



ASYMTEK Panorama S-Line

Small Footprint. Superior Results.

In today's competitive marketplace, manufacturers face significant pressure to meet consumer demand with reliable products. Many new products are designed to work in extreme environmental conditions that can affect performance and reliability. Increasingly, manufacturers are moving to full conformal coating line solutions that combine coating, curing, and inspection capabilities with closed-loop process controls to meet demand and deliver consistent product reliability.

The ASYMTEK Panorama™ S-Line delivers conformal coating process control in a compact footprint – with overlapping line processes that minimize manufacturing floor space use up to 50%. In this revolutionary patent-pending line layout, the lower compartment in each piece of equipment can include a curing or flash-off process.

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**Nordson**
ELECTRONICS SOLUTIONS

ASYMTEK Panorama S-Line

Equipment Options



Customers need more than products, they need complete solutions and innovative partners. Nordson delivers on that promise with leading-edge equipment and technical expertise, from challenging applications to award-winning service and support.

Panorama Line Solutions are designed to bring the right balance of equipment and process control for optimal conformal coating efficiency. Select the equipment and layout you need today, and scale with confidence as demand increases. Your ideal solution will depend on the type of board and application, the desired cycle rate, and coating material. With your application in mind, consider the following equipment options and sample line configurations. A variety of line layouts and curing lengths are provided. Contact us for details. We look forward to helping you select the optimal layout and equipment to complete your line.

Overall Benefits

- **Unique design minimizes floor space use up to 50%**
- **A turn-key coating solution with single supplier support for the entire line**
- **Award winning support in your region**
- **Traceability through logged process parameters**
- **Closed-loop controls, parameter limits, and inspection within the line**
- **CE and UL compliant**
- **Industry 4.0 connected**



Select Coat SL-940 Conformal Coating Module

General	Description
System weight	526 kg max
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck	Description
Conveyor speed	10 - 381 mm/s

Lower Deck	Description
Conveying height	550 mm below upper deck
Conveyor speed	3 - 20 mm/s

The Panorama S-Line Coating Module combines the Select Coat® SL-940 conformal coating system with a Flash-off or IR-9 Module in the lower deck to minimize floor space usage. The Select Coat SL-940 conformal coating system offers a robust feature set with integrated process controls. Dedicated EasyCoat® 6 software provides intuitive visual programming. Offline programming in your office avoids production downtime and maximizes productivity, ease of operation, and accuracy.

ASYMTEK Panorama S-Line

Equipment Options



FX-940UV/FX-942UV Automated Coating Inspection Module

General	Description
System weight	530 kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck	Description
Conveying height	950 mm \pm 50 mm
Conveyor speed	100-200 mm/s

Lower Deck	Description
Conveying height	550 mm below upper deck
Conveyor speed	3-20 mm/s

Inspection set-up is fast and intuitive typically requiring less than 30 minutes. Capture up-to-the-minute process data with FIS/MES integration. When developing a new recipe, use the inspection system feedback to optimize a program for complete coverage. After the program is set up and verified, the FX-940UV will continue to validate coating performance. The FX-940UV Automated Coating Inspection Module is equipped with a lower deck that can accommodate an IR or Flash-off Module.



Line Loader/Unloader Module

General	Description
System weight Load/Unload and IR	1140 mm (510 kg), 1700 mm (680 kg), 2260 mm (850 kg)
System weight Load/Unload and Flash-off	1140 mm (480 kg), 1700 mm (620 kg), 2260 mm (780 kg)
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck	Description
Conveying height	950 \pm 30 mm
Conveyor speed	100-200 mm/s

Lower Deck	Description
Conveying height	550 mm below upper deck
Conveyor speed	3-20 mm/s

The Line Loader/Unloader Module is typically located in the middle of the line. From the Line Loader/Unloader Module, operators can feed new product into the line and unload finished product simultaneously. The module is available in different lengths, and can be equipped with an operator touchscreen. The lower deck can be configured with IR curing or Flash-off.

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Equipment Options



Configured as IR/IR or IR/Flash-off.

Note: Configurations with UV and UV LED curing are available in all curing frame lengths. Contact your local representative for details.

