Rhythm™ Nozzles

Elastic

Improved elasticized structure performance and hand

Rhythm elastic nozzles deliver superior hotmelt adhesive dispensing for strand-based elastic attachment applications.

Non-crossing patterns deliver uniform bonding and results in pleating of the nonwovens carrier to provide elastic feature softness (also known as “hand”) that is especially important in baby diaper and pant, and adult incontinence briefs, for example.

Rhythm elastic nozzles utilize precision shim-based construction to create process air jets that work to oscillate adhesive fibers. Nozzles dispense in the direction of the elastic and web travel to accommodate high production speeds and are non-handed. This means that the nozzle direction may be conveniently reversed to adapt to machine routing.

Rhythm elastic nozzles feature Nordson’s patented integral strand guiding to stabilize the elastic at the point of adhesive application for consistent performance.

Large adhesive orifices resist clogging, and the durable, all-steel nozzles accommodate single and multi-strand configurations with customer-specified spacing.

Rhythm nozzles are compatible with the Nordson’s popular Universal™ nozzle mounting system that enables quick-exchange. The quick-exchange feature allows Nordson nozzles to be easily and economically updated to support product and production performance optimization.

Features

- Side-to-side oscillating (sinusoidal) patterns
- Stabilize elastic strand position with integral guides
- Optimize adhesive placement
- High strength bonding
- Individual elastic strand coating
- Shim-based, steel construction
- Nordson Universal™ nozzle mounting systems

Benefits

- Produces discrete bond points
- Robust, consistent bonding
- Optimal for intermittent dispensing
- Improve creep resistance
- Reduce adhesive consumption
- Extended service life
# Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Rhythm Elastic</th>
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<tbody>
<tr>
<td>Maximum add-on weight</td>
<td>25 to 100 milligrams per strand per meter @ 600 m/min</td>
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<tr>
<td>Production speed capability</td>
<td>100 to 600 m/min (330 to 1,969 ft/min)</td>
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<tr>
<td>Adhesive viscosity (recommended)</td>
<td>8,000 to 15,000 cps (10,000 cps recommended)</td>
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<tr>
<td>Operating temperature</td>
<td>70° to 205° C (160° to 400° F)</td>
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<tr>
<td>Air consumption</td>
<td>0.08 to 0.21 scfm per strand</td>
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<tr>
<td>Air pressure (typical)</td>
<td>0.5 to 1.5 bar (7 to 21.8 psi)</td>
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<tr>
<td>Working hydraulic pressure</td>
<td>13.8 to 55.2 bar (200 to 800 psi)</td>
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<tr>
<td>Maximum hydraulic pressure</td>
<td>89.6 bar (1300 psi)</td>
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</tbody>
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**Rhythm Elastic nozzle**

**Speed-Coat® module (left) and Rhythm Elastic nozzle (right)**