



**Engineering progress
Enhancing lives**

RAUKANTEX Magic

Technical information



Bonding RAUKANTEX pure magic

The edgebands in RAUKANTEX pure magic product range are all coated with an universal primer. It is therefore possible to process RAUKANTEX pure magic with conventional EVA, PUR or APAO based hot melt adhesives. The quality of the adhesive, such as thermal stability depends upon the hot melt adhesive selected. However, a very high level of heat resistance can be achieved using a heat resistant adhesive in conjunction with RAUKANTEX's very tight tolerances. It is therefore important to pay careful attention to the instructions provided by the hot-melt adhesive supplier.

1. Processing on straightline edgebanders

- RAUKANTEX magic I

Format trimming:

A cutting tool with a cutting angle of > 40° should be used where there are problems with splintering along the edges running at a right angle to the board.

Capping:

Change the cutting direction of the cap saw where there are problems with splintering. Where possible, cut towards the board.

Flush milling/radius milling:

Counter to board travel (away from the carrier). If there should be any problems with a disconnection of the layers, mill in same direction towards the carrier.

Scraper:

Adjust the scraper blade so that continuous and uniform chips are produced. If required, ask for information about the special "magic scraper" from our technical applications department.

- RAUKANTEX magic II and twin-level edging

Format trimming/capping/milling:

Process in the same way as normal PP edgeband (milling direction away from the board) counter direction.

Scraper:

Adjust the scraper blade so that continuous and uniform chips are produced. If required, ask for information about the special "magic scraper" from our technical applications department.

- RAUKANTEX magic III

Format trimming/capping/milling:

Process in the same way as normal PP edgeband (milling direction away from the board) counter direction.

- RAUKANTEX magic 3D

Format trimming/capping/milling:

Process in the same way as normal PP edgeband (milling direction away from the board) counter direction.

Supply store and feeding of edgeband:

It should be ensured that edgeband transport and edgeband guiding devices cannot cause any damage to the edgeband. Rubberised rollers in the edgeband feeder have proved their worth here.

2. Processing on processing centres

- RAUKANTEX magic I

Flush milling/radius milling:

Milling direction towards the board (splintering may occur where the cutting direction is incorrect).

Infrared lamp/hot air:

The edgeband must be applied around the external radius free from tension. Therefore, select as high a lamp setting/hot air temperature and as low feed rate as possible in the area of the board's external radii. If the edgeband is not heated through sufficiently there is a risk of stress cracking. Equipment that is not fitted with an adequate heat source is not suitable for processing radii using magic I.

Scraper:

Adjust the scraper blade so that continuous and uniform chips are produced. If required, ask for information about the special "magic scraper" from our technical applications department.

Tips on cleaning and stress cracking

Stress cracking:

Essentially, all transparent hard plastics are susceptible to stress cracking if they are over stretched and are cleaned with more or less aggressive cleaning agents. Depending on the extent to which the material is over stretched, stress cracking can be seen as a deep material crack, as a hairline crack, or as cloudiness on the transparent material. For this reason, it is crucial that the edgeband is applied around the external radius of the board free from tension. This is achieved by sufficiently heating the edge material with UV rays or hot air.

Checking the selected fabrication parameters:

To control whether the selected processing parameters are suitable for applying around radii, the external radius of the sample board should be cleaned using a plastic cleaning agent (e.g. special plastic cleaner LP 305/98 from the company Riepe or FSG plastic cleaner from the company Schäfer). If cracks or cloudiness still appear on the surface of the edgeband then the parameters are not okay and or the edgeband has not be heated through sufficiently.

To rectify the problem, apply more heat or increase the external radius of the board. This simple preliminary check can be used to avoid subsequent complaints from end customers.

Edgeband repairs:

If small stress cracks do appear and are not too deep they can be eliminated by controlled local heat treatment with a hot-air blower. When using EVA or APAO adhesives in particular the heat must be applied sparingly otherwise the edgeband might become detached from the board.

- RAUKANTEX magic II and twin-level edging

Format trimming/capping/milling:

Process in the same way as normal PP edgeband (milling direction away from the board) counter direction.

Scraper:

Adjust the scraper blade so that continuous and uniform chips are produced. If required, ask for information about the special "magic scraper" from our technical applications department.

- RAUKANTEX magic III

Format trimming/capping/milling:

Process in the same way as normal PP edgeband (milling direction away from the board) counter direction. Possible outside radius for chrome version: min: R 50.

- RAUKANTEX magic 3D

Format trimming/capping/milling:

Process in the same way as normal edgeband (milling direction away from the board) counter direction.

Supply store and feeding of edgeband:

It should be ensured that edgeband transport and edgeband guiding devices cannot cause any damage to the edgeband. Rubberised rollers in the edgeband feeder have proved their worth here.

Hot melt application:

If the hot melt is applied directly onto the edgeband, use special glue application rollers e.g. rubberised in order to prevent any damage to the décor print.

The best quality, comprehensive service and ease of processing can be taken for granted for all RAUKANTEX designs!

More detailed information can be obtained from REHAU's technical applications department.

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