

ICSF Select6

Our innovative selective fluxer offers a high speed, high precision, real selective fluxing process for both wave soldering and selective soldering processes. The machine is designed to optimize the amount of flux for each individual solder joint, maintaining the required cycle times, even for high volume wave soldering.

It transforms your wave into the ideal selective soldering machine!
The only 100% selective High Speed Fluxing system.

NEW

 **PulseSpray**

with Selective **Jet** and/or **Spray** Valve(s)

SELECTIVE FLUXING

for
Wave & Selective
Soldering



 **Material Cost
Reduction**

 **Industry 4.0
ready**

 **Environment
Friendly**

 **Unique, Automatic
Flux Jet Detection**

 **User
friendly**

 **Smart Product
Positioning**

 **Improved
Reliability**

 **Improved
Cleanliness**

 **Total Flux
Process Control**

 **Low
Maintenance**



Intelligent Fluxing

ICSF-Select6 Specifications

Product Size, L x W	610 x 610mm or 920 x 610mm (with oversized boards software option)
Dimensions, W x D x H	1,000 x 1,240 x 1,670mm
Weight	600kg
Machine Frame	Welded
Conveyor Type	Horizontal or slanted (option) SS316 5mm pin chain conveyor
Conveyor Length	1,000mm
Conveyor Height	SMEMA height 930mm ±30mm
Conveyor Width	Automatic adjustment by software: Max 610mm
Conveyor Speed	Incoming/outgoing: 10 to 300 mm/s (separate software setting)
Interface protocol	SMEMA (standard)
Pass Through Direction	left to right or right to left. Software setting, NO mechanical change over Patented soft stop with 2 step detection by Laser Sensor in standard fluxing mode - No mechanical stopper
Product Positioning	In continuous fluxing mode the conveyor never stops and the flux is applied while the product is moving. Optional Fixed Sensor (only for Continuous Fluxing Mode)
Safety	Safety circuit with front and back emergency stop buttons, front and back door with individual contacts and feedback to software. CE certified (UL preparation optional)
Power Supply	1-Phase, 200-240V AC, 50/60Hz, 13A
Compressed Air Supply	Compressed air NOT required
Exhaust Requirement	Exhaust NOT required. 100mm diameter exhaust connection available.
XY Linear Axis System	High speed, high precision, servo-controlled belt drive
Speed	Max. 1,500mm/s
Accuracy	±0.5 mm
Repeatability	±50 µm
Flux types	ALL types; water based, water soluble, alcohol based, rosin based, ...
Maximum Solid Content	40%
Flux Supply	Patented variable flow, volume and pressure system with supply pump and flux valve
Flux Flow	Variable for each programmed location on the board. Controlled by software setting and flux supply pump
Flux Volume	Variable for each programmed location on the board. Controlled by software settings, valve controller and flux valve.
Flux Pressure	Manually adjustable pressure setting
Valve Type	High Speed Jet Valve for Volume Application (HSV-V type) Selective Airless Spray Valve (SSV type)
Valve Quantity	Single or Double Valve Configuration (for 2 different Fluxes or Jet / PulseSpray Valve combination with one flux)
Valve Wetted Material	Stainless steel, PEEK, PPS, sapphire, FFKM seals, ... depending on valve type
Flux Quantity Control	Through valve Open/Close time: min/max limits depending on valve type. The flux quantity is also related to the flux type and properties.
Flux Nozzle Cleaning	Automatic, programmable purging function to prevent clogging.
Flux Jet Control	Patented flux drop check by laser guarantee the correct application of each drop (Optional, only for jet valves)
Flux Quantity Measurement	Software function for accurate flux quantity measurement. A separate precision weighing scale is required.
Flux Tank	Stainless steel, 10 or 3 liters. (Optional Flux Supply Pump Module)
Tank Quantity	Single (for Single Valve or Jet / PulseSpray Valve combination with one Flux) or Double (for Double Valve Configuration with two Fluxes). Additional tanks with or without couplings for quick tank exchange also available
Flux Level Detection	Low-level switch and alarm for each tank
Flux Tank Drain	Automatic drain of supply system and tank by software function with operator prompts
Machine Software	PLC controlled, can run independently from the PC Software in case PC breaks down
Programming Software	Windows 11 PC with Flux Designer software package, with on and offline programming, picture editing and machine control
Programming device	PC with Microsoft Windows 11 operating system
User Security	4 user levels, each with defined access level and a programmable user list
Programming Base	Point and click programming. JPEG, BMP, GIF, DXF picture import. For CAD and GERBER files a screen print is recommended.
Picture Editing	Editing software integrated in main software: four-point stretch, rotation, mirroring, brightness & contrast control
Flux Library	Database with default programming values for each type of flux
Flux Programming Options	Dots, lines, multi-lines, and areas. Parameters can be set for each individual dot, line or area
Flux Programming Functions	Copy, paste, copy with base point, rotation, line up, zoom, etc.
Program Optimization	Software function to optimize flux application routing
Flux Modes	Standard Fluxing Mode: stop & clamp, highest precision Continuous Fluxing Mode: non-stop, highest throughput
Alarms and Events	Current alarms, alarm history, software events, machine events and security events
Barcode Options	Different barcode options are available for automatic program selection, program verification and traceability applications. (Optional)
Traceability Option	Industry 4.0 ready. All process values are available in text file reports and an SQL database. (Optional)
MES Interfacing	Customer specific modules interfacing the traceability software (SQL dB) with Manufacturing Execution System software can be developed. (Optional)
Remote Support	Remote support for PLC and programming software available worldwide via TeamViewer

