



Press News

HOMAG demystifies the increasingly complex world of edgebanding

Advances in technology have driven quality expectations higher and higher, particularly in manufacturing. The furniture industry is no exception and one manifestation of this is the advent of edgebanding 'without joints' or, as it is more commonly known, 'zero-joint' technology. There is now a mind-boggling range of options to choose from, so we thought it would be a good idea to demystify the process.

Simon Brooks, sales and marketing director of HOMAG UK explains, "The HOMAG Group has been a pioneer of edgebanding since 1960 and so, with over 55 years' experience under its belt, is well placed to explain the potentially confusing world of edging."

Cost-effective EVA Glue

The original edging solution, EVA offers simple, clean, reliable edgebanding which can be used on a wide range of board and edge materials. It is the conventional hot melt adhesive that provides a cost-effective option for your entire standard edging requirements. Hot melt adhesives are polymer based and are 100% solids, containing no solvents or water. The lack of water and solvents allow hot melts to attain peak bonding strength very quickly.

Water Resistant PUR Glue

Higher specification jobs can require water or heat resistant products and PUR adhesive provides this additional performance. Far less PUR adhesive per square metre is required to form a much stronger bond when compared to traditional hot melts. Consequently, this reduced volume of adhesive results in a very tight glue line. It also offers superior bond strength to EVA, although it does take longer to fully cure than the instant 'grab' of EVA; this, however, has no detriment to the quality of the product whatsoever.

Nowadays, having seen major advances in the chemistry of PUR adhesive, it is a trouble free bonding material providing a cross linked bond that once fully cured is very strong and very stable. PUR can be used on a wide range of materials and is particularly popular in the kitchen, bathroom, washroom and door markets due to its ability to resist moisture and heat.

airTec Technology

The **airTec** technology uses hot air and special edge material to form an invisible or 'zero-joint'. The special edge material consists of a hard décor layer backed with a meltable functional layer. This functional layer is melted by the hot air and then pressed onto the panel edge. The **airTec** process is very clean and cost-effective and results in perfectly crafted products, where joints are no longer visible. The airTec system is available across HOMAG's full range of edgebanders allowing even the smaller business to compete in the invisible joint market where frontals such as doors and drawers need to be at a very high standard.

laserTec for high volume invisible edging

Laser technology enables manufacturers to produce invisible joints at high volumes. The laser fuses the edge band to the panel at speeds of up to 60m/min and delivers perfect quality every time. HOMAG's system, **laserTec**, is a simple but highly effective solution that delivers more parts produced per unit of time. Laser joining allows you to achieve consistent production quality and to reduce the staff costs associated with post-processing and finishing.

HOMAG – a solution for every need

Simon Brooks again, "The immense knowledge and experience that the HOMAG Group has amassed has enabled the company to provide the right edgebanding solution for all levels of manufacturing."

Even the bespoke craftsman can benefit from 'zero-joint' technology at an affordable price. The BRANDT Ambition 1220 and 1230 **airTec** models are great entry level edgebanders. They offer a high degree of automation and come equipped with a joint trimming unit for an optimum edge joint quality, a contour trimming unit

for optimum corner rounding and a trimming unit with DFC tool technology for maximum dust extraction.

For small to medium sized businesses, the BRANDT Ambition 1440 **airTec** offers a higher degree of flexibility and can be optimised according to customers' requirements. The basic model has a joint trimming unit, an exact gluing unit, an end trimming unit, a trimming unit and a two-motor corner rounding unit. It also offers lower energy costs with **ecoPlus** and is controlled with **powerTouch** using the 21.5" widescreen multi-touch monitor.

For larger manufacturers, BRANDT offers high specification versions of the Ambition including the popular 1650 **airTec** model. The 1650 offers both **airTec** and Quickmelt gluing (EVA & PUR). In standard trim, the 1650 offers a variable feed speed from 8 - 18m/min, with an option to increase feed rates up to 20m/min.

As well as a heavy duty pre-milling unit for panel up to 60mm in thickness, a Quickmelt gluing unit and the **airTec** unit, the Ambition 1650 **airTec** boasts a two-motor end-snipping unit, top and bottom trimming units, a servo controlled corner rounding unit, profile and surface scraping units for the perfect finish. The Ambition 1650 FC provides versatile, high quality edgebanding on a consistent basis.

HOMAG laserTec – the ultimate high speed edging technology

Compared to conventional glue-based methods, HOMAG **laserTec** offers immense benefits. It simplifies the edging process enormously, eliminating unproductive waiting periods and set-up work for colour changes.

Separate settings for glue quantity and temperature are no longer required, nor are entries for different materials such as chipboard or MDF. In comparison to conventional hot-melt glue technology on throughfeed machines, **laserTec** delivers energy savings of over 40%, as there is no longer any heating up period required, so no energy is used without productivity. This reduces CO₂ emissions by up to 26 tons per annum and offers cost savings of up to £3,380 per year. The consistently high standard of processing quality substantially reduces the scrap volumes, delivering maximum production efficiency.

Stronger bond with improved safety and environmental benefits

Not only does **laserTec** produce an invisible surface-to-edge transition, but also the bond achieved between the edge and the panel is considerably stronger and more robust than with conventional techniques. What's more, the work pieces, downstream processing units and the tools on the machine are far less susceptible to contamination than with conventional edgebanding adhesives.

Glueless production is particularly environmentally friendly, as it eliminates glue fumes and prevents any risk of hot melt glue being burnt in the machine. In addition, HOMAG's **laserTec** method has a 'class 1' laser safety rating, making it safe for use in any kind of furniture production.

CNC Processing Centre with laserTec

Completing its edgebanding options, HOMAG offers customers the choice of EVA, PUR and **laserTec** edging on a selection of CNC processing centres. This innovation means that all work pieces with shaped edgebanded edges can be produced with the same high quality and aesthetic standard as straight edged components.

Simon Brooks concludes, "The HOMAG Group offers a comprehensive range of edgebanding machinery for the UK market. From entry level models all the way through to high end volume production lines, there is really no question that we have a solution for every need.

"Our extensive knowledge and experience in the edgebanding market combined with our ability to provide a choice of edge bonding techniques at any level of business (even offering multiple systems on the same machine), enables our customers to make an informed decision and to invest with confidence.

"It's quite simple, if you're looking for consistently high edgebanding quality day-in, day-out, there is no better place to start than with HOMAG. And don't forget, our experienced team at HOMAG UK is always on hand to provide answers to your questions or organise finance, if required."

If you would like to see a demonstration of any of the HOMAG Group edgebanding solutions, call Adele Hunt at HOMAG UK on 01332 856424.

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