

## INSPECTION CERTIFICATE

EN10204:2004/3.1

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 &  
PED 2014/68/EU MM+AD2000W0 Certified Company

Customer :

QATAR PETROCHEMICAL COMPANY (QAPCO)

Certificate No :

OM/L/MTC/20-21/11096

Page

1

Order No :

82479

Date

04-Dec-2020

Invoice No :

Date

**Specification :** ASTM A105/A105N - 14, ASME B16.5-2003

No.	Description	Quantity	Heat No.	Heat Treatment
1	WNRF FLANGE 3" X 300# X SCH 40	1.00 Nos.	F0233	Normalized at 900°C and Air Cooled
2	BLLFF FLANGE 1" X 600#	4.00 Nos.	F0234	Normalized at 900°C and Air Cooled
3	BLLFF FLANGE 2" X 600#	2.00 Nos.	F0235	Normalized at 900°C and Air Cooled
4	BLRF FLANGE 1-1/2" X 600#	4.00 Nos.	F0236	Normalized at 900°C and Air Cooled
5	BLLMF FLANGE 6" X 600#	4.00 Nos.	F0237	Normalized at 900°C and Air Cooled

### Chemical Composition


Heat No.	C%	SI%	Mn%	P%	S%	Cr%	Ni%	Mo%	V%	Cu%	Ceq %
F0233	0.197	0.178	0.698	0.014	0.005	0.169	0.037	0.028	0.002	0.101	0.362
F0234	0.204	0.206	0.711	0.019	0.004	0.176	0.039	0.030	0.005	0.089	0.373
F0235	0.182	0.194	0.723	0.012	0.009	0.183	0.040	0.035	0.006	0.096	0.356
F0236	0.179	0.209	0.728	0.015	0.006	0.180	0.041	0.032	0.004	0.105	0.353
F0237	0.193	0.187	0.705	0.017	0.007	0.178	0.035	0.031	0.003	0.073	0.360

### Mechanical Properties

Heat No.	Tensile				Hardness	
	U.T.S	Y.S	Elongation	Red. Area	HRB	
	Mpa-Rp 0.2	Mpa-Rp 0.2	%	%		
F0233	601	372	40	67	77,78,78	
F0234	612	364	43	65	76,77,77	
F0235	594	370	38	69	77,77,78	
F0236	597	354	42	60	79,79,80	
F0237	620	375	39	64	76,76,77	

Visual Inspection	OK	Dimension Inspection	OK	Country of Origin	INDIA
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Marking	Brand - Item - Size - Specification - Dimension - Heat No.
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Remarks	Seal of Customer / Surveyor	FOR OM TUBES & FITTINGS INDUSTRIES
1) Test samples were tested and inspected in accordance with the order & were found to meet the requirements. 2) Material free from mercury or radioactive contamination. 3) No welding or weld repair. 4) Ultrasonic Test as per ASTM SA 388 - Found OK. 5) Material is Fully Killed and Fine grain Practice.		 QC HEAD