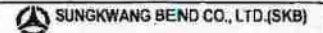


MATERIAL TEST & INSPECTION CERTIFICATE



26, Noksansandan 262-ro, Gangseo-Gu, Busan, Korea
 TEL : 82-051-3300-450
 FAX : 82-051-3300-335
 http://www.skdbend.com

CUSTOMER: DODSON GLOBAL, INC.
 PROJECT NAME: N/A

According to

DIN 50049 3.1 / EN 10204 3.1 / ISO 10474 3.1

PURCHASE ORDER NO. 240797-00		SPEC. FOR MATERIAL ASTM/ASME A/SA234WPB-S 17/17ED		CERTIFICATE NO. OCLY2020040945						
PJT NO. N/A		SPEC. FOR INSPECTION ASME B16.9		DATE OF ISSUE 2020.04.16						
STARTING MATERIAL SEAMLESS PIPE		SKB NO. 2019102903		VISUAL & DIMENSION SATISFACTORY						
NO.	SEQ/LINE/ITEM NO	DESCRIPTION					QTY	HEAT NO.	MFG ID NO.	POR/CODE/TAG NO
6		90D ELBOW(L)	S40	20"	B.W SMLS	Black	50	185159	185159	
10		45D ELBOW(L)	STD	16"	B.W SMLS	Black	40	802231	802231	

CHEMICAL COMPOSITION(%) (L : LADLE, P : PRODUCT)

HEAT NO.	STD.	SPEC.	CHEMICAL COMPOSITION(%) (L : LADLE, P : PRODUCT)																	TENSILE TEST					
			C	SI	Mn	P	S	Ni	Cr	Mo	Cu	V	Nb	N	Al	B	Zr	Fe	Ti	C.E	SPEC.	Y.S 0.2% offset	T.S	EL.	R.A
			MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
185159	L	0.13	0.28	1.04	0.007	0.002	0.03	0.05	0.01	0.07	0.01									0.32		48.5	74.0	41.0	
	P																								
802231	L	0.20	0.27	0.69	0.012	0.007	0.01	0.02	0.01	0.01	0.01									0.32		44.6	70.3	34.0	
	P																								

HEAT NO.	IMPACT TEST	TEST TEMP.	SIZE OF SPECIMEN(mm)	ABSORBED ENERGY STD. I		LATERAL EXPANSION STD. I		PERCENT SHEAR STD. I		HARDNESS HBW		HEAT TREATMENT	HOT FORMED. 870°C, N/A, "Air"				
				VALUE	AVG.	VALUE	AVG.	VALUE	AVG.	MIN	MAX		N.D.E	N/A			
				185159		802231		B/M		H.A.Z			W/M		B/M		H.A.Z
										154	152	PMI	N/A	N/A	N/A	N/A	N/A
										138	135	FLATTENING TEST	N/A	N/A	N/A	N/A	N/A
												BENDING TEST	N/A	N/A	N/A	N/A	N/A
												HYDROSTATIC TEST	N/A	N/A	N/A	N/A	N/A
												CORROSION TEST	N/A	N/A	N/A	N/A	N/A
												GRAIN SIZE TEST	N/A	N/A	N/A	N/A	N/A
												HIC TEST	N/A	N/A	N/A	N/A	N/A

NACE MR0175

WE CERTIFY THIS MATERIAL HAS BEEN MANUFACTURED AND EXAMINED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE SPECIFICATION AND THE RESULTS OF ALL EXAMINATION ARE ACCEPTABLE.

REVIEWED BY : _____
 WITNESSED BY : _____

[Signature]
 CHIEF QUALITY OFFICER

SKE-8903

*본 검사증명서에 영기된 규격용의 사용시 안전상 문제가 발생할 수 있으며, 검사증명서 위 변조시 사문서 위조(형법231조)로 불이익을 당하실 수 있습니다.