

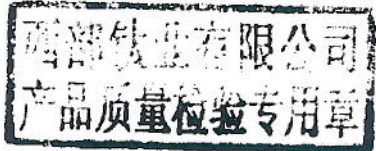
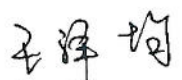



**MATERIAL CERTIFICATION**

**W.T.T. CO., LTD.**

INSPECTION CERTIFICATE TO EN10204-3.1  
WTP8205K08

No. J3027-09

<b>Product</b>	Titanium Seamless Tube		<b>Contract No.</b>	4078/ BL 41559	<b>Specification</b>	ASTM B861-00		
<b>Grade</b>	Gr.2		<b>Heat Treatment</b>	Annealed vacuum	<b>Dimension</b>	Dia. 21.3 X 2.11 X 6000mm		
<b>Quantity (pcs)</b>	34 pcs /204.00m		<b>Net Weight (kg)</b>	111.80	<b>Heat No.</b>	006	<b>Lot No.</b>	006
<b>Chemical Composition (wt.%)</b>				<b>Mechanical Properties</b>				
<b>Requirement</b>		<b>Result</b>		<b>Requirement</b>		<b>Test Result</b>		
		<b>Top</b>	<b>Bottom</b>			<b>Sample 1</b>	<b>Sample 2</b>	
<b>Ti</b>	<b>Remainder</b>	<b>Remainder</b>	<b>Remainder</b>	<b>Tensile Strength (MPa)</b>	≥345	505	495	
<b>Fe</b>	≤0.30	0.075		<b>Yield Strength 0.2% (MPa)</b>	275~450	370	370	
<b>C</b>	≤0.08	0.03		<b>Elongation (%)</b>	≥20	31	28	
<b>N</b>	≤0.03	0.007						
<b>H</b>	≤0.015	0.002						
<b>O</b>	≤0.25	0.13						
				<b>Flattening Test</b>	Pass	<b>Flaring Test</b>		
				<b>Hydrostatic Test</b>	Pass	<b>Ultrasonic Test</b>		
				<b>Visual Inspection</b>	Pass	<b>Dimension Inspection</b>	Pass	
<b>Residuals</b>	<b>Each</b>	≤0.1	≤0.1	<b>Notes:</b>				
	<b>Total</b>	≤0.4	≤0.4	Hydrogen : Final product analysis Cold formed				
 <b>Product Manager</b>			 <b>Quality Manager</b>			The Certificate Copied is Invalid Date : JAN. 13, 2009		

We hereby certify that the product is in compliance with contract No. 4078 / BL 41559 and the specific test result. Furthermore, we certify that the above stated quantitative results were derived from testing and analysis and in accordance with referenced specification requirements.