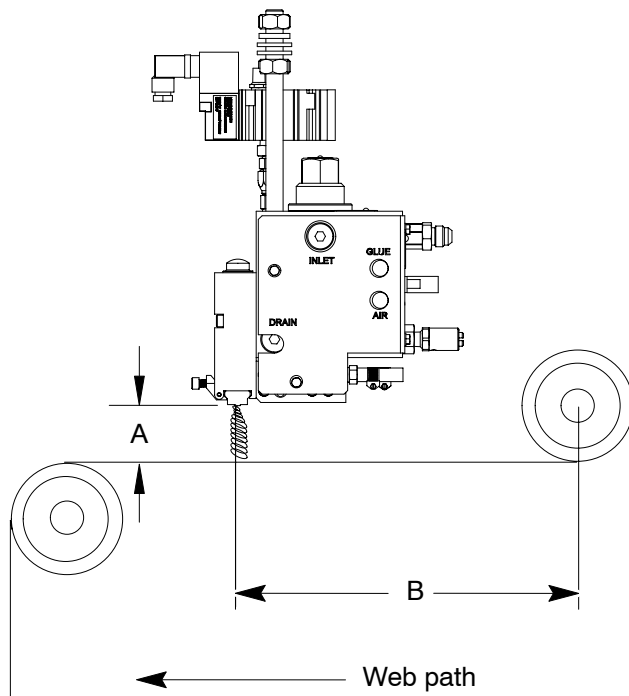


Non-Contact Mini Swirl (Summit™) Applications

This instruction sheet provides recommended process parameters and conditions for mini-swirl, or Summit (trade name), applications. Refer to the applicator manual for complete installation, operation, and maintenance instructions. The applications covered in this quick-reference guide are: **non-contact tissue/core form, construction/lamination, nonwoven construction, and acquisition.**

Process Parameters: Non-Contact Tissue/Core Form



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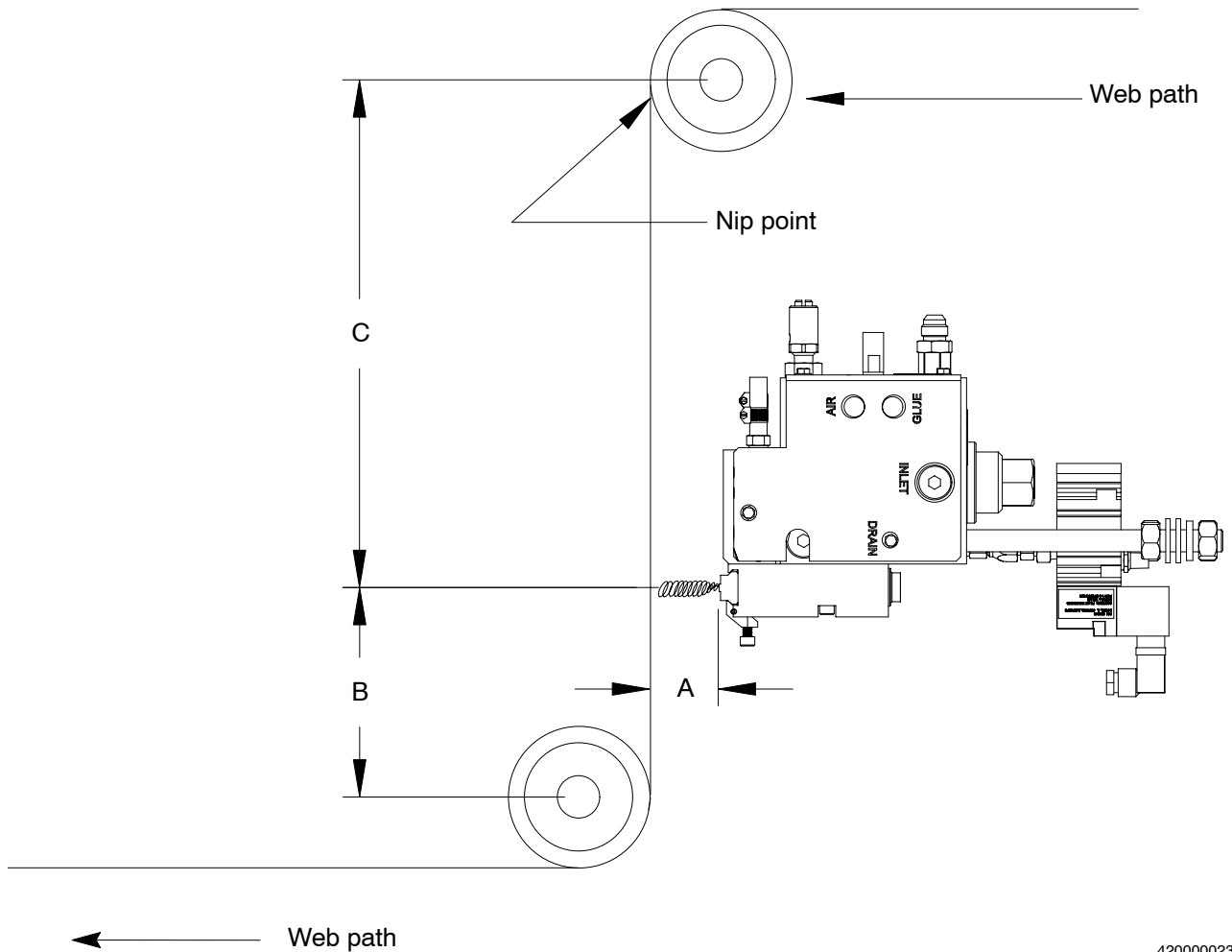
Figure 1 Non-contact tissue/core form parameters A-B