IR Cure Module

General

General	Description
System weight IR/IR	1140 mm, 690 kg; 1700 mm, 930 kg; 2260 mm, 1380 kg
System weight IR/Flash-off	1140 mm, 650 kg; 1700 mm, 870 kg; 2260 mm, 1300 kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck

Upper Deck	Description
Conveying height	950 ± 30 mm

Lower Deck

Lower Deck	Description
Conveying height	550 mm below upper deck

The ASYMTEK Select Cure® IR oven is ideal for top and bottom material curing in mid- to high-volume production environments. The Flash-off Module prevents bubbles and other defects like “orange peel” by allowing time for entrapped air and excess solvent to evaporate before a coated board enters the curing oven.



Configured as Flash-off/IR or Flash-off/Flash-off.

Note: Configurations with UV and UV LED curing are available in all curing frame lengths. Contact your local representative for details.

Flash-off Module

General

General	Description
System weight Flash-off/Flash-off	1140 mm, 610 kg; 1700 mm, 820kg; 2260 mm, 1250 kg
System weight Flash-off/IR	1140 mm, 650 kg; 1700 mm, 870 kg; 2260 mm, 1300kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck

Upper Deck	Description
Conveying height	950 ± 30 mm

Lower Deck

Lower Deck	Description
Conveying height	550 mm below upper deck

Nordson ASYMTEK's Flash-off Module is ideal for top and bottom material curing in mid- to high-volume production environments. The Flash-Off Module prevents bubbles and other defects like “orange peel” by allowing time for entrapped air and excess solvent to evaporate before the coated board enters the curing oven.

ASYMTEK Panorama S-Line

Equipment Options



Flip Module

General	Description
System weight Flip Module/Flash-off	650 mm, 360 kg
System weight Flip Module/IR	650 mm, 400 kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck	Description
Conveying height	950 ± 30 mm
Conveyor speed	100-200 mm/s

Lower Deck	Description
Conveying height	550 mm below upper deck
Conveyor speed	3-20 mm/s

Flips boards automatically to allow both sides of a board to be coated without operator intervention. Automatic one- or two-sided conformal coating reduces board handling requirements and increases yield.



Manual Inspection Module

General	Description
System weight Manual Inspection/Flash-off	650 mm, 410 kg; 1140 mm, 700 kg; 2260 mm, 880 kg
System weight Manual Inspection/IR	650 mm, 400 kg; 1140 mm, 740 kg; 2260 mm, 920 kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck	Description
Conveying height	950 ± 30 mm
Conveyor speed	100-200 mm/s

Lower Deck	Description
Conveying height	550 mm below upper deck
Conveyor speed	3-20 mm/s

The Manual Inspection Module allows an operator to check the coating results. For optimized floor space use, the lower deck can be equipped with either a Flash-Off Module or an IR-9 Module.

Note: Configurations with UV and UV LED curing are available in all curing frame lengths. Contact your local representative for details.

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Equipment Options



X-View Module

General

General	Description
System weight X-View/Flash-off	750 kg
System weight X-View/IR	840 kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m

Upper Deck

Upper Deck	Description
Conveying height	950 ± 30 mm
Conveyor speed	50-200 mm/s

Lower Deck

Lower Deck	Description
Conveying height	550 mm below upper deck
Conveyor speed	3-20 mm/s

The X-View Module uses top cameras to inspect the coating results during the flash-off process or after cure. The operator can monitor the results via the central line HMI. For optimized floor space use, the lower deck can be equipped with either a Flash-Off Module or an IR Module.



Lift Module

General

General	Description
System weight Left Flash/Right Flash	280 kg
System weight Left IR/Right IR	310 kg
Width adjustment	Automatic
Board clearance (above and under)	100 mm
Maximum conveyor load	4 kg/m
Conveying height	950 ± 30 mm
Conveyor speed	3-200 mm/s

The Lift Module transfers products efficiently between the two decks of the line. It can be equipped with IR elements for a consistent temperature profile.

