

**NEW**

# Model 850

## Flip Chip Placement System



Semiconductor Equipment Corporation's Model 850 is a versatile, semi-automatic placement system for flip chips, chip scale devices and bare die. The system is intended for low volume production and development projects requiring accuracies of  $\pm 12$  microns. A typical application consists of a cycle in which devices are picked up from a wafer pack, dipped into flux and then placed on a substrate.

An optional heated stage is available. An additional option, SEC's Model 430 Hot Gas Jet Module (see description on reverse side) can be integrated to operate on the Model 850 as a spot heating source for reflow on this system.

**Semiconductor  
Equipment  
Corp.**



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## Color Video System

A motorized zoom lens allows the operator to optimize viewing with its standard range of 40X to 240X. Other ranges are available.



## Fiber Optic Illuminators

The system has two separate fiber optic illuminators with separate controls for each, one illuminating the die and the other illuminating the substrate.

## Micrometer Adjusted Stage

A micrometer stage is used to adjust X,Y and Theta to move the substrate into exact alignment with the die. A 4 inch square vacuum chuck is provided.

## SEC Model 430 Hot Gas Spot Heater ( optional)

The Model 430 Hot Gas Jet Module uses heated gas to heat a single die to reflow. Its closed loop temperature control and gas flow control are integrated with the operation of the Model 850. This unit may be purchased as a field upgrade.

## Fluxing Station (optional)

The system includes a fluxing tray to dip the die into flux or adhesive prior to placement. The fluxing station can be added as a field upgrade.

## Sliding Table With Brakes

The system has a sliding table which has a 5" x 13" travel. Table movement is controlled by a joystick. Pneumatic brakes lock the table in position.

## Heated Stage (optional)

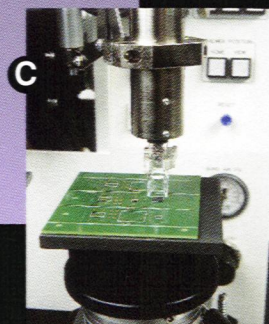
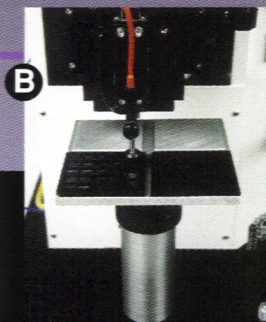
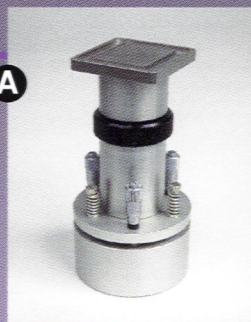
The heated stage is capable of 350°C operation . It incorporates a separate control box with its own closed loop temperature controls. This unit may be purchased as a field upgrade.

## Specifications

- Plus or minus twelve micron placement accuracy.
- Four 2x2 waffle pack pickup stage.
- Four inch square vacuum stage standard ( optional sizes available).
- Bond load- 30 to 200 grams standard (10kg optional).
- Throughput- Up to 200 placements per hour.

## Utilities

- Compressed air: 60 psi
- Vacuum: 20 inches Hg
- Power: 110V, 3 amp- 60 Hz  
220V, 1.5 amp- 50 Hz
- Size: 39"W x 30"D x 24"H
- Weight: System- 185 lbs. Shipping- 225 lbs.



A- A flux tray and doctor blade are used to apply a controlled and uniform thickness of flux.

B.- Die are picked up from waffle packs.

C.- SEC's Model 430 Hot Gas Jet Module delivers heated gas to the die in order to reflow a single die without affecting nearby components.



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