

# Select Coat® SC-104/105 Film Coater

## Precise Non-Atomized Conformal Coating Application

### Features and Benefits

- High coating velocity up to 750 mm/sec
- With a transfer efficiency of virtually 100 percent, the Film Coater applicator improves conformal coating utilization by 30 to 50 percent
- The non-atomized design minimizes common problems such as over-spray, masking, and rework
- Wet coating thicknesses range from 125 to 750 µm (0.5 to 3 mils) for solvent-based materials and 0.1 to 0.2 mm (4 to 8 mils) for 100-percent solid materials
- A heated, circulating fluid system provides closed-loop temperature control and allows fluid viscosities to remain independent of the ambient environment
- The standard Fourth Axis provides a 0 – 90 degree rotation of the fan pattern
- Optional Fifth-Axis Tilt accessory increases accessibility to tight or difficult-to-access areas that may not be achievable with the standard downward approach (0 degrees)



SC-104 Heated, Circulating  
Film Coater

The Prime SC-104/105 Film Coater Fluid System optimizes throughput and increases yield by delivering high velocity, excellent edge definition, and the ability to program and use a variety of coating widths.

The non-atomized film coater is compatible with a circulating fluid system, and provides automated, selective application of conformal coating materials with viscosities less than 100 centipoise.

Programmable applicator modes – spots, lines, and area coverage – provide powerful coating results that fit your specific process needs. Consistent fan pattern – even after idle – is ensured by the unique design that circulates heated fluid through the applicator extension maintaining a consistent nozzle temperature at all times.

Easy Coat® software creates process synergy between the applicator and platform design through routines and validation steps that can be used to define the optimal start and stop points during production.

Programmers define the process temperature and the corresponding process limits in Easy Coat software. If the fluid temperature moves outside the defined process limits during production, the system triggers an alarm condition and operators can intervene to prevent potential errors.

To optimize the Prime SC-104/105 Film Coater Fluid System, you have the choice of two nozzles and two fluid reservoirs of either 1- or 5-gallon capacity. Fluid pressure is controlled electronically through Easy Coat software – ensuring optimal performance to match your production needs.

The SC-104/105 Film Coater Applicators are intended for use with the Select Coat® SL-940 conformal coating system.

## Select Coat® SC-104/105 Film Coater Specifications

Film pattern width: 6.35 to 19.05 mm (0.25 to 0.75 in.)

Masking required: no

Material viscosity: under 100 cPs

Application thickness:

Solvent-based materials: 0.50 to 3 mils

100-percent solids materials: 4 to 8 mils

Edge tolerance:  $\pm .762$  mm ( $\pm 0.03$  in.)

Transfer efficiency: over 99%

Coating velocity: 130 to 510 mm/sec (5 to 20 in./sec)

Typical fluid dispense pressure: 103 to 413 kPa (15 to 60 psi)

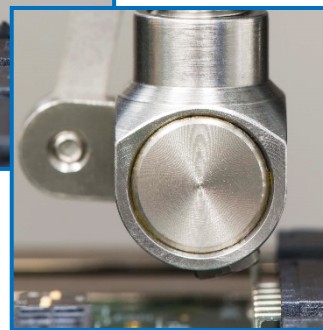
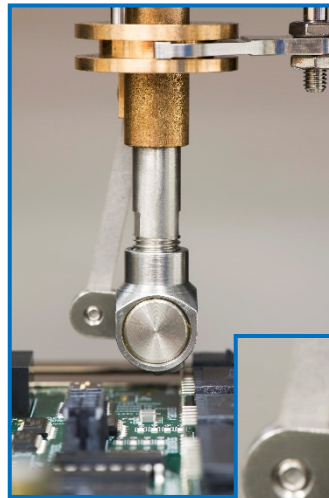
Pattern width: 6.35 to 19.05 mm (0.25 to 0.75 in.)

### Featured Options

Fifth-Axis Tilt

Laser Fan Width Control

Dual-Simultaneous Programmable Pitch



SC-105 Heated, Circulating Film Coater with optional Fifth-Axis Tilt

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## Fifth-Axis Tilt – Additional Benefits

Fifth-axis tilt allows the film coater nozzle to be rotated and tilted to access hard-to-reach areas of the product. Programmers can easily set and modify the rotate and tilt parameters for an applicator within Easy Coat® software.

- Ideal for coating vertical surfaces and underneath components
- The nozzle can tilt at 30 degrees, and the mechanism can be rotated in 4 positions – in 90-degree increments (0, 90, 180, and 270) to direct the fan pattern to the left, right, front or back to coat all four sides of a component
- The nozzle is fully integrated into the applicator assembly and can be installed horizontally for a narrow coating pass when it is tilted or vertically to achieve vertical area coverage
- Tilting of the nozzle as opposed to tilting the entire applicator eliminates the need for a direct line of sight and provides optimal agility during the conformal coating process

## Dual Simultaneous – Additional Benefits

With the dual-simultaneous configuration, the SL-940 system can coat two parts (multiple-up) at the same time. Processing two parts in parallel significantly improves the throughput, while maintaining high yield. The actual conformal coating process time is reduced by 50%, so that throughput performance can be significantly increased – especially when conducting a high takt time conformal coating process with few overhead movements.

Two of the same applicators are installed and operate simultaneously. When there is no need for simultaneous conformal coating, Easy Coat software allows the programmer to disable the second applicator and set the pitch as part of the programming.

- Coat two parts at once – reducing overall cycle time
- Enable the second applicator as needed
- Fully adjustable pitch



Dual-Simultaneous Programmable Pitch

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