

Edge banding machines KAL 310



Chip disposal with the I-system

Optimat | profi line | power line



Optimat KAL 310: the range for every edging material

The new Optimat concept: An optimum cost-to-performance ratio and perfect design

With its new Optimat series, the Homag Group is setting a whole new standard in terms of performance, engineering, quality and price. And because there is more to manufacturing excellence than what lies "on the inside", particular importance was attached to an attractively designed "outside". In keeping with its striking and sophisticated new design, the Optimat machine series is the perfect embodiment of outstanding ergonomic engineering, functionality and aesthetic appeal – making the legendary Homag quality standard instantly recognizable.

Superb engineering from every angle

Interior fitters and industrial manufacturers alike are confronted today with an ever increasing number of different materials. At the same time, growing cost pressure necessitates extremely careful investment planning. As a result, any practically-oriented edge banding machine has to permit efficient, flexible application for any type of edging material. This was the guiding principle behind the development of the KAL 310 series. The outcome: A modular range offering outstanding performance and design at an affordable price.

As individual as it is universal: The modular Optimat concept

Two basic models are available: The edging Optimat and the jointing Optimat. In addition, you can choose precisely the processing units you require from the wide modular range available.

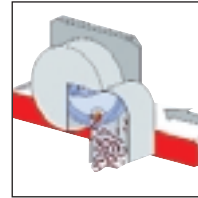
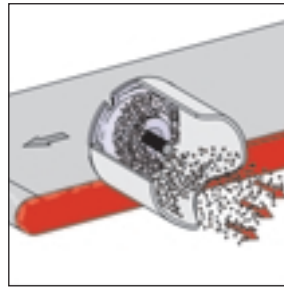
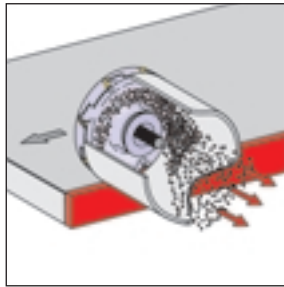
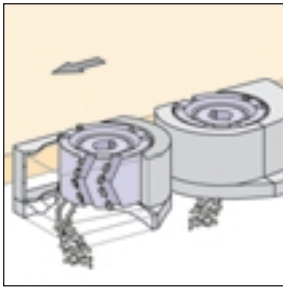
Automation

All Optimats can be fitted as an optional extra with automated sequences (almost) throughout. From automatic resetting of individual motors through to full automation with CAN axes and precision adjustment of units from the control panel.

One series for every type of material

The new Optimat KAL 310 series allows you to process all types of edging material. These include, for example, solid wood, coils and fixed length material, melamine, PVC, ABS and veneered edges. Primarily hot-melt glues are used for banding, or PU adhesives for special requirements.





New: The I-system

The new tool generation with internal extraction provides a revolutionary new technology for controlled chip pick-up. While conventional tools allow chips to fly away uncontrolled and in some cases adhere to the workpiece, with the I-system, they are fed directly to the extraction hood. The benefits:

- Optimum processing quality, as the tracing rollers are not impaired by adhering glue or chips
- Substantially increased availability of machine and tools
- Greater economy due to minimized extraction output
- Improved workpiece quality



With and without jointing trimming: Two efficient models for precise edges

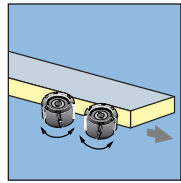
Optimat KAL 310: An overview

This series comprises two basic models: The **edging Optimat** and the **jointing edging Optimat**, each with their own fixed basic equipment and a free space for customer-specific options.

Each basic model can be fitted with two gluing variants: A3 for edges up to 3 mm and A20 for solid wood up to 20 mm.

Free space for additional units

The free space in the finish processing section can be freely equipped as required.



A jointing trimming unit has been positioned in front of the gluing unit in the **jointing-edging Optimat** for any necessary trimming, treatment or repair work on panels whether for longitudinal or transverse processing.

