



SAMYOUNG FITTING

Maintenance Metals, LLC
1215 Lathrop Street

INSPECTION CERTIFICATE

(EN10204 3.1/ISO 10474 3.1)

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Gangseo-gu, Busan
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Customer: Houston, Texas 77020	Certificate No: 20200313064	Date: 2020 03 13
CIP/BL#: SYF2003C6-78910D-H / ELKRUSHOU11	Project Name:	
Job No:	Container #: TTNU1666957/KR4730674	
Specification for Material: ASME SA105N NACE-2015ED	Dimension and Visual Inspection:	GOOD

HCN	Description	Qty (pcs)	Heat Treatment	Line No	ITEM CODE
P016	FULL COUPLING 3000# NPT 4"	16	N 900 (1652F) AC		3MCPL104
P172	TEE 3000# NPT 2"	340	N 900 (1652F) AC		3MTT02.0
P201	BUSHING 3000# NPT 2" x 1-1/2"	500	N 900 (1652F) AC		3M-B02 CX01.5
P201	BUSHING 3000# NPT 2" x 1"	625	N 900 (1652F) AC		3M-B02 CX01.0
P231/P232	UNION 3000# NPT 2"	258	N 900 (1652F) AC		3MU102.0
P231/P232	UNION 3000# NPT 2"	270	N 900 (1652F) AC		3MU202.0
P232	90ELBOW 3000# NPT 1"	440	N 900 (1652F) AC		3M9T01.0
P246	HEX PLUG 3000# NPT 1"	8	N 900 (1652F) AC		3MHI1P04
P288	90ELBOW 6000# NPT 3/4"	40	N 900 (1652F) AC		6M9T.75
P307	CROSS TEE 3000# NPT 2"	156	N 900 (1652F) AC		3MCRS102.0

CHEMICAL COMPOSITION(%)

HCN	spec.	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Raw	Raw Maker
	Max	0.35	1.05	0.035	0.040	0.35	0.40	0.30	0.12	0.40	0.080	Heat No	
	Min		0.60			0.10							
P016	L	0.18	0.91	0.017	0.008	0.20	0.05	0.14	0.02	0.10	0.000	B42128	SeAH
P172	L	0.190	0.920	0.014	0.010	0.210	0.060	0.120	0.020	0.110	0.010	C48803	SeAH
P201	L	0.190	0.930	0.014	0.008	0.210	0.060	0.110	0.020	0.140	0.010	C48798	SeAH
P231	L	0.190	0.910	0.011	0.012	0.200	0.070	0.130	0.030	0.110	0.010	C49889	SeAH
P232	L	0.190	0.910	0.014	0.008	0.200	0.050	0.110	0.020	0.120	0.010	C50008	SeAH
P246	L	0.190	0.940	0.012	0.009	0.200	0.040	0.090	0.020	0.100	0.010	C50015	SeAH
P288	L	0.200	0.910	0.016	0.009	0.190	0.040	0.110	0.010	0.130	0.010	C52348	SeAH
P307	L	0.180	0.930	0.012	0.009	0.200	0.070	0.100	0.010	0.150	0.000	D07226	SeAH

MECHANICAL PROPERTIES

HCN	spec	YS		E L (%)	Red. (%)	Hardness Test HB	
		Ksi					
		Max	Min	22.0	30.0	187	
P016	P	44.8	75.0	33.4	69.1	142	148
P172	P	38.8	76.1	34.2	71.4	143	145
P201	P	46.6	75.9	33.8	69.1	145	140
P231	P	49.9	76.1	35.8	73.9	141	140
P232	P	44.4	76.1	34.9	80.9	138	145
P246	P	49.2	80.7	34.8	70.9	141	140
P288	P	45.2	75.1	34.5	71.5	144	147
P307	P	43.8	76.1	32.9	64.9	141	140

We hereby certify that the material herein has been made and tested in accordance with the above specification and also with the requirements called for by the above order

Remark :

- *ORIGIN KOREA
- *FINE GRAIN PRACTICE STEEL
- *THE FITTING SUPPLIED IDENTIFIED AS ASME B16.11-2016
- *CONFORMS TO NACE MR0175-15/ISO 15156-15/MR0135-15

Legend:
 HB: Brinell AC: Air Cool
 ST: Solution Treatment OC: Oil Cool
 SR: Stress Relieving WQ: Water Quenched
 HCN: Heat Code No.
 N: Normalized
 T: Tempered L: Ladle
 A: Annealed P: Product
 Q: Quenched
 (G): Hot-Dip Galvanized Coating
 (EG): Electronic Galvanized

SAMYOUNGFITTING CO.,LTD.

S.H. Shin
 S.H. SHIN
 Director of Quality Assurance Dept

Reviewed by : _____
 Witnessed by : _____

Approved by