

Classifications

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 instruction

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)

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