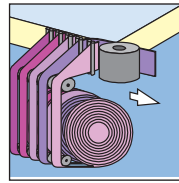
The most important features of the two basic models

- Compact design
- Low-maintenance machine structure
- Environmentally friendly technology
- Optimum operator convenience
- Modern, functional design
- Optimum cost-to-performance ratio

Highlights for wide-ranging and tangible benefits

Optimum edge quality

No need for reworking, thin, almost invisible glue joint, optimum gluing quality due to the quick melt system. Quickly ready for operation, continuous supply of fresh glue, energy saving. The optionally available PU 34 gluing system permits highly resistant waterproof and heatproof gluing on a polyurethane basis – for the best gluing results ever.

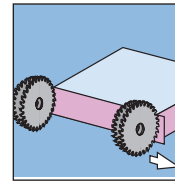


Option:

Coil magazines are optionally available with 2, 6, 12 or 24 slots.

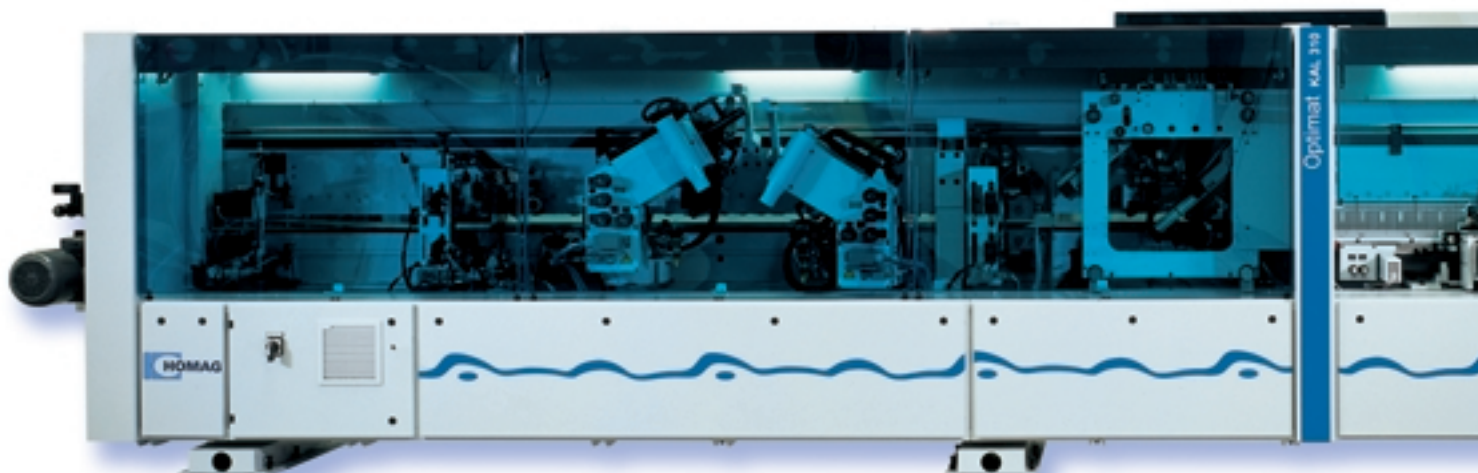
Future oriented technology


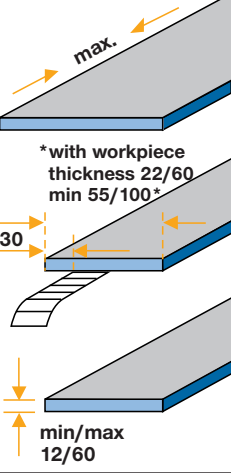



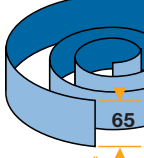


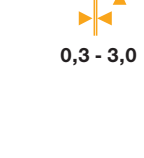
- PLC control system without limit switches, low-wear and trouble-free
- Frequency converter technology, low-noise, no maintenance, automatic braking of motors for optimum personal safety
- Flexible clamping system for processing units (also simplifies subsequent upgrading)
- Central waste and chip disposal, energy saving, environmentally friendly



The basic equipment also includes the **snipping unit** for flush trimming of all overhanging edging materials with manual resetting from chamfer to straight cuts.

