

QUALITY MONITORING INSTRUCTION FOR INSPECTION		Issue No : 01
		Rev No:
		Date of Issue 104/2021
TEND-2630 (PRE MACHINED BLANK OF FRONT FRAME 90%)		OFT/MI/MGL/30P 1104
Rev.No	Amendment	Date


MATERIAL SPECIFICATION : 35XH2 MØA-W-OCT 3-98-80. (or)
BS:970, PART-1,1983,GRADE-826 M40(or)
BS:970, PART-3,1991, GRADE709 M40(or) EN19.
CONDITION OF SUPPLY : FULLY FINISHED WITH FIRM'S MATERIAL.
END USE : 40mm MGL

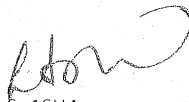
INSPECTION CHECK TO BE CARRIED OUT


Table 'A'

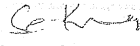
SL NO	CHARACTERISTICS	SPECIFICATION / REQUIREMENT	SAMPLE SIZE
1.	Visual	The Component shall be free from defects such as rust, scale, burrs and any other harmful defects.	100%
2.	Dimension	100% Dimension to check as per drawing	
3.	Chemical Composition (%)	<u>35XH2MØA-W, OST 3-98-80 .</u> C = 0.32-0.37 Mo = 0.20-0.30 Si = 0.17-0.37 V = 0.10-0.18 Mn = 0.30-0.60 S = 0.010 (Max) Cr = 0.60-0.90 P = 0.016 (Max) Ni = 2.00-2.40 Cu = 0.20 (Max)	One Sample Per Heat
		<u>BS:970 Pt.1, 1983 GR.826 M40</u> C = 0.36-0.44 Mo = 0.45-0.65 Si = 0.10-0.35 S = 0.040 (Max) Mn = 0.45-0.70 P = 0.035 (Max) Cr = 0.50-0.80 Ni = 2.30-2.80	
		<u>BS:970, PART-3,1991,GRADE-709M40</u> C = 0.36 – 0.44 Mn = 0.70 – 1.00 Si = 0.10 – 0.40 Cr = 0.90 – 1.20 Mo = 0.25 – 0.35 S = 0.040 (Max) P = 0.035 % (max)	
		<u>EN-19</u> C = 0.35-0.45 Mo = 0.20-0.40 Si = 0.10-0.35 V = 0.05 (Max) Mn = 0.50-0.80 S = 0.050 (Max) Cr = 0.90-1.50 P = 0.050 (Max) Ni = 0.40 (Max)	
		(Permissible variations in value as per specification standard)	


4.	Mechanical Properties	<u>35XH2MØA-W, QST 3-98-80.</u>	One Sample Per Heat	
		Ultimate Strength		180Kgf/mm ² (Min)
		Yield Stress		145Kgf/mm ² (Min)
		Elongation		10% (Min.)
		Impact Strength	6 Kgf/cm ² (Min).	
		Reduction in area	40% (Min)	
		<u>BS:970 Pt.1, 1983 GR.826 M40 ('W' Condition)</u>		
		Tensile Strength	1075-1225 N/mm ²	
		Yield Strength	940 N/mm ² (Min)	
		Elongation	11% (Min.)	
		Impact Izod	30 ft.lb (Min).	
		<u>BS:970: PART-3-1991 Grade 709M40 ('S' Condition)</u>		
		Tensile Strength	775 - 925 N/mm Square	
		Yield Strength	585 N/mm Square	
		Elongation	15% (min.)	
		Izod Impact	54 Joules (Min)	
		<u>EN-19 ('R' Condition)</u>		
		Tensile Strength	45 Tons/Sq.In (Min)	
		Yield Stress	34 Tons/Sq.In (Min)	
		Elongation	22% (Min.)	
		Impact (Izod)	40 ft.lb (Min).	
5.	Hardness	32-38 HRC (As per Drawing)	Each Consignment	
6.	Packing	The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit.		
7.	Marking	Each Packing shall be legibly marked with manufacturer's identity , Qty, Heat No, OFT Supply order No etc.,		



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