KNOWLEDGE BASE

Inverter Technology

The Advantage

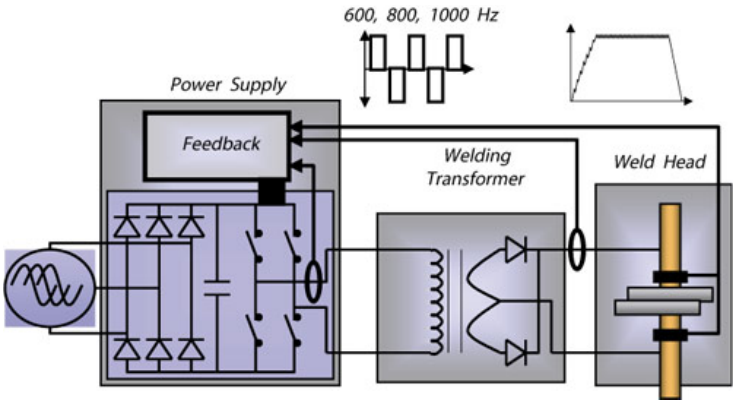
Resistance Welding fundamentals have not changed. Technology has! As a result, State-of-the-Art technology will produce superior welds at a lower overall cost! The initial capital investment will be slightly higher, however, Power reduction and Weld Quality will overshadow this expenditure.

The Benefits

- Balanced Load across Three Phase System
- High Power Factor
- Reduced Primary Ampere Demand
- Reduced Primary Wire Size, Conduit, Circuit Breakers etc.
- Weld Times can be shorter than ½ Cycle (< 8.3 milliseconds)
- Closed-loop Secondary Feedback Control
- Ideal for Resistance Welding Aluminum (All Grades and Conditions)
- Qualify to Mil-Spec 6858A

The Technology

Modern Electronics has made it possible to “invert” a D.C. signal into a medium frequency (400 to 1200 Hz) A.C. signal which is applied to a compact medium frequency Welding Transformer. The physical iron core cross sectional size and weight of a Welding Transformer is inversely proportional to the input frequency, therefore, Medium Frequency Inverter Welding Transformers are much more compact than conventional 60 Hz Welding Transformers. The output of the Welding Transformer is rectified to produce a clean D.C. output with no Inductive Loss. Advanced high-speed electronic circuitry within the Welding Control samples IGBT and Welding Transformer output signals in real time and automatically compensates for variances, which may occur during the welding sequence. This method of Closed-Loop Feedback makes Inverter Technology the clear choice for critical metal joining applications



SUPPORT

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