



# Weld 501-PL

## Powder For PTA/Laser Cladding

### PRODUCT DESCRIPTION

A specially designed powder that can operate in high temperature corrosive environments and is suitable for metal-to-earth and metal-to-metal wear, friction and impact. Can be used for hot applications up to 550°C.

### TYPICAL DEPOSIT CHARACTERISTICS

Abrasion Resistance	Good
Impact Resistance	Good
Deposit Layers	Up to 2 (6.5mm)
Microcracking	No
Matrix Hardness	HRC.50-55
Grain Size Distribution	100x270 mesh(45–150µm)

### ALL WELD METAL COMPOSITION (WT%)

C	< 0.2
Si	< 1.5
Mn	< 1.0
Cr	17.0 – 20.0
Ni	2.0 – 3.0
Mo	< 1.5
B	0.8 – 1.3
Fe	Bal
Other	< 1.0

### TYPICAL WELDING PARAMETERS

Current, amp	100 – 200
Voltage, volts	20 – 35
Shielding Gas, l/min	Argon, (7 – 9.5)
Plasma Gas, l/min	Argon, (1.5 – 4.7)
Carrier Gas, l/min	Argon, (5.7 – 8)
Stand-Off Distance, mm	13 – 19
Powder Feed Rate, g/min	23 – 151
Thickness per Pass, mm	1.0 – 3.2
Polarity	DCEN (Straight)
Position, AWS / EN	1G / PA

#### NOTE:

Typical arc parameters are likely to vary from one welding system to another. These are guidelines only and original equipment manufacturer specifications may apply.

### STANDARD SIZES & PACKAGING

Product	Packaging	Item No.
Weld 501-PL	5 kg bottle	EWPL5010P

### TYPICAL APPLICATIONS

- Steel mill roll
- Mining machinery



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