



PHILARK PH NI 3

Coated Electrode for High Alloyed Special Steels Difficult to Weld



General Description

PHILARK PH NI 3 is a nickel-chromium-molybdenum electrode designed for welding of Inconel® 625 or 601, for high strength welds on 9% nickel steels, and for overlaying carbon steel

Used for joining dissimilar combinations of steels or stainless steels to nickel-iron-chromium alloys, such as Incoloy® 800 or 801

Crack resistance	████████
Bonding	███████
Machinability	████████

Mechanical Properties of Weld Metal

Tensile Strength : 60 - 65 kg/mm²

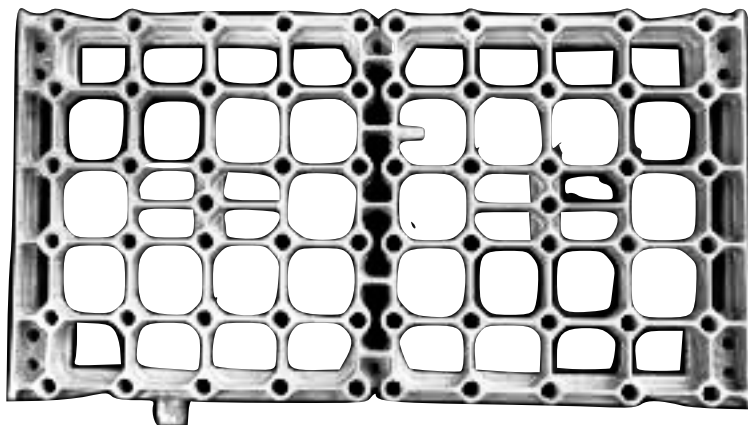
Yield Strength : 38-42 kg/mm²

Elongation (L=5d) : 35 - 40 %

Hardness : 140-180 HB

Typical Applications

- Joining or repairing of heavily constrained massive
- Walls of ball mills
- Superheaters of Pressure Vessels
- Machine parts subject to thermal cycling and sub-zero temperatures such as cryogenic equipments
- Heat treatment and case hardening of industrial furnace parts
- Ball mill driving gears, journals and collars - Blast furnaces
- Flame hardening equipments
- Crusher rotor Crack repairs
- Joining dissimilar combination of steels.



Heat treatment Trays

Welding Parameters

Current Type and Polarity : AC/DC(+)

Diameter [mm]	2.50	3.15	4.0
Length [mm]	350	350	350
Current [A]	80-90	100-110	120-140

