

## Power for large books of panels



Preliminary version

**The 6 series:**

**HKL 600**

Version 2015/1

# HOLZMA's high-performer – the new 6 series

The HKL 600 angular saw of the new HOLZMA 6 series represents the ultimate in performance and availability. This new development combines innovative technologies with efficiency and unparalleled ease of servicing and maintenance, thus guaranteeing a long machine life even in the case of very heavy loads. This makes the 6 series the new high-performer for all those who cut large quantities of panels in books in a short space of time, who produce in large batches and who are looking for a powerful saw for multi-shift operation.

## A real heavyweight

With its heavy-duty SORB TECH mineral compound base, the HKL 600 profilLine is one of the heaviest and most stable machines on the market, guaranteeing long-term precision and a long service life.



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# HKL 600 profiLine

Speed, precision and performance: the new HKL 600 profiLine angular saw unit is packed with power for volume production. The 190 mm saw blade projection and ruggedly designed, heavy-duty basic machine already give some idea of this. They are accompanied by individually and flexibly selectable optional features to meet all industrial cutting requirements.

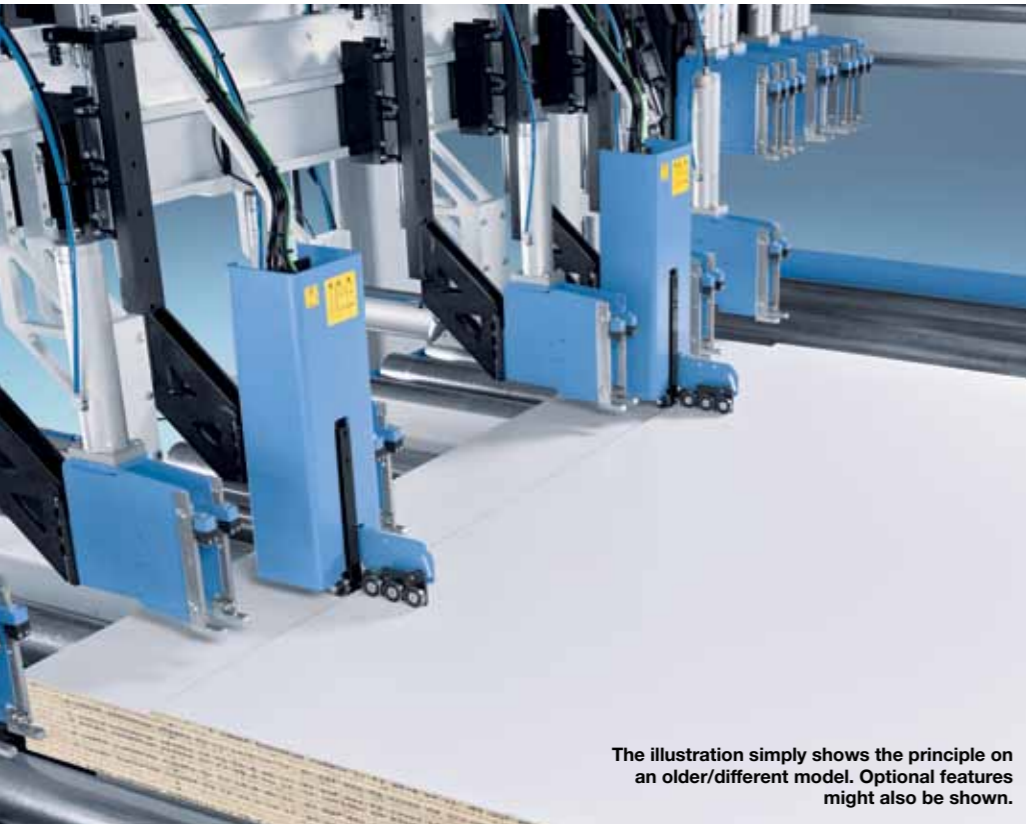
## Highlights at a glance

- Angular saw unit for industrial use
- High output due to fully automatic rip and cross cutting
- 190 mm saw blade projection
- Cutting lengths of up to 5600 mm
- Stand-alone solution or for integration in a production line
- More power at no extra cost: three additional clamps in the cross cut saw increase output by about 5 to 10 percent (depending on the cutting pattern)



The illustration simply shows the principle on an older/different model. Optional features might also be shown.

You think ahead. So does HOLZMA. This is clearly reflected in the standard features. You benefit from state-of-the-art, high-precision technology.



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## Powerful feeding system

Feeding is performed by the electro-hydraulic four-column lifting table.

