

## Thermanit 25/09 CuW

Stick electrode, high-alloyed, stainless, rutile

#### Classifications

EN ISO 3581-A

E Z 25 9 3 Cu N L R 1 2

AWS A5.4 E2593-17

#### Characteristics and typical fields of application

Stainless; resistant to intercrystalline corrosion – wet corrosion at 250 °C (482 °F). Corrosion resistance superior to that of Thermanit 22/09 (W). Good resistance to stress corrosion cracking in chlorine and hydrogen sulphide bearing environments. The high Cr and Mo contents provide resistance to pitting corrosion.

#### **Base materials**

1.4515 - GX3CrNiMoCuN26-6-3;

1.4517 – GX3CrNiMoCuN26-6-3-3

Typical analysis of all-weld metal (wt%)								
	С	Si	Mn	Cr	Мо	Ni	Ν	Cu
wt-%	0.02	0.7	0.9	25.0	3.0	9.0	0.1	2.0

Structure: Austenite/ferrit

### Mechanical properties of all-weld metal

Heat- treatment	Yield strength $R_{p0.2}$	Yield strength $R_{p1.0}$	Tensile strength R <sub>m</sub>	Elongation A ( $L_0=5d_0$ )	Impact work ISO-V KV J
	MPa	MPa	MPa	%	+20 °C
aw	600	650	800	23	35
1120 °C / 4 h:	480	580	750	25	55

**Operating data** 

	Polarity:	ø (mm)	L mm	Amps A
	DC ( + ) / AC	3.2	350	60 – 110
←		4.0	350	90 – 150

# Welding instructionMaterialsPreheatingPostweld heat treatmentMatching / similar steels /<br/>cast steel gradesNoneMostly none; if necessary solution<br/>annealing at 1120 °C (2048 °F) / water

#### Approvals

TÜV (05200), CE