Heesemann

KSA 8

SANDING MACHINE FOR LARGE SANDING WIDTHS

THE WHOLE PRODUCTION OF HEESEMANN SANDING MACHINES IS LOCATED AT THE HEADQUARTERS IN BAD OEYNHAUSEN, GERMANY.

HEESEMANN
SANDING WITH DEDICATION

Heesemann has produced sanding machines for the industry and craftsmen for more than 80 years.

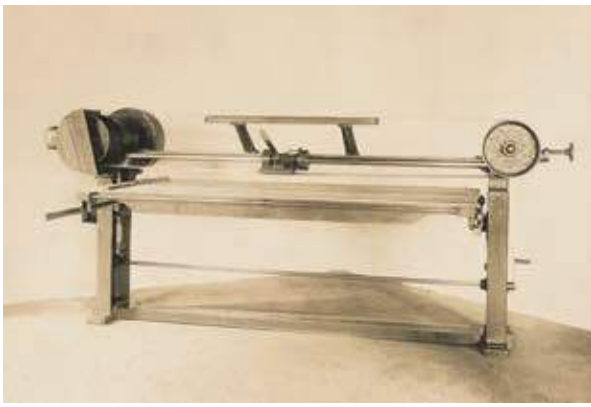
Numerous trend-setting, essential innovations were made during this time, many of which are now industry standards. Heesemann has, throughout its history, consistently provided new inventions and revolutionized sanding technology.

Heesemann has always been the leader in innovative sanding technology and every decision we make is with this objective in mind.

Today Heesemann has about one hundred fifty employees in Bad Oeynhausen, Germany and is the world market leader in the area of wood sanding machines. The production program includes machines for sophisticated handcraft as well as huge industry machines.

A world-wide organized distribution network and service subsidiaries in the most important regions and markets provide appropriate local contact people, guarantee efficient communication and the highest parts and service department performance.

Heesemann supports our customers with broad service offerings covering the entire lifetime of our machines. These include a wide spectrum of services such as an extensive application consultation, professional training of your staff, technical support and functional upgrades.



One of the first Heesemann belt sanding machines.

THE KSA 8
IS UNIVERSALLY IN WORKING WIDTHS AND
MACHINE CONFIGURATIONS APPLICABLE FOR
DIVERGENT SANDING TASKS.

up to 2 600 mm
Sanding width

5 - 25 m/min
Feed speed

up to 6
Sanding units

KSA 8
THE SANDING MACHINE FOR LARGE WORKING WIDTHS

The KSA 8 is the universal solution for working widths up to 2 600 mm. Up to 6 calibration, cross belt and longitudinal sanding units can be combined on the machinery base. It can be utilized for divergent sanding tasks like calibrating, fine sanding and lacquer sanding of assembled window sashes, for the industrial sanding of wide panels, for sanding wall trimmings, conference tables or desktops as well as the top covers of grand pianos.

As a sanding line consisting of a machine sanding from above and a machine sanding from underneath the KSA 8 minimizes the necessary handling costs on large work pieces.

All Heesemann sanding machines are operated via an intuitive user interface based on Microsoft® Windows® on a touch screen device.

KSA 8
AVAILABLE SANDING UNITS

Contact roller unit

Cross belt sanding unit

Longitudinal sanding unit
(with or without pressure segment belt)

Orbital sanding unit OSR

KSA 8
SPECIAL EFFECT SANDING

Utilizing Heesemann surface sanding machines equipped with at least one cross belt sanding unit and one longitudinal sanding unit you can achieve stunning sanding results. This is a brief description of what you can achieve and how it works:

ROUGH SAW-CUT PATTERN

Utilizing a Heesemann cross belt sanding unit and a very rough abrasive grain you can create an outstanding rough saw-cut pattern onto the surface of veneered boards in feed through production.

SCATTERED TROUGHS

Using a Heesemann longitudinal sanding unit in combination with highly flexible sanding belts, a special steel plate and a special sanding program you can create scattered troughs into the surface of your work pieces.

VINTAGE LOOK

You can achieve a vintage look on your work pieces using a Heesemann longitudinal sanding unit on a surface with two different lacquers. Work pieces primed with a dark paint and then lacquered with a lighter varnish can be processed using a special sanding program to create a specific antique sanding result.

THE HEESEMANN CONTACT ROLLER UNITS ARE OFFERED WITH STEEL ROLLERS AS WELL AS WITH RUBBER-COATED ROLLERS IN DIFFERENT SHORE HARDNESSES.

