

4842 Ti

CATEGORY SMAW Stick Electrodes

TYPE Rutile coated electrode for heat resistant stainless steels

APPLICATIONS Common applications include industrial furnaces, annealing chambers, fused salt treatment installations and boiler parts, as well as heat exchangers..

PROPERTIES For welding heat-resistant austenitic steels of the 25% Cr, 20% Ni types. 4842 Ti has good general oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. The temperature limits for use under intermittent oxidation depend on cycle frequency. In general the alloy is heat resistant up to 1200°C. This alloy can withstand relatively severe thermic shock, and is superior to type 309 L.

CLASSIFICATION

AWS	A 5.4: E 310-16
EN ISO	3581-A: E 25 20 R 12
DIN: W.Nr.	~1.4842
DIN	8556: E 25 20 R 26

SUITABLE FOR 1.4823, 1.4826, 1.4828, 1.4832, 1.4840, 1.4841, 1.4846, 1.4848, 1.4837, 1.4710, 1.4713, 1.4724, 1.4726, 1.4742, 1.4745, 1.4762, 1.4845, 1.4849 heat resistant stainless steel,

WELDING POSITIONS:



WELD DEPOSIT WEIGHT %

C	Mn	Si	Cr	Ni	Mo
0.10	2.9	0.5	25	20	-

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HV 40
				20°C	-40°C	-60°C	
AW	>410	>600	>29	>70			200

AW: as welded

WELDING PARAMETERS PACKING

D (mm)	Welding Parameters			Packing		
	Length (mm)	Current (A)	kg / can	kg / 6pack	kg / 1000	
2.5	300	80-110	2.5	15	19	
3.2	350	100-150	2.8	16.8	35.8	
4.0	350	150-190	3.0	18	54.5	
5.0	350	160-210			84.7	

REDRYING TEMPERATURE 300°C/2hr (not often required).