Universal™ Control Coat® Nozzles

Improve hot melt adhesive pattern uniformity and product quality on continuous and intermittent web laminations.

**Universal Control Coat nozzles:**

- Produce breathable, permeable and soft product features
- Provide exceptional control of side, leading and trailing pattern edges
- Allow adjustable pattern widths and placement
- Apply non-contact fibrous coatings on irregular surfaces

Universal Control Coat nozzles deliver consistent hot melt adhesive spray coatings, producing uniform patterns and repeatable bonds. Nozzles produce fibrous patterns with exceptional control of side, leading and trailing edges. Adhesive cools before web contact, reducing web distortion. The non-contact process is used for high-quality nonwovens and textile laminations that require breathable, permeable and soft product attributes.

Nozzles are compatible with several Universal series modules, including the UM25 module for continuous and less-demanding intermittent operations, Speed-Coat® module for high-speed intermittent lines, and UM3 module for metering applications. Manufacturers can tailor patterns using nozzles in 25-millimeter increments for full coverage or in 5-millimeter increments for partial coverage. Partial coverage nozzles are available in side-justified or centered designs.

Common Universal parts minimize inventory and simplify service. Modules accept other spray technologies to help further reduce inventory requirements. Universal Control Coat nozzles accommodate multiple coating widths with a simple nozzle change to speed product changeovers.

Serviceable, surface-mounted elastomeric o-ring prevents leaks. The Universal module screw applies uniform nozzle clamping for a positive hydraulic seal and thorough heating. Nozzles are easily cleaned and withstand repeated handling. Recessed nozzle tips protect against damage or incidental contact.
Universal™ Control Coat® Nozzles

Specifications
Module Compatibility
UM25, UMSC, UM3
Materials of Construction
Stainless steel
Edge Control
±1.5 mm (±0.06 in.)
Coating Width (Per Module)
Full coverage 25 mm, partial coverage 5 mm (side-justified or centered)
Nozzle Orifice Sizes
0.1 mm (0.004 in.) wide slot
Nozzle to Substrate Distance
10 to 30 mm (0.38 to 1.2 in.)
Maximum Hydraulic Flow
50 grams per minute per nozzle at 10,000 centipoise, 14 GSM @ 300 m/min
Maximum Add-on Weight
6.6 GSM @ 300 m/min, 3.3 GSM @ 600 m/min
Production Speed Capability
10 to 600 m/min (33 to 1968 ft/min)
Adhesive Fiber Size
25 to 75 microns
Adhesive Viscosity (Recommended)
1,000 to 5,000 centipoise
Operating Temperature
70° to 205° C (160° to 400° F)
Adhesive Flow
5 to 50 grams per minute per 25 mm nozzle
Air Consumption
0.5 to 1.5 scfm per nozzle
Air Pressure (Typical)
0.5 to 2 bar (7 to 30 psi)
Working Hydraulic Pressure
13.8 to 55.2 bar (200 to 800 psi)
Maximum Hydraulic Pressure
89.6 bar (1300 psi)

Universal Control Coat nozzles produce consistent patterns in machine and cross-web directions.

Patented module screw applies uniform nozzle clamping for positive hydraulic seal and thorough heating.

Durable all-steel nozzles are easily disassembled and cleaned.