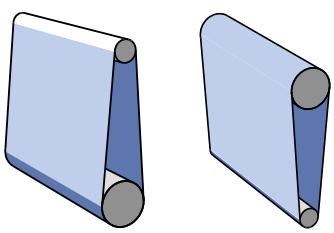
HEESEMANN
CONTACT ROLLER UNIT

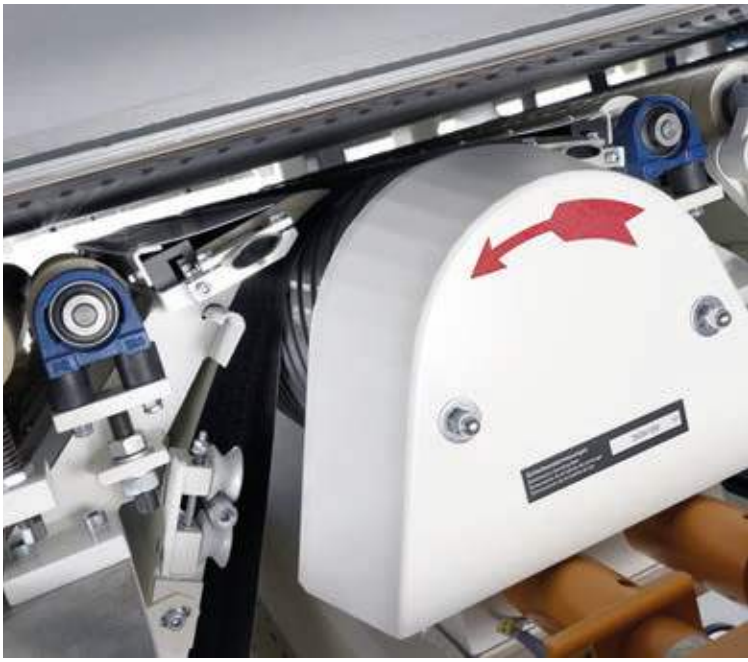
The Heesemann contact roller units are offered with steel rollers as well as with rubber-coated rollers in different Shore hardnesses. Both types are deliverable with different roller diameters.

The contact roller unit with a steel roller with a diameter of 300 mm or 400 mm allows the exact calibration of materials like solid wood, particle boards, MDF or plastics. The surface of the roller is grooved in a spiral shape. This allows a better cooling of the roller and makes it easier to extract the generated abrasive dust.

Contact roller units with rubber-coated rollers with a diameter of 400 mm can be delivered as well. Depending on their Shore hardness they can be used for varying sanding tasks.

The contact roller unit can be equipped with different kinds of hold down elements depending on the requirements of the application.





The contact roller unit working from underneath.

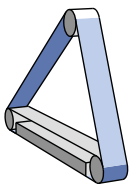
THE CROSS BELT SANDING UNIT IS AVAILABLE WITH SANDING BELT LENGTHS OF 6 600 MM (260”) OR 7 000 MM (276”).

HEESEMANN
CROSS BELT SANDING UNIT

For wooden surfaces the cross sanding method achieves the world-wide accepted best sanding result. The work pieces are sanded crosswise to the grain direction first and are afterwards sanded in direction of the grain with one or more sanding units.

This way the higher standing harder areas of the annual rings are leveled and loosened fibres are sheared off, a wash out effect is avoided and the fibers cannot straighten up again after applying paint or stain.

The Heesemann cross belt sanding units are equipped with the Heesemann CSD® magnetic pressure beam system and a pressure segment belt. They are available as three-point and four-point units as well as with commonly or separately driven pressure segment belt.



The sanding dust is removed from the sanding belt directly after the sanding process.

THE LONGITUDINAL SANDING UNIT WITH THE LONG BELT LENGTH OF 3 250 MM (128“).

HEESEMANN
LONGITUDINAL SANDING UNIT

A longitudinal sanding unit with an optimized distance between the lower driven drums allows a large amount of a freely suspended sanding belt for a highly flexible pressure onto the work piece. This way a smooth sanding and high working speeds are achieved.

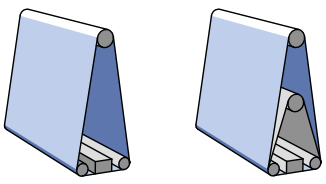
The longitudinal sanding units are available for sanding belts with belt lengths of 2 620 mm (103“) or 3 250 mm (128“).

Optionally the longitudinal sanding unit can be equipped with an eccentric bearing of the front driven drum for slight calibration work (combi unit). The driven drum is activated via the terminal. The driven drums may either be flat or grooved.

The longitudinal unit with an internally running pressure segment belt is a reasonable addition to many applications. The pressure segment belt interrupts the abrasive scratch lines of the sanding belt grit and thus offers a much better blended and even sanding scratch pattern.

If a particularly fine grit is being used for lacquer sanding, the pressure segment belt may significantly increase the lifetime of the abrasive material.

Two eccentrics are located on the unit to allow the guide drums to be readjusted in accordance with the wear of the pressure segment belt. This compensates for the thickness of the pressure segment belt, and its lifetime is extended many times over.



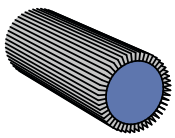
The longitudinal sanding unit is equipped with the Heesemann CSD® system that has proven its worth for more than 25 years.

