

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	: 140382
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 45 ELBOW LR STD 5"	47812	10	11-711	2554-812
2 45 ELBOW LR STD 8"	47814	100	1107015	2554-814
3 45 ELBOW LR STD 10"	47815	50	1107003	2554-815
4 90 ELBOW SR STD 3"	47364	50	208-72	2554-364
5 TEE STD 2"	47891	200	104A-291	2554-891
6 TEE SCH40 2 1/2"	47521	10	1015306	2554-521
7 TEE STD 20"	47872	2	710A-38	2554-872
8 RED TEE STD 2"x1 1/2"	47891	10	104A-291	2554-891
9 RED TEE STD 3"x2"	47901	100	031101652	2554-901
10 RED TEE STD 4"x3"	47913	50	D08-1-3425	2554-913
11 RED TEE STD 4"x2"	47913	94	D08-1-3425	2554-913

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	x	psi	psi	%	Hb
Min.	-	10	29	-	-	-	-	-	-	-	-	-	35,000	60,000	30	-	-
Max.	30	-	106	48	58	40	40	40	15	8	-	50	-	85,000	-	197	42
1	18	25	51	18	15	6	9	7	-	-	-	-	46800	70000	36	165	39
2	19	25	50	15	9	7	4	9	-	-	-	-	47500	70700	35	147	30
3	19	24	51	14	7	11	10	9	-	-	-	-	47100	69600	37	141	39
4	20	22	54	15	11	2	1	3	-	-	-	-	44600	66100	32	144	30
5	19	23	49	9	8	<1	<1	2	<1	<1	-	-	46800	69600	33	155	28
6	19	22	41	10	5	4	2	4	1	2	1	2	55800	76125	34	166	38
7	19	22	50	10	7	11	5	5	<1	<1	-	-	45700	69600	40	142	29
8	19	23	49	9	8	<1	<1	2	<1	<1	-	-	46800	69600	33	155	28
9	21	23	54	9	9	2	1	2	<1	<1	-	-	38900	67500	30	130	31
10	20	22	56	15	12	2	1	4	<1	<1	-	-	46400	66800	36	170	30
11	20	22	56	15	12	2	1	4	<1	<1	-	-	46400	66800	36	170	30

* 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