

AWS A5.11 E Ni-1 KS D7021 D Ni-1 JIS Z3224 D Ni-1

Applications

Welding of Nickel 200 and 201 (Special Metals), Nickel 99.6 and 99.2 (VDM)

Characteristics

These consumables give low carbon pure nickel with the addition of titanium for refinement and de-oxidation. They are used for joining pure nickel to itself, for buffer layers, and for cladding joint faces and flanges.

Notes on usage

- (1) Dry the electrodes at 150~200°C for 60 minutes before use.
- (2) Use recommended current range. If not it will be much spatter and undercut.
- (3) Cleaning base metals before welding.
- (4) Keep the interpass temperature below 120°C.

Typical chemical composition of weld metal (%)

С	Mn	Si	Р	S	Ni	Al	Cu	Fe	Ti
0.015	0.64	0.69	0.002	0.003	95.8	0.07	-	0.54	1.12

Typical mechanical properties of weld metal

TS N/mm²(kgf/mm²)	EL %	X-ray Test	Bending Test	
520(53)	43	Good	Good	

Size & recommended current range (DC+)

Dia	. (mm)	3.2	4.0	
L (mm)		350	350	
Amp.	F	90-120	120-150	
	V&OH	80-110	100-140	