

MATERIAL TEST & INSPECTION CERTIFICATE


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CUSTOMER: ALLIED FITTINGS
PROJECT NAME: N/A

According to
 DIN 50049 3.1 / EN 10204 3.1 / ISO 10474 3.1

PURCHASE ORDER NO.	61511GSB	SPEC. FOR MATERIAL	ASTM A234WPB-W 07, ASME SA234WPB-W 07ED	CERTIFICATE NO.	QCLP2011101296
PJT NO.	N/A	SPEC. FOR INSPECTION	ASME B16.9	DATE OF ISSUE	2011.10.14
STARTING MATERIAL	STEEL PLATE	SKB NO.	2011061704	VISUAL & DIMENSION	SATISFACTORY

NO.	SEQ/LINE/ITEM NO	DESCRIPTION	QTY	HEAT NO.	MFG ID NO.	POR/CODE/TAG NO
16		45D ELBOW(L) X-S 36' B.W WELD Black	15	SF05800	SF05800	

CHEMICAL COMPOSITION(%) (L : LADLE, P : PRODUCT)																				TENSILE TEST						
HEAT NO.	STD.	SPEC.	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	0.10	0.29																		KSI	60.0	%	%
			MAX	0.25	1.06	0.050	0.058	0.40	0.40	0.15	0.40	0.08												35.0	85.0	30.0
SF05800	L		0.16	0.26	0.81	0.016	0.003	0.02	0.02	Tr	0.01	Tr										40.7	64.8	40.0		
	P																									
	L																									
	P																									

IMPACT TEST HEAT NO.	TEST TEMP.	SIZE OF SPECIMEN(mm)	ABSORBED ENERGY		LATERAL EXPANSION		PERCENT SHEAR		HARDNESS HB		HEAT TREATMENT	HOT FORMED. 870°C, N/A, "Air"			
			STD./	AVE.	STD./	AVE.	STD./	AVE.	MIN	197		PMI	N/A	N.D.E	R.T:GOOD
			VALUE		VALUE		VALUE		MAX	149					
SF05800		B/M								HB	FLATTENING TEST	N/A	**MEMO		
		H.A.Z									BENDING TEST	N/A			
		W/M									HYDROSTATIC TEST	N/A			
		B/M									CORROSION TEST	N/A			
		H.A.Z									GRAIN SIZE TEST	N/A			
		W/M									HIC TEST	N/A			

- MANUFACTURED IN ACCOR. TO DIN 50049-3.1 & MEET NACE MR0175-2003 STANDARD SPEC.
 - R.T REPORT NO. : HIE-BS-SKALL-RT-11-10-002

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 : _____

ALLIED FITTING
 TRUE COPY OF
 ORIGINAL MTR
 SIGN 


 QM DIV. SENIOR MANAGING DIRECTOR