Heesemann

Reliability by proven design

MFA Impression

The perfect machine for surface sanding

75 years of sanding innovations

Someone has to lead the way.

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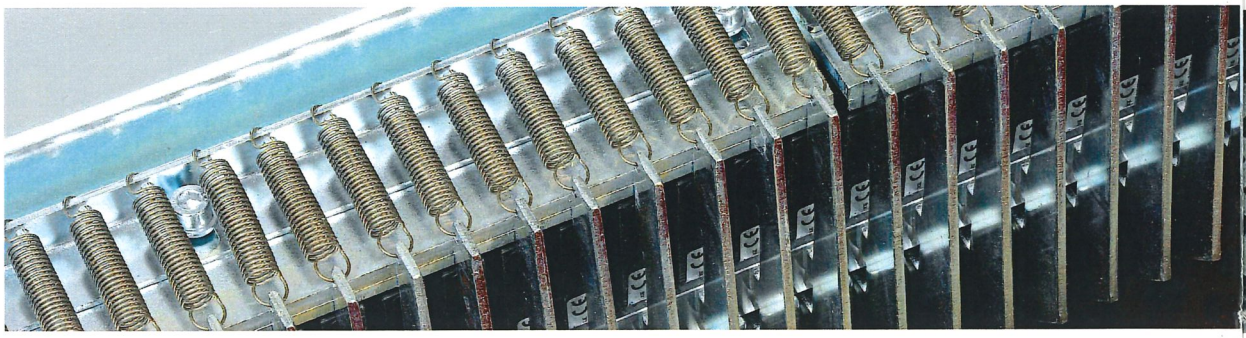


Heesemann MFA Impression

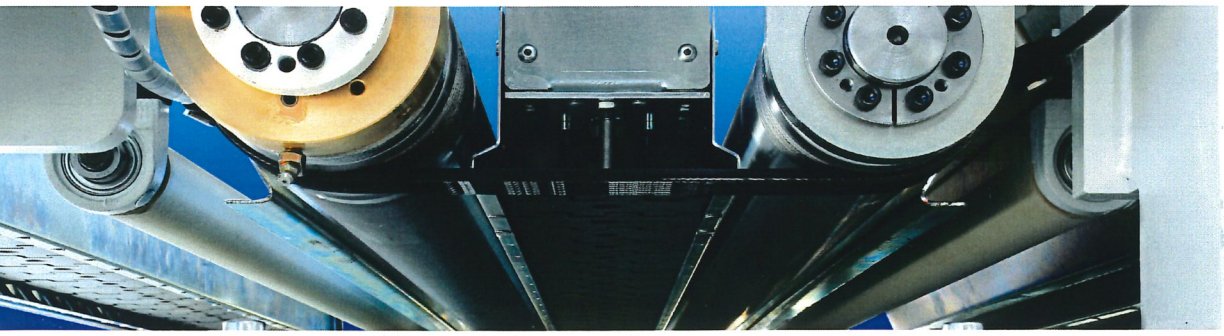
Proven industrial machine technology for the small to medium shop, the machine has both a compact design and an attractive price.

A perfect sanding result can be achieved for any kind of application.

Standard equipment

- Maintenance-Free CSD® electromagnetic pressure beam system for all sanding units
- Precise sensing of workpiece contours for precise sanding pressure calculations
- Dust-Resistant electrical cabinets integrated in the machine base
- Thickness Compensation - up to 2 mm
- Transport table with constant working height
- **N**umerically **C**ontrolled height adjustment
- Variable feed speed of 3 to 15 m/min
- Energy efficient vacuum system for the transport of small workpieces. The vacuum blower mounted inside the machine base for noise and footprint reduction.
- Combined longitudinal sanding unit with eccentric bearing for light calibration in all machines, unless already configured for calibration.

