

Classifications

solid wire

EN ISO 14343-A

AWS A5.9

Material-No.

G 29 9

ER 312

1.4337

Characteristics and field of use

UTP A 651 is suitable for joining and surfacing of steels of difficult weldability, repair of hot and cold working steels, cushioning layers.

The weld metal of UTP A 651 is scale resistant up to 1150 °C. Crack and wear resistant, stainless and work hardening.

Hardness of the pure weld metal: approx. 240 HB.

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0.1	0.4	1.6	30.0	9.0	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>
650	750	25	27

Welding instructions

Clean weld area thoroughly. High carboned and solid work pieces depending on shape and size have to be preheated up to 150 – 250 °C. Steady guidance during welding process.

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