UTP A 6635 stainless steels

Classifications		TIG rod
EN ISO 14343-A	AWS A5.9	Material-No.
W 13 4 (Si)	~ ER 410 NiMo	1.4351

Characteristics and field of use

UTP A 6635 is used for joining and building up on identical and similar martensitic CrNi cast steels for the water turbine- and compressor construction with steels.

The weld deposit of UTP A 6635 is stainless and corrosion resistant as 13 %-Cr(Ni)-steels. It presents a high resistance to corrosion fatigue.

Base materials

1.4317 G-X4 CrNi 13-4
1.4313 X3 CrNiMo 13-4
1.4351 X3 CrNi 13-4
1.4414 G-X4 CrNiMo 13-4

ACI Gr. CA6NM

Typical analysis in %

C	Si	Mn	Cr	Mo	Ni	Fe
0.03	0.7	0.7	13.5	0.55	4.5	balance

Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	*Tensile strength R_m*	*Elongation A*	*Impact strength K_V*
MPa	*MPa*	*%*	*J [RT]*
> 600	> 800	15	> 40

Welding instructions

For similar materials up to 10 mm wall thickness, preheating is not necessary. From 10 mm wall thickness and up, preheating at 100 – 150 °C should be provided.

Approvals

TÜV (No. 10434)

Form of delivery and recommended welding parameters

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