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**Ultra i1 Offline Selective Soldering
System Machine Brochure**

Ultra i1

Offline Selective Soldering System

Distributed worldwide, the SASinno range of equipment is a continually developing and improving windows 11 based software interface combined with a quality hardware platform.

The Ultra-i1 is the next generation of Offline Selective Soldering machines. With a comprehensive high-end standard configuration and a wide range of optional features, the Ultra-i1 delivers exceptional soldering performance and unlocks the full potential of intelligent manufacturing, making it an indispensable solution for Industry 4.0 applications.

The Ultra-i1 features a drop jet fluxer for high-precision flux application, combined with top and bottom preheating modules to ensure thorough thermal preparation of the PCB prior to soldering. The PCB is positioned and moved via an X/Y-axis table driven by servo motors, while the solder pot and drop jet fluxer are independently adjusted along the Z-axis using servo motors, providing precise three-axis motion control throughout the soldering process. An electromagnetic selective solder pot ensures accurate solder control, while the auto wave height calibration system continuously self-adjusts to maintain consistent solder wave performance.

The Ultra-i1 supports PCB board sizes up to a maximum of 460 x 510 mm and is controlled via a Windows 11 based PC using the specialised Selective Soldering software that is tried and tested across the full SASinno machine range. Additional standard features include an inline N2 heater for nitrogen atmosphere optimisation, fiducial mark recognition for high-precision PCB positioning, and a live-on camera system for real-time process monitoring, ensuring complete visibility and control at every stage of the soldering cycle.



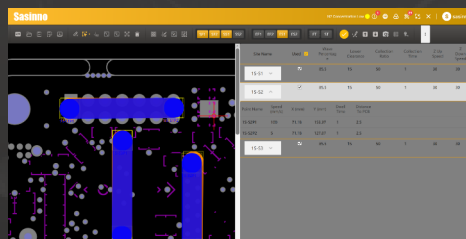
The Ultra-i1's extensive range of optional upgrades allows customers to further tailor the machine to their specific production requirements, ensuring it continues to meet the evolving demands of next-generation intelligent manufacturing environments.

Contact us for more information or to request a live demonstration at sales@detech-europe.com or call us on +44 (0)1262 409944

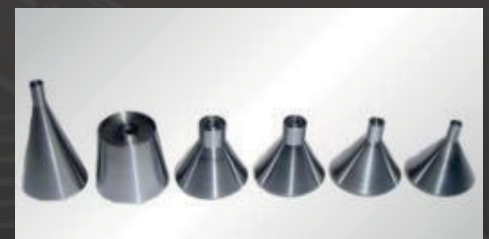
Key Features



Precise Selective Soldering System



User Friendly and Easy To



Various Soldering Nozzle Sizes

Technical Specifications

Operating Power / Max Power	4KW / 17KW
PCB Dimensions	50mm x 50mm Up to 460mm x 510mm
PCB Clearance	65mm Top Side and 32mm Bottom Side
Maximum PCB and Carrier Load	Upto A Combined Total Of 20KG
Machine Weight and Dimensions	W: 1,402mm x D: 1,660mm x H: 1,521mm Weight: 815KG
Power Supply	3Ph 380V 50Hz Maximum 36A (Requires 63A Breaker)
Air Supply	Between 3 - 5 Bars
Exhaust Requirements	400M3/h With A 150mm Diameter Exhaust Port
PC System	Windows 11 Industrial PC
Typical Program Creation Time	Approximately 10 Minutes
Programming Method	Either Camera Teaching or Drawing On Scanned PCB Image
Offline Programming	Available As An Additional Option
Machine Safety Curtain	Included At The Entrance Of The Machine
Fiducial Camera System	Used For Fiducial Verification and Program Teaching
Axes Of Motion	Controllable X, Y and Z Axis Via Servo Motors
Motion Hardware	Ball Screw and Linear Guide Rail With + / - 0.05mm Accuracy
Motion Table Limit Alarm	Limit Sensors With Linked Alarm System
Flux Nozzle	1 x Drop Jet Fluxer
Flux Tank Capacity	1 Litre For The Fluxer Nozzle With Constant Pressure
Cleaning Tank Capacity	1 Litre For The Cleaning Nozzle With Constant Pressure
Cleaning Solvent Alarm	Integrated Alarm System When Cleaning Solvent Is Low
Bottom Pre-Heating	Included As Standard Up To 8KW
Top Pre-Heating	Included As Standard Up To 3.5KW
Solder Pot Capacity	1 x 10KG Solder Pot With Electro Magnetic Pump
Solder Temperature Control	PID With A Heat Up Time Of Approximately 40 Minutes
Pre-Melt Solder Function	Included As Standard, Timer Can Be Set In The Software
Maximum Temperature	Up To 380 C As Standard With A 2.4KW Heater
Temperature Alarm	Included As Standard
Temperature Auto Calibration	Included As Standard
N2 Flow Monitoring	Included As Standard
N2 Purity Monitoring	Additional Option
Solder Pot Quick Exchange Trolley	Additional Option
Solder Pot Docking Rack	Additional Option With Pre-warming Function
Mini Wave Nozzles	4, 6, 7, 10, 12mm Diameter As Standard (Can Be Customised)
N2 Heater	Included As Standard For Each Soldering Nozzle
N2 Requirements	>99.99% Pure, 25 - 250 C, Consumption Per Nozzle 1.5M3/H



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Cost Effective Selective Soldering Without Compromise

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