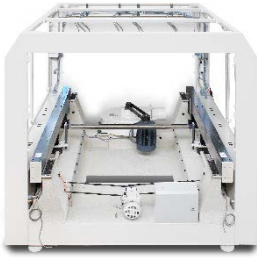


Heesemann Wide Belt Sander MFA Impression CLLef DB-S



Since 1933, Heesemann has been building superior quality sanders built to withstand high production needs. Heesemann has continued to make technology breakthroughs in the sanding industry, including the first profile sander, pressure segment belt and cross sanding units. With Heesemann sanding equipment, technology and quality go hand-in-hand, with over 120 patents registered.



Heesemann MFA Impression Frame

Heesemann is known for manufacturing long-lasting sanders that begin with a durable welded steel structural frame as well as a heavy gauge formed and welded steel housing. Heesemann's unique frame design uses I-beams to lift the sanding units and is driven by a drive shafts system for fast, accurate and stable height adjustment and maximum machine stability. Each sanding head has its own structural frame, making the machine extremely rigid. The MFA Impression comes standard with:

- Thickness adjustment of sanding units from 3-160mm (1/8" -6 1/4")
- Constant pass line height with no pinch points
- An over-thickness control system
- An emergency stop at machine infeed and outfeed
- A hold-down roller system at the machine infeed machine to safely transport thin and warped workpieces into the sander

Heesemann's MFA Impression transport conveyor features:

- Variable speed drive system
- Variable feed speed 3 to 15 mpm (10 to 49 fpm)
- Sanding width 1350mm (53 inches)
- A transport belt with 1/2" diamond profiles and one-piece construction
- Automatic tensioning & tracking
- Clean out ports located on feed bed for easy access and cleaning

Press on Roller 50mm

A press on roller at machine infeed pushes down workpieces and controls for excessive workpiece thickness.

Vacuum Hold Down

This sander is equipped with vacuum hold down for safe movement of workpieces shorter than 500 mm (19.7") in feed direction. Heesemann's unique frame design integrates **rigid vacuum plenums** for maximum vacuum hold down force and eliminates hoses that are traditionally found on vacuum hold down systems. Heesemann also has a special vacuum table design to help evacuate dust and maximize vacuum suction – producing the strongest vacuum hold down in the industry.

Binding Posts

This machine is equipped with interlocking of emergency stop and feed, which is necessary when linked in a line of machines.

Emergency Stop

Emergency stop buttons are located at the machine outfeed, with one located on the right side and one located on the left side of the machine.

Doors with Glass

Doors have glass inserts for visual inspection while machine is operating

Industrial PC

This sander is equipped with a 21.5" high resolution touch screen / industrial PC and features:

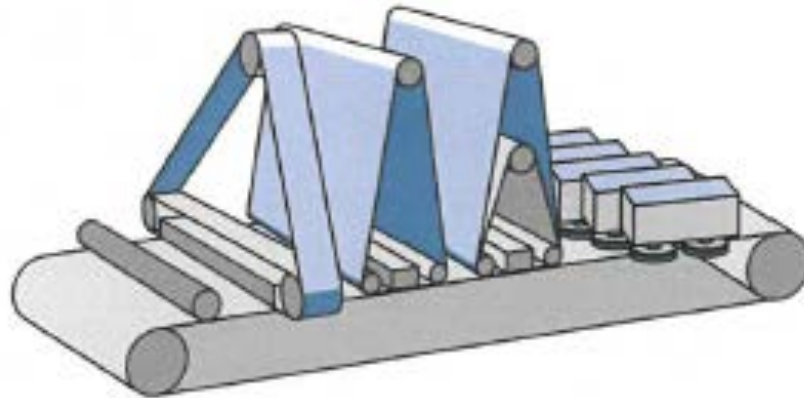
- High resolution display
- CF card 1 GB
- Windows® embedded operating system
- Pendant mounted with adjustable viewing position
- Ethernet connection
- Configured as web address for easy network access
- Automatic on-screen diagnostics
- Metric or English input
- 100 memory addresses
 - Alpha/numeric format
 - Password protected
- Digital keypad input
 - Workpiece thickness
 - Conveyor belt feed speed
 - Sanding pressures
- One button start

Battery Backup

For abrasive belt oscillation



Machine Configuration:



Head 1: C Head – Cross Sanding Unit

Heesemann's cross sanding head unit removes fiber from solid wood or can be used to remove tape from veneer in preparation for finishing. This C head features:

- CSD[®] segmented pad system
- A pinch roll system, rubber covered and adjustable
- An automatic infra-red belt control
- Servo cross belt tracking adjustments, for quick and easy belt centering when loading
- Internal drive motor with electronic braking and adjustable tensioning; also includes:
 - C-Flange mounted
 - "Poly-V" one piece drive belt
- Pneumatic abrasive belt cleaning at bottom that is timed with workpiece

Variable Speed Belt

- This sanding unit is equipped with an inverter motor which allows for variable abrasive belt speeds, ranging from slow to fast belt speeds.

Sanding belt size:	4800 mm x 150 mm	(189" x 6")
Sanding belt speed:	2 to 20 mps	(5.9 to 65 fps)
Drive size:	17.4 kW	(23 Hp)

Head 2: L Head – Combi Longitudinal Sanding Unit

Heesemann's Longitudinal "L" head is suitable for finish sanding or light calibration. This head includes:

- Sanding belt running against feed direction
- CSD® segmented pad system
- Eccentric bearing for the front high speed drive roller for light calibration
- Automatic sanding belt grit compensation (for calibration) controlled via controller
- A pinch roll system, rubber covered and adjustable
- An automatic infra-red belt control
- Internal drive motor with electronic braking and adjustable tensioning; also includes:
 - C-Flange mounted
 - "Poly-V" one piece drive belt
- Pneumatic abrasive belt cleaning at bottom that is timed with workpiece
 - Sealed cleaning tube

Variable Speed Belt

This sanding unit is equipped with an inverter motor which allows for variable abrasive belt speeds, ranging from slow to fast belt speeds.