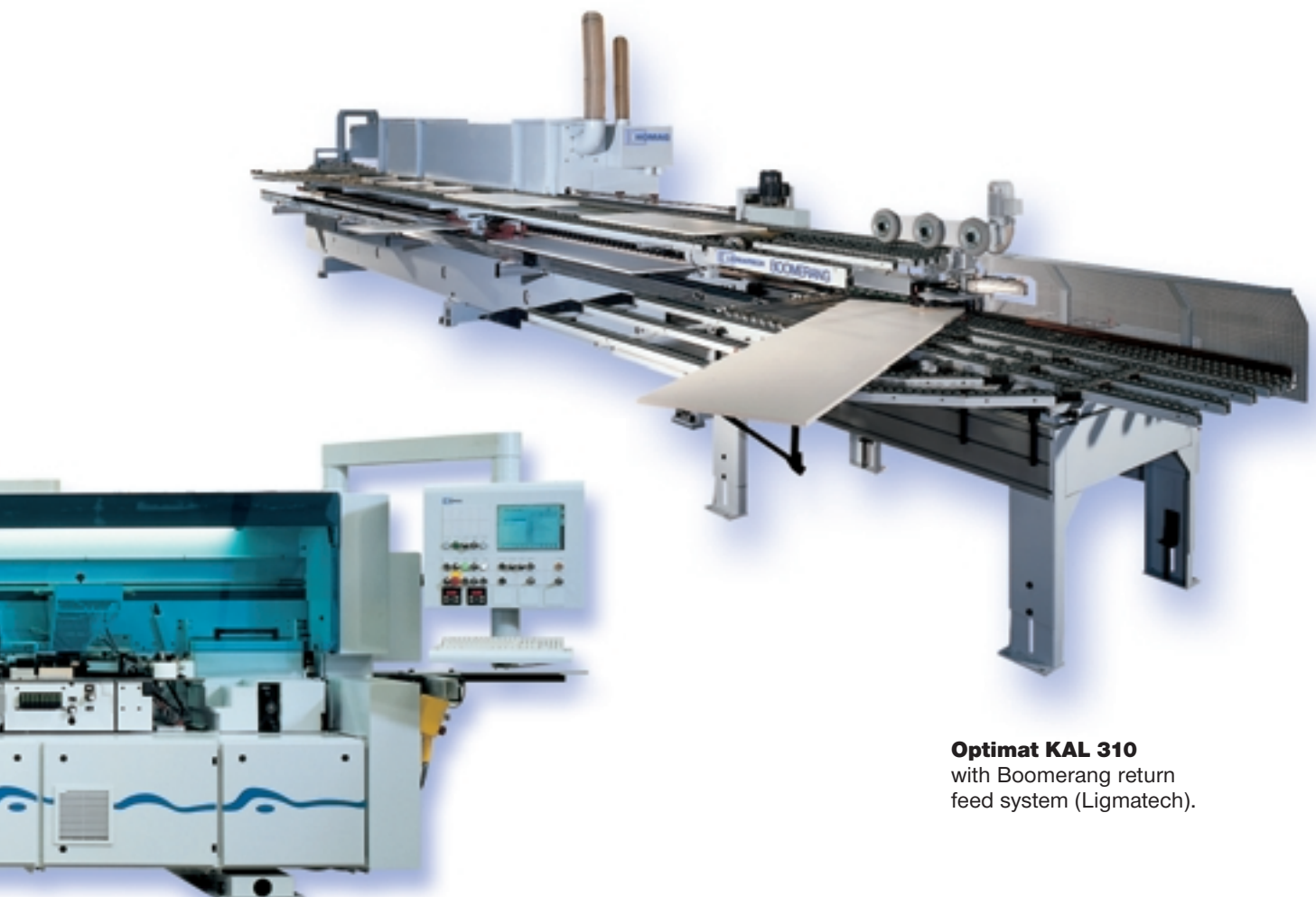
Option: Automatic chamfer/straight adjustment.



Machine model	Edging material			Workpiece size
	Solid wood	Fixed lengths	Coils	
Edging Optimat KAL 310	A 3 			 <p>*with workpiece thickness 22/60 min 55/100*</p>
	A 20 			
Jointing edging Optimat KAL 310	A 3 			
	A 20 			
Dimensions in mm				

One series for every material

The new Optimat KAL 310 machines are capable of processing all kinds of edging material. These include, to name just a few examples, solid wood, coil and fixed length material, melamine, PVC, ABS and veneer edges. Although hot-melt glue is primarily used for banding, PU adhesive can also be used for special requirements.

