

### Which is the KF Design Concept for you?

The right individual KF design concept to fit in with your production requirements is determined by 4 factors:

- The number of workpieces to be produced
- The number of width adjustments required
- The range of different parts
- The minimum workpiece width

The 6 sketches above show some of the possible KF design concepts:

Variation A assumes that ready-sized workpieces are being processed.

Variation B will carry out sizing work on small piece numbers – with a void between workpieces due to carriage return.

Variation C achieves improved output over B, as the continuous workpiece feed eliminates production voids.

Variation D carries out double-sided sizing work and single-sided edge banding. The advantages of this design concept:

- Parallel square-edging in the 1st throughfeed
- Precisely angled sizing before edge processing in the 2nd throughfeed
- Dispenses with the need for feed systems as shown in front of machine C.

- Permits frequent width adjustment, as only the short part of the machine needs to run idle.

Variation E, the classical solution for series production, will achieve an optimum output with only minimal daily width adjustments. To avoid the often long machine from having to run idle before every width adjustment, its length can be divided into two or three units.

Variation F is in successful application

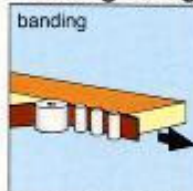
- as a panelling line unit for double-sided processing of narrow workpieces –
- with intermediate transport from machine 1 to machine II, to allow sized parts to be run independently of length and width.

# Gluing Technology



Application example:

## Banding straight edges



Let us provide you with an idea as to which of the versatile processing possibilities provided by a Homag KF Combination Machine will fit your particular requirements:

1. Accurately-angled

square edging on all sides (design concepts B, C, D, E)

2. Edge banding using hot melt glue or PVAC adhesive – with all currently used edging materials

3. Finish processing with

- perfectly sanded and chamfered veneer edges
- profiling and profile sanding with solid edge banding materials
- Profiling and finish processing on PVC edges
- Finish processing of furniture parts, ready for assembly, perfectly surface-finished – without further processing stages.

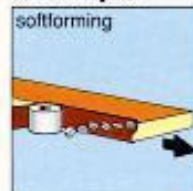
4. Can be used for transverse processing of postforming parts and parts with softforming profiles.

5. As an additional work process, for example continuous or intermittent grooves and rebates can be made.

6. High-frequency (HF) banding with urea glue for watertight joints is also carried out.

Application example:

## Gluing with the softforming technique



Softforming makes panel edges more elegant, and blends better with surface veneers – as well as being cheaper and more economical than solid wood edging.

In the softforming

technique, too, Homag KF machines offer a whole range of processing possibilities:

1. Accurately-angled sizing and profiling on all sides (design concepts B, C, D, E)

2. Edge banding with hot melt glue or PVAC adhesive – with possible application for all formable edging materials

3. Finish processing with

- perfectly sanded profiles on veneer edges
- finish processing of furniture parts, ready for assembly, perfectly surface-finished – without further processing stages.

4. Possible types of processing:

- profiled longitudinal edges with straight transverse edges
- edges profiled on four sides



5. Particular application advantages for many product shapes, for example for

- profiles visible on the front of the finished furniture product
- decorative inlay strips (veins)
- veneer-finish hand-hole profiles (hand-hole recesses)

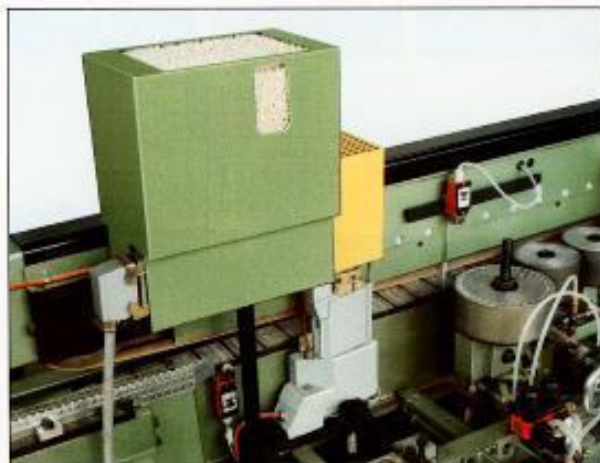
- furniture elements designed for pleasant-to-handle finish (inlay floors etc.)
- veneer-finish rebates, particularly on internal doors
- panelling



### Processing of all currently used edging materials

Homag KF combination machines will allow unlimited processing of all currently used edging materials:

- Veneers in coils or fixed length material
- Plastic edges in melamine, laminate, finish foil in the form of coils or fixed lengths
- Thick PVC edges in coils or fixed length material
- Solid wood strips
- Finish strips



### The right gluing technique for every field of application: Hot melt glue ...

Ever since the considerable improvements made in hot melt glues, this technique has gained increasing popularity – both for straight and profiled (softforming) edges. Homag KF series machines can be equipped with the standard, tried and tested hot melt gluing unit or the new, environmentally beneficial quick hot melt system.

