

NICKEL BASED ALLOY

GLST-N647 ELECTRODE

Classification: AWS A5.11M ENiCrCu-7
EN E Ni 4060

Characteristics and Application:

GLST-N647 is a Nickel base electrode for DC and the welding can be done in all positions with diameter under 3.2mm. The nominal composition of the weld is including 66%Ni , 30%Cu, 3%Mn 1%Fe nickel-copper alloy. It provides stable arc, good appearance, little spatter, easy slag removal, excellent porosity resistance, stable mechanical property of deposited metal. It is suitable for nickel-copper alloy, such as Monel 400/404, ASTM B127, B163, B165, and dissimilar metals welding of joining steel to nickel-copper alloy and surfacing on the steel.

Welding Position :



Chemical Composition of Deposited Metal :

Element wt%	C	Mn	Si	Cu	Ni	Fe	P	S	Ti
AWS	0.15	4.0	1.5	27.0-34.0	≥62	2.5	0.02	0.015	1.0
Type Value	0.036	3.20	0.61	29.3	65.3	0.54	0.011	0.008	0.18

Mechanical Property of Deposited Metal:

	Yield Stress MPa	Tensile Strength MPa	Elongation %	Charpy V-notch J/°C
AWS	-	480	30	-
Type Value	-	520	44	-

Notes on Usage:

- 1 Rebake the electrodes at 350-400°C for one hour before use.
- 2 Clean up the contaminations on the base metal and welding seam.
- 3 Reduce heat input as possible, and while welding with weave method, moving range should be controlled within 2.5 times of the wire’s diameter.
- 4 Notice the travel speed to prevent from slag inclusion.
- 5 Keep the inter-pass temperature under 100°C.
- 6 Filling the crater after welding to avoid from crater cracks. Grinding with the Grinder if ther crack exists and then continue welding.

Sizes and Recommended Parameters:

Diameter and Size/mm		2.6×350	3.2×350	4.0×350
Current/Amp	F	60-90	80-115	110-150
	V, OH	55-85	75-100	-