

Heat Number : 33542
Trans Am Piping Products Ltd. - Rev'd By: RA
Shipments / Seq # : 14 - 5155
3" STD BW TEE A234-WPB

33542 (2)

3" STD WPB TEE

P.O. 134729

Awaji



INSPECTION CERTIFICATE

EN 10204 3.1 : 2004

AWAJI MATERIA (THAILAND) CO.,LTD.

81,MOO4, PRAKASA ROAD, TAMBOL BANGMUANG, AMPHUR MUANG
SAMUTPRAKARN THAILAND 10270, Tel : (662)701-5226

ISO 9001 :2008 Manufacturing Company
Certified by BV. Certificate No. TH004535

Material manufacturer QMS acc.
PED 97/23/EC. Annex1. Par4.3/AD2000W0
Certified by Lloyd's Register
Certificate No. 50207/1

Purchaser : ALLIED FITTING CANADA

MADE FROM SEAMLESS STEEL PIPE

Date : MARCH 20, 2013

Certificate No. : T13-31148

Order No. 112511AAW/WPB/56		Job No. -		Product CARBON STEEL BUTT WELDING FITTINGS		Raw Material Pipe Maker NIPPON STEEL & SUMITOMO METAL CORPORATION (JAPAN)																																																																																																																																																					
Inspection Standard ASME B16.9-07, ASME B16.25-07 ASTM A960-10 NACE MR-0175/ISO 15156-2-09, SS Region3 MR-0103-10		Material Standard ASTM A234-11a, WPB ASME SA234-10, WPB except nuclear usage CSA Z245.11-09, GR241 CAT. I-SS		Visual GOOD		Dimension GOOD																																																																																																																																																					
Pipe Heat No. : J2LA113		*4 UT Inspection -		Magnetic Particle Test GOOD																																																																																																																																																							
Manufacturing No. (Heat code.) 33542	Product Code -	Material WPB	Article & Size STD TEE 3"			Quantity 500 Pcs.	Note.																																																																																																																																																				
<table border="1"> <thead> <tr> <th rowspan="3">Specification</th> <th colspan="17">*1 Chemical Composition (%)</th> <th colspan="4">*2 Mechanical Test</th> <th rowspan="3">Hardness</th> </tr> <tr> <th>C</th><th>Si</th><th>*3 Mn</th><th>P</th><th>S</th><th>Cu</th><th>Ni</th><th>Cr</th><th>Mo</th><th>V</th><th>Nb</th><th>Ti</th><th>B</th><th>Ca</th><th>N</th><th>Al</th><th>C.E.</th> <th>Y.S.</th><th>T.S.</th><th>E</th> </tr> <tr> <th>X100</th><th>X100</th><th>X100</th><th>X1000</th><th>X1000</th><th>X100</th><th>X100</th><th>X100</th><th>X100</th><th>X100</th><th>X100</th><th>X100</th><th>X10000</th><th>X10000</th><th>X1000</th><th>X1000</th><th>X100</th> <th>MPa</th><th>%</th><th>HB</th> </tr> </thead> <tbody> <tr> <td>Min.</td> <td>-</td><td>10</td><td>29</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td> <td>240</td><td>415</td><td>25.5</td> </tr> <tr> <td>Max.</td> <td>30</td><td>-</td><td>165</td><td>50</td><td>58</td><td>40</td><td>40</td><td>15</td><td>8</td><td>2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>50</td> <td>-</td><td>-</td><td>-</td> </tr> <tr> <td>Heat No.</td> <td>L</td><td>20</td><td>22</td><td>68</td><td>16</td><td>8</td><td>1</td><td>3</td><td>5</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>9</td><td>4</td><td>18</td><td>33</td> <td>328</td><td>480</td><td>36.8</td> </tr> <tr> <td>J2LA113</td> <td>P</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td> <td>-</td><td>-</td><td>-</td> </tr> </tbody> </table>								Specification	*1 Chemical Composition (%)																	*2 Mechanical Test				Hardness	C	Si	*3 Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	B	Ca	N	Al	C.E.	Y.S.	T.S.	E	X100	X100	X100	X1000	X1000	X100	X100	X100	X100	X100	X100	X100	X10000	X10000	X1000	X1000	X100	MPa	%	HB	Min.	-	10	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	415	25.5	Max.	30	-	165	50	58	40	40	15	8	2	-	-	-	-	-	-	50	-	-	-	Heat No.	L	20	22	68	16	8	1	3	5	1	0	0	0	0	9	4	18	33	328	480	36.8	J2LA113	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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$$C.E. = C + \frac{Mn}{6} + \frac{Cr+Mo+V}{5} + \frac{Ni+Cu}{15}$$

*4 UT = Ultrasonic thickness inspection

*1 Equivalent for A234 WPB

*2 Y.S.= Yield Strength (0.2% offset), T.S. = Tensile Strength, E = Elongation (in 50mm)

*3 As per foot note D of ASTM A234 Table 1.

L = Ladle Analysis, P = Product Analysis

Weld repair is not applied to our products.

Steel Making by Vacuum degassed, fully silicon aluminium killed & fine grain.

ELBOW / Forming temperature 850°C-945°C and cooled in still air

TEE, REDUCER & CAP / Normalizing : 910°C

*We hereby certify that the material described herein has been duly inspected and conforms to the standard as specified above.

Surveyor to

QA. GM. /Work Inspector S. MAEKAWA

AT-24(2)18