HEESEMANN
BRUSH UNITS

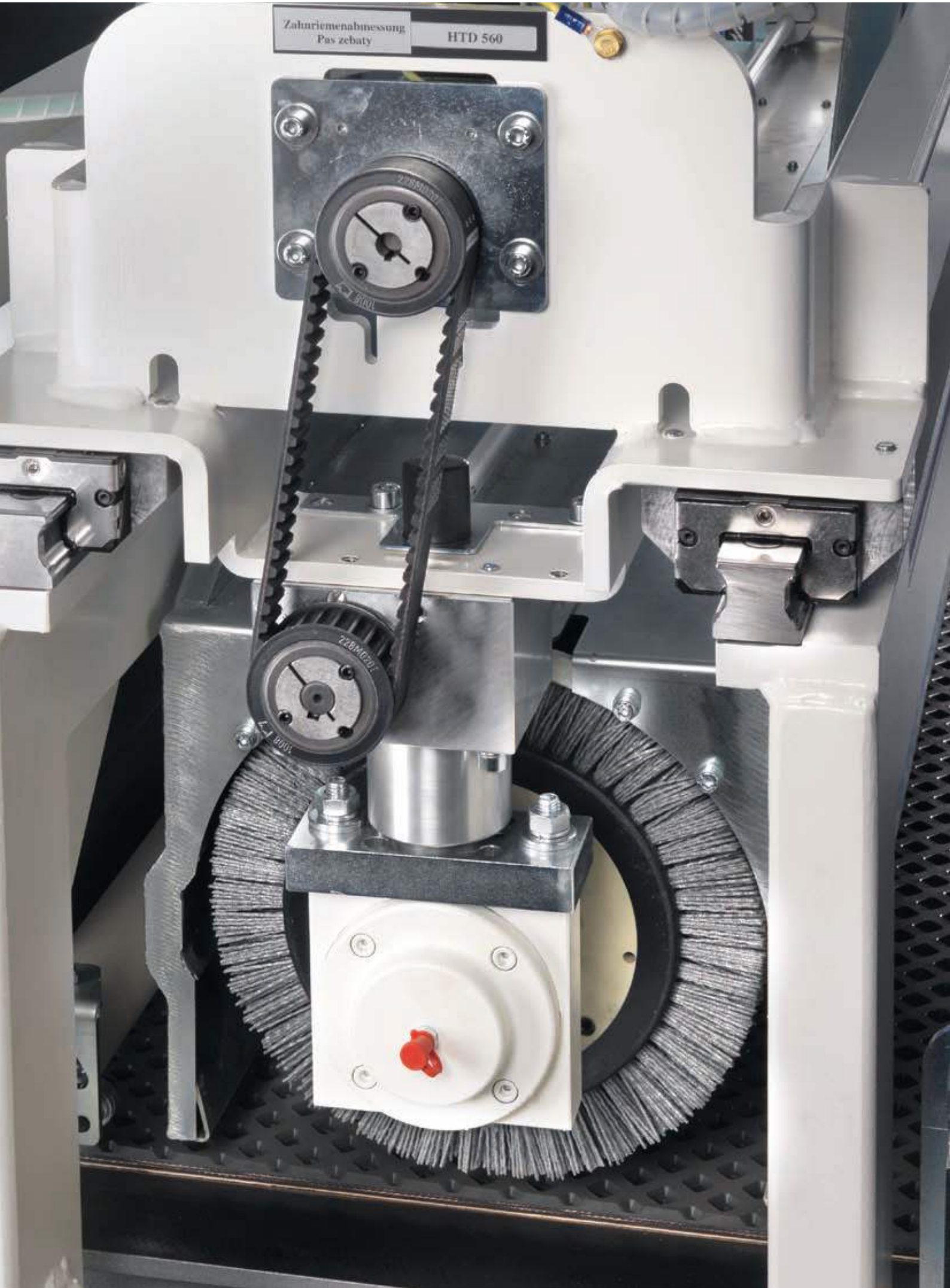
Heesemann sanding machines have available a wide variety of brush units with different bristles and abrasives for sanding and structuring. The brush units can be mounted on an angle to the feed direction or can be equipped with oscillation.

Heesemann offers brushes with horsehair, nylon fiber, sisal cord and mixed trimmings to clean the work pieces, fleece brushes to smooth lacquered surfaces, brushes with Flex Trim abrasive strips to sand 3-dimensional work pieces and brushes with Tinex or stranded wire bristles as well as twisted knot brushes to structure the work pieces for a distressed effect.

THE HEESEMANN BRUSH UNITS CAN OPTIONALLY BE EQUIPPED WITH AN OSCILLATION MECHANISM.



The Heesemann brush units can be equipped with different trimmings for sanding or structuring.


Zahnriemenabmessung
Pas zebaty
HTD 560

THE COMPUTER-CONTROLLED SELECTIVE PRESSURE REGULATION OF THE CSD® MAGNETIC BEAM SYSTEM CAN SMOOTHLY ADJUST THE SANDING PRESSURE TO EVERY INDIVIDUAL ELEMENT IN THE PRESSURE BEAM WITHIN MILLISECONDS.

