



Head Office : 395/5 Silom Road, BangRak, Bangkok 10500, Thailand. Tel: (662)-2377230-40 Fax : (662)-2366627, 2377241
Production Plant : 33/3 GP. 7, Soi Pon-Chareon, K.M. 16.5 Bangna-Trad Road, Bangplee, Samulprakan 10540, Thailand
website : www.ttu.co.th email address : sale001.ttu@ttugroup.com, chris.ws@ttugroup.com

MANUFACTURER'S CERTIFICATE

Purchaser : PLESA ANAHUAC Y CIAS, SA DE C.V. Certificate No : 140075 Page 1/4
Product : SEAMLESS STEEL WELDING FITTING Order No : PO. 17201
Specification : ASTM A-234 WPB - 2011A Date : JANUARY 31, 2014
: ASME SA234 WPB L/C No : T/T

Table with 4 main columns: Raw Material Standard, Inspection Standard, Visual Inspection, Dimensional Inspection. Includes a detailed table with 11 rows of product specifications including size, heat ID, quantity, heat number, and raw material maker.

Table with 17 columns: Standard, Chemical Composition %, Mechanical Test, Average Hardness, CE Long Formula. Includes a detailed table with 11 rows of chemical and mechanical test results.

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 (with signature and stamp)



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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 : 140075 Page 2/4
Product : SEAMLESS STEEL WELDING FITTING Order No : PO. 17201
Specification : ASTM A-234 WPB - 2011A Date : JANUARY 31, 2014
: ASME SA234 WPB L/C No : T/T

Table with 4 columns: Raw Material Standard, Inspection Standard, Visual Inspection, Dimensional Inspection. Rows include ASTM A106 B / A53B / API5LB and ANSI B16.9 / ANSI B16.28.

Table with 5 columns: Product & Size (inch), Heat ID., Quantity, Heat NO., Raw Material Maker. Lists 11 items including RED TEE SCH40 and CON RED STD with various sizes and quantities.

Table with 17 columns: Standard, Chemical Composition %, Mechanical Test, Average Hardness, CE Long Formula. Includes rows for Min. and Max. values and a detailed list of 11 items with their respective chemical and mechanical properties.

COUNTRY OF EXPORT : THAILAND
COUNTRY OF ORIGIN : THAILAND

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Handwritten signature and blue circular stamp of the Chief of Quality Assurance Dept.

Chief of Quality Assurance Dept



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Table with 4 columns: Purchaser, Product, Specification, and Certificate No/Order No/Date/L/C No. Values include PLESA ANAHUAC Y CIAS, SA DE C.V., SEAMLESS STEEL WELDING FITTING, ASTM A-234 WPB - 2011A, ASME SA234 WPB, 140075 Page 3/4, PO. 17201, JANUARY 31, 2014, and T/T.

Table with 4 columns: Raw Material Standard, Inspection Standard, Visual Inspection, and Dimensional Inspection. Values include ASTM A106 B / A53B / API5LB, ANSI B16.9, ANSI B16.28, PASS, and PASS.

Table with 5 columns: Product & Size (inch), Heat ID., Quantity, Heat NO., and Raw Material Maker. Lists 9 items including ECC RED SCH40 and 90 ELBOW LR XH with their respective specifications and quantities.

Table with 18 columns: Standard, Chemical Composition %, Mechanical Test, Average Hardness, and CE Long Formula. Includes rows for Min. and Max. values and a detailed list of 9 items with their chemical and mechanical properties.

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| | | | |
|---------------|------------------------------------|----------------|--------------------|
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| Product | : SEAMLESS STEEL WELDING FITTING | Order No | : PO. 17201 |
| Specification | : ASTM A-234 WPB – 2011A | Date | : JANUARY 31, 2014 |
| | : ASME SA234 WPB | L/C No | : T/T |

| Raw Material Standard | Inspection Standard | Visual Inspection | | Dimensional Inspection |
|---|---------------------------|-------------------|----------|------------------------|
| PIPE : ASTM A106 B/ A53B / APISLB 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 STD 14" | 41442 | 10 | 232442 | 050696 |
| 2 CAP STD 16" | 42442 | 17 | 232442 | 050696 |
| 3 CAP STD 20" | 41442 | 20 | 232442 | 050696 |

| 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 | TRANSVERSE 17 | | |
| Max. | 30 | - | 106 | 48 | 58 | 40 | 40 | 40 | 15 | 8 | - | 50 | - | 85,000 | | 197 | 42 |
| 1 | 18 | 19 | 80 | 16 | 11 | 0 | 0 | 0 | 0 | 0 | - | - | 49300 | 71700 | 27 | 162 | 31 |
| 2 | 18 | 19 | 80 | 16 | 11 | 0 | 0 | 0 | 0 | 0 | - | - | 49300 | 71700 | 27 | 162 | 31 |
| 3 | 18 | 19 | 80 | 16 | 11 | 0 | 0 | 0 | 0 | 0 | - | - | 49300 | 71700 | 27 | 162 | 31 |

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