

Classifications

Special alloy

Characteristics and field of use

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.

The weld metal contains high mechanical properties and a very low expansion coefficient.

Typical analysis in %

C	Si	Mn	P	S	Ni	Fe
0,015-0,025	0,1	0,3	< 0,01	< 0,01	34,0-38,0	balance

Mechanical properties of the weld metal

Yield strength R _{PO,2}	Tensile strength R _m	Elongation A	Impact strength K _V	Hardness
MPa	MPa	%	J	HB
> 280	> 350	> 25	> 80	appr. 150

Welding instruction

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 technique.

Rod diameter x length [mm]	Current type	Shielding gas (EN ISO 14175)
2,0 x 1000*	DC (-)	I 1
2,4 x 1000*	DC (-)	I 1

*available on request