Checking edgebander setup and edgebanding problems

One of the most common problems users encounter is edgebanding that won't stick. The solution involves examining the whole system: Edgebander, Board or Substrate, Edgebanding, Adhesive, and the process itself.

Examine Components of the system individually:

1. Edgebander:
   - Temperature – because most edgebanding is applied with hot-melt glue, temperature is often an issue
   - Make sure temperature of glue pot and application nozzle is in line with the recommended application temperatures on the manufacturers spec sheet of the hot-melt adhesive
   - Check whether the temperature is off at the application head, or whether the pressure zone within the application equipment is too short
   - Check the quality and set up of the edge and edge trimming knives. Knives must be sharpened regularly to cut smooth. Be sure and check alignment of blades

2. Board (Substrate):
   - Consistency of the board
   - What is the board thickness?
   - Is the cut of the board square and clean? If not, this could lead to improper pressure and uneven application
   - Temperature of the board, if the board is to cold, it could draw the heat out to quickly, affecting the hot melt application temperature

3. Adhesives:
   - What type of glue is being used? Is the right adhesive being used for the job?
   - Is a Technical Data sheet available? Be sure to operate at proper application temperature
   - Review properties of bond, is there adequate coverage of adhesive Check edgebanding for evidence of wood pull

4. Edgebanding:
   - What type of edgebanding material is being used
   - If PVC, make sure there is primer on backside
   - See if there is separation of the backer to the veneer, (delamination)
   - Make sure that the planned edge trim is not excessive

   If edgebanding is chipping, check to see if there is wood fiber from the substrate on the back of the chips. If there is wood fiber evident, then you know that the glue is doing its job. If there is no or little wood fiber evident, then the problem goes back to adhesion. If it is not adhesion, check the tooling. It may be necessary to take the tooling off and inspect the cutting heads for chips, voids or uneven surfaces. With preglued edging, the end user often has a tendency to apply heat and pressure at the same time, causing an insufficient bond or curling at the edges. The solution here is to apply pressure seconds after the heat, while the glue is still in the cooling process.