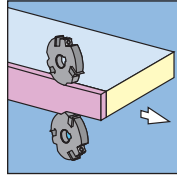
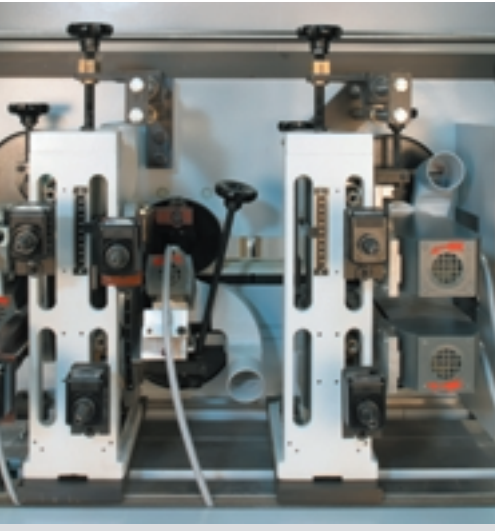


Optimat KAL 310
with Boomerang return feed system (Ligmatech).

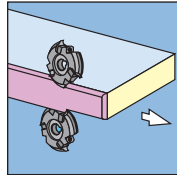
Your option: The free space you want for the equipment you need

The new KAL 310 Optimats are typical throughfeed machines capable of complete workpiece processing. For complete, read: no additional processing

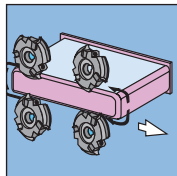
steps. To allow you as much scope for choice as possible, we offer a wide range of units and options – through to the perfect finish.



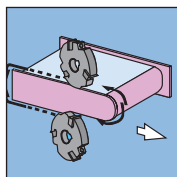
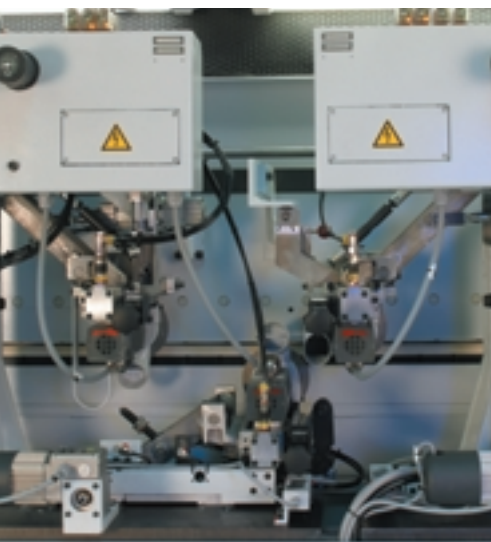
Rough trimming unit
For rough trimming the upper and lower edge overhang.



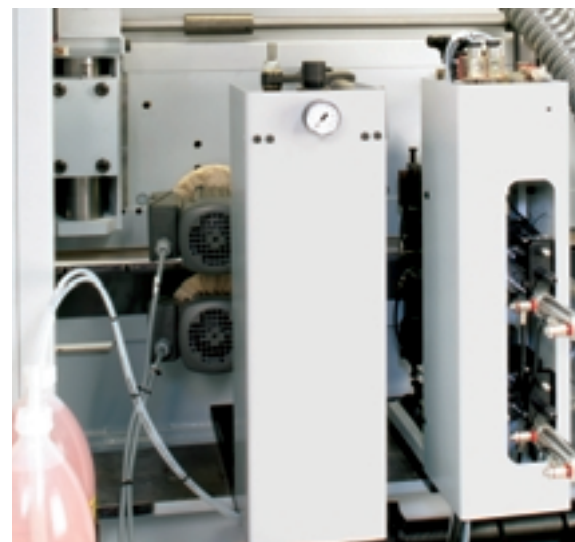
Trimming unit
For trimming chamfers or radii.

