Thermanit 30/40 E

TIG rod, high-alloyed, stainless austenitic

Classifications

AWS A5.9 / SFA-5.9	EN ISO 18274
ER383 (mod.)	S Ni 8025 (NiFe30Cr29Mo)

Characteristics and typical fields of application

TIG rod of S Ni 8025 (NiFe30Cr29Mo) / ER383 (mod.) type. Max. service temperature 450ºC. Good corrosion resistance, especially in reducing environment. For joining and surfacing work with matching and similar, unstabilized and stabilized fully austenitic steels and cast steel grades containing Mo (and Cu) and dissimilar welding to unalloyed/low-alloy steels.

Base materials

1.4465 X1CrNiMoN25-25-2, 1.4563 X1NiCrMoCu31-27-4, 1.4577 X5CrNiMoTi25-25, 2.4858 NiCr21Mo

Typical analysis

	C	Si	Mn	Cr	Ni	Mo	Fe	Cu
wt.-%	0.02	0.2	2.6	29	Bal.	4.3	30	1.8

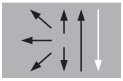
Structure: Austenite

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Yield strength $R_{p1.0}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J
	MPa	MPa	MPa	%	20°C
u	350	380	550	30	120

u untreated, as-welded

Operating data



Polarity	DC-
Shielding gas (EN ISO 14175)	I1
Rod marking	+ 2.4656

Dimension mm
2.0 × 1000
2.4 × 1000
3.2 × 1000

Weld as cold as possible. Suggested heat input is max. 1.0 kJ/mm and interpass temperature max. 100ºC.
Post-weld heat treatment generally not needed. In special cases, solution annealing can be performed at 1120ºC.
For dissimilar joints preheating temperature as required by the base material.

Approvals

TÜV (00118)