Sanding belt size:	2620 mm x 1400 mm	(103" x 55")
Sanding belt speed:	1.8 to 18 mps	(5.9 to 60 fps)
Drive size:	17.4 kW	(23 Hp)

Contact Roller on Combi Head

- Steel roller for calibration – helically grooved
- 130mm diameter

Head 3: Lef Head – Longitudinal Sanding Unit with Inner Pressure Belt

Heesemann's longitudinal enhanced finish Lef head features an inner chevron belt to allow for fine sanding of the workpiece. This head includes:

- Internal pressure segment belt
- Sanding belt running against feed direction
- CSD® Segmented pad system
- Eccentrically adjustable drive drums for facilitating adjustment of the sanding unit for different chevron belt thicknesses, as well as for operation without chevron belt if desired
- A pinch roll system, rubber covered and adjustable
- An automatic infra-red belt control
- Internal drive motor with electronic braking and adjustable tensioning; also includes:
 - C-Flange mounted
 - "Poly-V" one piece drive belt
- Pneumatic abrasive belt cleaning at bottom that is timed with workpiece
 - Sealed cleaning tube

Variable Speed Belt

This sanding unit is equipped with an inverter motor which allows for variable abrasive belt speeds, ranging from slow to fast belt speeds.

sanding belt size	2620 mm x 1400 mm	(103" x 55")
belt speed with pressure segment belt	1.8 to 9 m/s	(5.9 to 29.5 ft/s)
belt speed without pressure segment belt	1.8 to 18 m/s	(5.9 to 59 ft/s)
drive size	17.4 kW	(23 hp)

Head 4: DB-S Head – Rotating Planetary Sanding Unit

Heesemann's rotating planetary sanding unit incorporates sanding discs for the purpose of smoothing the work surface along with effects sanding. This head includes:

- 10 driven brush discs with quick changing device
- Rotation in both directions
- Central height adjustment
- 4 kW (5.3 Hp) motor to power the discs
- 1.5 kW (2 Hp) motor gear box
- Brush trimming: Flex Trim
- Brush Diameter: 150 mm (6")
- Other brush discs available on demand

CSD® - Segmented Pad System (10 Year Warranty) (3x)

Only Heesemann features a state-of-the-art electro-magnetic segmented pad system with an interlocking design for consistent sanding of irregular shaped work-pieces. Heesemann's CSD® segmented pad system also includes:

- 100% electronic stepless pistons – pressure is applied smoothly to work-piece
- Maintenance-free pistons – no oil, water or other materials to maintain
- A sealed enclosure keeps dust and other particles out
- Precise surface pressure control allows for a consistent finish
- Precise edge pressure control so pressure is applied to the work-piece consistently and evenly
 - Edge pressure operates independently from the work-piece surface
- Pressures that are stored and controlled in IPC
- Single or multi-track control of edge pressures
 - Three (3) rollers per segment
 - 21mm roller spacing
 - Non-mechanical, magnetic switches activate the segmented pads are ideal as there are no moving parts to worry about
- Thickness compensation; 2 mm within and 2 mm between work-pieces
- Adjustable sanding start/stop that can be administered from the controller
- Interlocking phenolic segments

Segmented Workpiece Blasting Device

Rotating compressed air nozzles for blasting workpiece surface. Only operate if a workpiece is present.

- Each rotor is separately controlled according to part size to preserve compressed air
- A conveyor belt cleaning program is included in the software, which lowers machine height and cleans conveyor belt 1 complete rotation.

Energy Management System

This sanding machine is equipped with an automatic frequency inverter motor control system which allows for a system standby mode with the machine is not in use. Machine can idle and vacuum can turn off to preserve energy and avoid machine wear and tear, without required a separate machine startup when ready to run

Standard Accessories Kit

- One (1) operator's manual

Technical Specifications

Working height:	880 mm	(36.2")
Workpiece thickness:	3 mm to 160 mm	(0.118" to 6.29")
Working width:	1350 mm	(53")
Transport belt speed:	3 mpm to 15 mpm	(10 fpm to 49 fpm)
Wide Belt size:	2620mm x 1400mm*	103" x 55"*
Cross Belt size:	4800mm x 150mm	189" x 6"
Sanding belt access:	Left hand (right on request)	
Operators side:	Left hand (right on request)	
Voltage:	480 Volts, 3 Phase, 60 HZ (24 V controls)	
Full load amps:	Approx. 182 at 480 Volts	
Compressed air:	~100 cfm @ 100 psi max	
Dust extraction:	~ 5,800 CFM	
Machine weight:	6,500 kg (14,300 lbs)	

*Normal belt size used is 103" x 52" Wide belts

Important Notes

1. An executive drawing will be sent after receipt of order.
2. Total connected load is given as a planning estimate and may vary with different machine configurations.
3. Vacuum fan discharge can be connected to dust extraction system or exhausted to the outside.
4. In case of incoming main voltage fluctuations of more than $\pm 10\%$ of machine connected voltage, the customer must install a voltage stabilizer on the incoming power connection.
5. All motor ratings (kW) are shown @ 60 Hz.
6. Voltage other than 480 will require an additional transformer, which is not included in this proposal.

Price

Total price of above machine

\$ 

All prices quoted are F.O.B. Place of Inventory/Port of Entry

Price quoted includes importation and installation.

Price quoted excludes all state and local taxes.