MFA Impression



The CSD® magnetic pressure beam system

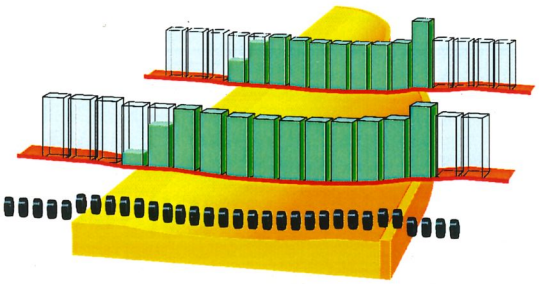
A technical revolution in pressure beams. The sanding pressure of each individual segment continuously adjusts to the workpiece regardless of its shape.

The correct sanding pressure value is a key surface quality factor. With the help of the computerised selective pressure regulation of the CSD® electromagnetic pressure beam system the sanding pressure of each individual segment in the pressure beam is continuously adjusted, automatically in milliseconds.

Automatic edge pressure adjustment for asymmetric and round pieces, in particular, is possible only thanks to our outstanding CSD® pressure system. Furthermore, when the edges are finished differently, e. g. by a single-sided solid wood strip, the pressure can be regulated asymmetrically as well. The pressure beam will push harder on the side with the solid wood edge to ensure it is flush.

The sensitive sensing rollers at the infeed ensure a precise, consistent pressure calculation regardless of shape. The elastic pressure beam offers thickness compensation of up to 2 mm within a workpiece or from workpiece to workpiece.

Because the segments of the pressure beam are controlled electromagnetically instead of pneumatically, they are virtually maintenance-free. There is no hesitation, or sticking of the segments due to any oil, water, or particulate in the system. This will occur only with the pneumatic pressure system.

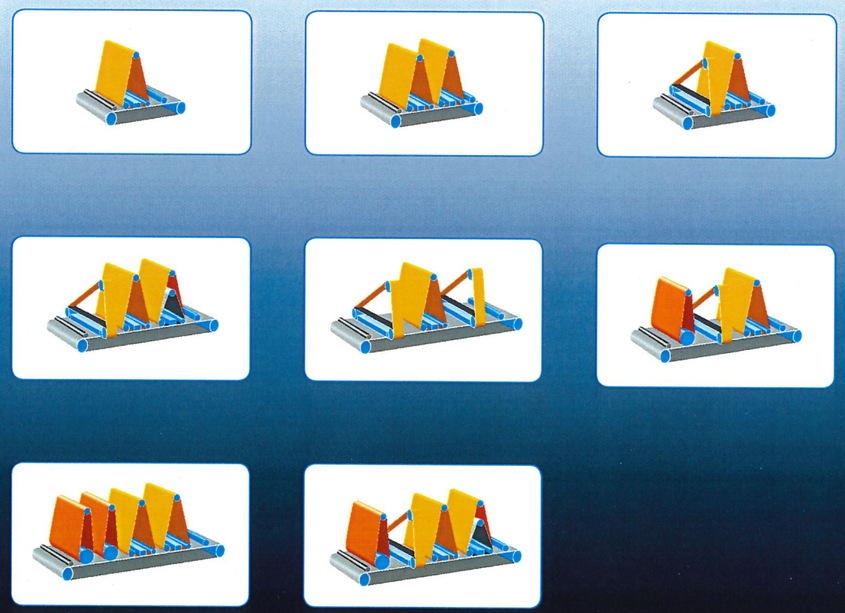


The perfect machine for surface sanding **MFA Impression**

Key features:

- Innovative, modern machine design and construction that combines precision, rigidity and durability.
- All rotating devices are precision balanced. No separate drive discs. Long, vibration-free lifetimes.
- All bearings are lubricated for lifetime use – no maintenance required.
- Drives of sanding units via Poly-V-belt – vibration-free and durable.
- Energy-saving, workpiece controlled sanding belt cleaning for all units – no compressed air consumption if there is no sanding operation.

Available configurations:



- Cleaning brush with separate driven motor and dust extraction hood.
- 10.4" Industrial PC controller with touch screen operating terminal. Integrated modem for remote diagnostics in case of a machine fault or direct support from Heesemann or from another service point is needed.
- Roller table at the infeed of the machine.

