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(858) 536-5050
For Quote

DEN-ON RD-500 Series III BGA/SMT Rework Stations

 by DEN-ON Instruments Corporation of Japan
distributed by FocalSpot, Inc. in North/South America, Canada and Mexico.

The RD-500 Series III Rework Systems are semi-automated single axis placement and reflow stations for BGA/SMT rework. Using advanced computer control technology, the RD-500 Series III rework stations will meet the most demanding rework applications, including lead free rework.

RD-500 Series Product Features:

- ➔ **Internal Flash Memory Hard Drive Control System:**
No hard drive or separate computer necessary
- ➔ **3-Independent High Performance Heaters:**
 - Provides superior lead free rework capabilities
 - Localized Hot Gas Top and Bottom Heaters
 - Infrared Area Heater
 - Each heater deliver up to 650°C | 1202°F
- ➔ **3-Point Cooling System:**
 - Produces stronger solder joints
 - Delivers cool air through Top and Bottom Local Nozzle
 - Integrated Cooling Fan
- ➔ **2-Point Auto-Profiling:**
Prevents package over-temperature
- ➔ **Top Vented Nozzle Design:**
Improves thermal isolation between adjacent component
- ➔ **Pre-Heat Temperature Set Point:**
 - Improves thermal profile consistency and repeatability
 - Operator selectable pre-heat temperature prior rework
 - Provides 125-160°F soak for Lead free applications.
- ➔ **Reflow before Place:**
 - Heat solder paste to reflow prior to placement
 - Facilitates optimal placement of SMT leaded devices
- ➔ **Cleaning Mode**
Maintains rework site temperature (preset) to permit easy cleaning and site prep.
- ➔ **High-Resolution Optics** (digital split image)
- ➔ **Rules-Based Profile Verification** (user defined)
- ➔ **Real-Time Data Logging** (QA and task tracking)

RD-500 Series III BGA/SMT Rework Station



The RD-500 is designed for reworking medium to large PCBAs. The RD-500 incorporates a highly efficient five stage heating system that delivers 3kW overall thermal output for sufficient thermal capacity and control to execute precise profiles on PCBs up to 20x24" | 500x600 mm.

RD-500SH Series III BGA/SMT Rework Station



The RD-500SH is designed for reworking small to medium sized PCBAs. The RD-500SH incorporates a highly efficient three stage heating system that delivers 2.2kW overall thermal output for sufficient thermal capacity and control to execute precise profiles on boards up to 16x18" | 400x457mm.

Rework Accessories for ALL DEN-ON RD-500 Stations

- Vacuum Pads and Tips
- Nozzles (Standard, Custom and Kits)
- DEN-ON™ Soldering and Desoldering Hand Tools
- PCB Fixtures and Part Holders (Standard and Custom Tooling)
- PH-3100A standalone pre-heater for desoldering and site prep
- Side Inspection Reflow Camera to visually monitor solder reflow

See: <http://www.focalspot.com/rework-accessories.htm>

About FocalSpot

FocalSpot, Inc. is recognized worldwide as a leader in the design and manufacture of affordable high-quality x-ray inspection systems; providing Inspection and Rework solutions for Electronic Manufacturers worldwide. FocalSpot is also a regional distributor and value-added reseller for DEN-ON BGA/SMT rework solutions; Optilia BGA/SMT video microscopes; and First Article AOI Inspection Systems; providing sales, service and support in North/South America, Canada and Mexico.

DEN-ON RD-500 Series III Specifications	RD-500	RD-500SH
Rework System Specifications		
Maximum PCB Size	20 X 24" 500 X 600mm	16 x 18" 400 X 457mm
Maximum Device Size	2.5" 60mm	2.5" 60mm
Placement Accuracy	+/-0.0009" +/-0.025mm	+/-0.0009" +/-0.02 mm
Zoom Lens Magnification (15" monitor)	126X	126X
Top Heater Wattage (Hot Air/Gas)	700 Watts	700 Watts
Bottom Localized Heater Wattage (Hot Air/Gas)	700 Watts	700 Watts
Area Array Heater Wattage - Dark IR	400W X 6(IR) 2400Watt Total	400W X 3(IR) 1200Watt Total
Temperature Setting Range (Top Heater)	0 - 1202° F 0 - 650 ° C	0 - 1202° F 0 - 650 ° C
Temperature Setting Range (Bottom Heater)	0 - 1202° F 0 - 650 ° C	0 - 1202° F 0 - 650 ° C
Temperature Setting Range (Area Array Heaters)	0 - 1202° F 0 - 650 ° C	0 - 1202° F 0 - 650 ° C
Air Requirements - Dry / Clean Air (4 SCFM Intermittent, Estimate at 50% duty)	44.99 PSIG 0.1 - 1.0 MPA	44.99 PSIG 0.1 - 1.0 MPA
Nitrogen Requirements - Dry / Clean Nitrogen (Requires 1.5 SCFM intermittent)	44.99 PSIG 0.1 - 1.0 MPA	44.99 PSIG 0.1 - 1.0 MPA
Power & Air Requirements		
Electrical Power Requirements 200-230 VAC	200- 230 VAC	100-120 VAC (50-60Hz)
Three (3) Wire Power Cable (Black/Black/Green) Supplied with six (6') cable	Neutral / Ground / Hot 50 / 60 HZ, 1 Phase	Neutral / Ground / Hot 50 / 60 HZ, 1 Phase
Required Circuit Amperage - Dedicated Line (Fused Neutral 15 AMP / Hot 15 AMP)	20 AMPS	20 AMPS
Plug Requirements Type	NEMA L6-30-R/30A/250V Local	Type B/20A/120V Local
Receptacle Requirements Type	NEMA L6-30-R/30A/250V Local	Type B/20A/120V Local
Receptacles Total (3)	1-NEMA, 2-STD/120V Local	4-STD/120V Local
Machine Weight	~ 150 Lbs ~ 78 Kgs	~ 110 Lbs ~ 50 kgs
Maximum Load Capacity (Bench Requirements)	~ 200 Lbs ~ 90 Kgs	200 Lbs 90 kgs
Physical Dimensions	W30 X D29 X H34" W77 X D75 X H 86 cm	W23 X D23 X H28" W58 X D58 X H71cm
Air Inlet Size and Fitting Type (Located in Machine Rear /Single Filter Regulation)	0.25" OD 6.35mm OD Legris Type	0.25" OD 6.35mm OD Legris Type
Air Inlet Tubing Size (Located in Machine Rear /Single Filter Regulation)	*0.236" OD *6mm OD	*0.236" OD *6mm OD
Exhaust Requirements Ventilation Flow (25CFM)	0.25" CFM 6.4 mm	0.25" CFM 6.4 mm
Machine Height Adjustment Range (Foot Pads are 1" in Diameter)	1" 25 mm	1" 25 mm
Computer System Specifications		
Computer Control System	Controller (PC-500) Windows© OS	Controller (PC-500) Windows© OS
Power Requirements PC Controller	120 VAC	120 VAC
Video Display	Flat Panel Display 15" 38cm	Flat Panel Display 15" 38cm
Power Requirements Video Display	120 VAC	120 VAC

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