

Standard: AWS A 5.9 YB/T5092	Chemical Composition %								
	C	Mn	Si	Cr	Ni	P	S	Mo	Ti
Grade ER321	≤0.08	1.0-2.5	0.3 - 0.65	18.5 - 20.5	9 - 10.5	≤0.03	≤0.03	≤0.75	9×C-1.00
Type	Spool (MIG)				Tube (TIG)				
Specification (MM)	0.8、0.9、1.0、1.2、1.6、2.0				1.6、2.0、2.4、3.2、4.0、5.0				
Package	S100/1kg                      S200/5kg S270,S300/15kg-20kg				5kg/box	10kg/box	length :1000MM		
Mechanical Properties	Tensile Strength Mpa				Elongation after fracture A (%)				
	≥ 530				≥ 35				
Diameter (MM)	0.8	1.0	1.2	1.6	2.0	2.5	3.2		
Current (A)	70 ~ 150	100 ~ 200	140 ~ 220	50 ~ 100	100 ~ 200	200 ~ 300	300 ~ 400		
Application	<p>ER321 is also known as H08Cr19Ni10Ti. The weld metal of H08Cr19Ni10Ti has good mechanical properties by adding titanium to sequester carbon to prevent the intergranular precipitation of chromium carbide and to improve the intergranular corrosion resistance of the weld.</p> <p>For the welding of 1Cr18Ni9Ti austenitic stainless steel and 20Cr-10Ni-Ti steel, the resistance to intergranular corrosion is greatly improved due to the addition of Ti.</p>								
Notice	<ol style="list-style-type: none"> <li>Oil, dirt and rust on the welding wire surface should be removed before welding. Surface impurities such as oil, rust and water should be thoroughly removed in the welding place, so as to prevent blowhole, crack and so on during welding. The surface of the groove and its surroundings should be polished with metallic gloss.</li> <li>In order to obtain good mechanical properties of welding seam, suggest protect gas Ar+2%O<sub>2</sub> and shield gas flow rate 20-25 L/min for MIG welding. For TIG welding, suggest protect gas pure Ar and shield gas flow rate 8-15 L/min, Arc length 1~3 mm; Length of the tungsten pole is about 3~5 mm; wind speed limit ≤ 1.0 m/s, argon protection at the back of welding area.</li> <li>In the welding process, the welding line energy directly affects the mechanical properties and crack resistance of weld metal, and should be paid more attention to.</li> <li>The above welding methods, conditions and specifications are for reference only. Users should evaluate the welding process according to their own welding characteristics before using the welding wire for the formal product welding.</li> </ol>								