

Classifications

TIG rod

EN ISO 14343-A	AWS A5.9	Material-No.
W 18 8 Mn	ER 307 (mod.)	1.4370

Characteristics and field of use

UTP A 63 is suitable for particularly crack resistant joining and surfacing of high-strength ferritic and austenitic steels, hard manganese steels and cold-tough steels, as cushioning layer under hard alloys, dissimilar metal joints.

The weld metal of UTP A 63 is scale resistant up to 850 °C, cold-tough to – 110 °C. Work hardening.

Hardness of the pure weld metal: approx. 200 HB

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0.08	0.8	6.5	19.5	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>MPa</i>	<i>MPa</i>	<i>%</i>
> 370	> 600	> 30

Welding instructions

Clean weld area thoroughly. Thick walled, ferritic elements have to be preheated to approx. 150 – 250 °C.

Approvals

TÜV (No. 04097)

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

*available on request