

MANUFACTURER'S CERTIFICATE

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

Purchaser	: <u>PLESA ANAHUAC Y CIAS., SA DE C.V.</u>	Certificate No	: <u>130505</u>
Product	: <u>CARBON STEEL FITTINGS</u>	Order No	: <u>PO. 16082</u>
Specification	: <u>ASTM A-234 WPB / NACE MR -01-75</u>	Date	: <u>AUGUST 10, 2013</u>
	: <u>ASME SA234 WPB</u>	L/C No	: <u>M929849</u>

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 90 ELBOW SR STD 3"	38364	50	208-72	2554-364
2 90 ELBOW SR STD 4"	38273	50	801A-163	2554-273
3 RED TEE STD 10"x6"	38605	10	1130716	2554-605
4 RED TEE STD 16"x12"	38861	3	208-15	2554-861
5 CON RED STD 6"x3"	38931	20	11102288	2554-931
6 CON RED STD 8"x3"	38942	20	1037205	2554-942
7 CON RED STD 14"x8"	3849A	5	1031434	2554-49A
8 ECC RED STD 12"x8"	38497	5	1031436	2554-497
9 90 ELBOW LR XH 2"	38802	200	923574	2554-802
10 90 ELBOW LR SCH80 16"	38111	2	20140	2554-111
11 45 ELBOW LR XH 2"	38802	50	923574	2554-802

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 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	54	15	11	2	1	3	-	-	-	-	44600	66100	32	144	30
2	20	20	53	8	6	13	13	7	1	<1	-	-	43600	66800	35	160	32
3	23	25	88	12	8	8	3	7	1	<1	1	3	57300	81200	44	147	40
4	19	21	52	14	10	14	6	6	-	-	-	-	46400	67900	34	172	30
5	20	22	51	13	6	6	2	3	1	1	-	-	46400	67100	35	140	30
6	19	22	42	5	2	3	2	2	1	<1	1	2	49300	68200	47	101	27
7	17	40	95	15	3	8	2	3	1	1	1	3	53700	76900	40	150	36
8	14	37	96	18	3	5	2	3	1	1	1	4	47900	63800	48	140	33
9	20	23	44	16	23	4	2	3	-	-	-	-	45000	67100	33	158	38
10	18	24	102	18	2	1	2	3	0	1	-	-	48000	74000	43	143	36
11	20	23	44	16	23	4	2	3	-	-	-	-	45000	67100	33	158	38

* 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