

WT6000 MFDC

Latest Generation of Resistance Welding Inverters

The WT6000 Medium Frequency DC control is used by major automotive manufacturers for welding steel and aluminum bodies. Over 60,000 inverters during last 10 years have been provided for major automotive projects.

- Up to 255 Weld Programs (Optional 511)
- Multi-Language Programming
- Web Based Interface
- Free Format Programming for Various Applications
- Configurable I/O
- Network Ready (View-R)
- Various I/O Connectivity
DIO, Device Net, Ethernet IP, ProfiNet, ProfiBus
- Weld Tool Efficiency Monitoring
- Weld Transformer Protection (Flux Control)
- Weld Transformer Diode Failure Detection
- Duty Cycle of Inverter Monitoring
- Laptop or DEP Interface for Programming and Data Acquisition
- Secondary Current & Voltage Monitoring
- Oscilloscope Quality Data Archiving
- 220v-480VAC 50/60hz Mains (600VAC optional)
- Programmable Output Frequency (400-2000 hertz)



WT6000 MFDC powered by
GEN6 inverter technology

Supported Languages:

English, German, French, Spanish, Portuguese, Chinese, Korean, Polish



WT6000 for Welding Steel & Aluminum

WT6000 MidPak MFDC (Welding Steel) - mounts on top of robot controller

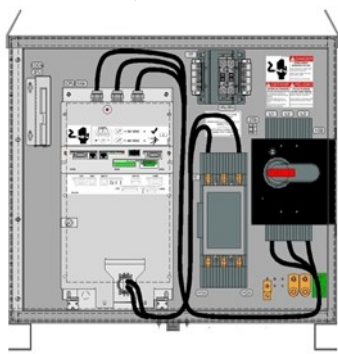


- 100 Amp, 3 Pole Circuit Breaker with magnetic, thermal, and external shunt trip
- Size 3 Isolation Contactor for safety
- 250VA Control Transformer
- GEN6 BW4 Inverter
- Device-Net, EIP, ProfiBus, or ProfiNet Connectivity
- RAFT Feature (Optional)

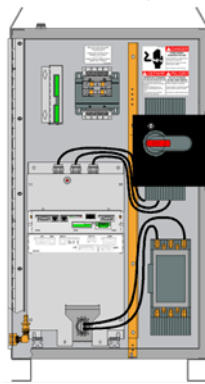
WT60U5

Various Enclosure Types for WTC Inverter Controls

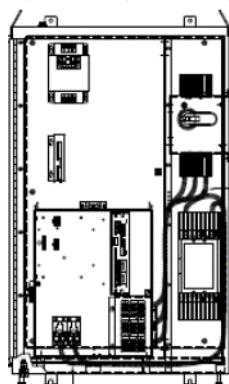
Model	Description	Dimension (mm)			Circuit Breaker	CIOM Option	Tip Dress Option	XFRM VA	Inverters
		X	Y	Z					
WT60U5	MidPak	640	600	390	100	N	N	250	BW
WT60TN	Top Mount	737	610	432	150	Y	Y	250	CA, CW
WT60LN	Tall MidPak	597	737	356	125	Y	Y	250	CA, CW
WT600N-A1	A1 Stand	510	838	406	150	Y	Y	250	CA, CW
WT604N	A10 Stand	711	1105	406	250	Y	Y	500	DW
WT600N-A3	A3 Multi	990	1500	457	250 / 400	Y	Y	500 / 600	3X - CW
WT600N-A13	A13-AO	510	1500	457	150	Y	N	250	1W3C - CW
WT6055-FF-TD	A50 - Aluminum / Force Feedback	1016	1105	457	400	Y	Y	675	EW
WT6005	2-Door cabinet	1264	1680	710	800	Y	Y	675	2X - EW
WT6065	A60-Cascade 1-3	950	1525	410	400	Y	Y	675	1W3C - EW
WT6055-AO	6055-FS	1016	1765	457	600	Y	Y	675	FW
WT6001	2-Door cabinet with Air Cool	2252	1984	613	1000	Y	N	675	GW
WT6001	3-Door cabinet	3016	2238	613	1600	Y	N	675	HW



