# PROWELD Ni99 For Cast Iron

## Classification

AWS A5.15 : ENi-CI

JIS Z3252 : DFCNi

DIN 8573 : E Ni BG 22

#### Applications

Welding and filling up of cavities of cast iron products.

## Characteristics

PROWELD Ni99 is a graphite type electrode with a pure nickel core wire. Weld metal is not so hard and is easily machined. Arc is stable and slag is easy to remove. No preheating is required in general.

Typical Chemical Composition of Deposited Metal (%)								
С	Si	Mn	Р	S	Ni			
0.5	0.5	0.5	≤0.020	≤0.010	98.0			

Typical Tensile Strength & Hardness of Deposited Metal

Tensile Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Vickers (HV)	Share	Heat Treatment
430 (43)	193	28	As welded

Size & Recommended Current Range (AC or DC+)							
Diameter/Length(mm)	3.2/350	4.0/350	5.0/350				
Welding Position		Current (A)					
F	70~110	110~150	150~190				
V, OH	80~100	120~140	160~180				

#### Guideline in Usage

- 1. Use dry electrodes only. Damp electrodes should be re-dried at  $80 \sim 120^{\circ}$ C for 60 minutes before use.
- 2. Remove degenerated layer completely and avoid continuous welding.
- 3. Deposit short runs and give hot peening at each bead.
- 4. Preheating and postheating are not necessary in general. However, preheating at 100-200°C is required for a structure which is apt to cause stress cracks.

# Welding Positions



All positions, except vertical down

Because PROWELD is constantly improving products, PROWELD reserves the right to change specifications without notice.

Approvals

TIS