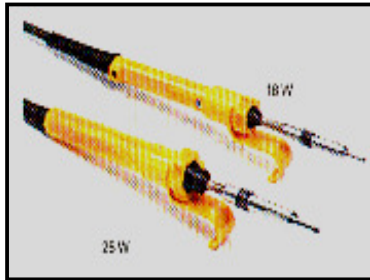


# SOLDERING WORK-STATION

Feedback controlled with battery back-up/energy efficient

MSWS-Series

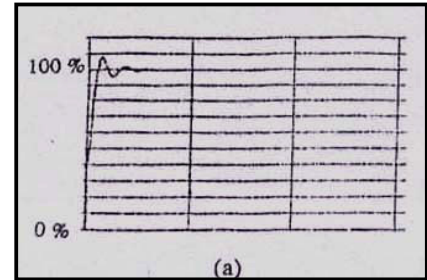
**Introduction:** MSWS series of electronic soldering workstation optimally controls tip temperature irrespective of volume/weight of bit or any metallurgical/ thermodynamical properties of solder using feedback/ feed forward control topologies assisted by multi point average temperature sensing technique (using thermopiles), which ensures homogeneous and stable thermal distribution at soldering tip. Tip temperature is controlled using high frequency chopper control system, working under constant current thermal feedback control. Soldering workstation may operate on battery/ main supply. These finds application in electrometallurgical applications, biomedical, othopaedics, MEMS, space, psychological research, high energy physics, bio-metric, Welding, Semiconductors, thin film, ceramics, medicine ,Photovoltaic/piezoelectric/smd/dielectric ,Telecom, space, avionics, telecom, nuclear, defense , RF/MEMS devices/sensors manufacturing, industrial electronic , Heavy electrical engineering, solid state physical researches. local surface relieving etc.



ELECTRONIC SOLDERING WORKSTATION



MCRO SOLDERING IRON



FEEDBACK CONTROLLED SOLDERING IRON

**Soldering iron mechanical/electrical specifications:**

| Model     | Watts | Volts | Amps | Bit Temperature °C/<br>Back-up time | Model     | Watts | Volts | Amps | Bit Temperature °C<br>Back-up time |
|-----------|-------|-------|------|-------------------------------------|-----------|-------|-------|------|------------------------------------|
| MSWS00101 | 010   | 220   | 0.05 | 350/06hrs                           | MSWS00102 | 010   | 12    | 00.8 | 350/06hrs                          |
| MSWS00201 | 020   | 220   | 0.10 | 350/03 hrs                          | MSWS00202 | 020   | 12    | 01.6 | 350/03 hrs                         |
| MSWS00351 | 035   | 220   | 0.20 | 350/02hrs                           | MSWS00352 | 035   | 12    | 02.4 | 350/02hrs                          |
| MSWS00501 | 050   | 220   | 0.25 | 350/1.5hrs                          | MSWS00502 | 050   | 12    | 04.0 | 350/1.5hrs                         |
| MSWS01001 | 100   | 220   | 0.50 | 350/0.5 hrs                         | MSWS01002 | 100   | 12    | 08.0 | 350/0.5 hrs                        |
| MSWS02501 | 250   | 220   | 1.25 | 350/0.2hrs                          | MSWS02502 | 250   | 12    | 20.0 | 350/0.2hrs                         |
| MSWS05001 | 500   | 220   | 2.50 | 350/0.1hrs                          | MSWS05002 | 500   | 12    | 40.0 | 350/0.1hrs                         |

**High Frequency Soldering work station controller:**

Operating voltage 220 volts, 1/3 phase, 40-60 Hz  
 Output current/voltage 0-8.0/0-40 Volts/40.0 Amps (max)  
 Operating frequency 10 K.Hz  
 Temperature-time profile control facility with display.  
 Temperature control accuracy 99% of set point/0.1 °C  
 Step down ration: 1:100  
 Repeatability 100 percent  
 Response time 0.5-1.1 milli-seconds  
 Interface Signal 0.0-12.0 volts D.C. (proportional to temperature)-optional  
 Workstation with large wattage/ higher temperature control available  
 Voltage control range 0.0-8.0 volts  
 SPACE-MARK RATIO 1:3 to 1:9  
 Control options 1.cascade feedback control with soft start/sliding mode  
 2. Contant voltage/current with external adjustment.  
 Display Temperature/Voltage/current in 3½ red glow LED display  
 Protection over voltage/short ckt.



MSWS00501



GOLD/SILVER PREFORM

**Soldering work station controller diemnsion:**

|               |          |               |          |
|---------------|----------|---------------|----------|
| MSWSW-4000015 | 04X06X06 | MSWSW-4002000 | 05X08X08 |
| MSWSW-4000050 | 04X06X06 | MSWSW-4004000 | 05X08X08 |
| MSWSW-4000200 | 04X06X06 | MSWSW-4008000 | 05X08X08 |
| MSWSW-4001000 | 04X06X06 | MSWSW-4015000 | 05X08X08 |

**FOUR** numerals after MSWS indicates WATTAGE and last digit indicate 1-A.C./2-D.C.. All dimensions are in inches.

**MOTORON SEMICONDUCTORS CORPORATION**

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