INVERTER CONTROLLED SPOT WELDER

# **ID40IV HP NT**



# ID40IV HP NT — An Advanced Spot Welding Solution



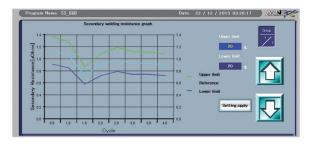
A lack of advancements in spot welding has left this manufacturing process unpredictable and time-consuming, especially during part changeover. The **ID40IV HP NT** features the latest inverter spot welding technology that is capable of consistently producing high-quality, sparkless welding. Vertical press type welding combines the power of inverter technology with the accuracy of a microcomputer controller.

An integrated AMNC PC Touchscreen Control provides storage and editing capabilities of welding programs and conditions. Additionally, the control features a digital camera that allows reference photos to be embedded with welding programs — resulting in reduced setup times and maximum productivity.

- Latest inverter spot welding technology
- · Consistently produce a high-quality, sparkless weld
- Integrated AMNC PC Touchscreen Control
- Digital camera can capture reference photos
- Reduce setup times and maximize productivity

# AMNC PC CONTROL

To decrease setup times between a variety of material types, the ID40IV HP NT features an AMNC PC Touchscreen Control. This control provides users a variety of on-screen information, including the ability to store and edit multiple welding programs. Welding programs include material type, thickness, electrode configuration, and welding conditions. Any editing performed to the program, including the addition of notes and photos, can be conveniently saved to the control. Reports containing key welding information can be output as a PDF document.



Graphical plotting

# **Digitally Capture Setup and Welding Information**

A digital camera allows operators to take photographs of a specific program for future reference. On-screen editing allows written notes, freehand drawing, and labeling of spot weld locations to indicate the proper sequence for a specific welding task.





Program list

Program editing

# **Graphical Plotting of Welding Waveforms**

This feature registers a trial weld waveform as a reference to achieve consistent, high-quality welds. Subsequent welds are monitored and compared to the trial weld and if the programmed threshold is reached, an alarm is generated. Trial waveforms can be saved with each program and can easily be recalled and referenced in the future.







Embed reference photos

#### KEY FEATURES





# **Quick Release Couplers for Coolant Hoses**

To facilitate replacement of the electrode holder and decrease setup times, quick release couplers allow the coolant hoses to be connected and disconnected with ease.





#### One-Touch Clamp Lever With Rotary Dial

The horn is easily clamped using a one-touch clamp lever. A rotary dial allows users to perform precise adjustments when aligning the electrodes.



# **Advanced Inverter Power Supply**

The advanced inverter power supply is capable of producing 30,000 amps of consistent welding current. With reduced weld cycles, the power consumption requirement of the ID40IV HP NT is approximately 20% of standard welders.

Using only 100 amps at 460 volts, the inverter power supply provides a powerful current that achieves consistent, high-quality welds. Generally, many of the inconsistencies in resistance welding are due to fluctuations in line voltage. The

inverter power control automatically compensates for any variances in line voltage and maintains a reliable welding current.

The inverter power supply provides a direct current enabling short weld cycles, low current, and lower electrode pressure. By combining all of these factors, electrode life is extended and the cost of welding operations are reduced.

# CLEAN, SPARKLESS WELDING

Class A welding performance that requires little or no post processing.







Mild steel Stainless steel Aluminum



# SPECIFICATIONS

Welder	
kVA Rating	80kVA
Max. Welding Current	30,000 amps
Max. Electrode Force	1,320 lbs.
Admissible Duty Cycle	10%
Electrodes	0.62" x 1/10" taper
Throat Gap / Throat Depth	7.8" / 23.6"
Horn Spacing	I.970" x 0.787" (maximum open x working open)
Electrode Holder	11/4" x 8" (diameter barrel x long)
Holder Arm	2.7" (diameter)
Required Air	71 psi, 12 CFM

In the interest of technological progress, we reserve the right to make changes to equipment specifications, design, and illustrations. Workpiece precision and material thickness specifications are dependent on production conditions, material type, and pretreatment.

Inverter Controlled Power Supply	
Power Supply Primary Voltage	3-phase, 460V 100A
Voltage Output	300V
Current Output	600A
Power Demand Maximum Capacity	180kVA
Duty Cycle	5%
Estimated Cooling Water Amount	5L/min.
Required Cooling Water	1.6 gallons/min.

Material Thickness Specifications	
Mild Steel	Up to 0.125"
Galvanized	Up to 0.125"
Stainless Steel	Up to 0.118"
Aluminum	Up to 0.098"

