

QUALITY MONITORING INSTRUCTION FOR INSPECTION		Issue No : 01
		Rev No:
C1002 (INSERT)		Date of Issue 18/08/2021
		OFT/QMI/30mm/C1002
Rev.No	Amendment	Date


MATERIAL SPECIFICATION : nH-5.5 GOST 19903-74 / 30XrCA-3-a, GOST 11269-76
 INDIGENOUS MATERIAL : BS:970 PT.1, 1983 GRADE 708 M40 'W' CONDITION.
 CONDITION OF SUPPLY : FULLY FINISHED WITH FIRM'S MATERIAL.
 END USE : 30mm CANON.


INSPECTION CHECK TO BE CARRIED OUT

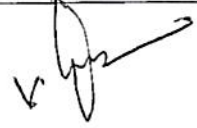
Table 'A'

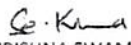
SL NO	CHARACTERISTICS	SPECIFICATION / REQUIREMENT	SAMPLE SIZE
1.	Visual	(i) The Sheets shall be free from defects such as rust, Scale, burrs, Surface Rupture, Layer Separation, traces of shrinkage pipes, cavities, gas bubbles and any other harmful defects. (ii) The macrostructure of steel should not have any traces of shrinkage cavities, foreign inclusions, cracks, bubbles and flakes and this should be ensured by the manufacturing method.	100%
2.	Dimension	100% dimension to check as per drawing	
3.	Chemical Composition (%)	<p>nH-5.5 GOST 19903-74 / 30XrCA-3-a, GOST 11269-76 (Gost 11269-76 should comply with the requirements of GOST 11268-76. GOST 11268-76 refers to GOST 4543-71). As per GOST 4543-71: C = 0.28-0.34 S = 0.025 (Max) Si = 0.90-1.20 p = 0.025 (Max) Mn = 0.30-1.10 Ni = 0.30 (Max) Cr = 0.80-1.10 Cu = 0.30 (Max)</p> <p>BS: 970 PT-1, 1983 GR.708 M40 C = 0.36-0.44 Mo = 0.15-0.25 Si = 0.10-0.35 S = 0.040 (Max) Mn = 0.70-1.00 P = 0.035 (Max) Cr = 0.90-1.20 Ni = 0.40(Max)</p>	One Sample Per Heat.
4.	Mechanical Properties	<p>nH-5.5 GOST 19903-74 / 30XrCA-3-a, GOST 11269-76 UTS = 50-75 Kgf/mm² %of Elongation = 20% (Min).</p> <p>BS: 970 PT-1, 1983 GR.708 M40 ('W' Condition) Tensile Strength 1075-1225 N/mm² Yield Strength 940 N/mm² (Min) Elongation 12% (Min.) Impact -Izod 30 Ft.lb(Min)</p>	2 Sheets from a Batch.

5.	Other Test	(i) Depth of decarburized layer (based on pure ferrite) of sheets should not exceed 2.5% of actual thickness of sheet from each side. (ii) Bend test as per specification standard.	2 Sheets from a Batch.
6.	Hardness	34-40.5 HRC (as per drawing)	Each Consignment
7.	Protective Finish	Accelerated electroless phosphating with chromate treatment.	
8.	Packing	The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit.	
9.	Marking	Each Packing shall be legibly marked with manufacturer's identity, Qty, Heat No, OFT Supply order No etc.,	



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HOS/STD.CELL
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G.DEVENDRANE
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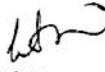
Note:


1. The 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 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. **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 / Warrantee certificate of supplier against the supply.
3. All the above Documents mentioned at Note No.2 above are to be forwarded to GM/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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