Edgebanding Application Tips

Temperature

The processing temperature of the adhesive, substrate, edgebanding, and room temperature of the plant in which the edgebander is located are all important factors. All materials should be stored at room temperature for a minimum of twenty-four hours prior to use. Cold panels or banding can result in premature adhesive set-up. The automatic edgebander should not be located in drafts or where cold air is circulating. This could also cause premature adhesive set-up. Evidence of premature set-up would be adhesive bonding well to the substrate but not to the edgebanding.

The temperature of the adhesive should be checked on a regular basis with a pyrometer to verify the accuracy of the thermostats in the melting container and application roller. Excessive heat will cause the adhesive to break down, creating charring and odors. Inadequate heat will cause the adhesive to break down, creating charring and odors. Inadequate heat will cause a poor bond.

Line Speed

The line speed of the automatic edgebander is also very important. Slower line speeds are more inclined to cause poor bonding than higher speeds. When operating at a low speed, the adhesive may prematurely set-up before pressure is applied. When a slower than recommended line speed is required, it is recommended the application roller thermostat be turned up slightly to compensate for a longer open time. The temperature should not be increased in excess of 10 degrees Centigrade over the recommended application temperature. Hot air blowers could also be located on the edgebander to further extend adhesive open times. Tests should be performed to determine the best overall temperature based on the line speed being run.

Glue Line

Thickness Glue line thickness is also critical. An excessively thick glue line will result in a poor bond and leave an unsightly glue line. Tests should be performed to adjust to the thinnest possible glue line while still giving a strong, durable bond. Care should be taken that the glue line is uniform and that no skips or voids appear.
Glue Pot Temperature

OLON recommends the glue pot temperature be turned down to approximately 150 degrees Centigrade if the edgebander is not going to be used for an extended period of time. This temperature will keep the hot melt molten, allow for a fast heat up, and also prevent unnecessary adhesive breakdown and oxidation. It is also recommended that should the molten adhesive sit in the pot for an extended period of time, it should be stirred or agitated. All panel edges should be cut square and clean. OLON recommends priming all high pressure laminate before application. Residue on the back side of high pressure laminate may cause weak or inconsistent bonding. Priming will ensure an excellent bond.

Glue Pot Maintenance and Cleaning

A regular maintenance schedule for glue pots and application rollers is recommended. Charred or oxidized adhesives should be removed from the pot sides and glue surface before refilling the pot. The glue pot should be kept a minimum of two-thirds full to reduce charring and oxidation on the pot sides. The glue pot and application heads should be completely and thoroughly cleaned on a regular basis. Excessive build-up of charred materials will reduce the overall effectiveness of the heaters and impair proper heat transfer.