Resistance Spot Welding Applications

Electronic Components, Relays, Switches, Thermostats

Amada Miyachi America has been the world leader in the design, manufacture and application of precision resistance welding equipment and systems for more than 65 years. Our product line offers the broadest range of welding power supply, control, transformer, weld head, electrode and accessory choices which, in a multitude of combinations, can deliver optimum weld quality, productivity, yield and throughput. Amada Miyachi America’s products provide superior performance in automated, production line, bench top, hand-held, and laboratory environments. All products are manufactured under an ISO 9001 certified system and are built to comply to CE regulations.

Following is a sampling of the many applications, over a broad range of products and a variety of markets, that are performed successfully every day by thousands of satisfied Amada Miyachi America customers. Due to space limitations and customer confidentiality, we have not included every application. Contact your local Amada Miyachi America representative for additional application information and examples.
BATTERIES AND BATTERY PACKS

Power tool battery pack connector
NiMH battery pack
Prismatic battery tab
NiMH battery tab

Lithium-ion coin cell battery tab
Prismatic nickel/cadmium battery assembly
Battery tab to lithium-ion cell
Battery cans and assembly

LAMPS AND TELEVISION TUBES

CRT Electron Gun
Automotive head lamp
Lamp assembly
Halogen lamp filaments

AUTOMOTIVE ELECTRONICS AND SENSORS

Air bag diffuser
Automotive switch
Air bag detonator module (squib wire)
Anti-lock brake system solenoid

Automotive sensor printed circuit board
Automotive sensor
Turn indicator assembly
Anti-lock brake system module
HEATING ELEMENTS

- Cal-rod heating element
- Flat heating element
- Hair dryer heating assembly
- Ceramic hot-plate element

TELECOMMUNICATIONS, COMPUTER AND HARD DISK DRIVES

- Hard disk drive lead frame assembly
- PC components
- Cellular phone antenna assembly
- PCMCIA card

MEDICAL DEVICES AND TOOLS

- Cauterizing tool
- Pacemaker
- Catheter guide wire assembly
- Hearing aid electronics

MOTOR ARMATURE FUSING

- Motor armature fusing
- Slotted motor armature fusing
- Motor fusing
- Motor cores for phones

ELECTRICAL COMPONENTS

- Switch assembly
- Crystal to leadframe
- Piezo electrical device
- Lead frame for crystal oscillator
WELDING SYSTEM SELECTION

The selection of a welding system is based on many application variables. The user must match the metallurgy, shape, configuration, condition and weldability of the parts to be joined with the production objectives which might include throughput, yield, welding strength, weld appearance, and deformation as tempered by equipment cost, electrode life, automation, and process data collection requirements. Amada Miyachi America operates applications laboratories around the world which, at no cost, provide written parts evaluation, sample parts welding, equipment and process recommendations, and user training.

Contact your local technical sales and service representative for assistance in selecting the best equipment from Amada Miyachi America’s broad product line to match your specific requirements.