

**QUALITY MONITORING INSTRUCTION  
FOR INSPECTION**

Issue No : 01

Rev No :

Date of Issue  
.10.2022

**STEEL ROUND dia 34 X 355 mm +2.0  
For 7.62mm TAR BARREL (1201\*3) & R 6565**

**OFT/QMI/TAR/RM**


Rev.No	Amendment	Date

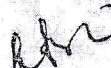
MATERIAL SPECIFICATION : JSS 9510-06-2012 (Rev.5) CODE REF - B, T-1 CONDITION  
 CONDITION OF SUPPLY : Vacuum degassed, hot rolled, peeled, reeled, softened  
 END USE : For Barrel - 7.62mm (TAR-K-1201\*3) & Rifle 5.56mm (R-6565)

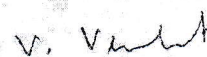
**INSPECTION CHECK TO BE CARRIED OUT**

Table 'A'


SL NO	CHARACTERISTICS	SPECIFICATION / REQUIREMENT	SAMPLE SIZE																																
1.	Visual	The Raw Material shall be free from defects such as rust, scale, burrs and any other harmful defects.	100%																																
2.	Raw Material	Steel 34 mm dia x 355 mm Length																																	
3.	Chemical Composition (%)	C = 0.35-0.45      Si = 0.10-0.35 Mn = 0.70-1.00      Cu = 0.35(Max) Cr = 0.90-1.50      Al = 0.03(Max) Mo = 0.20-0.30      S = 0.010(Max) P = 0.015(Max)      S & P = 0.022(Max) <i>(Tolerance as per standard applicable)</i>	One Sample Per Heat																																
4.	Mechanical Properties	Hardness                      248 - 302 BHN Tensile Strength              850-1000 MPa. Elongation                      13% (Min.) 0.2% Proof Stress              660 Mpa (Min) Izod Impact                      55 Joules (Min)	One Sample Per Heat where ever it is feasible.																																
5.	Other Tests	(i) Mechinability cum drilling test as per JSS 9510-06-2012. (ii) Macro Etch Test: Acceptance Standard better than or equivalent to C-1, R-1,S-1 for Plate I and Nil for Plate II as per ASTM-E-381 :84 or IS : 13015 - 1991 or JSS 9510-06-2012. (iii) Determination of Inclusion content as per IS:4163-82																																	
		<table border="1"> <thead> <tr> <th colspan="2">A</th> <th colspan="2">B</th> <th colspan="2">C</th> <th colspan="2">D</th> </tr> <tr> <th>Thin</th> <th>Thick</th> <th>Thin</th> <th>Thick</th> <th>Thin</th> <th>Thick</th> <th>Thin</th> <th>Thick</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>0.5</td> <td>2</td> <td>Nil</td> <td>2</td> <td>Nil</td> <td>2</td> <td>0.5</td> </tr> <tr> <td>(Max)</td> <td>(Max)</td> <td>(Max)</td> <td></td> <td>(Max)</td> <td></td> <td>(Max)</td> <td>(Max)</td> </tr> </tbody> </table>	A		B		C		D		Thin	Thick	Thin	Thick	Thin	Thick	Thin	Thick	2	0.5	2	Nil	2	Nil	2	0.5	(Max)	(Max)	(Max)		(Max)		(Max)	(Max)	
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U. MANGALASAMY  
JWM (SG) / STANDARD CELL  
checked by

  
L.S. ASHA  
JWM (SG) / QCM  
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**APPROVED**



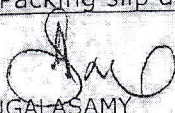
6.	Packing	The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit.	Each Consignment
7.	Marking	Each Packing shall be legibly marked with manufacturer's identity, Qty, Heat No., OFT Supply order No. etc. as per S.O. conditions.	

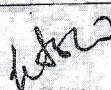
**Note:**

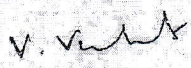
1. The steel Raw material/component/forging/casting to be tested by the firm on selection of the sample by the firm itself for chemical composition and mechanical properties in NABL accredited approved Lab as per Table 'A'.
2. The Firm has to check for the dimensions, visual defects, packing and marking as per Table 'A'. After completion of tests as per Sl. No. 1 of Note as stated above, the firm has to submit the following documents to OFT.
  - I. The Raw material certificate from the original manufacturer, Heat number, and quantity purchased and number of bars is to be mentioned in the inspection letter to OFT.
  - II. The Chemical and Mechanical test certificates from NABL accredited approved lab as per Table 'A'.
  - III. **Raw material sample minimum of 300mm should be supplied for cross verification along with the first supply of stores.**
  - IV. Dimensional reports including visual as per Table 'A'.
  - V. Guarantee / Warranty certificate of supplier against the supply.
3. All the above Documents mentioned at Sl. No. 2 of Note as stated above are to be forwarded to Executive Director/OFT along with supply.
4. Ordnance Factory-Trichy (OFT) shall verify all the parameters as per Table 'A' and after satisfactory results, the material will be accepted /cleared accordingly in time bound manner.
5. Material has to be replaced 100% by the firm in case of non-conformity to specification as per **Table-A**, during inspection at OFT, Trichy.

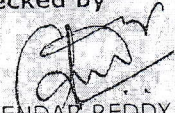
**VERIFICATION OF INSPECTION DOCUMENTS**


Sl.No.	INSPECTION DOCUMENTS
1	The Raw material original Manufacturer's certificate, Details of Heat Number, Quantity purchased and number of Bars ...etc.
2	The Chemical, Mechanical and other test certificates from NABL accredited approved Lab.
3	Dimension report including visual.
4	Packing slip details.

  
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