HEESEMANN
CSD® MAGNETIC PRESSURE BEAM

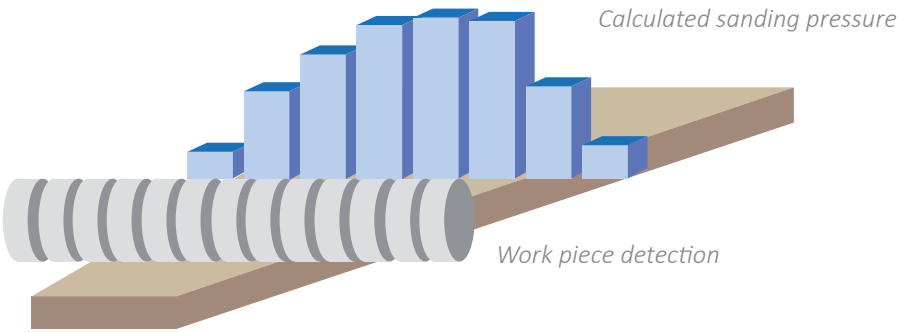
Precise control of sanding pressure is crucial for a high-grade, uniform surface sanding quality.

The computer controlled pressure regulation of the CSD® electro-magnetic pressure beam system can smoothly adjust the sanding pressure to every individual element in the pressure beam within milliseconds. A highly sensitive sensing system at the infeed supplies the data for exact calculation of pressure required.

The elastic pressure beam compensates for work piece thickness differences of 2 mm and more, whether the variation occurs within a single work piece or from one work piece to another.

The CSD® pressure beam system is maintenance free. There is only one moving part and the elements have electrical connections in a dust proof housing.

The CSD® magnetic pressure beam is an integral part of all Heesemann cross and longitudinal sanding units.



The elastic pressure beam compensates for workpiece thickness differences of 2 mm and more.

EMS

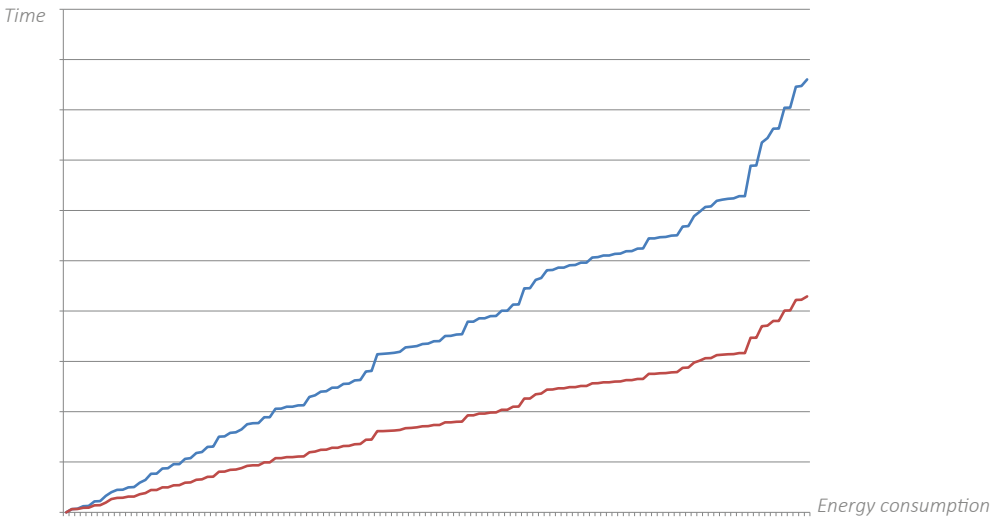
From our EnergyManagement-System our environment and the machine-user benefit to the same degree. A diminished energy consumption unburdens the environment and reduces the cost.

HEESEMANN
ENERGYMANAGEMENT-SYSTEM (EMS)

The KSA 8 can optionally be equipped with the EMS system. Both, our environment and the machine owner, benefit from this energy-saving system to the same degree. A diminished energy consumption unburdens the environment and reduces the cost of the machine operation.

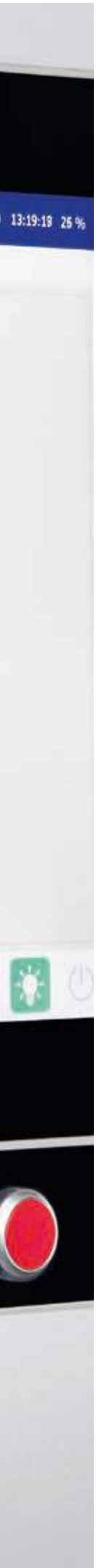
If no work pieces are being fed into the machine, the motors in the machine are run down to a low speed and a flap is closed on the suction blower in order to extremely reduce air consumption. Depending on its actual load, this reduces the energy consumption of the machine quite considerably. When new work pieces are fed into the machine, all motors are rapidly started up again automatically.

If the customer-supplied extraction system is purchased with an option to slow down its motor, the sanding machine can prevent the airflow through units that are not in operation by controlling dampers attached to the individual extraction hoods and thus make the extraction system save energy.