“The goal: The perfect surface.

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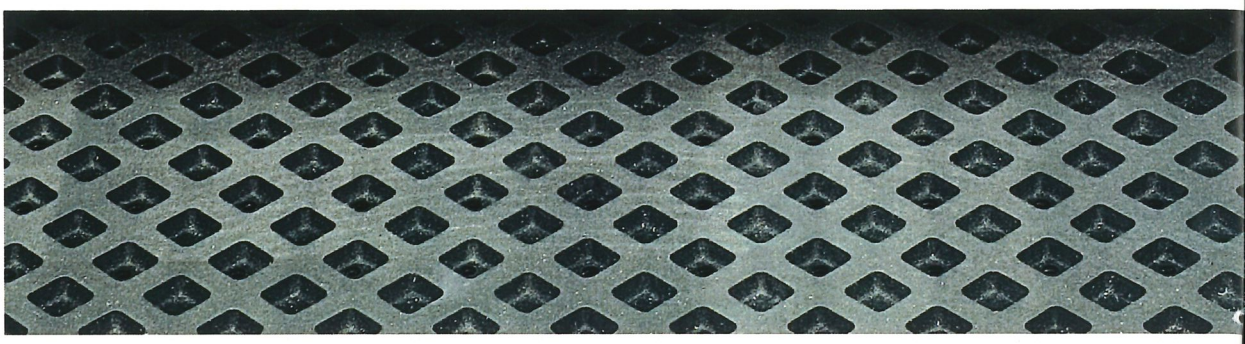


The cross sanding method

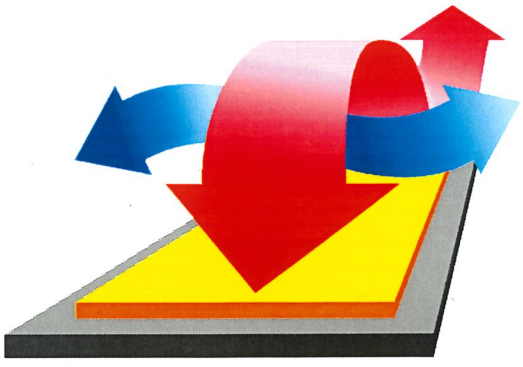
By general acknowledgement, the cross sanding method offers the best sanding result for wooden surfaces. First, a cross sanding unit is used for sanding perpendicular to the wood grain in order to sand with the grain with one or multiple units afterwards.

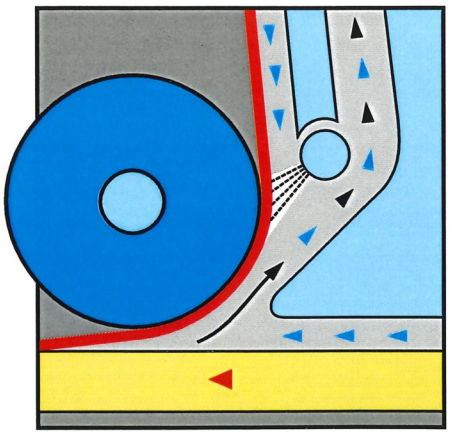
It is advisable to level the protruding hard areas of the annual rings and to shear the loose wood fibres. This avoids any blotchy, washout effect and any springing back of the fibres after finishing.

Sanding belt cleaning

Each sanding unit features a sanding belt cleaning device which blows compressed air into the sanding belt by means of a pipe oscillating directly at the sanding belt, thus removing the dust. The device is located close to the area where dust is produced in order to be able to work in a particularly efficient and energy-saving manner.

The system will be activated only if a workpiece is actively being sanded by the unit.





