

Classifications

EN ISO 14343-A	AWS A5.9	Material-No.
W 23 12 L (Si)	ER 309 L (Si)	1.4332

Characteristics and field of use

UTP A 6824 LC ist used for joining and surfacing in chem. apparatus and vessel construction for working temperatures up to +300° C. Weld cladding of non- and low-alloyed base materials. Dissimilar joints.

Base materials

1.4306	X2 CrNi 19-11
1.4401	X5 CrNiMo 17-12-2
1.4404	X2 CrNiMo 17-13-2
1.4541	X6 CrNiTi 18-10
1.4550	X6 CrNiNb 18-10
1.4571	X6 CrNiMoTi 17-12-2
1.4580	X6 CrNiMoNb 17-12-2

Joining these materials with unalloyed and low-alloyed steels is possible.

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0,02	0,4	1,8	23,0	13,5	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]
400	590	30	140

Welding instruction

Welding area must be thoroughly cleaned to metallic bright and degreased. Heat-resistant Cr-steels or cast steels have to be preheated according to the base metal. No preheating for similar austenitic steels.

Approvals

TÜV (No. 05391)

Rod diameter x length [mm]	Current type	Shielding gas (EN ISO 14175)
1,6 x 1000	DC (-)	I 1
2,0 x 1000	DC (-)	I 1
2,4 x 1000	DC (-)	I 1
3,2 x 1000	DC (-)	I 1