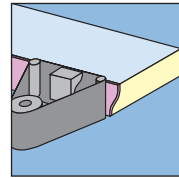


Profile trimming unit FK 11/FK 13
For processing edge overhang, as well as leading and trailing edges.
Options: Chamfer / radius adjustment with stepless axis or manually.



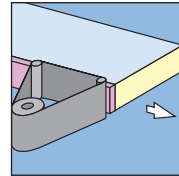
Profile trimming unit FF 12
For all-round finish trimming of workpieces, also those with postforming and softforming profiles.





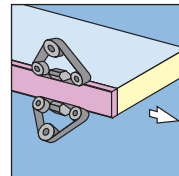
**Profile sanding unit
PS 10/PS 20**

For sanding profiles and straight edges. PS 20 uses the dual-pad technique



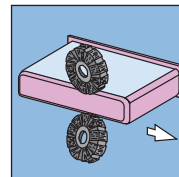
Belt sanding unit KS 10

For sanding straight veneer and solid edges.



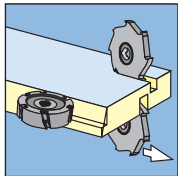
**Chamfer/radius sanding
unit PS 41/PS 42**

For sanding chamfers and radii above and below on veneer and solid wood edges.



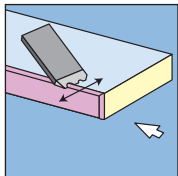
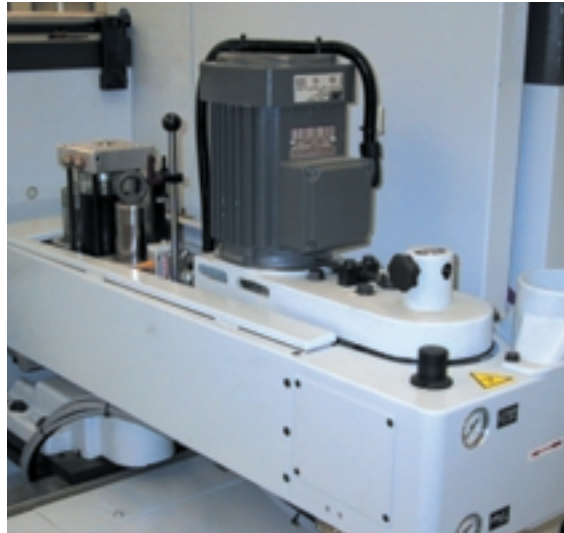
**Buffing unit above and
below with oscillation**

To smooth off edges utilizing the entire disk width.



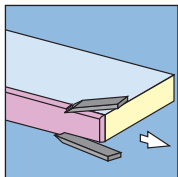
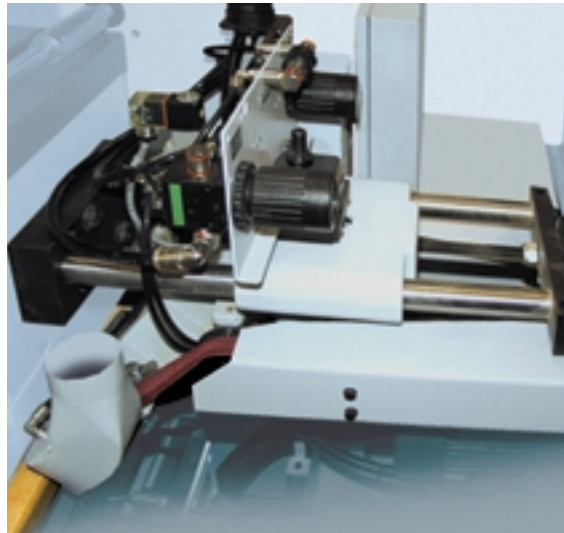
Universal trimming unit UF 11

For grooving, rebating and profiling with swivel-action and controlled motor.



**Multi scraping device
MN 20 / MN 21**

For chamfering or rounding up to three different trimmed PVC edges.