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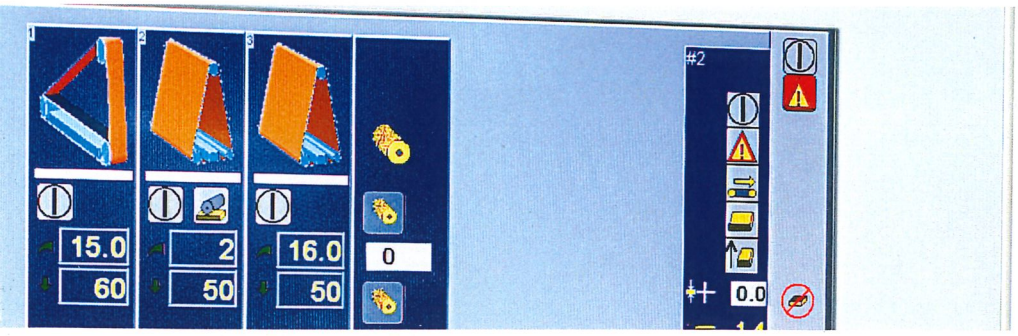

Industrial PC

The machine is operated via an Industrial PC 10.4" (option 12") controller with an intuitive Windows based user interface. All pre-selected setting can be stored as a sanding programme or recipe and called up again at any time. As an additional feature, the system offers a recording of operating data along with an indication of actual sanding belt wear, plus a log file as well as all inputs and outputs in their switching position on the display to provide support for any service work.

A clearly designed fault diagnosis system and a standard modem for the use of the Heesemann teleservice provide assistance in case of emergency.

Options

- Transport belt cleaning device
- Industrial belt length 2,620 mm instead of standard belt length 2,150 mm for the longitudinal unit
- Different motor ratings for special production requirements
- EnergyManagement System EMS
- To achieve an enhanced finish for wood and lacquer sanding the longitudinal sanding unit can be equipped with a pressure segment belt.

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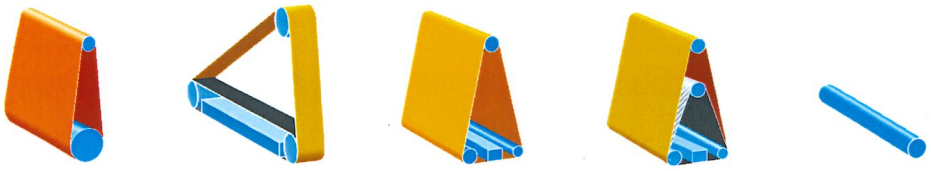

Modules

	Calibrating roller	Cross unit	Longitudinal unit	Longitudinal unit with pressure segment belt	Brush unit
Dimensions (LxW mm)	2,150 x 1,400 2,620 x 1,400	4,800 x 150	2,150 x 1,400 2,620 x 1,400	2,620 x 1,400	Ø 120 x 1,430 Ø 150 x 1,430
Drives Power/Belt speed (kW | m/s)	15 18 22 18	11 16 13/17 10/20 15 2.0-20	15 18 13/17 9/18 15 1.8-18	15 1.6-16	0.75 - 2.2
Extraction value (m^3/min.)	30.5	30.5	30.5	30.5	18.0
Socket diameter (mm)	Ø 180	Ø 180	Ø 180	Ø 180	Ø 146
Air speed (m/s)	20	20	20	20	20

Extraction quantity for cleaning of conveyor belt 18.5 m^3/min.

Machine base: Working height 880 mm/Sanding width 1,350 mm				
B 2,300 **W** 2,150	**Length** (mm)	**Weight** (kg)	**Feed** (kW m/min)	**Suction device** (kW m^3/min)
1-belt machine	1,710	3,000	0.75 3 - 15	3.0 11
2-belt machine	2,100	4,000	1.5 3 - 15	3.0 25
3-belt machine	2,700	5,000	2.2 3 - 15	5.5 25
4-belt machine	3,720	7,000	3.0 3 - 15	7.5 40

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Heesemann TÜV CERT DIN EN ISO 9001 Zertifikat: 08/100/9494/6

Production range for wood, lacquer and foil sanding
Cross sanding machines
Longitudinal sanding machines
Lacquer sanding machines
Veneer sheet sanding machines
Universal edge and profile sanding machines, NC and CNC controlled
CNC profile and surface sanding machines for 2D and 3D shaped parts