The use of our EnergyManagement System leads to significant savings at the power consumption of the machine and the whole installation.

ALL HEESEMANN MACHINES ARE EQUIPPED WITH A POWERFUL AND HIGHLY FLEXIBLE INDUSTRIAL PC.



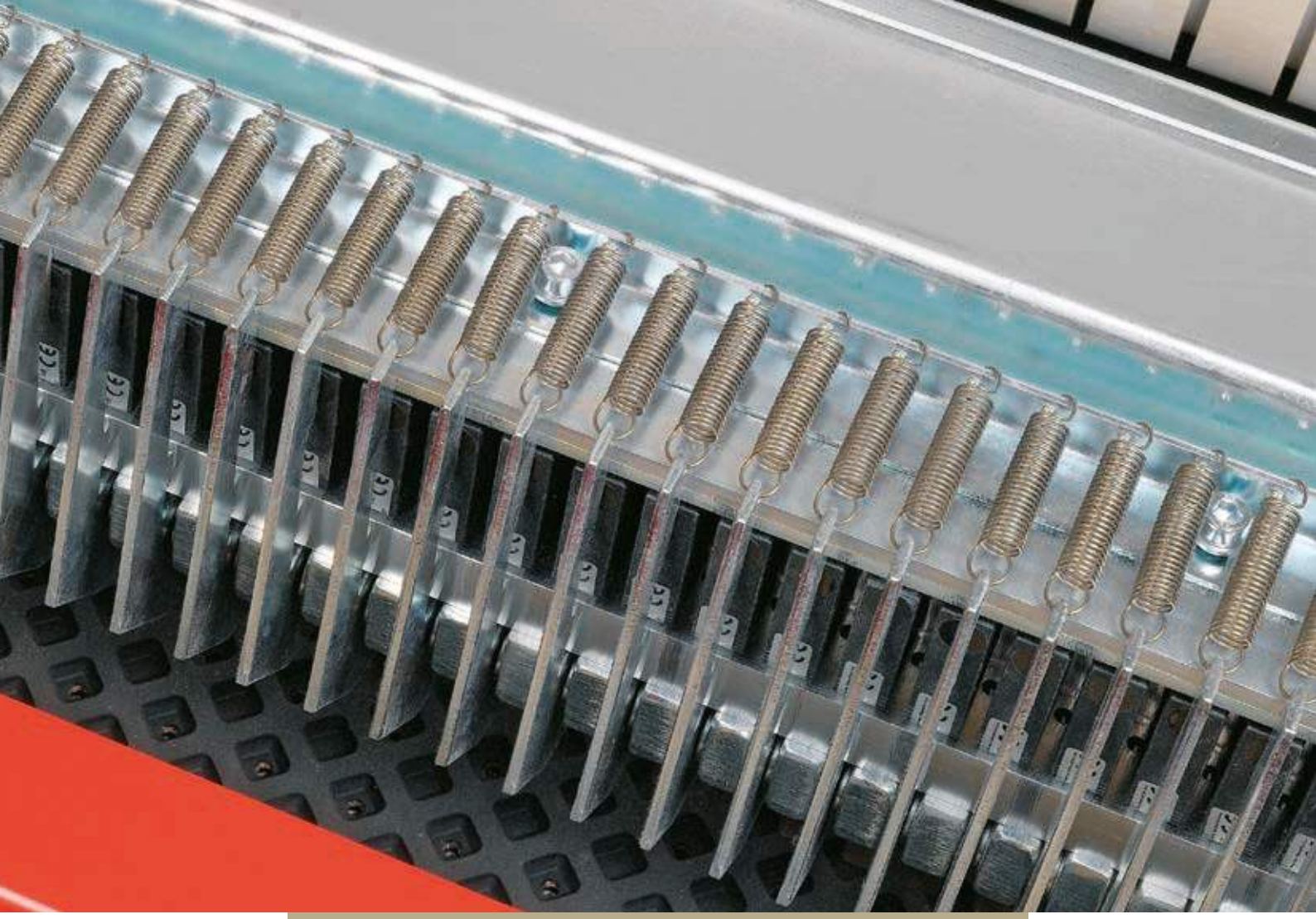
HEESEMANN
IPC WITH TOUCHSCREEN

All Heesemann machines are equipped with a powerful and highly flexible industrial PC. All frequently repeated adjustment values are graphically displayed clearly on one screen page.

In addition, this industrial PC provides the ability for fault diagnosis and the ability to use peripheral equipment at standard interfaces. It can also be connected to internal and external networks using Ethernet TCP/IP.
The industrial PC acts like a web server and is accessible using standard internet browsers.

The industrial PC of the KSA 8 has a screen size of 21.5“. It provides an operating data recorder and is height adjustable by a pivot mounted arm.

The industrial PC of the KSA 8 has a screen size of 21.5“.



