

Welding Systems Overview

CR500DA, CR510 & CTR12000





MODEL	CR500DA	CR510	CTR12000	BENEFITS
DESCRIPTION	Provides quality spot welds on all of today's high and ultra-high strength steels. It has a compact rugged design featuring powerful cutting edge inverter technology. The sophisticated software, with unique automatic control system, guarantees perfect welding results.	Provides quality spot welds on all of today's high and ultra-high strength steels. It has a compact rugged design featuring powerful cutting edge inverter technology. The sophisticated software, with unique automatic control system, guarantees perfect welding results.	Fully automatic process-regulated, multiple function spot welding machine with medium frequency inverter operation and liquid cooling. Designed for the repair of vehicle bodywork, particularly of components made of high or maximum strength, and also coated or laminated, steel panels.	
Maximum Tip Pressure	616 ft lbs @ 7 BAR	1236 ft lbs @ 7 BAR	1124 ft lbs @ 8 BAR	High tip pressure is needed for AHSS/Boron and future metals. Minimum of 1000 ft pounds should be available as new metals are being created at an alarming rate
Amperage Maximum Capacity	11,500 amps	11,500 amps	12,000 amps	Extremely powerful with decreased welding time and reduced heat to machine and weld area
Bad Spot Detection & Monitoring	Yes	Yes	Yes	Guarantees weld quality in finished repair.
Water Cooling Radiator System	No	Yes	Yes	Gives a cooler machine and tips, especially important when welding AHSS
Resin Coated Rectifier for Heat Control	Yes	Yes	Yes	Efficient heat dissipation for extra long welding duty cycles
Cooling Capacity LTRS	Not applicable	4 ltrs total & 4 ltrs per minute of <i>cooled liquid</i>	20 ltrs total and 6 ltrs per minute of <i>cooled liquid</i>	Higher capacity gives a cooler water source and improves the duty cycle
Cooling System	Air cooled	Yes + Water cooled	Water cooled with cooled water	Air cooling system for cables, gun and converter CTR12000, Completely liquid-cooled welding, from the power module all the way to the caps, providing a greater Duty Cycle
Welder Cable Diameter	240 mm sq.	240 mm sq	Transformer gun - diameter not critical (20' length)	Larger diameter cables enable more energy to pass in less time increasing duty cycle and reducing heat at the tips, cables, gun converter and heat affected weld area.
High Efficiency Diode Flat Packs	Yes	Yes	Yes	Enables more power in less time and with much less heat
Anti-Spin Electrode Shaft	Yes	Yes	Yes	Enables electrode removal ease
Isolated Ground Straps on Multi-Function Gun	Yes	Yes	Separate unit - ground straps not required	Increases safety, decreases explosion risk from improperly stored multi-function gun
High Pressure A-Tongue construction	Yes	Yes	Not Applicable	Capable of maintaining high pressure at the tips
600mm "U" Arm Extension	Standard	Standard	500mm Standard	Long reach "U" arms are standard, no additional cost, allows welding in hard to reach places
Rotation of yoke 360°		Yes	Yes	
Metal Type Detection	No	No	100% Automatic Self Detecting	CTR12000, no settings required, fully automatic eliminates need for vehicle spec. sheet, ensures proper weld nugget
Metal Thickness Detection	Manual	Manual	100% Self Adjusting	CTR12000, no settings required, fully automatic eliminates need for vehicle spec. sheet, gives accurate results via Pulse-Sonar System
Tip Pressure	Manual	Manual	100% Self Adjusting	CTR12000 automatically sets tip pressure according to metal type and thickness, gives accurate results
Automatic Amperage/ Power Settings	Semi-Automatic	Semi-Automatic	Fully Automatic	CTR12000, Advanced quality control system that monitors and adjusts the welder to guarantee the total energy input, gives accurate results.
USB Software Update Mode	Yes	Yes	Yes	Easily updated, enables faster and larger file uploads
Weld Logging Software	Optional	Optional	Optional	WinSpot QS Software enables documentation of each spot weld in a report format
Weld Cap Change Notification	Yes	Yes	Yes	Display notifies users when to check or change electrode caps
Personal Profiles	Yes	Yes	Yes	