



MANUFACTURER'S CERTIFICATE
(Mill Test Certificate) DIN 50049-3.1-B / EN 10204-3.1

Purchaser : _____
 Product : SEAMLESS STEEL WELDING FITTING
 Specification : ASTM A-234 WPB - 2006A
 : ASME SA234 WPB

Certificate No : 7540124
 Order No : _____
 Date : DECEMBER 11, 2017

Raw Material Estándar		Inspection Standard				Visual Inspection				Dimention Inspection							
PIPE ASTM A106 B/A53B/API5LB PLATE: ASTM A516 Gr 50 / 60		ANSI B16.9 ANSI B16.28				PASS				PASS							
Product & Size (inch)			Heat ID.		Quantity		Heat No.		RAW MATERIAL MAKER								
1 RED. ECCE STD 16" x 12"			344Zw		80		117801		B.T.L 513-964								
Standard	Chemical Composition %												Mechanical Test			Average Hardness	CE Long Formula
	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Al	YS	TS	E		
	x	x	x	x	x	x	x	x	x	x	x	x	psi	psi	%	Hb	x 100
Min.	-	10	29	-	-	-	-	-	-	-	-	-	35,000	60,000	30	-	-
Max	30	-	106	48	58	40	40	40	15	8	-	50	-	85,000	-	197	42
1	16	22	81	11	1	13	12	7	2	1	-	-	43450	75300	49	151	35

· Abbreviation: JFE = JFE STEEL CORP BTL = BENTELER, GERMANY SDC = SIDERCA, ARGENTINA
 SMI = SUMIMOTO, JAPAN DLM = DALMINE, ITALY MNM = MANNESMANN

· ALL FITTINGS ARE HEAT TREATED TO MEET NACE MR0175-03 STANDARD SPECIFICATION AT 650-680 C x 1.0 HR.

· $CE = C + (Mn/6) + (Cr + Mo + V)/5 + (Ni+Cu)/15$

· ALL TEES ARE TESTED BY MAGNETIC PARTICLE EXAMINATION (MT)

Chief of Quality Assurance Dept