KSA 8
WORK PIECE DETECTION

The finely graded work piece detection by means of control rollers at intervals of 16 mm (on sanding widths of 2 000 mm and more: standard 32 mm, option 16 mm) provides the machine control system with information about the shape and size of the work piece to be processed as well as its position on the transport belt.

KSA 8
POLY-V DRIVE BELTS

The sanding heads are driven by a vibration-free poly-V belt. The profile of the drive belt is machined into the most finely balanced drive roller (quality class G1, cf. car tyre G40). This way a permanently low vibration run is ensured. All bearings have been lubricated for life; this excludes maintenance errors in the selection of the lubricant and the lubrication intervals as well as assembly faults; no maintenance work is required.

KSA 8
SANDING BELT CLEANING

All sanding units are equipped with a cleaning device that loosens the sanding dust from the sanding belt and makes it accessible for the dust extraction. This cleaning takes place directly after the sanding process has been completed so that the sanding belt does not move the sanding dust through the machine.

KSA 8
SERVO DRIVES

Due to the use of new and extremely thin lacquer systems it can become necessary to reduce the sanding belt speeds to lower speeds than generally achievable with frequency inverters. Water-cooled servo drives allow a constant and safe abrasive belt running at full sanding power, without any fluctuations in speed even at minimum sanding belt speeds of 0.1 m/s. Machines equipped with these servo drives are perfect to use for water-based lacquer systems. The water-cooled servo drives are comparable to efficiency class IE 4.


OUR SERVICE TECHNICIANS TRAVEL
WORLDWIDE, IF NECESSARY OUR SERVICE
TECHNICIANS ARE ON SITE IN A FEW HOURS.

HEESEMANN
SERVICE - ON-SITE WORLD-WIDE

As a manufacturer of highly technical machines with a long machine life our customers' satisfaction is our highest priority. Customers' confidence in our competence is one of our most important goals.

Our technical customer service supports you troubleshooting an effective solution for possible problems. If advice by phone is insufficient, an online diagnosis can take place. If the dispatch of a technician is necessary, no problem - our service technicians travel world-wide, if necessary our service technicians are on site in a few hours.

Heesemann offers their customers all classical service activities like installation, commissioning, application enhancement, maintenance and repair.

We ensure a fast supply with wear and spare parts by our extensive spare parts warehouse. In cooperation with our freight partners we deliver world-wide with speed and reliability. Heesemann delivers original spare parts only which deliver our high standards in accuracy, material properties, durability, functionality and quality.

Our inspection service provides a detailed evaluation of your machines' technical condition. On demand we compile offers for further provisions, installation possibilities of latest sanding technology and control upgrades.

Such as our machines our customer service and spare parts are warrantors for quality and reliability "made in Germany".

Service hotline:

+800 188 188 19*

+49 5731 188-300

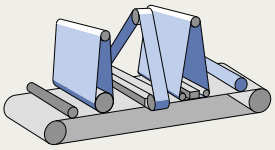
Our service team is available 24/7.

** Free call.*

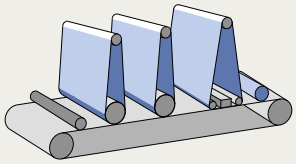

KP508E
P220

MACHINE CONFIGURATIONS
FREQUENTLY CHOSEN

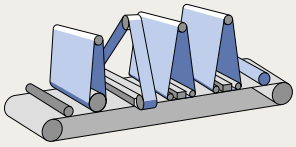
Solid wood sanding



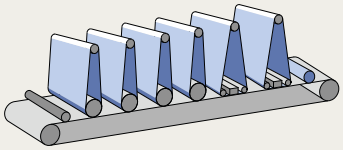
KSA 8 Lr/C/L
Calibration and fine sanding machine for very high surface qualities



KSA 8 Lr/Lr/L
Calibration and fine sanding machine for high stock removal

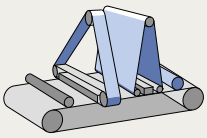


KSA 8 Lr/C/L/L
Calibration and fine sanding machine for high surface qualities with fine final grains

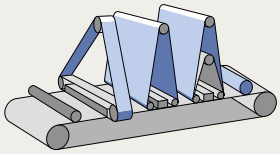


KSA 8 Lr/Lr/Lr/Lr/L/L
Calibration and fine sanding machine for high material removal or very high speeds

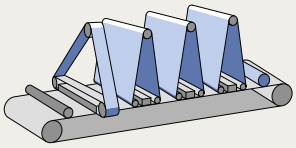
Veneer sanding



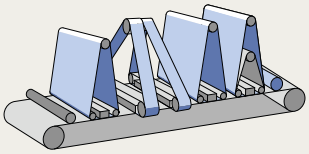
KSA 8 C/L
Cross sanding machine for low feed speeds



KSA 8 C/L/Lp
Cross sanding machine with pressure segment belt for medium feed speeds

