

UTP A 6824 LC

stainless steels

Classifications solid wire

EN ISO 14343-A	AWS A5.9	Material-No.
G 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	0.65-1.0	1.8	23.0	13.5	balance

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A</i>	<i>Impact strength K_V</i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J (RT)</i>
400	590	30	140

Welding instructions

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. 05392)

Form of delivery and recommended welding parameters

<i>Wire diameter [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>	
0.8*	DC (+)	M 12	M 13
1.0	DC (+)	M 12	M 13
1.2	DC (+)	M 12	M 13

*available on request