

## Classifications

EN ISO 17633-A	AWS A5.22
T 19 9 L P M21 1 / T 19 9 L P C1 1	E308LT1-4 / E308LT1-1

## Characteristics and field of use

UTP AF 68 LC PW is a strip alloyed flux cored wire with a rutile slag characteristic for position welding of austenitic CrNi steels. The support provided by the fast-hardening slag allows out-of-position welding with high current magnitudes and high welding speeds. The fine droplet, low-spatter, very powerfully welding spray arc, the reliable fusion penetration, the self-releasing slag and the effectively wetting seam formation result in a high weld quality at the same time as short welding times. Additional advantages to its application result from the ease of handling, the low heat input due to the high welding speed, and the small amounts of cleaning and pickling required. UTP AF 68 LC PW is preferred for flat and horizontal welding positions (PA, PB). The weld metal is cryogenic down to -196 °C and resists intergranular corrosion up to +350 °C.

## Base materials

1.4306 X2CrNi19-11, 1.4301 X5CrNi18-10, 1.4311 X2CrNi18-10, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10  
AISI 304, 304L, 304LN, 302, 321, 347, ASTM A157 Gr. C9, A320 Gr. B8C or D

## Typical analysis in %

C	Si	Mn	Cr	Ni
0,03	0,7	1,5	19,8	10,5

## Mechanical properties of the weld metal

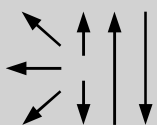
Welded condition	Yield strength R <sub>P0,2</sub>	Tensile strength R <sub>m</sub>	Elongation A	Impact strength K <sub>V</sub>	
	MPa	MPa	%	J [RT]	- 196 °C
untreated	380	560	40	70	40

shielding gas Ar + 18% CO<sub>2</sub>

## Welding instruction

Welding with conventional MAG devices, slightly trailing torch position (angle of incidence about 80 °), slight weaving of the torch is recommended in all positions. With 100% CO<sub>2</sub> the voltage must be raised by 2 V. The gas quantity should be 15-18 l/min.

## Welding positions



Current type DC (+)  
Shielding gases: M1 – M3, C1

## Approvals

TÜV (09117.), DB (43.014.23), CWB (E308LT1-1(4)), GL (4550S (C1,M21)), SEPROZ, CE

Recommended welding parameters		
Wire diameter [mm]	Amperage [A]	Voltage [V]
1,2	100-220	20-31
1,6	175-260	21-29