

# WT6000 *MiniPak*

Medium Frequency DC Resistance Welding Control



- Compact Design - Reduced Floor Space
- Light Weight for Maintenance Ease
- Single Access Point for Power & Weld Transformer
- Proven Reliable Rotary Circuit Breaker Mechanism
- External Connectors for Ethernet IP, Device Net, ProfiNet, or ProfiBus
- Inverter Film Capacitor Design for Extended Life
- Multi Language (English, German, French, Spanish, Portuguese, Polish, Chinese, Korean)
- Web Based Programming for 255 Totally Programmable Welding Schedules
- Weld Tool Efficiency Monitoring (C-Factor) & Weld Transformer Protection (Flux Control)
- Weld Gun Transformer Diode Failure Detection



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WELDING TECHNOLOGY CORP

# WT6000 MiniPak

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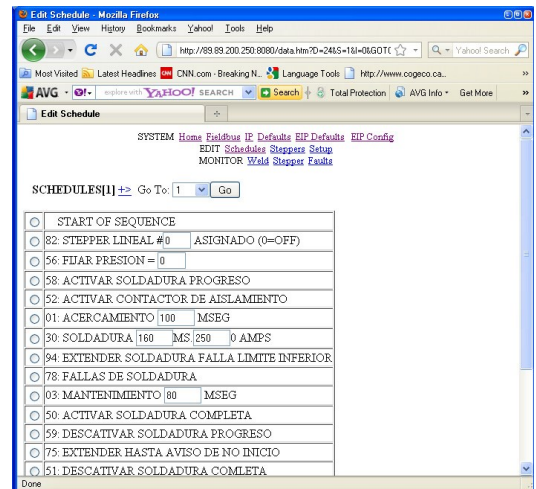
## Specifications

Power Source	
Voltage:	3-Phase AC 220V– 480V (± 10%)
Line Power Frequency:	50/60Hz (Automatic Selection)
Alternate Configuration:	Optional: 575V (± 10%)
Output Frequency:	1,000 Hz (Optional Range = 400Hz - 2,000Hz)
Output Current at 10% Duty Cycle:	400 amps
Device Type:	IGBT
Power Consumption:	70VA (Idling condition)
Processor	
Weld Processor:	WT6000 Integrated
I/O Protocol:	Ethernet IP 10/100 BaseT
Optional I/O Protocol:	Device Net, ProfiNet, ProfiBus
Onboard Inputs:	2 x 24VDC (for internal use)
Onboard Outputs:	3 x 120VAC (for internal use)
Number of weld schedules:	255
Number of steppers:	32
Processor Storage Type:	F-RAM (No Battery Required)
Weld Processor Languages:	English, French, German, Spanish, Portuguese, Polish, Chinese, Korean
Monitoring and Control Functions	
Firing Control:	Fixed Frequency, Option - Pulse Width Modulation
Firing mode:	Primary Constant Current Secondary Constant Current Voltage Control
Primary Current Range:	20A to Rated Current Level
Primary Current Accuracy:	± 1% Setting, ± .5% Repeatability
DC Bus Voltage Measurement Accuracy:	± 1% Setting, ± .5% Repeatability
Secondary Current Accuracy:	± 2% Setting, ± 1% Repeatability
Secondary Voltage Accuracy:	± 3%
Secondary Resistive Accuracy:	± 3%
MFDC Transformer Flux Protection:	Included
Digital Scope Function:	1 MHz Equivalent Uploads to PC
Duty Cycle Protection:	Monitors Inverter and Weld Transformer Duty Cycle
MFDC Weld Transformer Monitoring:	Secondary Diode Monitoring
Power Consumption:	70VA (Idling condition)

Enclosure	
Dimensions (mm):	300 H x 670 W x 505 D
Weight:	36Kg (80lbs)
Distance Between Mounting Centers:	640 mm
Water Fittings:	3/8 BSPP
Color:	Silver
Environmental Conditions	
Operating Temperature:	5 C° to +50 C°
Humidity:	0 - 90% Relative no Condensation
ESD:	EN 61000-4-2 Level 3
Noise Immunity:	EN 61000-4-4 Level 3
Surge Immunity:	EN 61000-4-5 Level 3
Water Cooling Requirements (for Water Cooled Version)	
Maximum temperature not to exceed 40° C. (104° F.), or fall below the dew point of ambient air at about 21° C. (70° F.). pH maintained between 7.0 and 8.0	
Maximum chloride content 20 parts per million (PPM)	
Maximum nitrate content 10 PPM	
Maximum sulfate content 100 PPM	
Maximum suspended solids content 100 PPM, non-abrasive	
Maximum total (suspended and dissolved) solids content 250 PPM	
Maximum calcium carbonate content 250 PPM	
Minimum Water Flow Rate:	Greater than 5 liters per minute (1.32 gal/min)
Pressure Rating:	less than 620 kPa / 6.2 bar / 90 PSI
Electrical Sensitivity of Water:	more than 5000 ohms / cm
Water Inlet Temperature:	Less than 35 C°
Air Cooling Requirements (for Air Cooled Version)	
Ambient Air Temperature:	Less than 40 C°
Minimum Fan Rating:	80 CFM

The **MiniPak's** low profile design mounted on top of the robot controller allows line of sight over the combination with reduced floor space requirement.

The **MiniPak** also features web pages that can be program via the robot's teach pendant.



MiniPak web page as seen on robot pendant

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