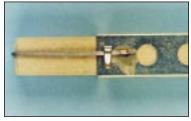
# RESISTANCE SPOT WELDING APPLICATIONS

Unitek Equipment has been the world leader in the design, manufacture and application of precision resistance welding equipment and systems for more than 50 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. Unitek Equipment'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 Unitek Equipment customers. Due to space limitations and customer confidentiality, we have not included every application. Contact your local Unitek Equipment representative for additional application information and examples.

## Electronic Components, Relays, Switches, Thermostats



Resistor support bracket



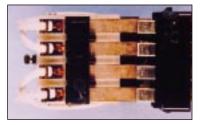
Appliance solenoid



Thermal cut-off assembly



Sensing device



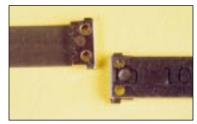
Relay terminal connection



Microphone plug



Element assembly



Relay latch plate assembly



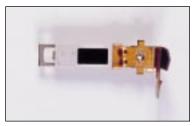
Power solid state relay (SCR)



Reed-switch assembly



Relay



Switch assembly



## **Batteries and Battery Packs**



Power tool battery pack connector



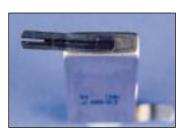
Lithium-ion coin cell battery tab



NiMH battery pack



Prismatic nickel/cadmium battery assembly



Prismatic battery tab



Battery tab to lithium-ion cell



NiMH battery tab



Battery cans and assembly

## Lamps and Television Tubes



**CRT Electron Gun** 



Automotive head lamp



Lamp assembly



Halogen lamp filaments

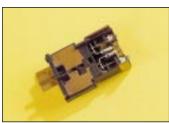
#### Automotive Electronics and Sensors



Automotive sensor printed circuit

Air bag diffuser

board



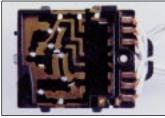
Automotive switch



Automotive sensor



Air bag detonator module (squib wire)



Turn indicator assembly



Anti-lock brake system solenoid



Anti-lock brake system module

## Heating Elements







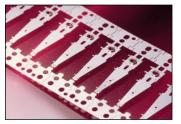
Cal-rod heating element

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**



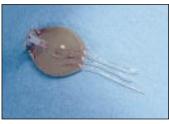
Cauterizing tool



Pacemaker



Catheter guide wire assembly



Hearing aid electronics

## Motor Armature Fusing



Motor armature fusing



Slotted motor armature fusing

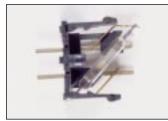


Motor fusing

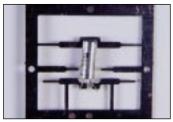


Motor cores for phones

## **Electrical Components**



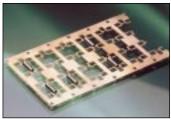
Switch assembly



Crystal to leadframe



Piezo electrical device



Lead frame for crystal oscillator

#### **Miscellaneous**



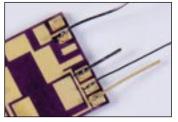
Rigid flex connector



Cigarette lighter



Coating wire (solenoid)



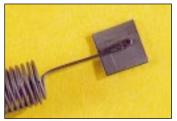
Fine wire to pad



Smart cards



Body piercing jewelry



Heating element interface



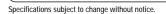
Gold wire to ceramic substrate

## 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. Unitek Equipment 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 Unitek Equipment's broad product line to match your specific requirements.

Your Local Representative



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