Our Standalone-Systems

IS-B-335 – highest quality at a low price!
The big advantages of the IS-B-335 are the large soldering area with the possibility to handle board of 335x335mm and the small machine size. The machine is equipped with titan solder pot, MicroDrop Fluxer and a wide range of other features and options making it ready for the technological challenges of the future.

IS-B-460 – high speed and high flexibility
The IS-B-460 can be fitted flexibly to customer wishes:

IS-B-460 S
The machine, which has a large soldeirng area of 460x460mm, comes with one titan solder pot, one MicroDrop and can be equipped with Top- and/or Bottom-Preheater, Pyrometer-Control und many more.

IS-B-460 P
By the two parallel solder pots and two parallel MicroDrop fluxer the IS-B-460P can solder two PCBs simultaneously. Besides the advantage of processing large boards the IS-B-460P is also capable of handling big lot sizes, thanks to double throughput.

IS-B-460 D
The double solder pot system IS-B-460D increases the flexibility of the system significantly. Thus, for example two different solder alloys can be used without replacing the solder pot or two different sized nozzles can be mounted. Especially for circuit boards with very dense areas and close SMDs but also large connectors this system facilitates work through short tooling times significantly.

IS-B-650 – for very large circuit boards
Despite the small machine size with a footprint of just 2,5m² the IS-B-650 can handle PCBs up to 650x650mm – unique in its class!

IS-B-650 S
The single solder pot machine can be fitted with Top- and/or Bottom-Preheater, Pyrometer-Control, operating data logging and many more. The large soldering area of 650x650mm is unparalleled.

IS-B-650 P
Also the IS-B-650 can be equipped with the InterSelect Parallel-System which increases the throughput dramatically. Two MicroDrop Fluxer and two solder pots enable the machine to solder two PCBs at once and provide twice the throughput!

Our Inline-Systems

IS-I-460 S and IS-I-700 S

The two systems IS-I-460S and IS-I-700S differ mainly in the maximum PCB size. While the IS-I-460S can process circuit boards up to 460x460mm the IS-I-700S can handle larger boards of incredible 700x700mm. Both Systems have "State-of-the-Art" technology and can be equipped with modern features that guarantee best and repeatable solder results with little effort.

IS-I-460 Modular und IS-I-700 Modular

This concept consists of 3 Modules:

- Selective Soldering Module
- Flux-Module
- Preheat-Module

The IS-I-460M and IS-I-700M are fully automatic "In-Line" and "Modular" selective soldering systems from InterSelect Germany which are able to handle PCBs up to 460x460mm respectively 700x700mm. With a SMEMA connection the Modules are directly linked together. The software-controlled and automatic conveyor width adjustment ensures fast and easy change over to different board dimensions. The IS-I-460M and IS-I-700M combine very high speed with precise process control.

IS-PhotoScan Offline Editor

The InterSelect IS-PhotoScan software ist he best and easy way to create and edit soldering programs. It can be installed on almost every Window-running PC so the machine itself can work continuously while the programmer edits the programs on a separate computer. The operation is very easy here.

S-10 Selective Soldering- and De-Soldering System

The Mini-Wave-System S-10 is perfect for soldering and desolder through hole components on PCBs. In the process the S-10 generates a solder wave which can be trimmed suitable for each different component by choosing one of a variety of nozzles. Besides our standard nozzles all kinds of custom nozzles can be provided. By triggering a foot switch the soldering process can be started and the wave raises until it touches the pins of the component. The temperature, soldering time and the height of the wave can be preadjusted and is digital controlled

Operating sequence

- Insertion of assembly to the fixture
- Move handling along the rail system to Fluxing-position and trigger the Flux-button
- Move handling to pre-heater (pre-heater time- / temperature controlled)
- Move handling to soldering station, assembly is above solder wave
- lower assembly to the wave by hitting pneumatic switch – componennt(s) will be soldered
- remove assembly and move handling to starting position

Digital controller regulates:

- Solder temperature
- Soldering time
- Wave height
- Nitrogen on/off
- Laser on/off

30 soldering profiles can be stored to the controller

Overhead locator laser light pinpoints position for centering component over the wave.

