

Compliance sheet

SL.No.	Description		Compliance Status
1	Wrought Nickel-Iron Soft Magnetic alloy		
2	Specification Standard – ASTM A 753-21		
3	Alloy type (UNS No.) : N14080		
4	Supply Condition – Hot Rolled, annealed & proof machined		
5	Sizes and quantities required		
	Ø 130 mm x 500 mm- 8 nos		
	Ø 140 mm x 500 mm- 3 nos		
6	CHEMICAL COMPOSITION (wt %ge)		
	Mn (max)	0.8	
	Si (max)	0.5	
	C (max)	0.05	
	Mo	3.5-6	
	Ni	79-82	
	Cu (max)	0.3	
	P (max)	0.02	
	S (max)	0.01	
	Cr (max)	0.3	
	Co (max)	0.5	
	Fe	remainder	
7	MECHANICAL & MAGNETIC PROPERTIES		
	Yield strength (Y S)	220 MPa	

	Ultimate Tensile Strength (U T S)	580 MPa	
	Percentage of Elongation (% El) (in 50 mm)	40	
	Max permeability	1,75,000	
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8	100 % Ultrasonic Inspection as per AMS 2630 E Class A1 (For Dia > 12.5 mm)		
9	ASTM E1019 test methods should be used for determination of Carbon and Sulphur content.		
10	ASTM A773/A 773M test method should be used for dc Magnetic properties test.		
11	Other tests: Visual examination and Dimensional inspection to be completed.		
12	Material should be Iron-Nickel Soft Magnetic alloy or equivalent grade as technical specification mentioned in Annexure-I. Supplier should furnish source/manufacturer of the material in their offer.		
13	Party should supply qualified material from a reputed manufacturer, without any defects and warpage within a period of 3 months from the dated order.		
14	Material should be supplied in hot rolled, annealed & machined condition to the specified size and length as mentioned in Annexure-I.		
15	Material test certificate Showing chemical composition, mechanical properties, magnetic properties and ultrasonic inspection etc. tested by government approved third party agency should be supplied along with the consignment.		
16	Party should send copies of mill certificates and third party's test reports to IISU for verification & acceptance, prior to dispatch of the item.		
	Report to be submitted by the party: ➤ Dimensional reports		

	<ul style="list-style-type: none"> ➤ Mechanical properties test report ➤ Chemical composition test report ➤ Magnetic permeability test report. ➤ Non –destructive testing (Ultrasonic) 	
17	Each of the above report shall contain the information like, Purchase order No. and date, Material, Heat /Lot No., Size, Quantity, Supply Condition etc.	
18	<p>Identification and marking: Material shall be marked or engraved with the following information:</p> <ul style="list-style-type: none"> ➤ Alloy designation and supply condition ➤ Heat No., Batch No and identification Number ➤ Size and quantity ➤ Manufacturer/supplier name 	