Study and control of PWM arc welding inverter based on a microcontroller

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Abstract: This paper presents an arc welding inverter, based on a microcontroller device for generate PWM pulse. An IGBT inverter was established by applying several control techniques. This system improves the power factor of welding machine and reduce the harmonics. Simulations results are presented to show the operation of proposed system.

Keywords: arc welding inverter, microcontroller, PWM, IGBT inverter