

3" 150# FS S/O FLANGE--FLAT FACE--

Heat # H6659



R.N. GUPTA &amp; COMPANY LTD., C-55, FOCAL POINT, LUDHIANA -141 010 ( INDIA )

F-MTR-01-01

MATERIAL / MILL TEST CERTIFICATE EN 10204 : 2004 - 3.1



CERTIFICATE NO. 13677 DATE 15/10/2018

NAME OF BUYER

RAW MATERIAL SPECIFICATION : ASTM A105-14/ASME SA105-13

SPECIFICATION FOR INSPECTION : ANSI/ASME B16.5-2013

P.O NO. 69407 DT. 26/04/2018

INVOICE NO. EXP/18-2308 DT. 10/10/2018

## MECHANICAL REQUIREMENTS

Sr. No.	Description	Qty (PCS)	Heat No.	Supp. Code	Y.S(Psi) Min 36,000	T.S(Psi) Min 70,000	E% Min 22%	RA% Min 30%	Heat Treatment	Soaking Time (Min.)	Hardness BHN 137-187
1	1 600# LJ FLGS	20	H 6647	6	53469	85169	34.64	59.50	NORMALISED	75	152 - 154
2	1 1/2 150# WNRF STD FLGS	100	H 6650	20	50485	80660	36.24	65.45	AS FORGED		152 - 154
3	2 1/2 150# WNRF XH FLGS	25	H 6650	20	50485	80660	36.24	65.45	AS FORGED		152 - 154
4	2 1/2 150# WNRF XH FLGS	15	H 6663	20	49004	84523	33.70	70.33	AS FORGED		154 - 156
5	3 150# SORF FLGS	167	H 6663	20	49004	84523	33.70	70.33	AS FORGED		154 - 156
6	3 150# SORF FLGS	33	H 6659	20	48694	80062	33.68	70.28	AS FORGED		154 - 156
7	3 150# SOFF FLGS	400	H 6659	20	48694	80062	33.68	70.28	AS FORGED		154 - 156
8	3 150# WNRF STD FLGS	50	H 6628	20	50842	81246	36.10	64.60	AS FORGED		154 - 156

## CHEMICAL REQUIREMENTS

Sr. No.	Heat No.	SPECIFIED ELEMENTS						UNSPECIFIED ELEMENTS				
		C.E. 0.47% Max	C 0.35 Max	Mn 0.60-1.25	P 0.035 Max.	S 0.04 Max.	Si 0.10 -0.35	Cu 0.40 Max.	Ni 0.40 Max	Cr 0.30 Max.	Mo 0.12 Max.	V 0.05 Max.
1	H 6647	0.40	0.21	1.09	0.003	0.017	0.23	0.005	0.008	0.006	0.003	0.002
2	H 6650	0.38	0.21	0.88	0.003	0.014	0.23	0.079	0.040	0.049	0.007	0.002
3	H 6650	0.38	0.21	0.88	0.003	0.014	0.23	0.079	0.040	0.049	0.007	0.002
4	H 6663	0.37	0.20	0.87	0.025	0.009	0.22	0.140	0.044	0.051	0.009	0.004
5	H 6663	0.37	0.20	0.87	0.025	0.009	0.22	0.140	0.044	0.051	0.009	0.004
6	H 6659	0.37	0.20	0.89	0.007	0.015	0.23	0.081	0.042	0.050	0.008	0.003
7	H 6659	0.37	0.20	0.89	0.007	0.015	0.23	0.081	0.042	0.050	0.008	0.003
8	H 6628	0.38	0.21	0.92	0.003	0.013	0.23	0.077	0.042	0.049	0.009	0.002

Material in accordance with NACE MRO 175-2015/ISO-15156 and NACE MRO 103-2015

All Products were manufactured, Sampled, Tested and Inspected Solely by the manufacturer shown on this Test Report in accordance with Indicated specification and were found to meet the requirements.

No Weld Repair was performed and all products are free of Weld Repair. All Products are free of Mercury Contamination and Radioactivity.

Note: We hereby confirm that our QA system comply with the requirements of Annex I, section 4.3 of PED 2014/68/EU and it is certified by M/s DNV BUSINESS ASSURANCE vide Certificate No.4487-2014-CE-IND-DNV GL valid upto 31-03-2020, ISO 9001:2015 Certificate No. is 39752-2008-AQ-IND-RvA Valid upto 22/07/2020. Products also conform to requirements of ASTM A105/ASME SA105

ALL NORMALISED MATERIALS ARE HEAT TREATED AT TEMP. 920 DEGREE CENTIGRADE.

For R.N. GUPTA &amp; COMPANY LTD. Page No : 1

METALLURGIST

Stock 4709893 05/28/2019

MATCONOR MN150FSF10 3IN 150LB SLJ  
ON WELD FLANGE FF