



70 Series Servo Motor Driven Weld Heads

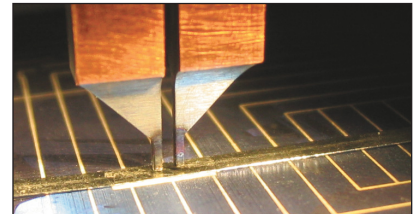
- Programmable speed and positions
- Controlled servo motor actuation eliminates overforce
- Extremely low-end force control (0.25 lbs.)
- “Soft Touch” part clamping
- Displacement and force options communication
- Unitip and blade thermode option

Designed for use in automation or benchtop welding, Miyachi Unitek’s 70 Series Weld Heads offer fast, repeatable electrode motion control for a wide range of resistance welding applications. Two different models are available, each equipped with an easy-to-program, state-of-the-art servo motor controller that allows precise programming of electrode position and speed for up to 32 different weld schedules.

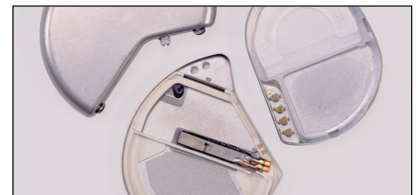
KEY FEATURES

- **32 schedules**
Write and save up to 32 motion schedules
- **“Soft-touch” part clamping**
Minimizes impact force – allows verification of part alignment prior to welding
- **Fast follow-up**
Less weld splash, more consistent welds
- **Individual speed control for “stroke to search” and “search to weld”**
Good for automation – increases flexibility and throughput
- **Overforce protection**
Ensures concise, repeatable force, less weld splash, reduced part deformation
- **Force independent of part height**
Constant applied force ensures weld repeatability
- **Easy programming**
Fast, efficient schedule adjustment

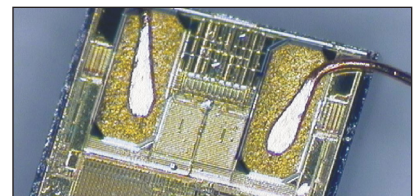
TYPICAL APPLICATIONS



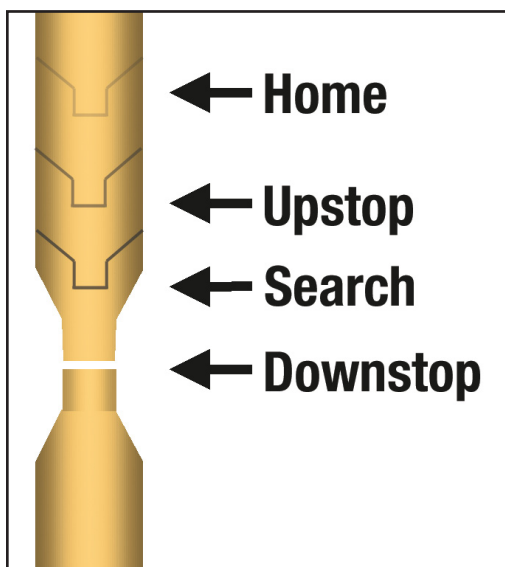
Solar Cell



Resistance Spot Weld, Pacemaker Interconnects



0.002" diameter magnet wire to gold pad



SERVO MOTOR DRIVEN WELD HEADS

programmable electrode positions – accurate to .004”

- The “Home” position allows for easy access during maintenance.
- The electrode is in the “Upstop” position in the “Ready” state.
- The first level of the footswitch moves the electrode down to the “Search” position at a programmable “Soft-touch” speed.
- The second level of the footswitch applies the pre-set welding force, with no overforce.
- The programmable “Downstop” inhibits welding if parts are not present.

SPECIFICATIONS

Model Number	Model 71	Model 72
Head Type	Opposed	Parallel
Force Range	0.25 – 8 lbs.*	0.25 – 8 lbs.* per electrode
Weld Force Method	Spring force setting	
Actuation Method	Servo motor	
Electrode Stroke	1.5 inches max. (.004-inch steps)	
Throat Depth Inches	4	8
Number of Schedules	32 (selectable externally)	
Electrode Speed	Start point – Mid point – 8 speeds adjustable by schedule (20-300mm/s) Mid point – Welding point – 4 speeds adjustable by schedule (7.5-30 mm/s) 8 settings (100, 200, 300, 400, 500, 1000, and 2000 ms, external END signal)	
Power Supply	100 - 220 VAC 50/60 Hz	
Welding Current	3000 amps @ 2% DC	
Weight Lbs.	9	16

*Force range dependent on which spring is used.