Parameter	Description	Minimum Value	Maximum Value	Recommended Value
A	Applicator to substrate	6.35 mm (0.25 in.)	25.4 mm (1.0 in.)	16 mm (0.625 in.)
B	Applicator to turning roll	51 mm (2.0 in.)	152 mm (6.0 in.)	102 mm (4.0 in.)

NOTE: The turning roll is positioned to break up the air currents associated with entrained air.

Process Parameters: Construction/Lamination

NOTE: Construction/lamination can be either a film or nonwoven substrate.



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Figure 2 Construction/lamination parameters A–C

Parameter	Description	Minimum Value	Maximum Value	Recommended Value
A	Applicator to substrate	6.35 mm (0.25 in.)	25.4 mm (1.0 in.)	16 mm (0.625 in.)
B	Applicator to turning roll	51 mm (2.0 in.)	152 mm (6.0 in.)	102 mm (4.0 in.)
C	Process open time (adhesive-dependent)	51 mm (2.0 in.)	457 mm (18.0 in.)	102–152 mm (4.0– 6.0 in.)

NOTE A: The applicator can be mounted at 90 degrees, but it must be perpendicular to the substrate.
 B: If parameter C is too close, turbulence will cause process contamination.

Process Parameters: Nonwoven Construction

NOTE: Nonwoven construction also applies to nonwoven top-sheet applications.