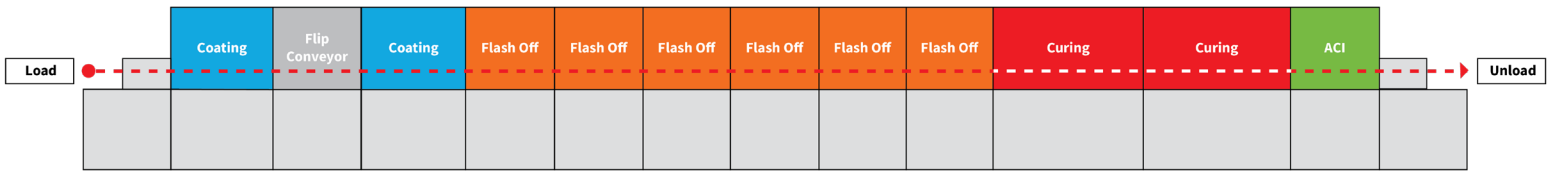


Sample Line Configurations

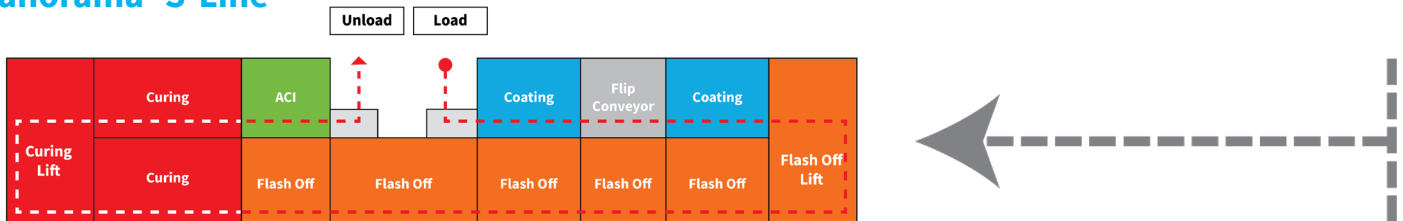
Whether your production environment is low-, medium-, or high-volume, we'll create a line solution that minimizes floor space usage and meets your throughput requirements.

In standard conformal coating lines, product is handled in the upper deck area of inline equipment – leaving empty, unused space in the lower deck. The revolutionary Panorama S-Line design repurposes the lower deck area to accommodate additional process. This efficient use of upper and lower deck space results in significant footprint reduction – even in the most complex line configurations.

Standard Conformal Coating Line



Panorama™ S-Line



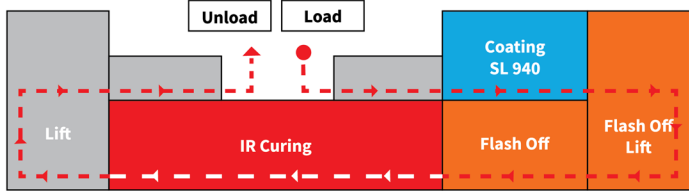
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Sample Line Configurations


Low-Volume Production

Reduce time-to-market, improve quality, and achieve consistency with conformal coating automation. The sample line solutions below feature coating, inspection, and curing capabilities. Use of the lower deck for curing means you don't need to install a separate curing oven — IR and UV curing methods are available. Add an automated coating inspection module to capture images of final parts before unload.

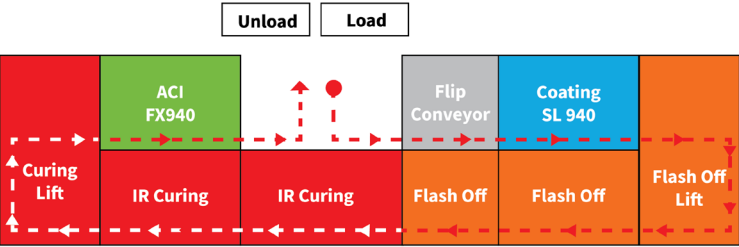
Low-Volume



Lengths (mm)					Total
Equipment	700	2260	1000	700	4660
Flash Off			1000	440	1440
Heated tunnel		2060			2060



Low-Volume

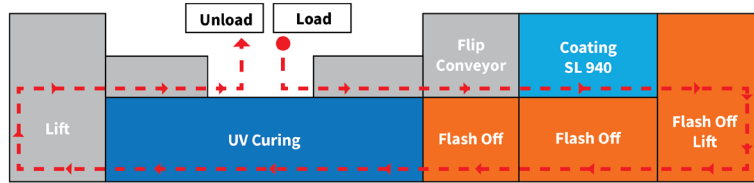


Lengths (mm)							Total
Equipment	700	1000	1140	650	1000	700	5190
Flash Off				650	1000	440	2090
Heated tunnel	440	1000	1040				2480

