

CERTIFIED MATERIAL TEST REPORT

Tube Forgings of America, Inc.
 5200 NW Front Avenue
 Portland, OR 97210
 ISO 9001-2000 Certified
 9/8/2005

Sold To: PLESA ANÁHUAC y CÍAS, S.A. de C.V.
 AV. VALLE DE LAS ALAMEDAS NO. 66-A
 TULTITLAN, EDO., MEX. C. P.54940

TFA Sales Order : 133086-1
Customer ID: 38350
Customer PO Reference: 103
Attention To:

Ship To: SPECIALISTS IN TRANSIT FORWARDING
 1801 MARKLEY MODERN INDUSTRIAL P/
 LAREDO, TX 78041

TFA Heat Code:	P645	Test Bar Type:	STRIP
Grade:	WPB	Yield (PSI):	45700
TFA Part ID:	15027	Tensile (PSI):	70200
Description:	3 X 2 STD TEE	% Elong In 2"	36.00
Quantity:		B.H.N. :	162
Mill:	SUMITOMO	Tensile Orientation:	LONGITUDINAL
Mill Heat :	J4L7561		
Process:	WPB-C45		
Customer Part ID:			

C	MN	P	S	SI	MO	CR	NI	CU	V	CB	B	TI	AL	C.E.
0.190	0.640	0.016	0.007	0.190	0.010	0.060	0.020	0.020	0.000	0.000				0.31

Coupon Size:	<u>Ft. Lbs</u>	<u>% Shear</u>	<u>Lateral Expansion (Mils)</u>
Charpy V notch test at	1:	1:	1:
degrees F:	2:	2:	2:
Charpy Orientation:	3:	3:	3:
	Avg:	Avg:	

1. THESE FITTINGS WERE COLD FORMED AND STRESS RELIEVED AT 1238F AND AIR COOLED. 2. THE HARDNESS DOES NOT EXCEED 197 BHN PART TO PART. 3. STARTING MATERIAL IS SEAMLESS PIPE. 4. THIS PRODUCT IS SEAMLESS. 5. TEES WERE "MAG PARTICLE" INSPECTED IN ACCORDANCE WITH (ASTM/ASME- SA / A234) REQUIREMENTS .

THE MATERIAL IS MANUFACTURED TO ASTM A 234 GR WPB REV: 03. ,ALSO PER ASME SEC II SA 234 GR WPB,2001 EDITION THRU ALL ADDENDAS AT TIME OF ORDER. 2. DESIGN AND DIMENSIONS TO ASME B16.9-2003 OR MSS-SP-75-98 AS APPLICABLE BY DESIGN. 3.PER NACE MR-01-75, 2003 REVISION. OUR QUALITY SYSTEM HAS BEEN REGISTERED BY (ABS) TO (ISO-9001. REV: 2000), CERTIFICATE #: 30248. OUR ORGANIZATIONAL STRUCTURE AND CERTIFICATION COMPLIES WITH (EN 10204-3.1.B). OUR FITTINGS SATISFY THE MATERIAL REQUIREMENT OF (PED 97/23-EC ANNEX 1-4.3).



[Signature]
 John Peachey, Mgr. Quality Assurance