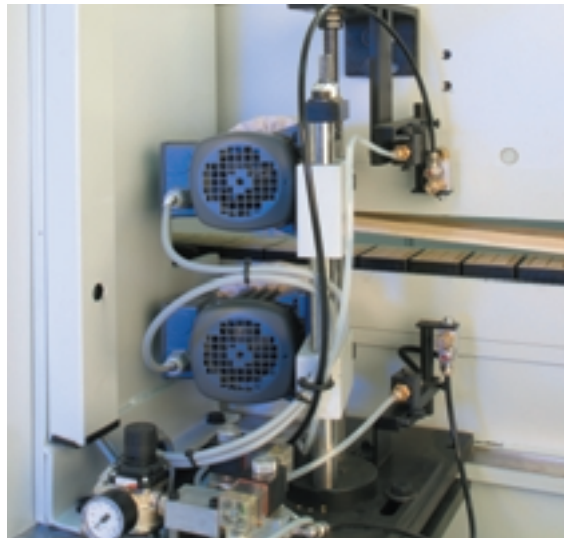


Finish processing FA 10

Comprising a glue joint scraping device for disposal of glue residues above and below on PVC edges.

Finish processing FA 11

Comprising a glue joint scraping device, cleaning agent application and buffing for disposal of glue residues on PVC edges.



The control system

User-friendly, fast, reliable

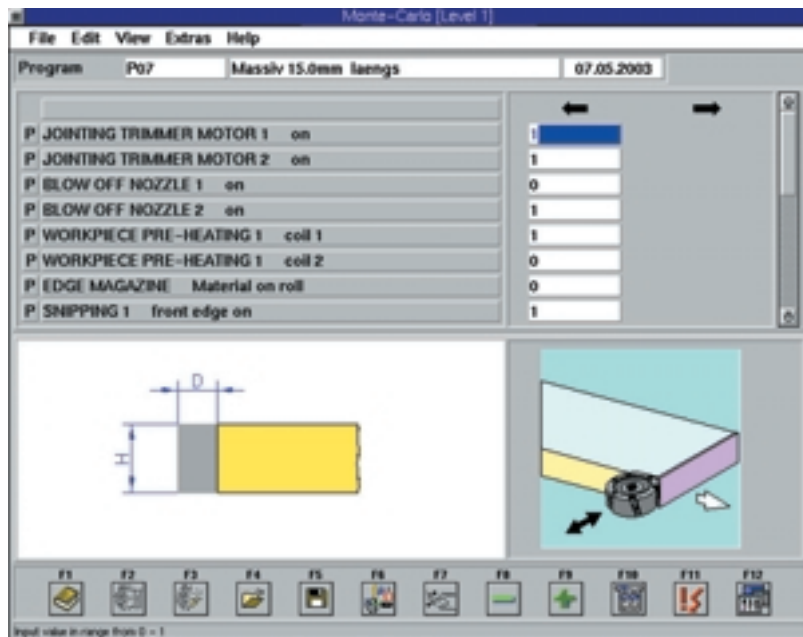
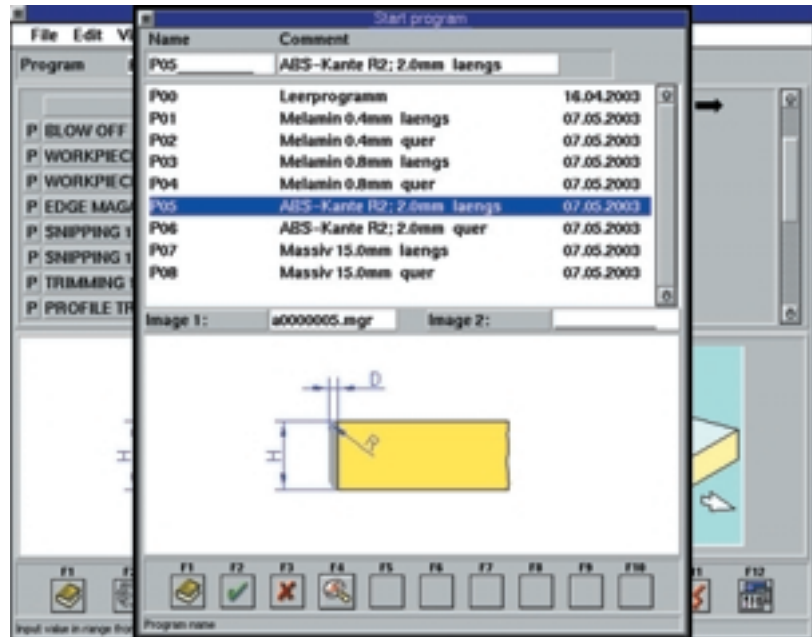
Homag control systems do their job with absolute reliability and apparent ease, using familiar Windows technology to provide maximum user convenience and simplicity.

