of the Fin Complete. This is particularly applicable for the fin attachment and the surfaces of the inside hexagon.


OIC / R&D

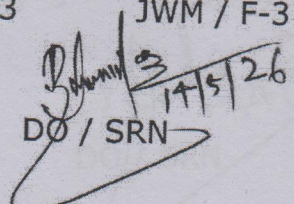

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3.4 Methods and equipment

The Blank for Fin shall be produced by cold extrusion process where the fins and the inside hexagon shall be given their final shape. Other features can be further processed to achieve finished Fin Complete.

3.5 Material specification

3.5.1 EN AW-6082 is a material intended for use where there are requirements for medium strength and good resistance to corrosion. The material is suitable for anodizing and electrolytic metal coating.

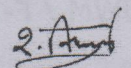
3.5.2 Standard information

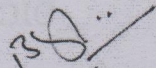
Chemical composition of EN AW-6082 based on EN 573-3.

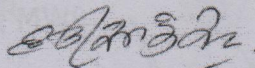
Si (%)	Fe (%) max	Cu (%) max	Mg (%)	Mg (%) max	Cr (%) max	Zn (%) max	Ti (%) max	Other (%) max	Al (%) min
0.7-1.3	0.50	0.10	0.6-1.2	0.40-1.0	0.25	0.20	0.10	0.15	Rem.

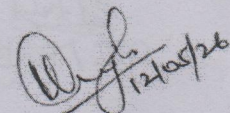
3.5.3 Form, description and temper used on EN AW-6082

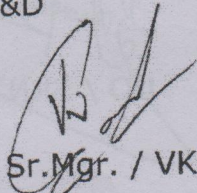
Form	External standard	Temper according to EN 515
Extruded rod/bar, tube and profiles	EN 755-2	-T6
Forgings	EN 586-2	-T6
Sheet, strip and Plate	EN 485-2	-T6
Cold drawn rod/bar and tube	EN 754-2	-T6
Sheet, strip and plate	EN 485-2	-T651
Sheet, strip and plate	EN 485-2	-T6 High Strength


OIC / R&D

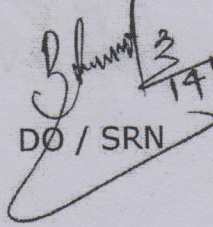

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3.5.4 Specific material requirements for EN 754-2 EN AW-6082-T6 high Strength

Form	Mechanical properties verified according to	Rm	Rp02
Bar	EN 755-2	>320 MPa	> 270 MPa

Material is purchased as normal EN 754-2 EN AW-6082-T6 but the supplier verifies the mechanical properties 273 mm from the center and out (2/3 of the diameter 410 mm).

3.5.5 Component parts

All components shall comply with the applicable technical documents.

3.5.6 Dimension

The dimensions specified in the drawing shall be considered as maximum dimensions and shall not be exceeded.

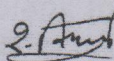
When delivered as a component, the details shall meet the requirements for the complete ammunition, functioning within the temperature range -40°C to +60°C.

3.5.7 Inspections

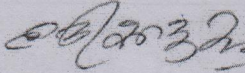
Visual inspection of package and fin assembly marking (i.e. Nomenclature, Lot no., Qty, consigner, consignee etc.) Dimensional and visual inspection of component.

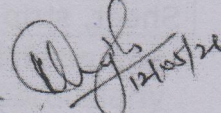
3.5.8 Sampling procedure: ISO 2859

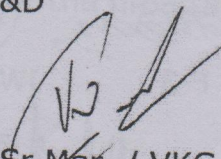
3.5.9 General inspection level: II, Normal


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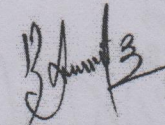

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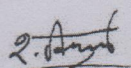

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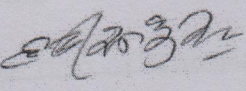
Date:- 06/05/2026

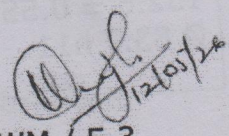
(i) VISUAL INSPECTION, PACKAGE

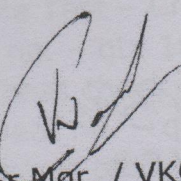
Activity of inspection	AQL	Acceptance/ Rejection criteria				Inspection method/ Equipment
		n	zn	Acc	Rej	
Critical defects not permissible- The package shall be free from visual defects that may adversely affect the function, safety, handling and transport of fin assy. Defects not classified to be judged when necessary. Incorrect marking. Minor defects-		3	3	0	1	Package
The package shall be marked in accordance with the applicable marking drawing. Indistinct marking.	4.0	3 3	3 6	0 1	2 2	Double sampling
The package shall be free from visual defects that may adversely affect the storage and transport of the Fin 751 complete.	2.5	3 3	3 6	0 1	2 2	Double sampling

