Advanced nozzle technology delivers precise adhesive fiber deposition for elastic attachment.

Universal SureWrap nozzles:
- Use proven Controlled Fiberization™ spray technology
- Stabilize elastic strand position with integral guides
- Optimize adhesive placement
- Improve creep resistance
- Reduce adhesive consumption
- Extend service life with hard-wear inserts

SureWrap nozzles accurately apply hot melt adhesive filaments to form discrete adhesive masses (discrete bond points) on the elastic strands used for elasticized legs, leg cuffs, and waistbands on baby diapers, training pants, and adult incontinence products.

The patented SureWrap nozzle uses an integral-strand guide to stabilize the elastic strand and an angular spray trajectory to maintain performance at high production speeds. Four air openings associated with each adhesive opening dispense four radially-tangential air streams, causing the adhesive filament to move in a spiral pattern. The spiraling adhesive filament wraps around each strand, forming discrete adhesive masses with no useful adhesive on the strand between adjacent discrete adhesive masses. These discrete adhesive masses optimize adhesive bonding, minimizing adhesive usage, and result in uniform elastic retractive forces.

Universal SureWrap nozzles with strand guides stabilize elastic during adhesive application.

For a more detailed explanation of the recommended use of SureWrap nozzles, refer to Manual Part Number 1103674.

SureWrap nozzles may be made to order for specific elastic configuration requirements. Nozzles are available in standard nickel-plated brass construction with steel inserts to resist wear or all-steel versions.

Nozzles are compatible with UM22 and UM25 modules for basic intermittent adhesive applications; Speed-Coat® modules for high-speed intermittent lines; UM50 modules for continuous operations; high-speed, electric E-400U modules and UM3 modules for metering applications. Common Universal parts minimize inventory and simplify service.

A serviceable, surface-mounted elastomeric o-ring prevents leaks. The module screw applies uniform nozzle clamping for a positive hydraulic seal and thorough heating. Nozzles are easily cleaned and withstand repeated handling.

* Patent Nos. 7,578,882; and 7,647,885
Universal™ SureWrap® Nozzles

Specifications

Module Compatibility
All Universal modules

Materials of Construction
Brass with hard-release coating and steel inserts, available in all-steel construction

Nozzle Orifice Sizes
0.51 mm (0.020 in.)

Nozzle to Substrate Distance
Contact

Adhesive Flow
2.5 to 25 grams per minute per orifice

Maximum Add-on Weight
25 to 100 milligrams/strand/meter

Production Speed Capability
100 to 600 m/min (330 to 1968 ft/min)

Adhesive Viscosity
8,000 to 15,000 centipoise (10,000 centipoise recommended)

Operating Temperature
70° to 205° C (160° to 400° F)

Air Consumption
0.07 to 0.21 scfm per strand

Air Pressure
0.3 to 1.5 bar (5 to 21.8 psi)

Working Hydraulic Pressure
13.8 to 55.2 bar (200 to 800 psi)

Maximum Hydraulic Pressure
89.6 bar (1300 psi)

For more information, speak with your Nordson representative or contact your Nordson regional office.

United States
Duluth, Georgia
(800) 683-2314 Phone
(966) 667-3329 Fax

Europe
Luneburg, Germany
(49) 4131-894-0 Phone
(49) 4131-894-149 Fax

Japan
Tokyo, Japan
(81) 3-5762-2700 Phone
(81) 3-5762-2701 Fax

Asia/Australia/
Latin America
Amherst, Ohio
(440) 985-4496 Phone
(440) 985-1096 Fax

Notes:

1. Results are typical and may vary based on specific adhesive and application.

2. Dependent upon desired spray pattern (regulation supplied by customer).

Comparison of Creep Performance

In leg elastic attachment, adhesive applied on individual elastic strands significantly improves creep resistance compared to multi-strand spray coverage.

Nordson Corporation
11475 Lakefield Drive
Duluth, GA 30097-1511

(800) 683-2314
nordson.com