

QUALITY MONITORING INSTRUCTION FOR INSPECTION		Issue No : 01
		Rev No:
		Date of Issue 09/10/2023
C 1039 -01 (PAWL)		OFT/MI/30mm/C 1039-01
Rev.No	Amendment	Date

MATERIAL SPECIFICATION : Sheet B-3, GOST 19904-74 / 4-III-50, GOST-16523-70
INDIGENOUS MATERIAL : BS :1449 PT.1 -1983 GRADE. CS 60 (OR) ✓
IS:2507-1975 Grade 2, DESIGN 55C6. ✓
CONDITION OF SUPPLY : FULL FINISHED WITH FIRM'S MATERIAL. ✓
END USE : 30mm CANNON.

INSPECTION CHECK TO BE CARRIED OUT

Table 'A'

SL NO	CHARACTERISTICS	SPECIFICATION / REQUIREMENT	SAMPLE SIZE
1.	Visual	The Component shall be free from defects such as rust, scale, burrs and any other harmful defects.	100%
2.	Dimension	100% Dimension to check as per drawing.	
3.	Chemical Composition (%)	<p><u>B-3, GOST 19904-74 / 4-III-50, GOST-16523-70</u> <u>(Refer GOST 1050-74)</u> C = 0.47-0.55 Cu = 0.25(Max) Mn = 0.50-0.80 S = 0.035(Max) Si = 0.17-0.37 P = 0.030(Max) Cr = 0.25(Max) Ni = 0.25(Max)</p> <p><u>BS 1449 PT.1 1983 GRADE. CS 60</u> C = 0.55-0.65 S = 0.045 (Max) Si = 0.05-0.35 P = 0.045 (Max) Mn = 0.50-0.90</p> <p><u>IS 2507:1975 Design. 55C6</u> C = 0.50-0.60 S = 0.050 (Max) Si = 0.10-0.35 P = 0.050 (Max) Mn = 0.50-0.65</p> <p>(Permissible variations in value as per specification standard)</p>	One Sample Per Heat

4.	Mechanical Properties	<u>Б-3, GOST 19904-74 / 4-III-50, GOST-16523-70</u> Tensile Strength 55-73 Kgf/mm ² Relative Elongation 13% (Min)	One Sample Per Heat
		<u>IS 2507:1975, Gr.1 Design. 55C6</u> Tensile Strength 1180-1420 N/mm ² Yield Stress 1030 N/mm ² (Min) Elongation 6% (Min.)	
5.	Other Tests	Decarburization Test, Bend Test are carried out as per material specification standards.	
6.	Hardness	38.5-45.5 HRC (as per drawing)	100 %
7.	Protective Finish	Accelerated Electroless phosphating with chromate treatment/ Impregnation with adhesive БФ-4, ГОСТ 12172-74, with Nigrosine, grade A, ГОСТ 9307-78, one coat.	100 %
8.	Packing	The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit.	Each consignment
9.	Marking	Each Packing shall be legibly marked with manufacturer's identity, Qty, Heat No, OFT Supply order No etc.,	



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Note:


1. The Raw material / component 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 Note-1 as 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. Dimensional reports including visual as per Table 'A'.
 - IV. Guarantee / Warrantee certificate of supplier against the supply.
3. All the above Documents mentioned at Note No.2 above are to be forwarded to ED/OFT along with supply.
4. OFT shall verify all the documents as above and accord clearance to the firm for dispatch of the material to OFT if all documents are in order.
5. OFT/Trichy shall verify all the parameters as per Table 'A' and after satisfactory results, the material will be accepted /cleared accordingly.
6. 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 and Mechanical test certificates from NABL accredited approved Lab.
3	Dimension report including visual.
4	Packing slip details.


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