The Homag quick hot melt glue system for standard granules works at a high melting output while ensuring optimum care of the glue. It gives off a constant supply of fresh melted glue, as only small amounts of granulate which are required for short-term working are melted at one time. The short melting time ensures a low energy requirement. Glue spreading is carried out by heated rollers:

For straight edges onto the workpieces, for softforming onto the edging.

### ... or cold adhesive (PVAC adhesive) ...

The cold glue activating technique (KA) can also be applied for straight and for profiled (softforming) edges. One of its characteristics is the almost invisible gluing joint with high heat resistance and good gluing strength. The glue is applied on the workpiece.

### ... or a combination of both techniques

Homag KF combination machines can also be equipped with combination gluing system – hot melt glue and KA.



## Design Concept Model 1:

# Double-sided Homag Panel Sizing and Edge Banding

For Kitchen Units – with the Homatic Control System

The processing sequences:

- Sizing
  - Profiling
  - Banding of straight and profiled edges.
- Edging materials:  
Melamine, PVC, solid wood strips

Gluing:

Combination of PVAC adhesive and hot melt glue

Application of PVAC adhesive for melamine, veneer, solid wood strips – and hot melt for PVC edges

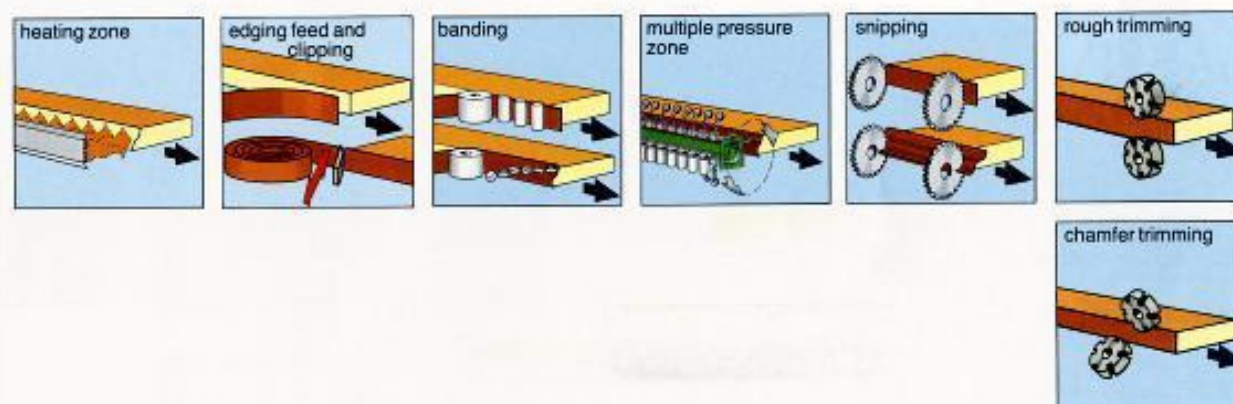
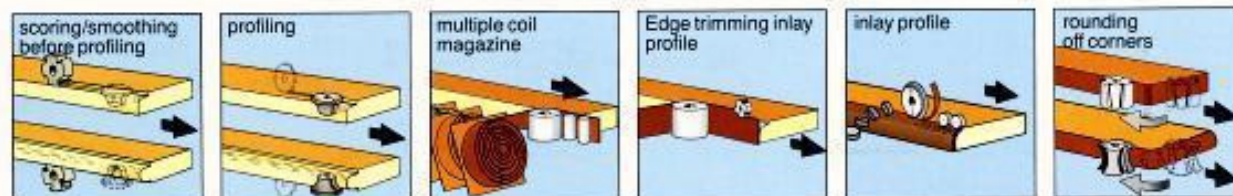
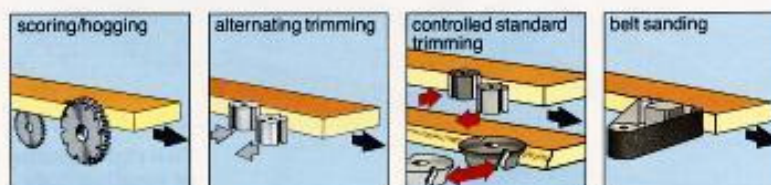
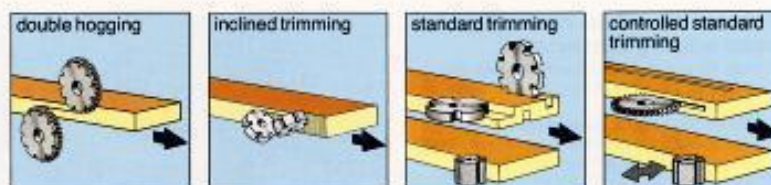
Finishing:

Right up to final ready-to-assemble parts – without further work processes

The Homatic electronic control system with programmable control takes care of line control, monitor input (operator guidance) and determination of operational data.

