

ESS-500 Selective Solder Machine

Your Economic Solution for:

Prototyping

Product Development

Short Run, High-Mix

Manufacturing Applications

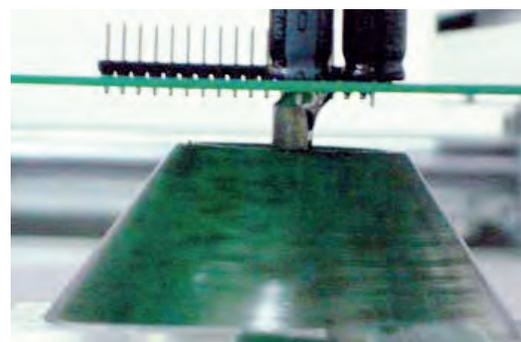
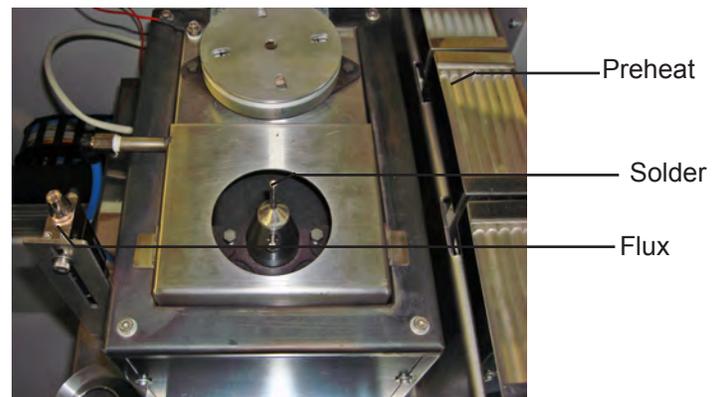
*Convert your hand soldering to automated selective soldering with an ESS
Achieve greater throughput, accuracy, and reliability...*



- Through-hole soldering flexibility - single point, drag, mini-wave, or dip soldering
- Exceptional accuracy and repeatability, with near “zero defect” solder joint yields
- Programming control and flexibility with on-board touch screen and off-line software
- Ease of operation, less handling, small footprint & durable construction

System Benefits & Features

- Precise, accurate, reliable soldering of through-hole components in mixed boards with previously soldered SMT components
- Reduce board processing time as compared with hand soldering
- Reduce direct labor costs, decrease rework costs, increase consistency over hand soldering through-hole components
- One, all inclusive system - Flux, Preheat, and Solder
- Touch screen interface for easy on instrument setup, programming and parameter control
- Instrument programming flexibility and control over preheat, temperature, soldering dwell times, location, direction, and more...
- Off-line programming with photoscan and Gerber import software for convenient machine setup
- Lead-free compatible



System Options & Accessories

- Complete 2nd Solder Pot available
- Witness Camera for Process Viewing.
- Variety of Nozzles available for flexibility - Standard Sizes from 4mm to 14mm. Wettable and Specialty Nozzles are also available. (Contact DDM Novastar for sizes & specifications)



Second Solder Pot Option

PRODUCT SPECIFICATIONS:

Specifications		ESS-500
Max. PCB Size		500 x 500mm (19.7" x 19.7")
Max. Clearance on Solder Side*		25mm (1")*
Max. Transport Speed		6m/min
Transport Angle		0° fixed
Position accuracy above fluxer, preheater, and solder nozzle		± 0.1mm (± 0.004")
Precision Spray Fluxer Module		
Flux Tank		2L Stainless Steel & Fittings, including Flux Level Monitoring
Flux Speed Max.		6m/min
Spray Width (Nozzle diameter 0.3mm)		3mm - 6mm (0.12" - 0.24")
Preheat Module		
100% IR Preheat		1200W
Solder Module		
Nozzles		Wettable, Special
Smallest Nozzle Diameter		4.0mm on Wettable Nozzles
Min. Neighbor Component Clearance*		1.5 - 3mm (0.06" - 0.12") depending on nozzle type*
Solder Capacity		Approx. 15kg (33 lbs.)
Max. Temperature		400°C (725°F)
Warm-up Time		Approx. 45 minutes

Nitrogen Technology	
N ₂ Supply (bottles, tank, or generator suitable, supplied by user)	N ₂ -covering over solder bath & pump unit
N ₂ Pressure	2bar (30 psi)
N ₂ Consumption	0.8 - 1.7 CFM (23 - 49 liters/min) dependent on nozzle and nozzle shroud
Air	
Pressure	5.5 bar (80 psi)
Electrical Data	
Power	220 VAC, 1Ø, 16A
Max. Power Consumption	3.0kW
Max. Fuse Rate	16A
Exhaust	
Exhaust Power (supplied by customer)	150 m ³ /hour
Exhaust Duct	100mm (4") in dia.
Dimensions	
Size Dimensions	1440mm L x 1250mm W x 1400mm H (56.7" x 49.2" x 55.1")
Weight	403kg (887 lbs.)

Leasing Options Available...

For more information, phone us at 215-485-5663 or email us at sales@ddmnovastar.com

* Consult factory on PCB Layout



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* Contact DDM Novastar Customer Service for sizes and specifications.