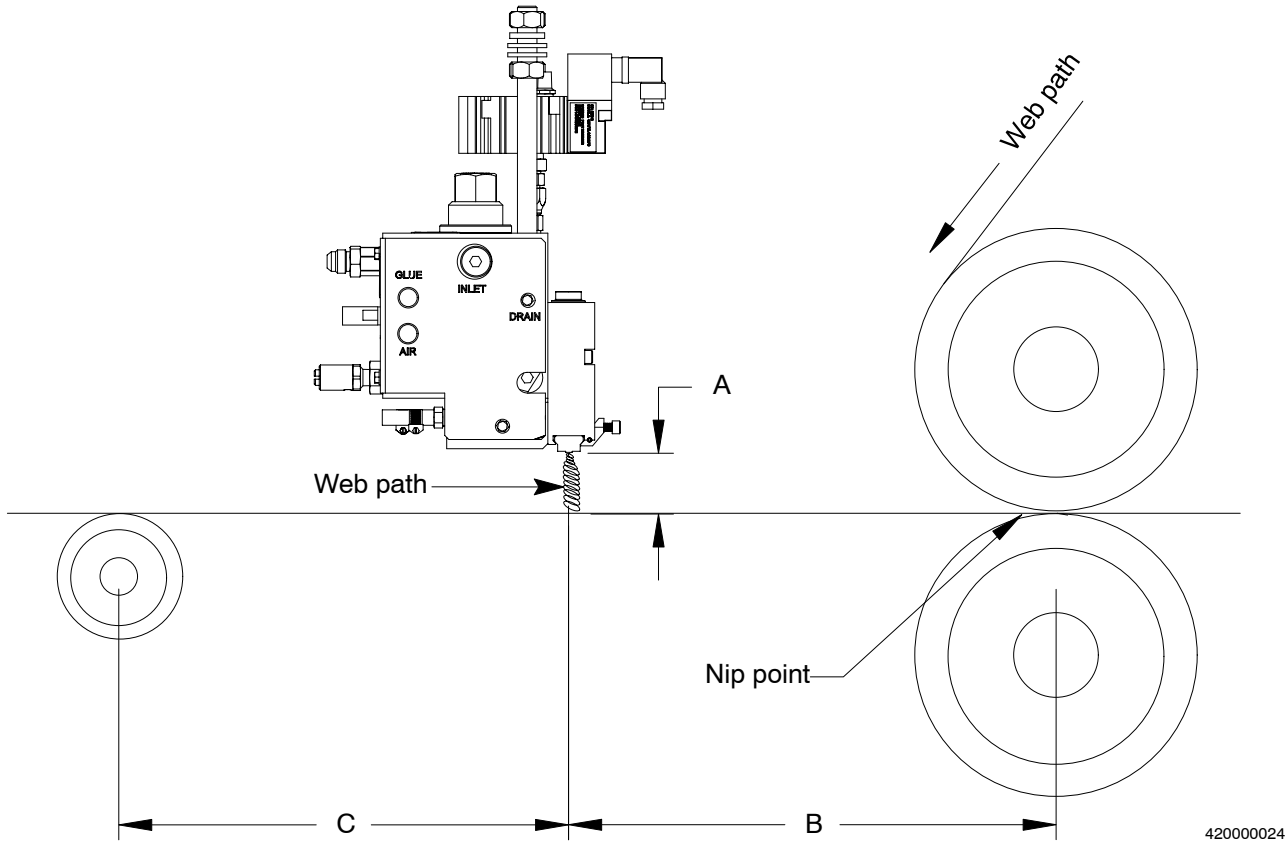
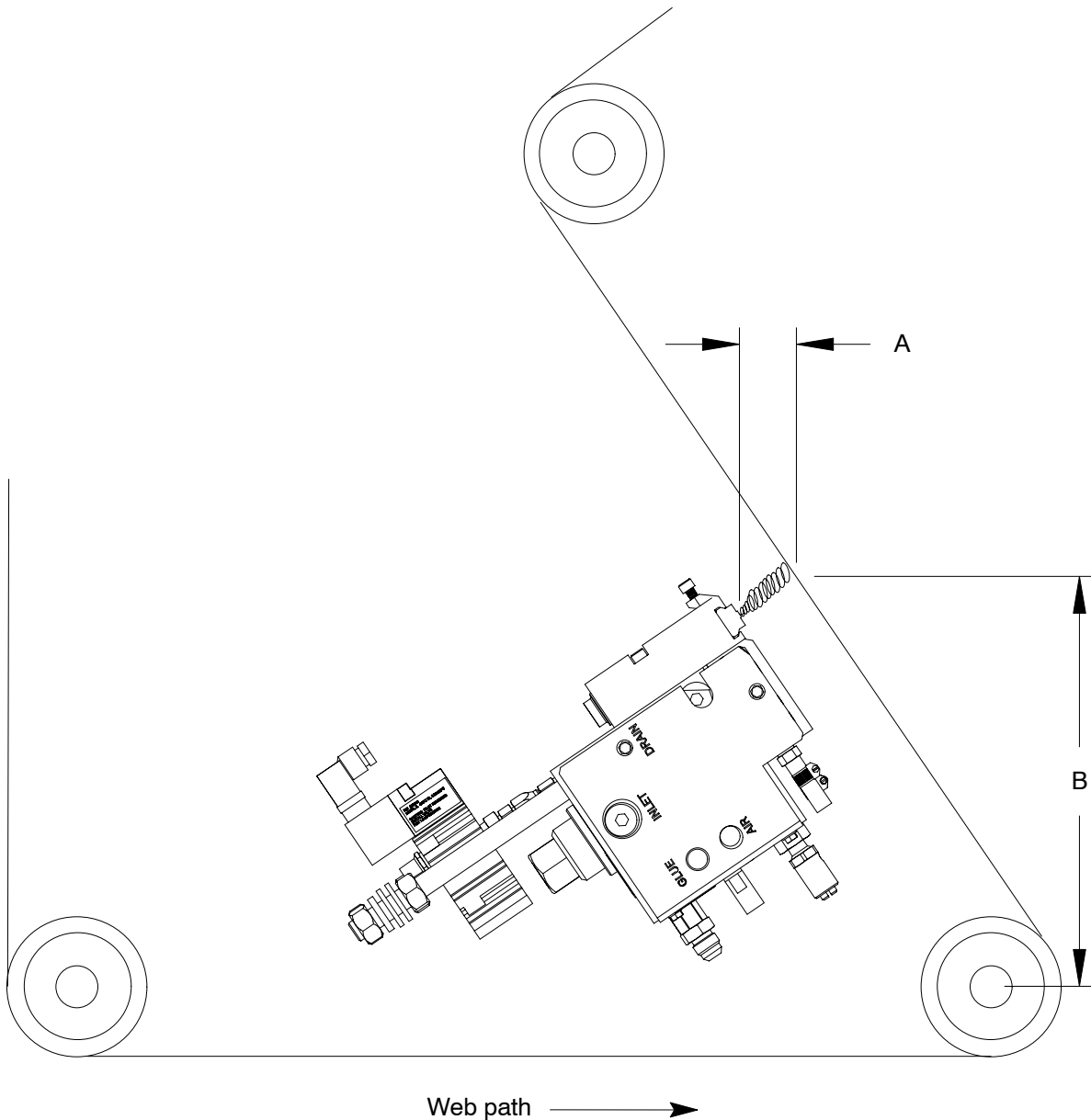


