HEBEI METALS INDUSTRIAL LIMITED
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MILL TEST CERTIFICATE

MTC ACC.TO EN10204 3.1

CUSTOMER				**PRODUCT**	CABON STEEL PLATE
PURCHASER	Saudi Arabian Oil Company			**SPECIFICATION**	ASME SA-516/SA-516M-2019
CONTRACT NO.	MTS240112			**UT:**	ASME SA578/SA578M(level C), OK
QTY	1	**TRAIN NO.**	DU3271	**CUNSTOMER ORDER NO.**	49799
TOTAL MT		**CERTIFICATE NO.**	HB101A10315005	**LICENSE NO.**	

				MATERIAL DESCRIPTION					**CHEMICAL COMPOSITION %**										**TENSILE TEST**							**IMPACT TEST**							**HD**			
NO.	**BATCH NO.**	**HEAT NO.**	**STEEL GRADE**	**T**	**W**	**L**	**QTY**	**W.T MT**	①	**C**	**Si**	**Mn**	**S**	**P**	**Als**	**Nb**	**Alt**	**B**	②	**Y.S Rt0.5**	**T.S Rm**	**E.L**	**Y.S/T.S**	**P.S**		②	⑥	**T**	**KV8 NOTCH 2mm J**				**Surface**	**Trans**	**G.S level**	**Condition**
										X10-2			X10-3					X10-4																		
										Cr	**Ni**	**Cu**	**V**	**Mo**	**Ti**	**CE**	**PCM**	**CEV**						**T**	**$R_{P0.2}$**										
				mm																																
										X10-2			X10-3			X10-3				Mpa		%		℃	MPa			℃	1	2	3	AVE	HBW		⑦	⑧
1	L21927065100 1LL12419900	21306109	ASME A516 Gr.70 MT	65	1200	2400	1		L	17 8	21 3	115 8	15 3	10 5	35 2	16 386	3	1	T	365	515	34.0						-30.7	174	218	229	207				N
2																																				
3																																				
4																																				
5																																				

COLD BEND TEST⑨	PASS	**ACCEPTABLE VISUAL AND DIMENSIONS**	PASS
REMARKS	1. MATERIALS ALL FULLY KILLED AND FINE GRAINED		

NOTES

①ANALYSIS: L=LADLE ANALYSIS, P=PRODUCT ANALYSIS; ②LOCATION AND ORIENTATION: B=BOTTOM, H=TOP, T=TRANS, L=LONGI., Z=THROUGH=THICK;
③G.L.=GAUGE LENGTH; ④ REDUCTION OF AREA; ⑤YIELD RATIO; ⑥SAMPLE SIZE: A=10*10*55, B=10*7.5*55, C=10*5.0*55, D=10*4*55, E=10*2.5*55, D=10*4*55, E=10*2.5*55, F=10*3.5*55, G=10*3.3*55, H=10*8*55, I=10*6.7*55, J=10*6*55;
⑦GRAIN SIZE LEVEL; ⑧STATE OF DELIVERY: N=NORMALIZED, NR=NORMALIZING ROLLING, Q=QUENCHED, T=TEMPERED, A=ANNEALED OR CONTROALLED ROLLED;
TM=TMCP, AR=AS HOT ROLLED; ⑨THE RESULT OF BEND TEST IS NOT TO BE THE DELIVERY TERM EXPECT AS CONTRACT SPECIFIED;
⑩CE=Ceq=C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15; CEV=C+Mn/6; PCM=C+Si/30+(Mn+Cu+Cr)/20+Ni/60+Mo/15+V/10+5B; UNS=230C+190S+75P+45Nb-12.3Si-5.4Mn;
⑪STATE OF SAMPLE: DC=DELIVERY CONDITION; DH=DELIVERY CONDITION+HEAT TREATMENT IN THE LABORATORY

WE HEREBY CERTIFY THAT THE MATERIALS DESCRIBED HEREIN HAVE BEEN MANUFACTURED AND TESTED WITH SATISFACTORY RESULTS.

PREPARED BY: MS. PING CHEN(陈萍) **INSPECTED BY: MR. JUN ZHU(朱军)** **APPROVED BY: Mr. Sun J.H 孙江海(Director)**

HEBEI METALS INDUSTRIAL LIMITED Q.C.

SJZ Metalsin Tech Co LTD