

## COATING LINE

This coating line is designed for **automated conformal coating processes** in electronics manufacturing. It integrates **precision dispensing, curing, inspection, and board flipping** to ensure complete coverage and high reliability. The concept emphasizes **automation, flexibility, and traceability**, reducing manual intervention and ensuring consistent quality.



### LITE FLEX MULTILOADER (AGV OPTION) + SHUTTLE

- Automated PCB loader with optional AGV integration.
- **Function:** Feeds boards into the line from multiple magazines.
- **Key Features:** Flexible magazine handling, AGV-ready for smart factory integration.

### NORDSON ASYMTEK SL-940 (2° Unit)

- Additional coating station for complex boards or higher throughput.
- **Function:** Applies coating on second side or additional layers.

### LITE NG BUFFER + Shuttle

- Buffer for non-good (NG) boards.
- **Function:** Isolates defective boards for review.
- **Key Features:** Shuttle system for ergonomic handling, integrated review station.

### NORDSON ASYMTEK SL-940

- High-precision conformal coating system.
- **Function:** Dispenses coating material on PCBs with programmable patterns.
- **Key Features:** Advanced fluid control, selective coating capability, minimal overspray.

### SMART INFINITY [SNAPCURE] [SNAPVISION][SNAPFLIP] (2° Station)

- Repeats curing, inspection, and flipping for second coating stage.

### LITE FLEX MULTIUNLOADER

- Automated PCB unloader for multiple magazines.
- **Function:** Collects finished boards at the end of the line.
- **Key Features:** Flexible magazine handling, minimal operator intervention.

### SMART INFINITY [SNAPCURE] [SNAPVISION][SNAPFLIP]

- Multifunctional robotic station.
- **Functions:**
  - **SNAPCURE:** UV curing for fast polymerization of coating.
  - **SNAPVISION:** Vision inspection for coating coverage and defects.
  - **SNAPFLIP:** Automated PCB flipping for double-sided coating.
- **Key Features:** High-speed handling, integrated quality control, traceability.

### APPLICATIONS

- › **Conformal coating** for PCBs in automotive, aerospace, industrial, and consumer electronics.
- › Protection against **moisture, dust, chemicals, and temperature variations**.
- › Ideal for **high-reliability sectors** requiring stringent environmental protection.
- › **Medium to high-volume production** with automated material handling and curing.

### TYPICAL PARAMETERS

- › **Board Size Range:** 50 × 50 to 450 × 350 mm.
- › **Coating Accuracy:** ±0.5 mm.
- › **Cycle Time:** ~30–60 seconds per PCB (depending on complexity).
- › **UV Curing Time:** 5–15 seconds per side.
- › **Inspection Resolution:** HD vision, down to 40 µm.
- › **Line Throughput:** Up to 120 boards/hour (depending on configuration).
- › **Data Connectivity:** Real-time MES monitoring

