

What is stringing?

Hot melt stringing appears as fine adhesive “hairs” or tails during application. Stringing can lead to messy equipment, buildup, inconsistent bead patterns, and potential bonding issues.

POSSIBLE CAUSES	WHAT IS HAPPENING?	SUGGESTED SOLUTIONS
Low adhesive temperature	Adhesive is too viscous and does not release from the nozzle cleanly.	<ul style="list-style-type: none">• Increase the temperature gradually.• Stay within the recommended temperature range to avoid overheating.
Cold substrate or stock	Adhesive cools too quickly at application due to a cold substrate or stock.	<ul style="list-style-type: none">• Allow substrate and stock materials to reach room temperature before use.• Pre-warm stock before use.
Nozzle too far from substrate	Adhesive stretches and creates strings before contact with substrate.	<ul style="list-style-type: none">• Move the application nozzle closer to the substrate.• Nozzle distance should be as close as possible to the substrate, typically less than 1". Follow supplier's recommendation.
Poor nozzle shutoff / worn nozzle	Adhesive does not cut off cleanly from the nozzle due to buildup, char, or other issues.	<ul style="list-style-type: none">• Clean the nozzle.• Repair or replace worn components.• Check nozzle for partial clogs or char buildup.
Adhesive degradation (char or contamination)	Adhesive chemistry is breaking down due to exposure, char, or contamination.	<ul style="list-style-type: none">• Drain and replace degraded adhesive.• Keep tank covered.• Minimize contamination exposure.
Low air pressure / poor pneumatic response	The application gun is not closing fast enough to provide a clean cut off.	<ul style="list-style-type: none">• Verify air pressure (typically >50psi).• Check solenoids and air lines.• Ensure quick, consistent gun actuation.
Improper timing or machine setup	Application speed is inconsistent with line speed or positioning, causing stringing due to the mismatched setup.	<ul style="list-style-type: none">• Adjust timing and alignment to match between application speed/positioning and line speed/positioning.• Verify carton positioning and speed consistency.

When to consider a different adhesive:

When issues persist, and adhesive viscosity does not match the application and/or the adhesive is not optimized for your speed or equipment, or a clean cutoff.