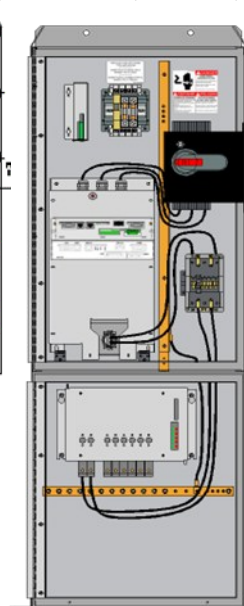
WT60TN



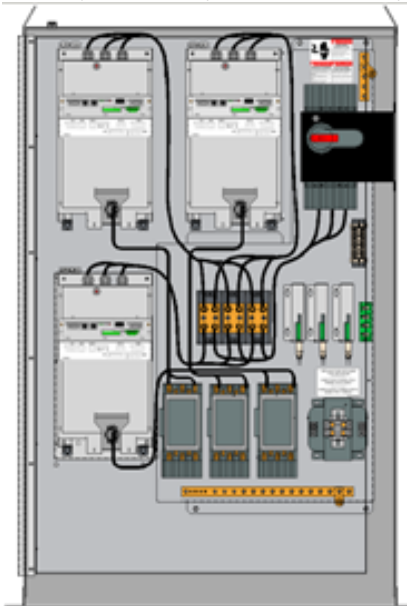
WT600N-A1



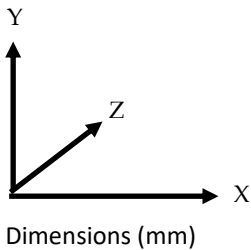
WT604N



WT600N-A13



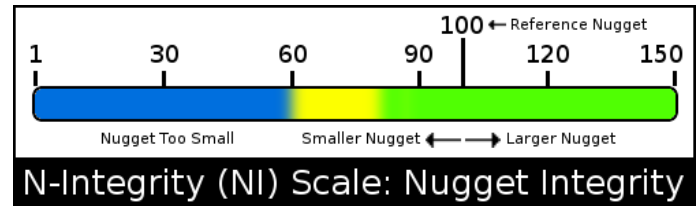
WT600N-A3



Adaptive **RAFT** Features

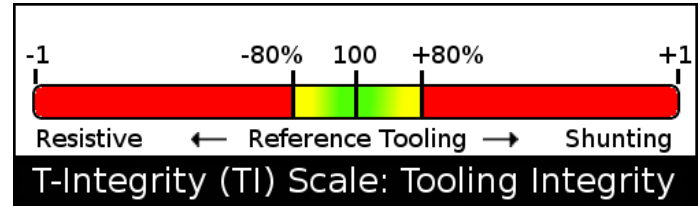
Nugget Integrity - Verification of Weld Nugget Size

SoftQ reports the nugget integrity for each weld, which is derived from the ratio of the actual weld against your reference weld nugget size.



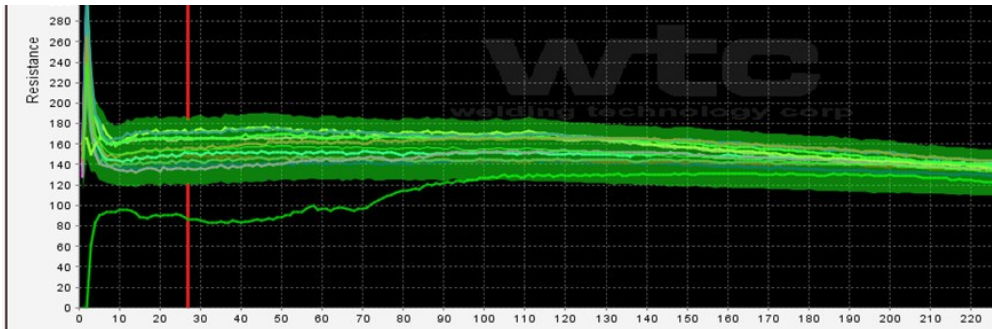
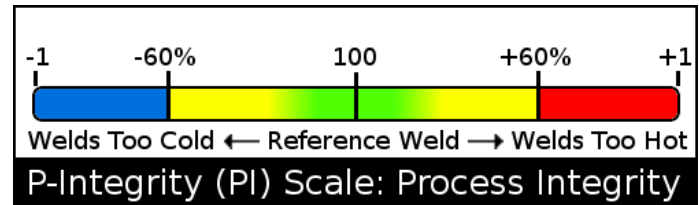
Tooling Integrity - The Tooling Health

Schedule maintenance with Tooling Integrity. SoftQ reports tooling wear and shunting paths.



Process Integrity - Identify Process Changes

SoftQ identifies process changes caused by disturbances. These disturbances could be a result of part fit up, shunting, sealer, part coating, incorrect stack up and knowing these process changes before they cause problems will improve the quality in your welding processes.



You can easily develop comprehensive process resistance envelope and detect any operations that goes outside these boundaries. With the View-R Network concentrator, you can report these excursions by control, by machine, and by part.

