

18. Problem diagnostics Tips and instructions for process step problems

Problem	Problem diagnosis and suggestions
1. The edgeband can easily be peeled off by hand. Hot-melt adhesive remains on the chipboard. The raster pattern of the glue applicator roller is visible.	<ul style="list-style-type: none"> • Application of adhesive not sufficient • Room temperature too low • Edgeband material too cold (storage outdoors) • Hot-melt temperature too low • Feed rate too low • Contact pressure of applicator rollers too low
2. The edgeband can easily be peeled off by hand. Hot-melt adhesive remains on the chipboard. The hot-melt adhesive surface is completely smooth (edgeband slides off).	<ul style="list-style-type: none"> • Board and/or edgeband too cold ⇒ Check hot-melt adhesive type ⇒ Check adhesive agent application
3a. The edgeband can be peeled off by hand. Most of the hot-melt adhesive remains on the edgeband.	<ul style="list-style-type: none"> • Temperature of board material too high due to previous process step (e.g. veneering)
3b. Glued joint is not closed (edge glueing machine).	<ul style="list-style-type: none"> • Contact pressure too low • Adhesive too cold ⇒ Raise application temperature, pre-warm board or increase feed rate • Edgebands have no, or inverse, pre-tension
3c. Glued joint is not closed (machining centre).	<ul style="list-style-type: none"> • Contact pressure too low • Edgeband has become too cold and cannot be squeezed • Restoring forces of edgeband material too high ⇒ Increase heater power or reduce feed rate ⇒ Increase geometry or use thinner edgeband material • Adhesive not machining centre compatible, heat adhesiveness too low • Adhesive does not harden quickly enough ⇒ Reduce the glue application temperature • Edgebands have no, or inverse, pre-tension
3d. Edgebands are only bonded in edge area.	<ul style="list-style-type: none"> • Contact pressure too low • Joint milling on board part hollow • Pre-tension of edgebands too high
4. The edgeband bonded does not have enough glue on the front edge of the board / the board is splintered at the front as the result of an incorrectly positioned glue applicator roller.	<ul style="list-style-type: none"> • Application of adhesive not sufficient as a result of incorrectly positioned glue applicator roller ⇒ Increase the quantity applied
5. Milling waves are visible.	<ul style="list-style-type: none"> • Feed rate too quick • Cut speed of milling cutters too low ⇒ Rework with draw blades and buffing station ⇒ Mill in counter direction ⇒ Increase number of blades on miller cutters ⇒ Increase speed
6. For thick edge strips, the colour in the milling area lightens a little (stress whitening).	<ul style="list-style-type: none"> ⇒ Heat the milling area using a hot-air station (can be retrofitted) • Draw blade is too thick ⇒ Rework with buffing station ⇒ Reduce draw blade size (max. 0.1 - 0.2 mm)
7. Stress whitening indications for machining centre processing within radius.	<ul style="list-style-type: none"> • Edgeband has become too cold ⇒ Increase heater power or reduce feed rate ⇒ Increase geometry or use thinner edgeband material
8. Strong stringing of adhesive after application	<ul style="list-style-type: none"> ⇒ Lower application temperature ⇒ Clean glue part ⇒ Test other adhesive
9. "Mouse teeth" in the joint	<ul style="list-style-type: none"> ⇒ Increase quantity applied ⇒ Increase application temperature ⇒ Pre-warm board

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10. Rupturing of the long edgebands after the cross-edging	<ul style="list-style-type: none"> ⇒ Only format and insert the MDF board ⇒ Check the miller cutter to see if the penetration depth is OK ⇒ Reduce the amount of material removed or use other chipboards
11. Damage to the decorative finish of the 3D edgeband for machining centre processing	<ul style="list-style-type: none"> ⇒ Use special rubber rollers
12. "Dents" or "scratches" in the edgeband	<ul style="list-style-type: none"> ⇒ Clean the edgeband feeder ⇒ Clean the contact rollers and spray them with separating agent ⇒ Clean the scan shoes; if not better, inspect the scan shoes for damage and renew them if necessary
13. Rupturing or luting at ends of edgeband	<ul style="list-style-type: none"> ⇒ Have the mitre saw sharpened ⇒ Ask the tool supplier for a suitable tool
14. Rupturing at the top and bottom of edgeband	<ul style="list-style-type: none"> ⇒ Lower edgeband projection ⇒ Adjust temperature (to above 18°C) of boards and edgebands the day before ⇒ Increase the room temperature and prevent draughts
15. Edgeband luted on copying	<ul style="list-style-type: none"> ⇒ Lower the number of blades ⇒ Regulate the speed ⇒ Mill edgebands in counter direction ⇒ Increase feed rate
16. 3D 2-in-1 offset in corner area	<ul style="list-style-type: none"> ⇒ Precise adjustment of the edgeband holding down clamp ⇒ Set edgeband projections to the minimum ⇒ Check edgeband for sabre shape

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Döllken-Kunststoffverarbeitung GmbH · Beisenstr. 50 · 45964 Gladbeck · Germany
 Tel.: +49 (0)2043 979-0 · Fax: +49 (0)2043 979-630 · info@doellken.com · www.doellken-kv.de