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## MANUFACTURER'S CERTIFICATE

(Mill Test Certificate) DIN 50049-3.1-B / EN 10204-3.1

Purchaser	: PLESA ANAHUAC Y CIAS, SA DE C.V.	Certificate No	: 140383
Product	: SEAMLESS STEEL WELDING FITTING	Order No	: PO. 18799
Specification	: ASTM A-234 WPB – 2011A	Date	: JULY 14, 2014
	: ASME SA234 WPB	L/C No	: T/T

Raw Material Standard	Inspection Standard	Visual Inspection	Dimensional 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 TEE STD 4"x2"	45913	6	D08-1-3425	2554-913
2 CON RED STD 4"x2"	47913	50	D08-1-3425	2554-913
3 CON RED STD 6"x5"	47931	30	11102288	2554-931
4 CON RED STD 8"x6"	47942	100	1037205	2554-942
5 CON RED STD 10"x8"	47605	50	1130716	2554-605
6 CON RED STD 10"x4"	47605	18	1130716	2554-605
7 CON RED STD 12"x8"	47497	20	1031436	2554-497
8 ECC RED STD 4"x3"	47913	10	D08-1-3425	2554-913
9 ECC RED STD 4"x2"	47913	10	D08-1-3425	2554-913
10 ECC RED STD 10"x8"	47605	20	1130716	2554-605
11 ECC RED STD 10"x6"	47605	20	1130716	2554-605

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 100	x 100	x 100	x 1000	x 1000	x 100	x 100	x 100	x 100	x 100	x 100	x 1000	x 1000	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	20	22	56	15	12	2	1	4	<1	<1	-	-	-	46400	66800	36	170	30
2	20	22	56	15	12	2	1	4	<1	<1	-	-	-	46400	66800	36	170	30
3	20	22	51	13	6	6	2	3	1	1	-	-	-	46400	67100	35	140	30
4	19	22	42	5	2	3	2	2	1	<1	1	2	-	49300	68200	47	101	27
5	23	25	88	12	8	8	3	7	1	<1	1	3	-	57300	81200	44	147	40
6	23	25	88	12	8	8	3	7	1	<1	1	3	-	57300	81200	44	147	40
7	14	37	96	18	3	5	2	3	1	1	1	4	-	47900	63800	48	140	33
8	20	22	56	15	12	2	1	4	<1	<1	-	-	-	46400	66800	36	170	30
9	20	22	56	15	12	2	1	4	<1	<1	-	-	-	46400	66800	36	170	30
10	23	25	88	12	8	8	3	7	1	<1	1	3	-	57300	81200	44	147	40
11	23	25	88	12	8	8	3	7	1	<1	1	3	-	57300	81200	44	147	40

\* We hereby certify that the products described herein have been manufactured, inspected and conforms to standard as specified above.

\* 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