SoftQ

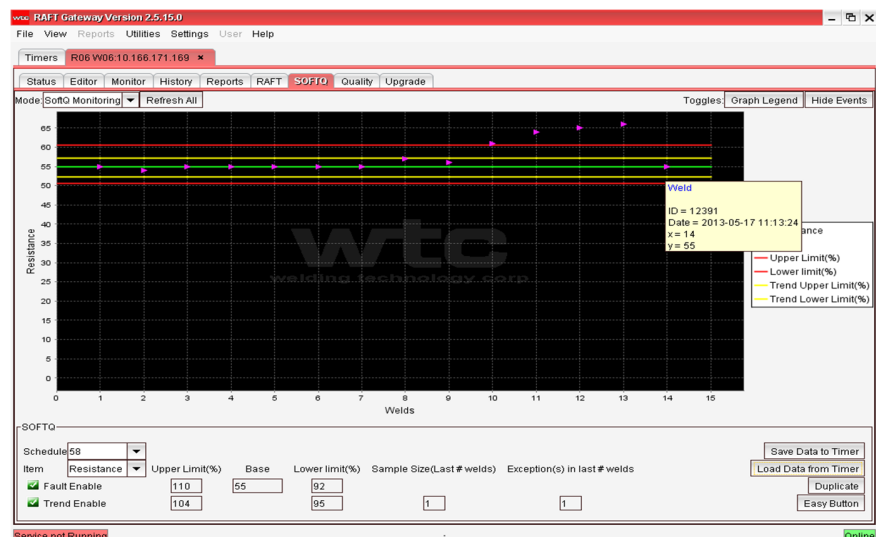
Keeping an Eye on Tip Dress Operations - **Tip Dress Verification!**



The WTC control can measure precise resistances of welding tips after they have been dressed. Although dressers can remove slag from the edges, the control will identify if the surface of the electrodes are brought back to an approved condition.

View-R has a SoftQ tool for graphing the results of the tip dress operation so that you can monitor the effectiveness of the tip dresser cutter blades. You can set an alert level and a faulted level.

Users claim that the SoftQ Tip Dress monitor is the fastest payback feature of **RAFT** for welding.



Enhance Your Productivity with Quality



RELIABILITY

- **WELD TRANSFORMER PROTECTION** (Flux Control)
- Weld Transformer **SECONDARY DIODE SHORT DETECTION**
- **TOOLING INTEGRITY** - Monitoring of Secondary Degradation
- **PROCESS INTEGRITY** - Confirmation of Consistency

WELD SPILL AVOIDANCE

- **NUGGET INTEGRITY** - Verification of Nugget Size
- **TIP DRESS VERIFICATION** - Confirmation of Dressed Electrodes
- **ADAPTIVE WELDING** - Automatic Compensation for Minor Disturbances



TECHNOLOGY

- **SoftQ** - Monitoring of Tooling, Process and Nugget Integrity
- **RAFT™** - Adaptive Quality Algorithm
- **FORCE MONITORING** - Graphical Data of Force Profile
- **FORCE CONTROL** - Set a Forge Force Value and Send Signal to Execute to Robot
- **VOLT/SECONDS FIRING** - Switch from Constant Current to Volt/Secs Firing for Projection Welding

QUALITY TOOLS

- **FAST RISE TIME** to Target Current - Achieve Target Current Faster
- **BALANCED FIRING** of Weld Transformer - Avoid Weld Transformer Saturation
- **GRAPHICAL REPRESENTATION** of Resistance, Current, Force and Energy (ms time base)
- **EXPULSION FREE REPORTING** - Minimize or Eliminate Expulsion

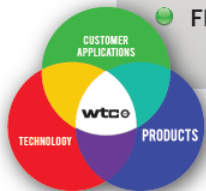


APPLICATIONS

- **VARIOUS I/O CONFIGURATIONS** - Ethernet IP, ProfiNet, ProfiBus, Device Net, Discrete
- **MULTI-LANGUAGE:** English, French, German, Spanish, Portuguese, Chinese, Japanese, Korean, Turkish
- **ROBOTIC WELDING**
- **MANUAL WELDING**
- **FIXTURE WELDING**

WT6000 PROGRAMMABILITY

- **SEAM WELDING**
- **PROJECTION WELDING**
- **GROUND FAULT MONITORING**
- **ANALOG I/O**
- **VARIOUS INVERTER SIZES**
- **PROGRAMMABLE OPERATING FREQUENCY** 400-2000hertz



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