- Automatic determination of book height
- Equipped as standard with longitudinal profiles and sensing device

- Also suitable for thin materials from 9.5 mm upwards. If equipped with the options micro-infeed and hold-back device, suitable for materials from just 3 mm upwards
- Maintenance-free and no lubrication required



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## Separate backing wall

- Not attached to the machine base. This ensures precise cuts
- Feed-stacking, aligning and unloading books of panels has no effect on the machine bed

## Pressure beam

- Innovative pressure beam guide for long-term precision and long service life
- Heavy-duty design
- Very short cycle times due to dynamic pneumatic system
- Convincing extraction results achieved by special geometry in the pressure beam – dust is extracted without any swirling and via the shortest route, also through the right-angled fence
- Micro-joint technology: the gaps for the optional clamps are firmly sealed, but can be opened very easily if required

- Clip-in brushes (patented) fitted inside the gaps for the clamps seal the pressure beam and prevent dust from escaping. Clip-in principle allows fast, easy brush replacement
- CADmatic automatically controls the contact pressure of the pressure beam for the specific workpiece – always over the entire cutting length, thus ensuring minimum torsion

## Program fence for precision and dimensional accuracy

- Resistant to torsion and bending
- Electronically controlled
- Precision guide rod on H-girder
- Electromagnetic measuring system guarantees positioning accuracy of +/- 0.1 mm, thus allowing minimal trim and dust cuts
- No wear and no maintenance



## New side pressure device

The HKL 600 works with a side pressure device that is lowered from above and can be moved independently. It aligns the strips over the entire cutting length.

From the operator's perspective, the side pressure device is behind the cutting line. In the case of systems with automatic outfeed, it can optionally be equipped with a second cylinder so that pressure can be applied on both sides of the cutting line.

## Clamps

- Rugged clamps, all with two fingers
- Gentle positioning of material
- The bottom fingers of the clamps can be removed to allow the clamp base to be cut in perfect alignment – a fast means of adjustment
- Contact pressure can be adjusted (manually) to suit each particular material, independently of the book height
- The top fingers of the clamps do not exert any leverage. They do not fold down but are lowered straight and their entire surface area rests on the material, ensuring it is held firmly
- Automatic clamp activation prevents damage to edges (option)
- Designed for continuous, multi-shift operation

## Program-activated clamps

- This option ensures panel edges are not damaged.
- Now also possible: automatic clamp activation in “measuring” mode.