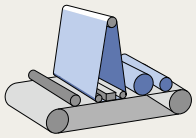


KSA 8 C/L/L/L
Cross sanding machine for high feed speeds

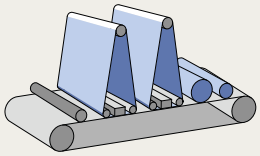


KSA 8 L/C/C/L/Lp
Sanding machine for workpieces with different veneer directions

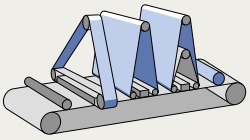
Lacquer sanding



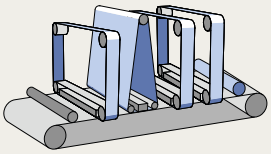
KSA 8 L
Sanding machine for low application quantities



KSA 8 L/L
Sanding machine for higher application quantities

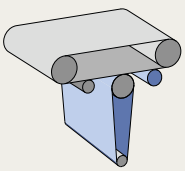


KSA 8 C/L/Lp
Sanding machine for higher application quantities and high feed speeds

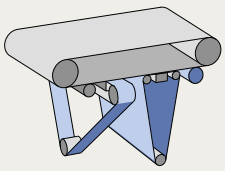


KSA 8 C/L/C/C
Sanding machine for high gloss lacquers

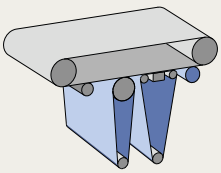
Sanding machines working from below



KSA 8-U Lr
Calibration machine

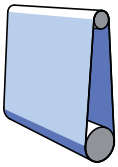
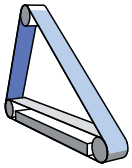
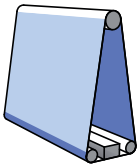
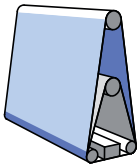


KSA 8-U C/L
Cross sanding machine for low feed speeds



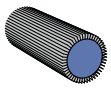
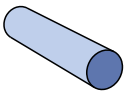
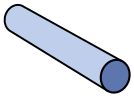
KSA 8-U Lr/L
Calibration and fine sanding machine

TECHNICAL DATA
KSA 8 - UNITS

Modules

	Contact roller	Cross unit	Longitudinal unit	Longitudinal unit with pressure segment belt
Sanding belt dimensions (LxB mm)	2 620 x 1 650 3 250 x 1 650 3 250 x 2 050 3 250 x 2 350 3 250 x 2 650	6 600 x 150 7 400 x 150 8 000 x 150 8 600 x 150	2 620 x 1 650 3 250 x 1 650 3 250 x 2 050 3 250 x 2 350 3 250 x 2 650	2 620 x 1 650 3 250 x 1 650 3 250 x 2 050 3 250 x 2 350 3 250 x 2 650
Drive performance (kW)	37 - 75	16.5 / 21.0 20.0 / 24.0 26.0 / 31.0 32.0 / 42.0	16.5 / 21.0 20.0 / 24.0 26.0 / 31.0 32.0 / 42.0	16.5 / 21.0 20.0 / 24.0 26.0 / 31.0
Sanding belt speed (m/s)	24	12 / 24 0.2 - 12 0.6 - 24	10 / 20 0.5 - 12 0.5 - 20	10 / 20 0.5 - 12 0.5 - 20
Connection diameter (mm)	1 600 mm: Ø 280 2 000 mm: Ø 280 2 300 mm: Ø 320 2 600 mm: on demand	1 600 mm: Ø 180 2 000 mm: Ø 180 2 300 mm: Ø 180 2 600 mm: on demand	1 600 mm: Ø 200 2 000 mm: Ø 220 2 300 mm: Ø 250 2 600 mm: on demand	1 600 mm: Ø 200 2 000 mm: Ø 220 2 300 mm: Ø 250 2 600 mm: on demand
Air velocity (m/s)	min. 20	min. 20	min. 20	min. 20

Modules

	Brushes	Fleece brushes	Cleaning brushes
Sanding belt dimensions (LxB mm)	Ø 400	Ø 250	1 600 u. 2 000 mm: Ø 220 2 300 u. 2 600 mm: Ø 250
Drive performance (kW)	5.5 - 22.0 50 - 400 U/min	4.0 - 7.5	1 600 mm: 2.2 2 000 mm: 4.0 2 300 mm: 4.0 2 600 mm: 5.5
Connection diameter (Sanding width: Ø mm)	1 600 mm: Ø 160 2 000 mm: Ø 180 2 300 mm: Ø 200 2 600 mm: on demand	1 600 mm: Ø 160 2 000 mm: Ø 180 2 300 mm: Ø 200 2 600 mm: on demand	1 600 mm: Ø 160 2 000 mm: Ø 180 2 300 mm: Ø 200 2 600 mm: on demand
Air velocity (m/s)	min. 20	min. 20	min. 20

Extraction value for the transport belt cleaning 18.5 m^3/min.

