

PUR Hot Melt Adhesives Selection Guide

This selection guide provides a general framework for choosing PUR hot melt adhesive systems based on application type, substrates, and processing requirements. It is intended as a technical reference for industrial users.

1. Selection Logic

PUR hot melt adhesive selection should be based on process conditions, substrate combination, and performance requirements rather than a single property.

Key decision factors:

- Coating / lamination process
- Substrate type and surface characteristics
- Required open time and green strength
- Heat resistance and flexibility requirements

2. Application-Based Selection Overview

| Application Area | Recommended PUR Characteristics | Typical Processes |
|-----------------------------|---|------------------------------|
| Textile Lamination | Soft bond line, good wash durability | Gravure / Roller |
| Home Textiles | Stable bonding, aging resistance | Gravure / Roller |
| Intimate Apparel | Low-temperature, high flexibility | Gravure / Press |
| Automotive Interiors | High heat resistance, dimensional stability | Extrusion / Gravure |
| Flexible Foams | High green strength, elastic recovery | Gravure / Roller |
| Nonwovens | Low coating weight, breathability retention | Gravure |
| Leather & Synthetic Leather | Controlled penetration, flex resistance | Gravure / Roller |
| Flexible Packaging | Uniform film, media resistance | Extrusion |
| Electronics | Dimensional stability, clean application | Slot Die / Precision Coating |

3. Process-Oriented Guidance

- Gravure Coating:** Suitable for soft and flexible PUR systems with controlled coating weight.
- Extrusion Coating:** Requires melt-stable PUR systems with consistent viscosity.
- Slot Die Coating:** Requires highly stable and clean-melting PUR formulations.
- Press Lamination:** Requires balanced open time and green strength.

4. Customization & Optimization

PUR hot melt adhesives can be customized to match specific substrates, equipment, and processing windows. Final selection should be validated through line trials.