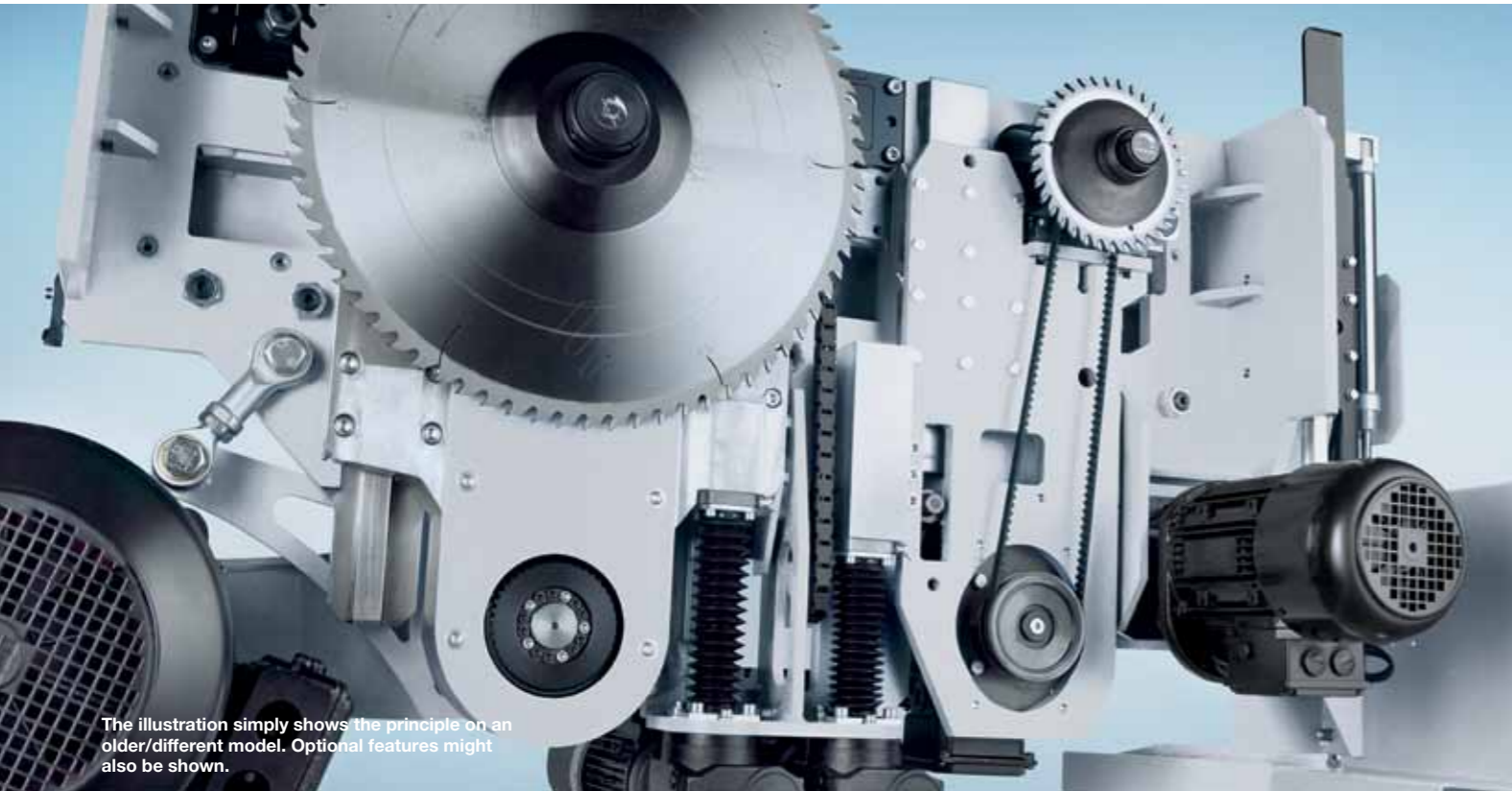
## Cutting gap closers

The automatic cutting gap closers provide higher levels of reliability and operating convenience. They prevent narrow strips from falling into the cutting gap and getting jammed there.

The illustration simply shows the principle on an older/different model. Optional features might also be shown.

### SORB TECH advantages over steel girder designs:

- 10 times better vibration dampening
- 20% higher sound absorption
- 30% longer saw blade life
- 40% lower consumption of primary energy during its production



The illustration simply shows the principle on an older/different model. Optional features might also be shown.



### Saw carriage

Exceptionally smooth running and low energy consumption are the hallmarks of the 6 series saw carriage.

- Torsion-resistant, compact and rugged basic design of the steel plate body for maximum dynamics and precision
- Infinitely variable feed speed – for precision cutting of demanding materials
- Long-term accuracy of saw blade projection
- Fast, precise and infinitely variable positioning of the main saw blade by means of linear guide system with rocker
- Electrically driven ball-screw spindle to raise the main saw blade (available as option – for even greater speed)
- Low-noise, maintenance-free main saw blade drive
- Long service life thanks to very easy servicing and maintenance as a result of, for example, simplified belt change, belt wear minimized in the design and integrated brush as a standard feature
- All main saw and scoring saw parameter settings can be saved. This allows the pair of saw blades to be fitted after sharpening without requiring any readjustment (available as option if the scoring saw is motor lifted)
- Patented spring-preloaded running rollers – this ensures that the running rollers maintain proper contact even after several years of operation
- Light sensor with blower unit

### Saw body made of SORB TECH

The faster a machine operates, the higher the susceptibility to vibrations and the noise level. This is why the 6 series saw body (machine base) is made of SORB TECH. This innovative construction material consists of hard stone grit in various sizes that is combined with bonding agents and special additives to form a casting compound that is tailored to the specific application requirements.

The result: the saw body is extremely torsion-resistant, low on vibration, stress-free, quiet and stable, even after millions of load changes.

- Ensures very precise running of the saw carriage and thus also of the saw blades
- Less wear, longer service lives – this reduces operating costs
- 6 series models operate far more quietly than other saws thanks to SORB TECH

### Power-Loc system

- Fast and easy saw blade change

### Cleaning drawer

The brush integrated in the saw carriage sweeps dust and chips straight into the cleaning drawer at regular intervals. The drawer can be pulled out and easily emptied.



### CADmatic 4.1 PROFESSIONAL

Developed with the needs of different user groups in mind and individually configurable, the CADmatic control software ensures optimized processes.

- Easy-to-understand operating software
- 3D real-time process graphics
- 19" TFT flat panel touchscreen monitor
- Graphically supported diagnostics
- Improved navigation due to permanent access to all functions
- Improved design for enhanced user-friendliness



Front cleaning flap



Rear cleaning flap

### Raised base for easy cleaning

The HKL 600 profiLine has a special raised base for easy cleaning. Its steel cover plates are designed in such a way as to allow the areas under the machine to be accessed and easily cleaned with a broom.

