

WELDING HEADS

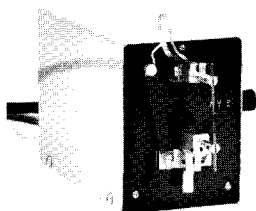
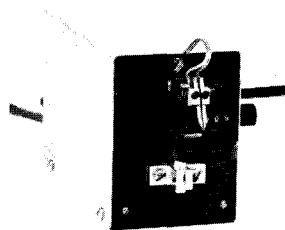
Model VTA-90

Micro Weld Head

The Model VTA-90 has been developed to provide the ultimate in precision force control through the use of accurate dead weights for force application. This head has seen wide use in laboratory and production installations where precise control is required. The head converts quickly from parallel gap to opposed configurations. In the parallel gap welding mode, variable gap and compliant tip design features like those of the VTA-66 head are employed. A kit is also available for the conversion to pulsed tip thermocompression ball bonding, providing a wide range of microjoining capability.

Design of the VTA-90 incorporates a precision mechanism that completely eliminates "overpressure" without requiring the adjustment of mechanical stops. Force applied is independent of work thickness. This precision control prevents deformation and damage to delicate assemblies. Unique no-drag bearings are used to achieve a hitherto unattainable degree of repeatability of applied electrode force. Lateral and front-to-back electrode play are completely eliminated, thus assuring precise location of finely pointed electrodes on minute work areas.

For ease of setup and to further insure repeatability, force settings are selected and displayed by means of a digital indicator. A reference curve anodized on the head's cover provides ready conversion of index units to grams.



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SPECIFICATIONS • Model VTA-90

Weld Head Type	Dead weight, compound lever type
Electrode Force Range	Less than 10 grams to 2 pounds
Force Selection Mode	Digital-indicated adjustment
Electrode Gap	Less than .001" to .015" continuously adjustable
Electrode Actuation	Foot pedal operated flexible cable type (included)
Connection	Weld cable or bus bars. Bus bars included as standard
Dimensions	4" high, 2½" wide, 7½" deep overall
Weight	2 pounds (head alone)
Throat Depth	1¾ inches
Maximum Weld Energy Ratings (limited by electrodes used)	
Parallel-gap Electrodes	100 watts maximum
Opposed Electrodes	20 watt-seconds max.
Equipment Included	Solid bus bars, switchcord and feedback leads for hookup to MCW-550 Power Supply; special Flex-Line foot actuator pedal; all fixtures and mounts necessary for operation with either parallel-gap or opposed electrodes; one pair ESQ-815-13 parallel-gap electrodes and one pair EH-062-02 opposed electrodes.
Additional Equipment Required	Welding Power Supply
Optional Equipment	10:1 Micropositioner Model MA-XY-90