

<b>UTP A 8036 S</b>						nickel alloys
<b>Classifications</b>						solid wire
Special alloy						
<b>Characteristics and field of use</b>						
<p>UTP A 8036 S is an alloy of the same composition as the base material and used for welding cast alloys with a nickel content of 34 – 40 % (INVAR qualities). The special operational area is the structural welding of housings made of plate and cast pieces with a nickel content of 36 %. Application field: air plane construction.</p> <p>The weld metal contains high mechanical properties and a very low expansion coefficient.</p>						
<b>Typical analysis in %</b>						
C	Si	Mn	P	S	Ni	Fe
0.015-0.025	0.1	0.3	< 0.01	< 0.01	34.0-38.0	balance
<b>Mechanical properties of the weld metal</b>						
<i>Yield strength <math>R_{p0.2}</math></i>	<i>Tensile strength <math>R_m</math></i>		<i>Elongation A</i>	<i>Impact strength <math>K_v</math></i>	<i>Hardness</i>	
<i>MPa</i>	<i>MPa</i>		<i>%</i>	<i>J (RT)</i>	<i>HB</i>	
> 280	> 350		> 25	> 80	appr. 150	
<b>Welding instructions</b>						
<p>Thorough cleaning of welding area is essential. Welding parameters need to be adjusted to each individual application. Pay attention to a low heat input. The weld should be performed by applying a pulsed arc technique.</p>						
<b>Form of delivery and recommended welding parameters</b>						
<i>Wire diameter [mm]</i>		<i>Current type</i>		<i>Shielding gas (EN ISO 14175)</i>		
1.2		DC (+)		M 12		