



TTU INDUSTRIAL CORP., LTD.

TTU Fittings

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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	: 140016
Product	: CARBON STEEL FITTINGS MADE FROM SEAMLESS	Order No	: PO. 17201
Specification	: ASTM A-234 WPB - 2011A	Date	: DECEMBER 28, 2013
	: ASME SA234 WPB	L/C No	: M930449

Raw Material Standard	Inspection Standard	Visual Inspection	Dimensional Inspection
PIPE : ASTM A106 B / A53B / API5L B 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 CAP SCH80 3"	41953	20	488953	545370
2 CAP SCH80 6"	41398	20	594398	619536
3 CAP SCH80 8"	41398	10	594398	619536
4 CAP XH 12"	41398	10	594398	619536

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	%			
Min.	100	100	100	1000	1000	100	100	100	100	100	1000	1000	35,000	60,000	TRANSVERSE 17	Hb	x 100	
Max.	30	-	106	48	58	40	40	40	15	8	-	50	-	85,000		197	42	
1	15	37	91	21	14	0	0	0	0	0	-	-	46900	69000	24	158	30	
2	13	24	89	20	10	0	0	0	0	0	-	-	42900	65600	29	168	28	
3	13	24	89	20	10	0	0	0	0	0	-	-	42900	65600	29	168	28	
4	13	24	89	20	10	0	0	0	0	0	-	-	42900	65600	29	168	28	

COUNTRY OF EXPORT : THAILAND
COUNTRY OF ORIGIN : THAILAND

VALUE OF THE PO 17201 - US\$94,159.70

- 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)