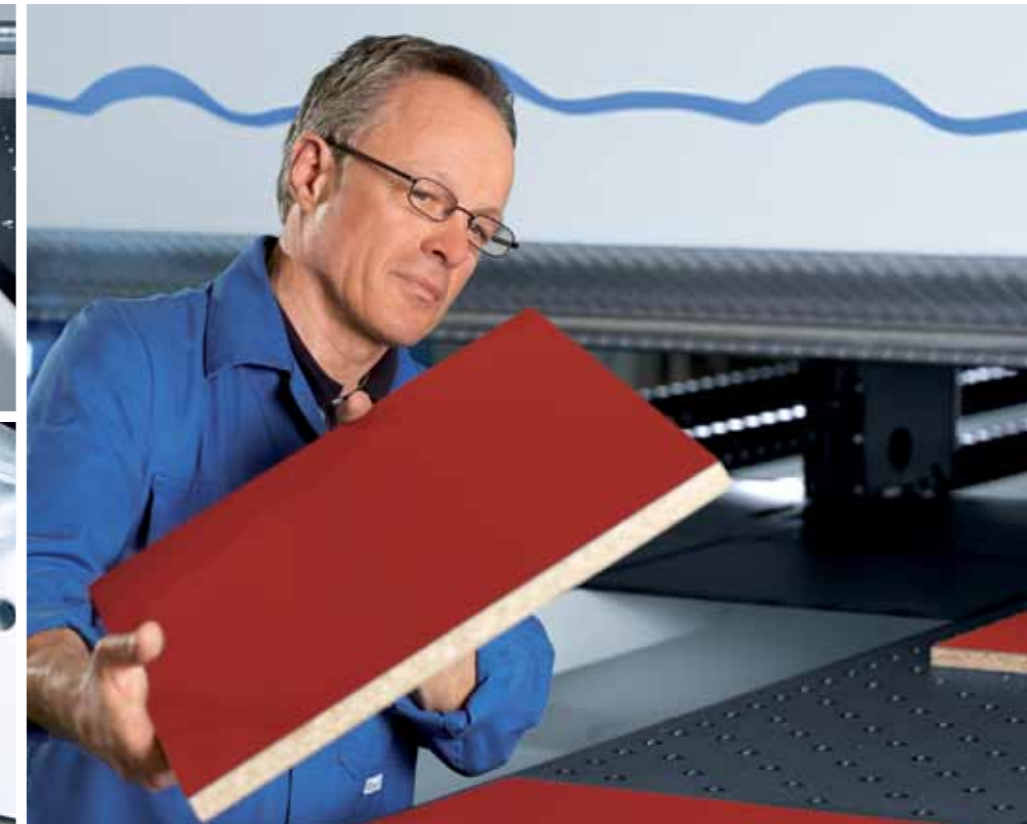


**Cleaning flap**

[Video available](#)

### Handy cleaning flap

Fast and convenient: flaps provide easy access to the area under the saw carriage, allowing easy removal or vacuuming of waste.





### Waste flap and pull-out device at the rip saw

- Waste flap with rollers for automatic waste removal at the rip saw
- Rip saw pull-out device for unproblematic transport of even narrow strips



The illustration simply shows the principle on an older/different model. Optional features might also be shown.



### Transfer to cross cut saw

- Cross transfer with sub-level carriage
- Energy-saving motor-driven aligners
- Rollers can be raised/lowered
- Aligning process with clamps, sub-level carriage and right-angled fence
- Lengthwise aligning device in front of the cross cut saw can be raised/lowered

### ecoPlus: state-of-the-art technology for energy savings of at least 20%

- The standby button, a standard feature, puts the saw in an energy-saving standby mode at the touch of a button
- All models with IE3 motors
- Variable speed control by means of a modern bypass circuit for all models with frequency-controlled main saw motor
- Patented rocker raises just the main saw blade, while the motor remains in position – this saves energy
- The light sensor on the saw carriage has its own blower unit (option), which utilizes the air discharged from the main saw motor
- Highly efficient dust extraction thanks to the perfected geometry of the saw carriage
- Intelligent optional feature: load-dependent control of the air cushion
- All models with the HOLZMA energy monitor for consumption monitoring
- Less energy required thanks to optimized extraction
- Numerous innovations for improved ergonomics and smooth production processes

More information in the ecoPlus brochure.