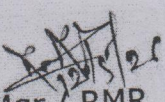

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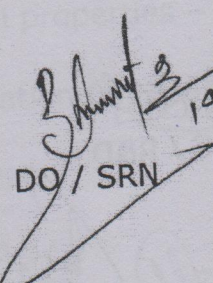

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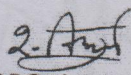

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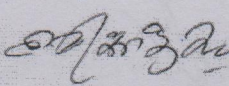
Date:- 06/05/2026

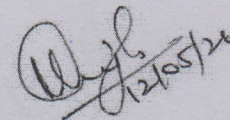
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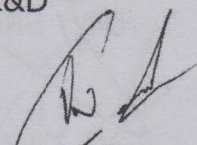
VISUAL INSPECTION						Double sampling
Fractural impressions in the bending areas.	0.25	125 125	125 250	0 1	2 2	
Free from burrs and hit marks (flat end at Ø 83.7).	0.4	125 125	125 250	0 3	3 4	
Free from flaws, burrs and hit marks (all surfaces).	1.0	125 125	125 250	2 6	5 7	
Surface sand blasted after surface treatment.	6.5	125 125	125 250	11 26	16 27	
DIMENSIONAL INSPECTION						Double sampling
Dimensions and tolerance in mm:						
6 x 2 + 0.14 / -0.06	0.4	125 125	125 250	0 3	3 4	Measuring machine
Ø 82.7 +0 / -0.1	1.0	125 125	125 250	2 6	5 7	Calliper
Ø 77.6 H9						
10.5 ± H 11						
1.05 0.25	1.0	125 125	125 250	2 6	5 7	Thread gauge
M77 x 1.5 - 6H	6.5	125 125	125 250	11 26	16 27	Calliper
132.6 ± 0.55						
Ø 83.7 h11						


OIC / R&D

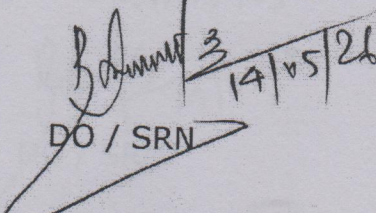

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**(ii) Functioning-
Live firing for MPI/Accuracy**

Type of test	Lot size	Functioning test series	
		Sample size	Conditioning temperature
Pilot lot	500	15	05 rds. at +60°C 05 rds. at +21°C 05 rds. at -40°C
Type testing lot (1 st , 3rd & 5 th subsequent OT lot)	4000 + proof samples	24	08 rds. at +60°C 08 rds. at +21°C 08 rds. at -40°C
Other OT lots	4000 + proof samples	08	08 rds. at +21°C

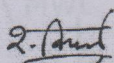
4.0 Miscellaneous: -

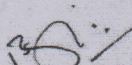
Sub components meeting the requirements:

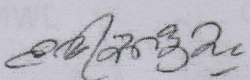
- Material Compatibility for sub components and their following parameters:
 - Mechanical properties
 - Chemical Composition

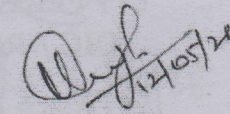
Documentation generally follows the basic quality control plan outlines in the referenced document. However, several reports and records required as per the defined inspection and testing scope are either missing or incomplete. These include, but are not limited to:

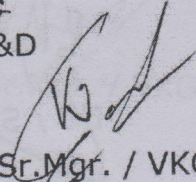
- Material Check – Control of alloy. Inspection of Material certificate – Per Heat no. – Applies for whole batch
- Tensile Test – Check the material the mechanical properties – Per Heat no. – qty 10 pcs
- Hardness check – According to technical specification 00813613 – Per Heat no. – qty 10 pcs
- Ultrasonic test – According to SAE-ASM-STD-2154

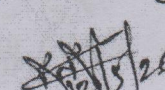

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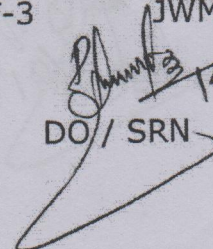

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- Dimensional check (FAI) – Full dimensional report – qty 10 pcs
- Surface treatment – Material specification 301080674 – applies for whole batch.
- Visual inspection – Check parts for visual defects, cracks, blisters etc. – qty 10 pcs
- Firing tests – which is Function and Safety critical,
 - (qty 08+08 Rounds) at temperature range -40 to +60°C, to observe correct fin function mechanism and correct flying properties of the complete round
- Surface treatment and ultrasonic test reports
 - 3rd party material analysis and certification if any

5.0 Inspection

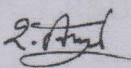
5.1 The firm will manufacture the components and will carry out testing of each component as per requirement mentioned in the respective drawing / specification.