Figure 3 Nonwoven construction parameters A-C

Parameter	Description	Minimum Value	Maximum Value	Recommended Value
A	Applicator to substrate	6.35 mm (0.25 in.)	25.4 mm (1.0 in.)	16 mm (0.625 in.)
B	Applicator to turning roll	51 mm (2.0 in.)	152 mm (6.0 in.)	102 mm (4.0 in.)
C	Process open time (adhesive-dependent)	51 mm (2.0 in.)	457 mm (18.0 in.)	102-152 mm (4.0- 6.0 in.)

NOTE: The applicator must be perpendicular to the substrate.

Process Parameters: Acquisition



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Figure 4 Acquisition parameters A-B

Parameter	Description	Minimum Value	Maximum Value	Recommended Value
A	Applicator to substrate	6.35 mm (0.25 in.)	25.4 mm (1.0 in.)	16 mm (0.625 in.)
B	Applicator to turning roll	51 mm (2.0 in.)	152 mm (6.0 in.)	102 mm (4.0 in.)

NOTE: The applicator can be at any angle, but it must be perpendicular to the substrate.

Process Conditions

NOTE: Refer to the applicator manual for additional process condition specifications.

Condition	Minimum Value	Maximum Value	Recommended Value
Adhesive viscosity	2,000 cps	8,000 cps	5,000 cps
System hydraulic pressure	10 bar (150 psi)	34 bar (500 psi)	17 bar (250 psi)
Module-actuating air pressure	4.5 bar (65 psi)	6 bar (90 psi)	5 bar (75 psi)
Pattern air temperature	Equal to adhesive temperature	14° C (25° F) above adhesive temperature	6° C (10° F) above adhesive temperature
Pattern air pressure (see Note)	0.14 bar (2 psi)	1–1.25 bar (15–18 psi)	0.3–0.6 bar (5–8 psi)
NOTE: The pattern air flow-path is critical. Restrictions caused by tubing supply size or a restricted flow-path will result in process differences or unexplained process deviations.			

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