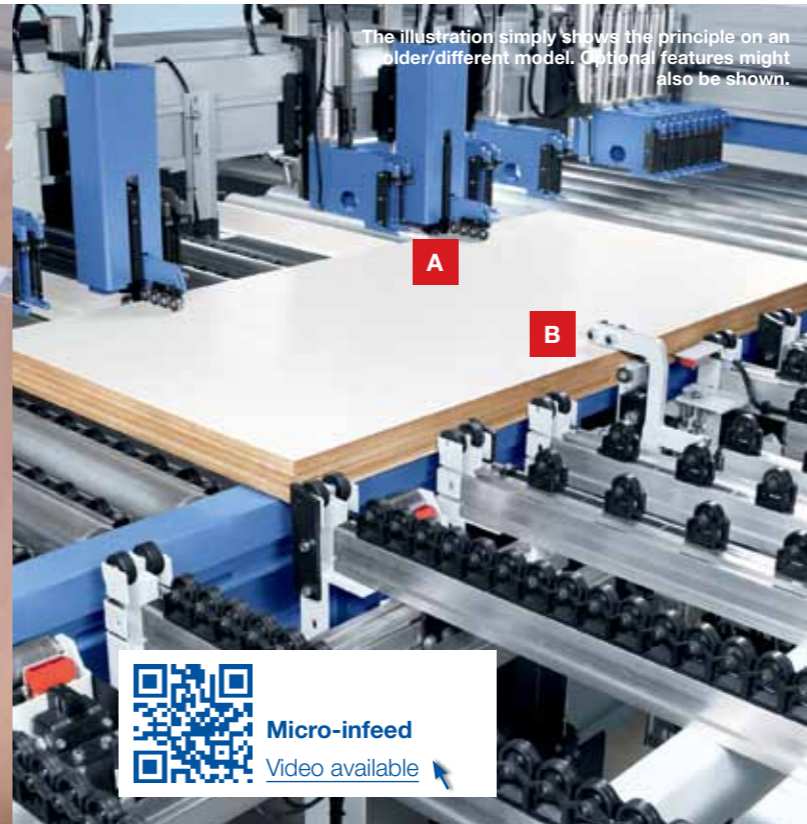


## Panel labeling system

The HOLZMA panel labeling system labels the panel before it is cut – independently of the saw, in non-productive time that hitherto went unused.

- Smallest part size 170 x 170 mm
- Up to 10 labels/min, optionally up to 15 labels/min
- Labeling independent of cutting process

- Saves time, because non-productive time is used productively
- Optimizes handling during destacking, because all the parts are already labeled
- Simplifies and speeds up production processes
- Automated parts tracking
- Can be retrofitted
- For smooth processes



## Hold-back device

The micro-infeed option **A** can be combined with the hold-back device **B** for thin panels from a thickness of 3 mm upwards.



## Extra impetus for feeding

The automatically driven roller conveyor integrated in the lifting table and additional roller conveyors on the side ensure fast stack changeover.

## Micro-infeed for thin panels

The micro-infeed option allows thin panels from 6 mm upwards to be pushed onto the rear machine table (provided that their properties meet HOLZMA specifications). Book height is measured by a non-contact, electromagnetic measuring system which is completely maintenance-free.



## Turning device for headcuts

- Labor-saving device for operators
- With automatic aligning function
- Significant increase in output
- Process integrated perfectly in the machine cycle
- Less time required for preparation
- Easy operation



## Automatic waste removal

- Vibrating conveyor: cutting waste that falls through the waste flap collects here | **A**
- Waste chopper: cuts waste into small pieces, facilitating automatic removal of the cutting waste | **B**
- Elevating conveyor belt for waste: transports cutting waste, for example, to a container | **C**



## Automatic outfeed fence

- Pushes panel remnants from the rear machine table across the cutting line to the front
- You no longer need to reach into the cutting area
- Ergonomic

# Optional features

Optional features  
**HKL 600 profiLine**

- “Highly sensitive surfaces” package:**
- Flocked rollers
  - 5 additional roller rails
  - All clamps in floating mountings
  - Anodized aluminum machine table equipped with air jets
  - Increased, frequency-controlled fan output



