

NORMA (INDIA) LIMITED

(AN ISO 9001:2015 & ISO 14001:2015 Certified Company)
48 Site IV industrial Area, Sahibabad, Ghaziabad-201010 (U.P) INDIA.
Tel: 91-120-2896091, 2895404, E-mail: normaindia@gmail.com

Works Test Certificate

(AS PER EN 10204:3.1)

NORMA/LAB NO-9965/20-21		INVOICE NO. E 2064		DATE: 14.01.2021	
P. Order. No:	9606	Customer: -	ALLIED FTG. L.P. HOUSTON U.S. A	Forging specification	ASME SA105-17 ASTM A105 -18
Item Code	L1SF3			Steel Supplier	R.I.N.L.
Component	3"-150 # SOFF FLG.			Mill Heat No.	19E05042
Drawing No.		Quantity: -	75Nos.		
Machining STD	ANSI B16.5- 2017 ASME B16.5- 2017				

TEST RESULTS

NORMA HEAT NO-251

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES.

Elements %	Specified Composition	Actual		PROPERTIES	SPECIFIED	OBTAINED	
		NORMA LAB	MILL T.C.				
Carbon	0.23max.	0.18	0.18	Yield Strength (mpa)	250.00 min.	347.97	Serrated face as per MSS-SP-6 With in limits of 125-250AARH Supply Condition: Fully Finished.
Manganese	0.60-1.05	1.22	1.24				
Silicon	0.10-0.35	0.25	0.26				
Sulphur	0.040max.	0.009	0.012	Tensile Strength (mpa)	485.00 min.	563.37	CARBON EQUIVALENT (CE) CE = C + Mn + Cr+Mo+V + Ni+Cu 6 5 15
Phosphorous	0.035max.	0.025	0.025				
Chromium	0.30max.	0.006	0.008	%Elongation in 50mm / 4D	22.00 min	30.00	MARKING AS PER MSS-SP-25-2008 3"-150 SA/A105 251 B16.5 NORMA INDIA.10/2020
Nickel	0.40max.	0.002	0.001	Hardness HB.	197. max.	149-167	
Copper	0.40max.	0.003	0.002				
Molybdenum	0.12max.	0.002	0.001	% Reduction of Area	30.00 min.	6534	
Vanadium	0.080max.	0.002	0.001	"As per ASTM A105 Table 1 Note: For each reduction of 0.01% below the specified carbon maximum(0.35%),an increase of 0.06% manganese above the specified maximum (1.05%) will be permitted up to maximum 1.65%.			Checked by: Satish Singh Metallurgist
Carbon Equivalent (CE)	0.430max.	0.386	0.389				Certified by: Ramesh Kumar Quality Control Manager

Remarks: We here by certify that the material described here in has been tested in accordance with the applicable specifications referred above and meets the requirements as per EN10204:3.1-2004, NACE MR0103-15, NACE MR0175-15/ISO15156-2. All material supplied is certified to be free of mercury contamination, No weld repair performed. Raw material used is fully killed and fine grain practice. Country of Origin/Melt: INDIA.

Stock

4709893

06/21/2021



MATCONOR MN150FSF10 3IN 150LB SLIF ON WELD FLANGE FF