

## Thermanit 25/09 CuT

Stick electrode, high-alloyed, stainless, basic

Classifications		
EN ISO 3581-A	AWS A5.4	Mat. No.
E 25 9 4 N L B 2 2	E2595-15	≈1.4501

## Characteristics and typical fields of application

Stainless. Resistance to intercrystalline corrosion – wet corrosion up to 250 °C (482 °F).

Very good resistance to pitting corrosion and stress corrosion cracking due to the high CrMo(N) content (pitting index > 40). Well suited for offshore applications.

## **Base materials**

1.4515 - GX3CrNiMoCuN26-6-3;

1.4517 - GX3CrNiMoCuN26-6-3-3

25 % Cr-superduplex steels

Typical analysis of all-weld metal (wt%)									
	С	Si	Mn	Cr	Мо	Ni	N	Cu	W
wt-%	0.03	0.5	1.2	25.0	3.7	9.0	0.2	0.7	0.6

Structure: Austenite/ferrit

Mechanical properties of all-weld metal						
Heat- treatment	Yield strength R <sub>p0.2</sub>	Yield strength R <sub>p1.0</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact w	
	MPa	MPa	MPa	%	+20 °C	−50 °C
aw	600	650	750	25	70	50

Operating data						
~ ^ ^	Polarity:	ø (mm)	L mm	Amps A		
`` <b>†</b>	DC (+)	2.5	300	55 – 80		
← .		3.2	350	80 – 105		
		4.0	350	90 – 140		
Malding instruction						

Welding instruction						
Materials	Preheating	Postweld heat treatment				
Matching / similar steels / cast steel grades	Mostly none. Welding of root pass with "thick layer". Next two passes with thin layers and low heat input to avoid precipitation and too high ferrite content	Mostly none; if necessary, solution annealing at 1120 °C / water.				