## CADmatic 4.5 PROFESSIONAL

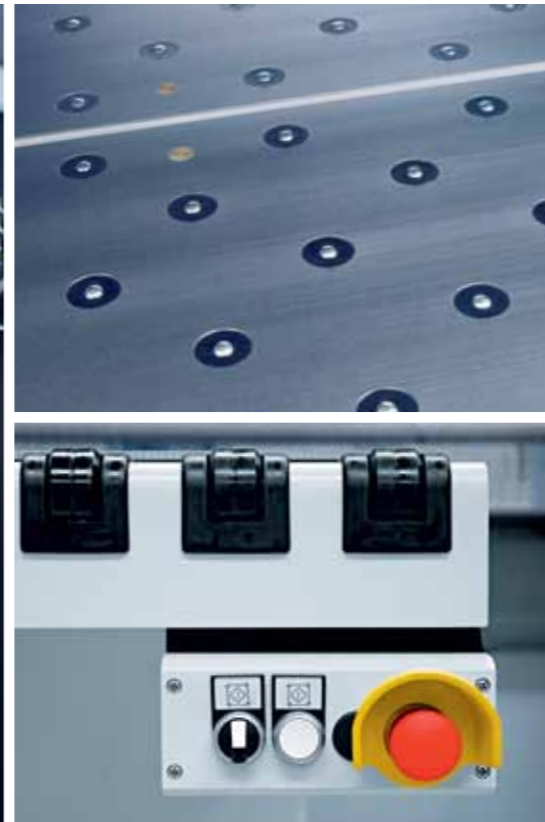
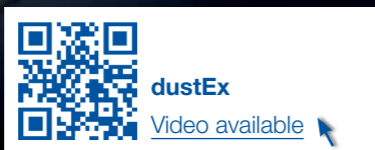
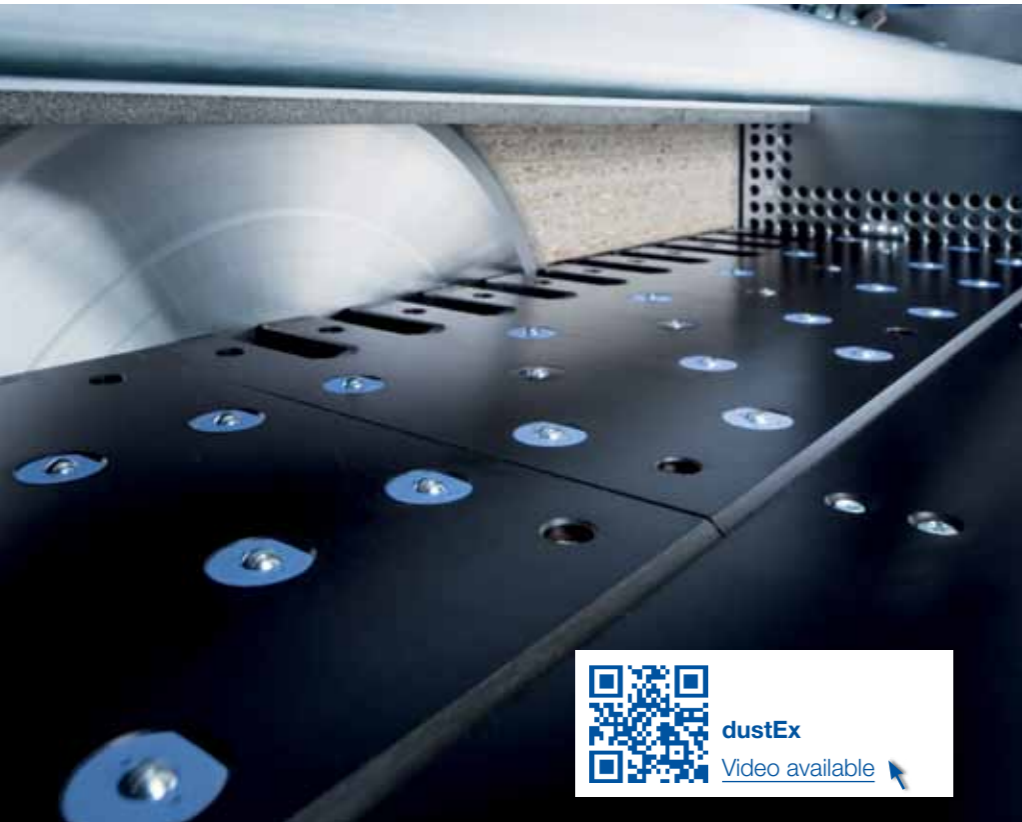
Intuitive machine control – simple, fast and clearly structured: this is what CADmatic 4.5 PROFESSIONAL stands for. The new operating system is available with the new wide-screen monitor and the package goes under the name of powerTouch. It makes machine control a breeze.

## Dust-trap curtain on both sides

- Attached to the front and rear of the pressure beam
- Protects operators from dust
- Improves extraction
- Ideal for dust cuts

