



HD-500 Solid State SCR Controlled Arc Welding Machine

The HD500 is an economical solution for the most demanding GMAW & Flux Cored Arc Welding applications.

Rated 500 Amp at 50% duty cycle (363 Amp at 100%) the "Heavy Duty" HD500 provides high quality welding performance from thin sheet metal to thick plate.

| Item | Specification | |
|----------------------|-----------------------------|----------------|
| Name | CPHD-500 (C0305) | |
| Rated Input Voltage | AC 230V 3Phase | AC 460V 3Phase |
| Input Voltage Range | 207V - 253V | 414V - 506V |
| Rated Input Power | 31.5 kVA (28kW) | |
| Rated Input Current | 79.1A | 39.5A |
| Rated Output Current | 500A | |
| Rated Load Voltage | 45V | |
| Output Current Range | 50-500A | |
| Output Voltage Range | 15-45V | |
| Max. No-Load Voltage | 65V | |
| Rated Duty Cycle | 50% | |
| Temperature Rise | 320° F | |
| Temperature Range | 14 - 104° F | |
| Mass | 364 lbs (165kg) | |
| Dimensions (in) | W: 16.1 X D: 26.0 X H: 37.2 | |

HD500 Key Features and Benefits

Versatility

- Ideal for use with mild steel and stainless steel wires - solid or flux cored.
- Very stable arc with 100% CO₂ or Argon / CO₂ mixtures on mild steel
- Positive output terminals for high and low inductance helps minimize spatter in any output range
- Built-in running gear with cylinder rack and steering handle
- Standard 15 ft. remote pendant provides wire feed speed, arc voltage, and wire inching control at the work area
- Pre-wired 7 ft. primary input power cable
- Wire slow-down on/off switch for improved arc starts
- On / Off switch for Fan-on-demand for power saving or extended cooling
- Light weight wire feeder with control circuits built-in the power source for durability

Simple Control Panel provides Advanced Functionality

- Wire Diameter - Gas & Wire Type Switch**
 - *Presets ideal fixed conditions to ensure a good arc start, arc end, and spatter control
- Digital Amperage & Voltage Meters**
- Crater Fill Function**
 - *Adjust output to easily fill the crater at the weld end
 - *Controls initial condition when selected (internal dip switch)
 - *Provides cruise control
- Synergic (One-knob) Control**
 - *Combines wire feed speed (Amperage) and arc voltage to easily go from this sheet to thick plate welding by adjusting only one knob - ideal for less experienced operators
- Penetration Control**
 - *Delivers uniform penetration even when tip-to-work distance varies
- Gas Check Switch**
 - *Activates gas flow to pre-set flow rate with no machine out-put to avoid wasting welding wire
- Warning Lamp (Error Detection)**
 - *Fully illuminates or flickers depending upon error type
 - *Trouble shooting guide identifies errors