Your added bonus in terms of reliability

Homag control systems offer absolute operating reliability through and through – under the toughest of conditions. Even where exposed to high levels of dust and heat, you may rest easy in the assurance that your Optimat will not let you down.

Plain text tells it how it is

Both the selection of programs and parameter entries can be read directly in the display text.



Troubleshooting diagnostics included

Direct indication of error messages at the monitor allows operators to respond quickly and so minimize downtimes. Any error messages are logged and can be diagnosed, for example, by remote servicing.

New from Homag

The operator prompting system is now provided as a standard feature. Manual adjustments are managed by the control system and indicated directly with the resetting process in the display.

Simple, convenient operation

The control system is extremely simple to program and operate, setting whole new standards in user convenience. It comes with a flat colour screen and a dustproof PC keyboard for data input. Every input is assisted by graphic support to indicate the meaning of each input box. Every entered value is also immediately plausibility checked, practically eliminating the possibility of input errors.

HOMAG

File Edit View Extras Help

Program P07 Messer 10.0mm Länge

07.01.2003

- P BLOW OFF NOZZLE 2 on
- P WORKPIECE PRE-HEATING 1 on
- P EDGE MAGAZINE Material on roll
- P SHIPPING 1 front edge on
- P TRIMMING 1 rear edge on
- P PROFILE TRIMMING TOP on



F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12

Input value change from 0 - 1



Control panel with various buttons and knobs:

- Large black knob
- Small black knob
- Small silver knob
- Small silver knob



It pays to be a Homag customer



Homag is everywhere

A well-developed servicing, sales and dealer network means even greater proximity, rapid response and improved customer support – all over the world.

Practically-oriented training

Although Homag products are designed for outstanding operating simplicity, thorough training does help cut down on commissioning times, reduces scrap from trial and error, helps develop the skills of the operator and generally improves efficiency.

With this aim in mind, customer training courses are held in a number of languages in our own training centre.

Careful maintenance

Scheduled, correctly performed maintenance helps reduce costs and increase the productivity and service life of plant and machinery.

Identical parts, simple handling

A large number of the parts, control elements and assemblies used in Homag Group plants and machines are identical. The wide-ranging benefits of this policy include simplified operation, lower costs, streamlining of spare parts management and also faster maintenance and servicing - to name only a few.

Remote diagnosis worldwide

All NC machines are fitted in the factory with a modem to allow remote diagnosis anywhere around the globe. A search for possible faults is performed from the Homag Service Centre. Once localized, they are narrowed and often already solved over the phone.

Specifications KAL 310

Machine models	Optimat	Optimat	Optimat	Optimat	Optimat
	KAL 310/3	KAL 310/4	KAL 310/5	KAL 310/6	KAL 310/7
Overall length mm	5.630	6.130	6.880	7.755	8.545
	KAL 310/8	KAL 310/9	KAL 310/10	KAL 310/11	KAL 310/12
	9.295	10.045	10.860	11.610	12.360

Machine dimensions

- Overall length mm _____ see table above
- Noise protection covers
Overall width closed/open _____ 910/1.540 mm
- Overall height closed/open _____ 1.740/2.280 mm
- Working height _____ 950 mm