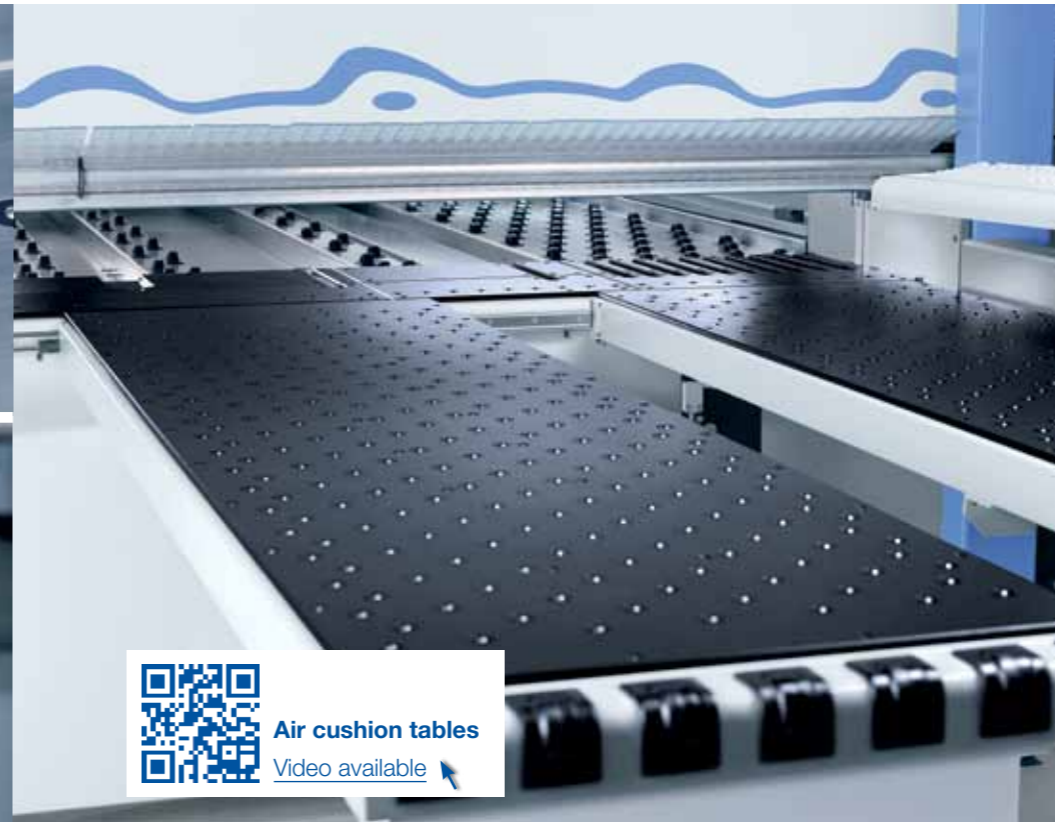
### Anodized aluminum machine bed plates

The special coating ensures exceptionally gentle material handling. Ideal for materials with highly sensitive surfaces. This option is also included in the "highly sensitive surfaces" package.



### Start-stop button

- Allows the program sequence to be started independently of the control panel
- Equipped with an emergency stop button



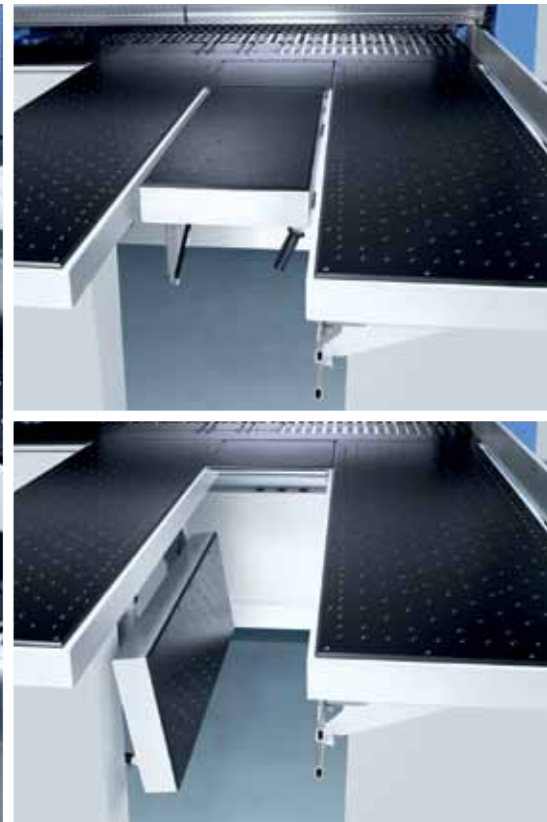
### Movable air cushion table

The movable air cushion table is easily moved along linear guides and offers you a mobile work surface and storage area. It allows you to move small panels, large panels or books of panels more ergonomically and with less risk of damage.

### Longer air cushion tables

(Not illustrated)

- Length increased from 2160 mm to 2810 mm
- Greater freedom of movement
- Better connection to destacking systems
- Very useful when cutting large-format panels



### Tiltable air cushion table

- Prevents thin materials from sagging
- Increases the work surface
- Primarily for large panels
- Folds down for easy access to the cutting line

### Air jets throughout: the machine table

Anyone working with sensitive material or especially heavy panels and books will benefit from the machine table being equipped with air jets throughout.

### Now with new dustEx technology

HOLZMA was one of the first manufacturers to introduce a machine table with air jets throughout. dustEx is now the next major evolutionary step.

New combination air jets, patent pending, are positioned along the cutting line and transport dust and chips toward the right-angled fence. They are now picked up here even more effectively thanks to new, innovative extraction technologies.

