증명서번호
CERTIFICATE NO. : CE202002-0039-000181(5020039)

제 품 명
COMMODITY : WELDED AUSTENITIC STAINLESS STEEL PIPES

제 품 규 격
SPECIFICATION : ASTM A312-04b/ASME SA312-01 + A02

INSPECTION CERTIFICATE

SeAH Steel Corp.
(주)세 아 제 강

HEAD OFFICE:SEAH TOWER,45 YANGHWA-RO,MAPO-GU,SEOUL,SOUTH KOREA
MANUFACTURED IN CHANGWON PLANT:280,GONGDAN-RO,SEONGSAN-GU,CHANGWON-SI,GYEONGSANGNAM-DO,SOUTH KOREA

발 급 일 자
DATE OF ISSUE : 2020.01.29

계 약 서 번 호
L/C No. (P/O No.) : 194-L699 (P06225)

수 요 가
CUSTOMER : ALLIED STAINLESS

주 문 자
SHIPPER : SEAH STEEL AMERICA,INC.

11/19/2020
Stock 3258309
SSPIPE 1/2IN SCH 40 304/L PLAIN
END IMPORT

ITEM NO.	HEAT NO. (BATCH NO.)	등 급 GRADE	주 문 치 수 ORDER SIZE	수 량 QUANTITY 본 수 PCS.	총 길 이 TOTAL LENGTH	중량(M/T) WEIGHT	비 고 REMARKS
1	SD42492 (SB19ZL0110)	TP304/304L	2,1/2 " X SCH40S X 20 FT [4IWSS2.5]	92	1,840.000 FT	4.894	ANSI B 36.10, B36.19 MERCURY FREE / NO WELD REPAIR 100% PMI TEST : ACCEPTABLE CORROSION TEST TO ASTM A262 PRACTICE 'E' NACE MR0175 / ISO 15156-3 / NACE MR0103 / SOUR SERVICE ELONGATION IN 2" EDDY CURRENT TEST ACCORDING TO ASTM PRACTICE E 426 *PR : PREN = %Cr + 3.3%(Mo + 0.5%W) + 16%N
2	SE17230 (SB20150040)	TP304/304L	1 " X SCH40S X 20 FT [4IWSS1]	83	1,660.000 FT	1.278	
3	SE17076 (SB20160030)	TP304/304L	1,1/4 " X SCH40S X 20 FT [4IWSS1.25]	252	5,040.000 FT	5.242	
4	SE16869 (SB20170070)	TP304/304L	1/2 " X SCH40S X 20 FT [4IWSS.5]	51	1,020.000 FT	0.398	

ITEM NO.	HEAT NO (BATCH NO.)	HYDROSTATIC Sec (psi)	HYDROSTATIC RESULT	PNEUMATIC Sec	PNEUMATIC RESULT	N.D.T *1	VISUAL & DIMENSION	FLATTENING	FLARING	FLANGE	Rev. BEND	Rev. FLATTENING	BEND	CORROSION
기준 SPEC														
1	SD42492 (SB19ZL0110)					G	G	G						G
2	SE17230 (SB20150040)					G	G	G						G
3	SE17076 (SB20160030)					G	G	G						G
4	SE16869 (SB20170070)					G	G	G						G

ITEM NO.	HEAT NO (BATCH NO.)	DESIG *2	C 3	Si 2	Mn 2	P 3	S 3	Ni 2	Cr 2	Mo 2	N 3	Pb 4	PR		DIR *4	TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L %	IMPACT ENERGY Joule	IMPACT LATERAL EXPANSION mm	HARDNESS TEST HRB
기준 SPEC		MAX MIN	35	100	200	45	30	1100 800	2000 1800							75000	30000	35			99
1	SD42492 (SB19ZL0110)	HP	22	47	143	31	4	805	1807	12	47	<100	19.2		L	94010	46200	55			87
2	SE17230 (SB20150040)	HP	22	39	146	30	4	807	1807	8	45	<100	19.1		L	93210	44930	55			88
3	SE17076 (SB20160030)	HP	23	42	142	31	7	805	1809	12	43	<100	19.2		L	92810	45620	54			86
															L	93550	47810	53			87
4	SE16869 (SB20170070)	HP	21	37	145	32	5	804	1812	10	39	<100	19.2		L	95200	47910	53			89

NOTE

*1
U : 초음파검사(Ultrasonic Test.)
E : 와류탐상검사(Eddy Current Test.)
P : 침투탐상시험(Penetrant Test.)
R : 방사선검사(Radiographic Test.)

*2
H : 용융분석(Heat(Ladle) Analysis)
P : 제품분석(Product Analysis)

*3
2 : x 100
3 : x 1000
4 : x 10000
G : Good

*4
L : 압연방향(Base Metal Longitudinal.)
T : 횡주방향(Base Metal Transverse.)
W : 용접부(Weld Part.)

THE MATERIAL HAS BEEN SOLUTION HEAT TREATMENT AT MIN 1040℃
(HEAT TREATMENT HOLDING TIME : MIN 30 SEC)
AND RAPID WATER QUENCHED
PED 2014/68/EU, CERT NO:2514-2013-CE-KOR DNV, VALID UEN 10204 TYPE 3.1

Surveyor :

· WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE.
· THE USE OF THE MATERIAL OUTSIDE THE SPECIFICATIONS INDICATED ON THIS CERTIFICATE MAY CAUSE SAFETY AND/OR MONETARY PROBLEMS. FURTHERMORE, ANY ORGANIZATION OR PERSON(S) WHO DELIBERATELY MODIFIES THE CERTIFICATE WILL BE PROSECUTED FOR FORGING AN OFFICIAL DOCUMENT (ACCORDING TO THE PROVISIONS OF THE CRIMINAL CODE 231)

Manager of Q.M Dept.

J. D. Bae