Processing dimensions

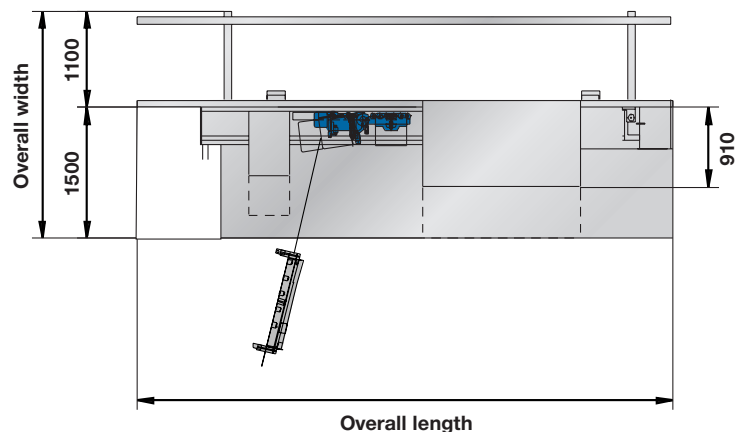
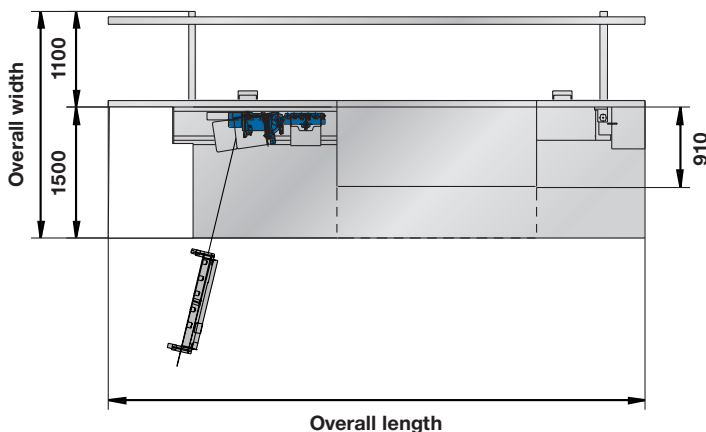
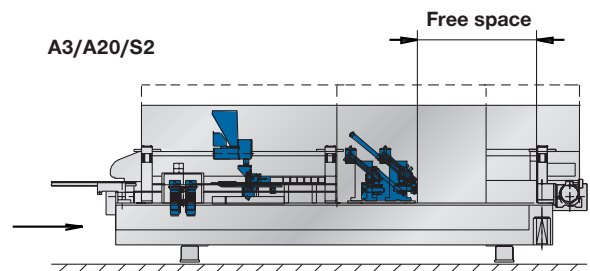
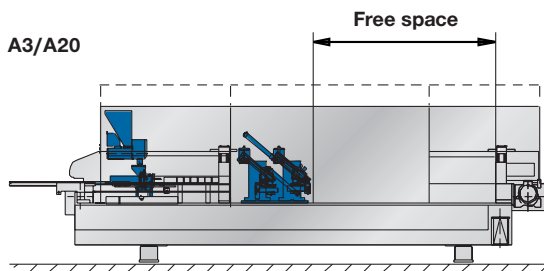
- Workpiece width
with workpiece thickness 22 mm _____ min. _____ 55 mm
with workpiece thickness 60 mm _____ min _____ 100 mm
- Workpiece thickness _____ min. _____ 12 mm
max. _____ 60 mm
- Edge thickness, fixed lengths _____ max. _____ 0,3 mm
- Edge thickness, coils _____ max. _____ 20,0 mm
- Profile depth, above _____ max. _____ 150 mm
- Profile depth, below _____ max. _____ 200 mm
- Workpiece overhang, fixed (optionally adjustable) _____ 30 mm

Connected loads

- Operating voltage _____ 400 V
- Control voltage _____ 24 V
- Frequency _____ 50 Hz
- Static converter _____ integrated
- Switch cabinet _____ mounted
- Total connected electrical load kW _____ depending on equipment
- Total extraction output m³/h _____ depending on equipment
- Chip conveyor belt _____ Optional
- Air flow rate _____ 28 m/sec.
- Compressed air consumption _____ depending on equipment
- Compressed air port _____ R1/2" female thread, supply line R1"
- Pressure loss _____ appr. 200 mm/WG

Miscellaneous

- Feed rate, fixed (optionally controllable) _____ 18 m/min.
- Machine weight appr. kg _____ depending on machine model





A member of the Homag Group



Homag Holzbearbeitungssysteme AG

Homagstraße 3-5
72296 SCHOPFLOCH
GERMANY

Tel.: +49 (74 43) 13-0
Fax: +49 (74 43) 13 23 00
E-Mail: info@homag.de
Internet: www.homag.com