A large selection of nozzles for all component sizes is available.

Height adjustable stainless steel platform

Nitrogen supply (Option)

Easy to change bayonet mount nozzles

Features and Options
Process-Camera
The Live-Video from the camera which shows the solder wave is displayed directly in the software. With the help of this video, the user can constantly monitor the nozzle and the solder wave - inclusively the soldering process. This allows the operator to adjust the soldering program and important parameters and to observe the result on the monitor directly.

Automatic Solder Wire Feeder with Level-Sensor
The height of the solder level in the solder pot is monitored by means of a laser sensor. Once the level falls below a predetermined threshold value the feeder automatically starts refilling the solder pot from a solder wire reel until a level for optimal soldering is reached again.

Solder Level-Sensor
The height of the solder level in the solder pot is monitored by means of a laser sensor. Once the level falls below a predetermined threshold value a message is displayed in the software application.

Wave Height Check and –Correction
By means of a laser-sensor the height of the solder wave is being checked fully automatically. The solder wave height then is being corrected for optimal solder results. The interval of how often the solder wave is checked can be set in the software application.

Operating Data Logging
All InterSelect machines are equipped with multiple sensors monitoring almost every single feature of the system. The information that these sensors read are stored to a SQL database and can be automatically exported in XML format. By default, the following parameters can be accessed: "Set" and "Is" temperature of the solder, "Set" and "Is" temperature of preheaters respectively the temperature of the PCB (with pyrometer), correct flux application (with flux sensor) and Error Messages. More parameters for read-out can be added optional.

Barcode/QR-Code Reader
The Barcode/QR-Code reader automatically scans the code from every PCB before soldering and saves it to the SQL database. Along with the operating data logging feature all read operating data can be allocated to every single PCB, stored together in the SQL database and exported as XML-File. The Barcode Reader and Operating Data Logging allow extensive "Traceability".

Automatic Conveyor Width Adjustment (Inline only)
All InterSelect Inline soldering systems have an automatic conveyor width adjustment. The required width is adjusted fully automatically according to the data of the soldering program as soon as the program is loaded. Setup times are extremely minimized.

Pyrometer-Controlled Preheating
While preheating the temperature is measured directly on the PCB surface by means of a laser-pyrometer. The preheater continuously adjusts the heating power and heating duration accordingly to the measured temperature. Instead of preheating just with heating-power and time values the user enters the desired preheat temperature and the live measurement will take care about everything – very convenient! Overheating is hereby excluded and it is guaranteed that the circuit board reaches the required temperature. Moreover, the preheat temperature of the PCB can be maintained exactly during the soldering process. Especially with long cycle times, the PCB without pyrometer-controlled preheating rapidly cools back and the last few solder points are effectively soldered without base temperature. The pyrometers controlled preheating ensures consistent and reproducible quality of the solder joints.

Warpage-Sensor
Particularly for very thin printed circuit boards or boards with heavy components the warpage sensor the sensor is mandatory. The sensor measures the height differences, calculates the bending of the circuit board and automatically corrects any Z-axis values. An extremely time-consuming manual matching of the soldering program can thus be avoided.

Remote Maintenance
All InterSelect soldering machines have a network connection to integrate the machine into the corporate network. If the system is connected to the Internet, on inquiry our service engineers can log directly on the machine and provide immediate relief. The possibility of remote maintenance drastically reduces service assignments are which saves our customers time and service fees.

IS-PhotoScan Offline-Programming-Software

The intuitive offline programming software IS-Photo Scan is the best way to create a soldering program without any prior knowledge. By simply "point and click" all flux-points and soldering-points are placed on a picture of the circuit board. The image is easily obtained by the scanning the PCB using a commercial scanner. All parameters of each solder pad can be adjusted to obtain optimal soldering results. The software can be installed and used on almost any Windows PC, thus the machine must not be stopped to create or change a soldering program. The finished soldering program is simply copied over the network or USB flash drive to the machine and is ready for production.