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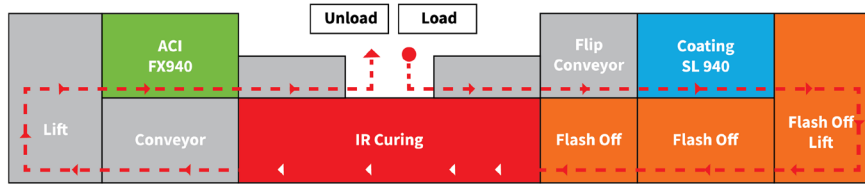
Sample Line Configurations

Low-Volume



Lengths (mm)						Total
Equipment	700	2260	650	1000	700	5310
Flash Off			650	1000	440	2090

Low-Volume



Lengths (mm)						Total
Equipment	700	1000	2260	650	1000	6310
Flash Off				650	1000	2090
Heated tunnel			2060			2060



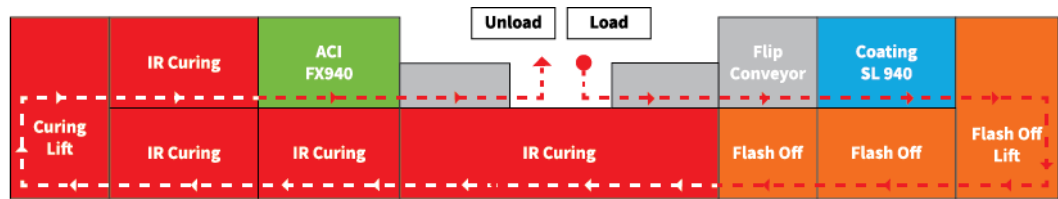
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Sample Line Configurations

Medium-Volume Production

In medium-volume production environments, oven modules can be added to meet throughput requirements — IR and UV curing methods are available. The Panorama S-Line’s dual-deck design provides twice the heating length at a fraction of the floor space. The sample line solutions below introduce a range of inspection options to enhance production quality. A Reject Module can be added to provide additional process flexibility – allowing the line to continue while rejected parts are addressed.

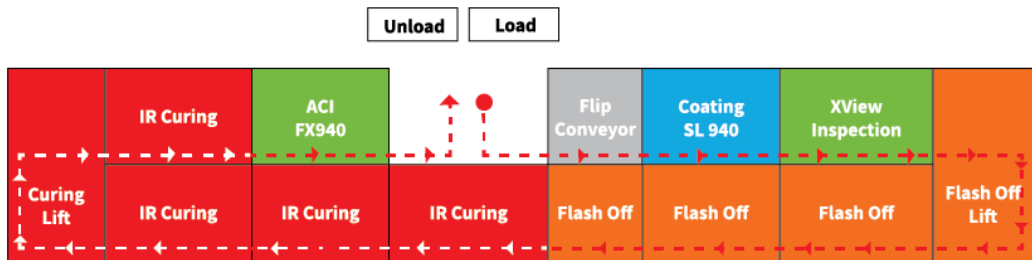
Medium-Volume



Lengths (mm)								Total
Equipment	700	1140	1000	2260	650	1000	700	7450
Flash Off					650	1000	440	2090
Heated tunnel	440	2180	1000	2160				5780



Medium-Volume

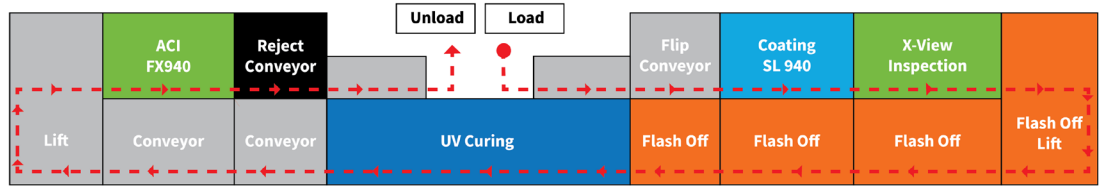


Lengths (mm)								Total
Equipment	700	1140	1000	1140	650	1000	1140	7470
Flash Off					650	1000	1140	3230
Heated tunnel	440	2180	1000	1040				4660