The pictogrammes in the bottom row show the units running on the machine,

The pictogrammes in the top row show all the other units which can be used on this machine if required.







#### Processing sequences for sizing:

- Scoring from above
- Scoring from below
- Controlled standard trimming
- Controlled standard trimming
- Universal profile trimming
- Universal profile trimming

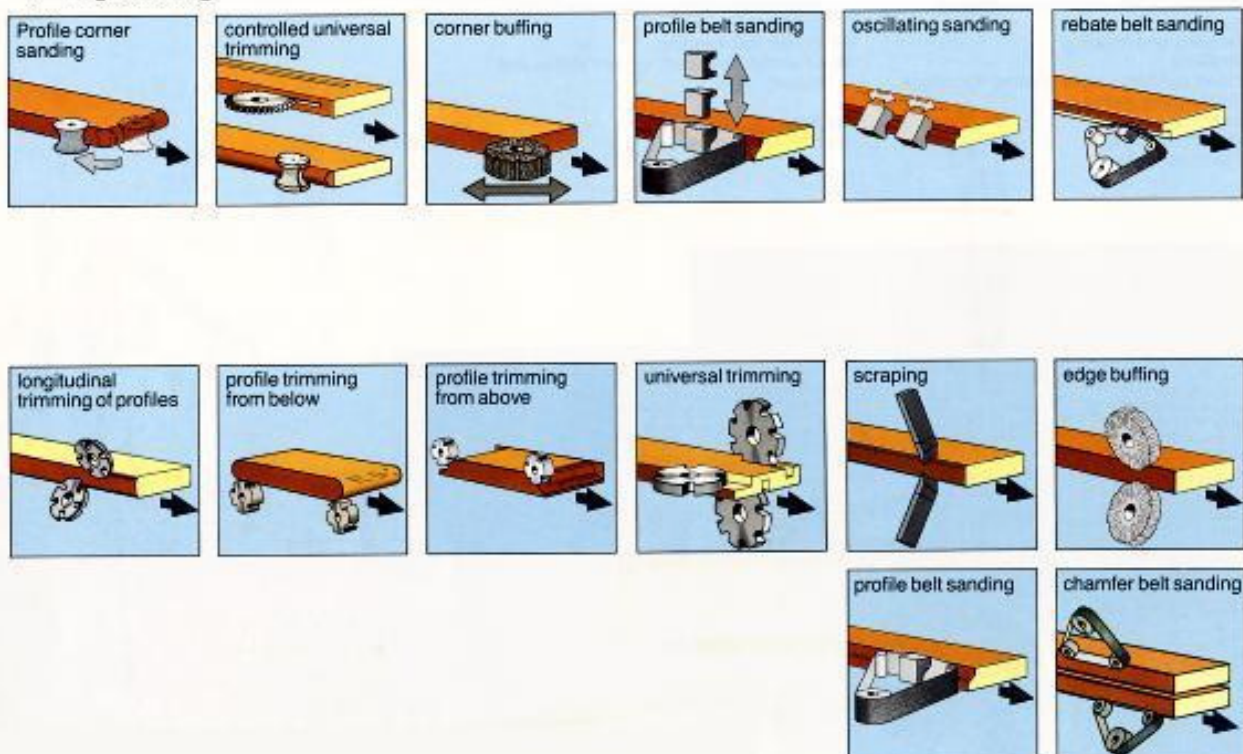
#### Gluing:

Hot melt gluing technique

Edging materials: Plastic finish foil and straight melamine edges – edge feed: With Homag magazine holding 6 coils

#### Finish Processing:

- Special snipping unit with increased snipping depth for profiles
- Rough trimming
- Chamfer trimming
- Profile trimming from below
- Profile trimming from above
- Edge buffing



# The processing units – variation, combination ...



A wide variety of tried and tested processing units allows optional combination – making a Homag KF series machine a sound investment for the future of your company.

All the units and appliances in customary use in the panel furniture industry are dealt with in individual Homag brochures, which offer the best and most clearly arranged guide to help you structure the Homag KF machine that is right for you.

If you should additionally require special units for particular processing requirements, these are sure to be contained in the special lists kept by your Homag consultant.

Homag has a solution to offer for every processing problem!

