

4009 Ti

CATEGORY SMAW Stick Electrodes

TYPE Basic coated electrode with approximately 13% Chromium

APPLICATIONS This alloy can be used for welding martensitic-ferritic steels , steel castings and for hardfacing exhaust valves.

CLASSIFICATION

AWS	A 5.4: E 410-25
EN ISO	3581-A: E 13 B 42
DIN: W.Nr.	1.4009
DIN	1913: E 4009

SUITABLE FOR X6Cr13 -1.4000, X6CrAl13 - 1.4002, X10Cr13 - 1.4006, X15Cr13 - 1.4024, Steel castings: G-X10Cr13 - 1.4006, martensitic steel, cast steel, cladding exhaust valves

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT %

C	Mn	Cr	Fe
0.1	0.7	11.5-14.5	Rest

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HB 30
				-20°C	-40°C	-60°C	
Tempered	>450	650	>15				180

Tempering: 840-870°C / 2hr, oven cooling down to 595°C (55C/hr), then cooled by air. AW: as welded

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters			Packing	
	Length (mm)	Current (A) DC+	kg / can	kg / 6pack	
2.5	300	60-90	2.5	15	
3.2	350	80-110	2.6	15.6	
4.0	350	100-150	3	18	

REDRYING TEMPERATURE 320°C/2hr

HEAT TREATMENT Preheating (200°C), interpass temperature and tempering temperature depending on the relevant base metal and material thickness.