

UTP A 651

stainless steels

Classifications

TIG rod

EN ISO 14343-A	AWS A5.9	Material-No.
W 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>Rod diameter x length [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>
1.2 x 1000	DC (-)	I 1
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