5.2 All the raw material procured for manufacturing of Fin Assy for 84mm HEAT 751 Ammunition are to be tested by the firm from NABL approved Lab in respect of chemical, physical & other parameters.

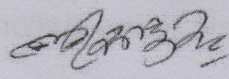
5.3 If the material is found meeting the requirements as per specification, the firm will manufacture bulk from the approved raw materials.

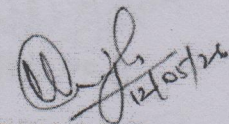
5.4 It is mandatory to carry out the in process inspection by the firm as stated above and the confirmation certificate with the data will be provided to OFK.

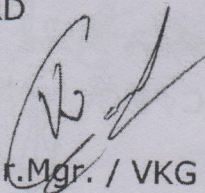
5.5 While offering the bulk for inspection, the firm will submit all quality documents i.e. pre inspection (along with in process inspection data), raw material test certificates, calibration certificate etc.


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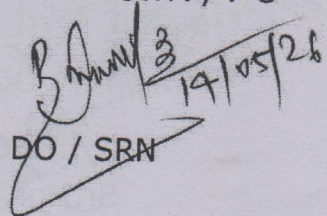

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5.6 Testing location will be decided by OFK in further course of action during development of Fin Assy. for 84mm HEAT 751 ammn.

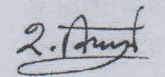
5.7 Sampling and inspection may be carried out as per ISO-2859 (Mil-Std-105E) or IS 2500 (General inspection level-II)

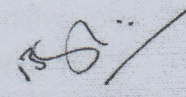
5.8 The final acceptance will be based on fitment trial of the matching components, static test and dynamic test as per para 4.5.8 (i) and (ii).

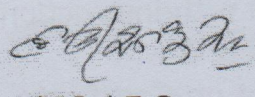
Note: In case of any dispute/ discrepancy, OEM documents will be referred.

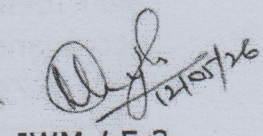
6.0 General Information-

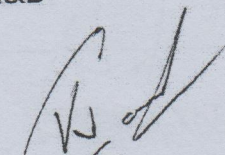
The supplier shall offer OFK or his authorized representative located at different stations free of cost, all reasonable/ related facilities (including test equipments/ gauges/ proof ranges) for satisfying himself during auditing that the stores are being manufactured strictly in accordance with the governing specifications/and the environment and for this purpose OFK or his authorized representative must have free access to the suppliers work premises, his processing facilities, assembly lines, test beds at all times during the auditing as well as run of the contract. The supplier is requested to notify OFK of all the subcontractors engaged by him and ensure their quality to execute and realize the specific order. The supplier shall also make arrangements with outside agencies wherever becomes imperative to execute the supply of materials/ Items as per its QAP.


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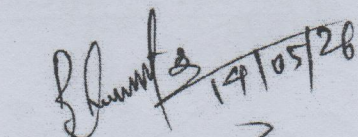

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QAP/Inspection criteria for 84 mm HEAT 751	
Item Code	12008560
Nomenclature	FIN 751 ASSEMBLY PART NO.1193880
End Use	84 mm HEAT 751
Critical / Non Critical	Critical
Drawing No.	TRD 5.1.4670 TRD 2.2.2467 a TRD 3.2.2497 a
Material	EN AW 6082
Test / Check acceptance criteria for finished component	As per drawing
Lot / Batch size if specified	4000 Nos
Inspection / tests	Examination of materials, Fitment trial/critical examination dimensional analysis.
Inspection/tests conducted by FY during bulk inspection	Visual inspection, critical examination
Inspection test conducted by QA(Mat)	After audit of acceptance documents, the necessary tests are being carried out.
Dimension checking at OFK after receipt of sample	As per Drawing
Reception Inspection Plan(Identification in accordance with instruction 301128746 and with requirement on Certificate of Conformity CoC)	Inspection steps 1. Certificate (Mentioned with lot no. with manufacture's initial & month/year of manufacturing). 2. Identification.

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