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Sample Line Configurations

Medium-Volume



Lengths (mm)									Total
Equipment	700	1000	650	2260	650	1000	1140	700	8100
Flash Off					650	1000	1140	440	3230

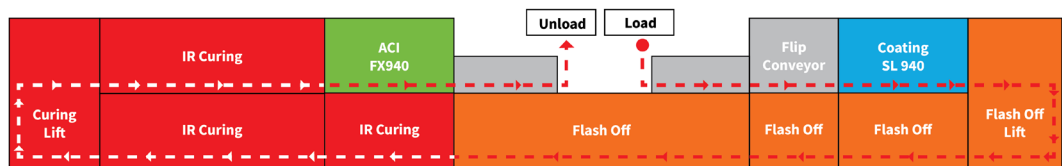
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Sample Line Configurations

High-Volume Production

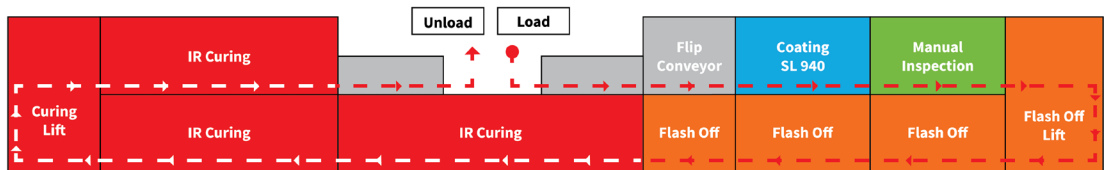
To meet quality and throughput targets, high-volume production lines rely on multiple coating and curing modules and a suite of inspection point locations – creating a critical need to balance manufacturing capability and floor space usage. The solutions below provide examples of more complex lines that include coating, inspection, and curing capabilities – all within an optimized foot print.

High-Volume



Lengths (mm)								Total
Equipment	700	1700	1000	2260	650	1000	700	8010
Flash Off				2260	650	1000	440	4350
Heated tunnel	440	3300	900					4640

High-Volume



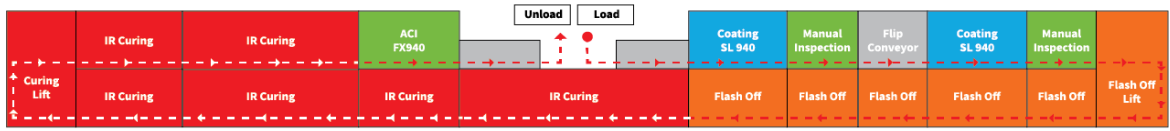
Lengths (mm)								Total
Equipment	700	1700	2260	650	1000	1000	700	8010
Flash Off				650	1000	1000	440	3090
Heated tunnel	440	3300	2160					5900



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Sample Line Configurations

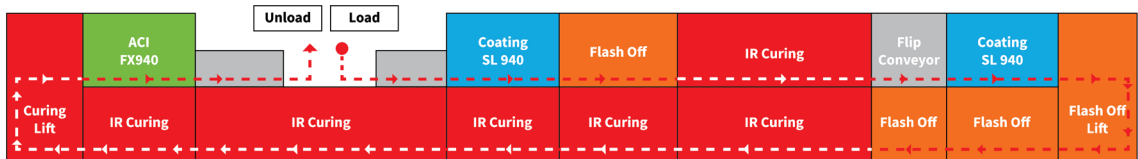
High-Volume



Lengths (mm)												Total
Equipment	700	1140	1700	1000	2260	1000	650	650	1000	650	700	11450
Flash Off						1000	1300	650	1000	1300	440	5690
Heated tunnel	440	2180	3300	1000	2160							9080



High-Volume



Lengths (mm)												Total
Equipment	700	1000	2260	1000	1140	1700	650	1000	700			10150
Flash Off							650	1000	440			3230
Heated tunnel	440	1000	2260	1000	1140	3100						8940



Why Nordson Electronics Solutions?

We can help you succeed.

Discover how Nordson's conformal coating solutions and outstanding application support can help you optimize your operation.

We've earned the confidence of the world's largest electronics companies to support their high-volume production lines.

Contact us with your specifications, and we'll get to work on your solution.

For more information, visit our website to find your local regional office or representative. We have several global locations to serve you.

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