

<b>Classifications</b>					
EN ISO 14343-A	EN ISO 14343-B	AWS A5.9	Mat. No.		
G Z 17 Ti	SSZ430	ER430(mod.)	1.4502		
<b>Characteristics and typical fields of application</b>					
Stainless; corrosion-resistant similar to matching 17 % Cr steels / cast steel grades (seawater, diluted organic and inorganic acids). For joining and surfacing work on matching ferritic and similar Cr steels / cast steel grades, suitable for quenching and tempering. Lowest possible heat input is required, as ferritic 17 % Cr steels are susceptible to embrittlement due to grain growth.					
<b>Base materials</b>					
1.4016 – X6Cr17; 1.4502 – X8CrTi17					
<b>Typical analysis of solid wire (wt.-%)</b>					
	C	Si	Mn	Cr	Ti
wt-%	0.06	1.0	0.6	17.5	> 8xC
<b>Structure:</b> Ferrite					
<b>Mechanical properties of all-weld metal</b>					
Heat-treatment	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Hardness	
	MPa	MPa	%	HB30	
800 °C / 1 h	300	500	20	130	
aw				170	
<b>Operating data</b>					
<b>Polarity:</b> DC (+)	<b>Shielding gas:</b> (EN ISO 14175) M12, M13		<b>ø (mm)</b> 1.6	<b>Spool:</b> B300	
<b>Welding instruction</b>					
Materials	Preheating	Postweld heat treatment			
Matching ferritic steels	200 – 300 °C (392 – 572 °F)	Cooling in air. For reduction of stresses induced by welding and restoration of grain decomposition resistance annealing at 800 °C (1472 °F), cooling in air. Not necessary for single-layer welds under corresponding service temperatures.			
Matching steels / cast steel grades, suitable for quenching and tempering	300 – 400 °C (572 – 752 °F)	Cooling to roughly 120 °C (248 °F), then temper or quench and temper, according to parent metal			
<b>Approvals</b>					
DB (43.132.04), CE					