Recommended: a front and rear dust-trap curtain rounds off the dustEx package. (see page 21).



### Cutting pattern optimization in the office

HOLZMA increases output and efficiency in panel cutting with its proven optimization software Cut Rite.

- Optimized project control
- Efficient cutting processes
- Full control of costs
- Faster calculations

As an alternative to the comprehensive Cut Rite optimization software, CADplan, an add-on module for CADmatic, can also be used to perform small optimization jobs directly at the saw.



### Label printer

The HOLZMA label printer has everything to facilitate an efficient workflow. You can print customized labels directly at the saw and design them to include bar codes, text and graphics, if required. If you also use our Cut Rite optimization software, instructions for downstream CNC machining can also be included on the labels. In this way, you can integrate the saw perfectly in your production flow.

### Options packages

HOLZMA now offers the most important optional features in attractively priced equipment packages:

- Package for highly sensitive surfaces (see page 20)
- Angle cut package
- Feeding package
- Grooving and cut-out package
- Labeling package
- Cut Rite package PROFESSIONAL
- Saw carriage dynamics package for increased speed of up to 150 m/min

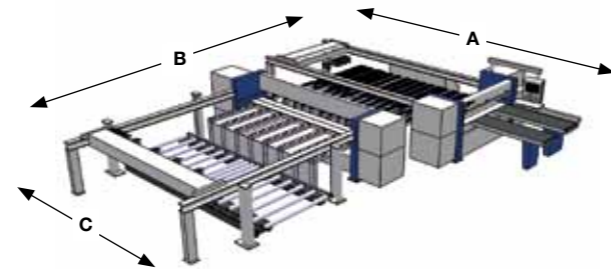
### Additional clamps

- For an even better grip on thin, narrow or smooth materials

# The HOLZMA 6 series at a glance

Technical data  
HKL 600 profiLine

Size, performance, features: the most important technical data for the 6 series can be seen here at a glance. If you would like to know more then simply ask your HOLZMA sales consultant. He will be pleased to give you detailed information.



Technical data*	HKL 600
Saw blade projection	190 mm   7.5"
Cutting length, cutting width	rip saw: 3200/4300/5600 mm   126"/170"/220.5" cross cut saw: 2200/2700 mm   86.6"/106.3"
Lifting table width	2200/2700 mm   86.6"/106.3"
Program fence speed **	rip saw: 90 m/min   295 ft/min, cross cut saw: 140 m/min   459.2 ft/min
Saw carriage speed	up to 130 m/min (150 m/min as option)   up to 426.4 ft/min (492 ft/min as option)
Main saw motor	36 kW at 50 Hz, or 42 kW at 60 Hz   49 HP at 50 Hz or 57 HP at 60 Hz
Scoring saw motor	2.2 kW   3 HP
Average total air requirement	490 NI/min   17.3 cfm
Compressed air requirement	6 bar   87 psi
Extraction system	13 100 m³/h (14 600 m³/h****), 26 m/sec   7 709.3 cfm (8 592 cfm****), 85.3 ft/sec
Max. stack height without pit	770 mm (up to 4300 mm cutting length)   30.3" (up to 170" cutting length) 660 mm (from 5600 mm cutting length)   26" (up to 220.5" cutting length)
Max. stack weight	4 t   8816 lbs
Working height at cross cut saw	1 130 mm   44.5"
Air cushion tables	2 x 2 160 mm   85"

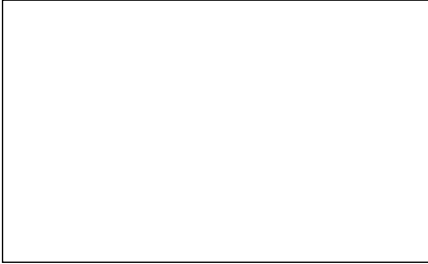
\* Values relate to the standard version  
 \*\* In EU countries, Switzerland and Liechtenstein forward speed is restricted to 25 m/min  
 \*\*\* Dim. A: incl. 64 mm for extraction connection.  
 Dim. C: standard program fence width  
 \*\*\*\* For the 5600 mm cutting length  
 \*\*\*\*\* Only right-handed version

All dimensions subject to change

Machine dimensions ***			
HKL 600	A	B	C
HKL 600/32/22	9 170 mm   361"	13 850 mm   545.2"	3 636 mm   143.2"
HKL 600/43/22	10 320 mm   406.3"	13 850 mm   545.2"	4 786 mm   188.4"
HKL 600/56/22	11 670 mm   459.4"	13 850 mm   545.2"	6 136 mm   241.6"
HKL 600/56/27	11 670 mm   459.4"	16 190 mm   637.4"	6 136 mm   241.6"



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