TECHNICAL DATA
KSA 8

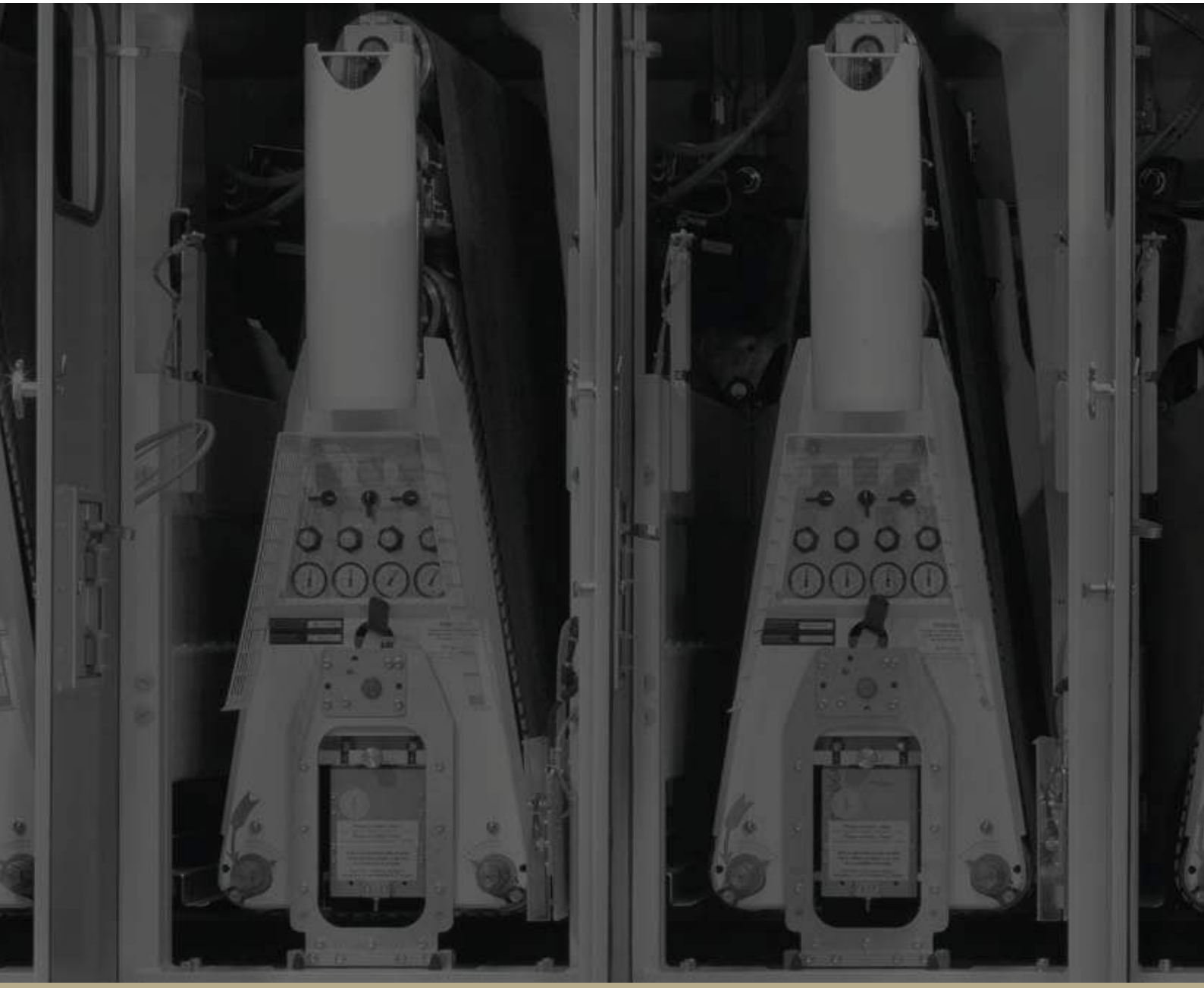
Machinery base: Working height 880 mm

Sanding width (mm)	Width (mm)	Length 1 unit (mm)	Length additional unit (mm)
1 600	2 650	2 560	700
2 000	3 050	2 180	830
2 300	3 350	2 180	830
2 600	3 650	2 200	830

Subject to technical modifications.

PRODUCT MATRIX
SURFACE SANDING MACHINES

	Sanding width	Feed speed	Sanding units
HSM	1 300 mm	3 - 15 m/min	2 or 3
Impression	1 350 mm	3 - 15 m/min	up to 5
MFA 10	1 350 mm	3 - 25 m/min	up to 8
BM 8	1 350 mm	3 - 25 m/min	up to 6
LSM 8	1 300 mm / 1 400 mm	5 - 25 m/min	up to 6
LSM 8-C	1 300 mm	3 - 15 m/min	3 or 4
KSA 8	1 600 mm - 2 600 mm	3 - 25 m/min	up to 6
FBA 8	650 mm / 1 350 mm	6 - 30 m/min	up to 4



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- Surface sanding machines for wood
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- Deburring machines for metal
  profiRounder
- Edge and profile sanding machines
  UKP 20
- Sanding machines for 3D processing
  BM 8, UKP 20