

### MFDC3 INVERTER



MFDC3 - 1600A



MFDC3 - 600A

**MFDC3 - 3rd Generation  
Mid-Frequency Direct Current  
Inverter for  
SPOT WELDING APPLICATIONS**

#### CHARACTERISTICS:

- **Modular Design:**  
Tailored for the Customer Application with modular Expandability.
- **Powerful:**  
Energy available for the weldability of many materials. Fine Current Control by a state-of-the-art software algorithm. High Reliability.
- **Compact:**  
Small dimensions, easy integration into Welding Cabinet.
- Separate Supply of Control and Power Circuits.
- Max Peak Current:  
600A, 1200A or 1600A
- Cooling: Air or Water
- Programmable via serial or ethernet with Hand Held Terminal HHT 4400 or PC Windows and Software WMS - Welding Management System.

### WMS Welding Management System

- Completely developed by **ISI WELDING**, it is compatible with the latest **Windows OS** versions.
- Centralization of the Timer Information.
- Remote Management of a high number of Welding Spots, easy-of-use, with specific functionality to reduce the programming time.
- Identification of the Welding Spot by using the specific spot name.
- Definition of comment field for the Welding Spot.
- Single Command with Action on more elements.
- On-Line & Off-Line Programming.
- Function for Import / Export of the various data to / from the database.
- Use of a Relational Database Engine for the big mass of data storage.
- IoT (Internet of Things) M2M Communication.

### WQS Welding Quality System

#### Oscilloscope Function:

Show the most significant waveforms relating to the welding spot, particularly useful in the phase of fine-tuning of a welding program.

#### Automatic Correction of Welding Parameters:

The system is able to correct the current during the welding phase of the sheet metal to guarantee the correct energy involved in the welding process. This function has the purpose of minimizing the risk of making "sticky" welds due to the shunt effect or electrode wear and checks for the presence of an ejection of welding material.

#### Classification and Diagnostics:

The system is able to provide an assessment of the welds. The waveforms and their characteristic parameters are saved on the personal computer for each Welding Spot using the WMS Software. The user has the possibility to choose a series of welds of acceptable quality thus creating a training database for each welding program, therefore for each type of welded spot. The system is able to process this database by obtaining the necessary information in order to classify the next welds (i.e. to recognize if they have similar characteristics to those used for training).

