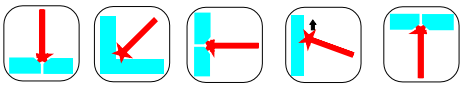
117 XE

AWS A 5.11: EniCrCoMo-1 ISO 14172: E-Ni 6617(NiCr22Co12Mo)

DESCRIPTION

Basic coated electrode with an alloyed core wire for welding of high temperature nickel alloys used at operating temperatures up to 1100°C. The electrode distinguishes itself by a soft arc, easy slag removal and regular weld beads. Principal applications are: Construction of gas turbines, combustion chambers, ovens, thermal equipment for heat treatment and petrochemical installations.

WELDING POSITIONS	CURRENT	COATING
	DC+	Basic

MECHANICAL PROPERTIES

Rm (Mpa)	*Rp 0,2 (Mpa)*	*A5 (%)*	*KV(J)*
730	460	40	+20°C – 100

WELD METAL COMPOSITION(%)

C	Mn	Si	Ni	Cr	Co	Mo	Fe	Al	Ti
0,04	0,3	0,8	rest	21,0	11,0	9,0	3,0	0,7	0,3

PACKAGING & WELDING PARAMETERS

Dimension (mm)	2,5x350	3,2x350	4,0x350
Box (kg)	5/15	5/15	5/15
Current (A)	45-60	75-95	90-120

EQUIVALENT CONSUMABLES

TIG	Meltolit 617 XT
MIG	Meltolit 617 XM

Rebaking for 1h in 250-300°C. Joints need to be clean. Guide electrode with a slight declination, weld with a short arc and prevent a high heat input by applying the stringer bead technique (weaving max 2 times core diameter). Nickel alloys are welded without preheating and an interpass temperature of <150°C.
For repair welding of steels with high carbon content a preheating between 200-500°C has to be applied. A post heat treatment can be performed without influence on the weld deposit.