The world sands with BÜTFERING

BÜTFERING – The Fascination of Sanding

For over 60 years the BÜTFERING brand has stood for high performance wide-belt sanding machines and innovative surface finishing. These include special and multi purpose sanding machines for calibrating and intermediate sanding as well as lacquer finishing machines. Always focused on the machining of wood and wood based composite materials.

World wide on site

BÜTFERING is on the spot and active world wide. Whether you are looking for good advice, sales or fast on-site service, you will find competent partners in over 65 countries representing the BÜTFERING brand.
SWT 900 – for customers with highest demands

The series profiLine SWT 900: High-Tech «Made in Germany». 

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The profiLine SWT 900 – Top-class sanding technology

Professional high-tech sanding technology – that’s the profiLine SWT 900 series. Due to its modern and efficient equipment the series sets new standards in technology, ergonomics and availability. And everything »Made in Germany«.

This top-class model range offers customers with highest demands high availability without any compromises regarding quality during operation.

The machines can be individually equipped. The well-established and wide range of head combinations and further intelligent options can respond to special requirements.
Focussing on the essential
mps 2.0 – for perfect surfaces with absolute repeat accuracy

With the fascinating mps-technology you meet even highest design requirements.

Dynamic force control

• Ensures that parts are uniformly sanded everywhere with the same intensity

• High-precision control of the actuators (sanding segments), with exact repetition at front and rear edges and with proportional force path at the longitudinal edges: avoids edge waste in the edge area

• No friction loss of the actuators (sanding segments), precise guidances allow very fast operation of the actuators without any wear

• Individual Actuator Control (IAC)

• Individual programming for extremely challenging sanding tasks

• mps 2.0 – magnetic pad system
  (in 2:1 standard ratio with 2 sensors per actuator)

or

• mps 2.0 plus – magnetic pad system plus
  (optional in 4:1 ratio with 4 sensors per actuator) – for special challenges in the industrial production

The combination of finest segmentation and tracing rails of high-capacity polymer ensures especially precise tracing of the workpieces.
SORB TECH – patented technology for unique quiet running

The patented composite material SORB TECH is characterized by an outstanding and fast vibration absorption, which is even superior to welded frame and cast iron constructions. Vibrations are much faster compensated by about 80% than with conventional steel constructions. Thus SORB TECH allows an all-time unique quiet running leading to even better processing results.

The exclusive SORB TECH technology has been patented and worldwide it is only available within the HOMAG Group. The SWT 900 Wide-Belt Sanding Machines include SORB TECH already as standard.

1. **Feed belt control**
   Two-sided control with non-contact monitoring and mechanic emergency stop. Low mechanic charge by special design provides for a long-life cycle and quietness.

2. **Main drive head**
   Main drives with Poly V-belts for optimum and low vibration power transmission. Constant belt tension via a construction for which a patent has been applied avoids vibrations. The motors are directly mounted on to fibre reinforced incorporated metal blocks.

3. **Height adjustment of heads**
   The height adjustment of the heads via lifting spindle gears guarantees a fast positioning speed at simultaneous precision in 1/100 mm range.

4. **Fixing of feed**
   The feed is directly connected with the cast mineral via cast-in anchors. This guarantees precision and quietness even under extreme charge.

5. **Steel cross bars**
   They are situated between the head carrying main cross bars for maximum stabilisation of the whole construction.

6. **SORB TECH**
   Fibre-reinforced cast mineral of which the basic machine is casted. Extreme load capacity and fast vibration absorptions ensure highest processing quality.
The SWT 900 is suitable for extremely difficult calibrations. The basic machine consists of the fibre-reinforced cast mineral SORB TECH, making the SWT 900 extremely resistant. The feed is directly screwed with the cast mineral leading to specially quiet running and precision even at highest feed speeds with frequent control processes.

The main drive unit with Poly-V-belt ensures an optimal power transmission.

Best conditions for best quality.
Sample configuration of the profiLine SWT 900:

U-Head  U-Head  H-Head  C-Head  Q-Head

The heads – combinable according to your requirements

Fine sanding, lacquer sanding, calibrating, veneer sanding, improving, roughening of surfaces and many more – the heads for the series profiLine SWT 900 provide all functions you require for your daily work and ensure a perfect processing result. They can be individually combined according to your requirements for the machine.
Contact roller head R –
exact tolerance calibration at high stock removal rates

Applications:
• Calibration of wood and wood composite materials
• Produce a surface roughness suitable as a mechanical key for glueing

Customer Benefits:
• Calibration with precise tolerance at high removal rates
• Maintenance-free, profiled steel contact roller
• No “wash out” effect between summer and winter wood
Crossbelt Q –
ideal for fine grain sizes

Applications:
• Veneer sanding, removal of veneer tape or short grain sanding on longer panels
• Intermediate lacquer (sealer) sanding and preparation sanding for high gloss
• Solid wood sanding

Customer Benefits:
• Long abrasive belt length, ideal for fine grit sizes
• Fibres, tape and glue residue are easily removed by sanding across the grain direction
• Optimum preparation for later coating processes
• Range of useful grit size: P 120-1200
Electronic pressure beam E – adjustment to different materials

Applications:
- Fine sanding of wood and wood composite materials as well as lacquered surfaces
- Improving and upgrading pre-sanded surfaces

Customer Benefits:
- Thickness tolerance variations of up to 2 mm in veneered and lacquered parts are easily handled by the use of the segmented pad
- Can adapt to most applications thanks the variable cutting speed
- No “sanding through” of edges due to fine geometric resolution
- Enables multi-track feeding, thus optimal use of the working width
- Range of useful grit sizes: P 120 - 400
Combi head C –
perfect for simple calibrations

Applications:
• Veneer sanding
• Fine sanding and calibrating of wood and wood materials
• Lacquer sanding

Customer Benefits:
• Sanding head for light calibration work and fine sanding
• Maintenance-free, profiled steel contact roller
• Exact tolerance calibration without “wash out” effect
• Thickness tolerance variations of up to 2 mm in veneered and lacquered parts are easily handled by the use of the segmented pad
• Range of useful grit sizes – calibration: P 60-120
• Range of useful grit sizes – fine sanding: P 120-400
Chevronbelt H – for specially homogeneous surfaces

Applications:
- High-quality sanding of different surfaces
- Intermediate lacquer sanding including high-gloss preparation sanding
- Solid wood sanding, especially for frame parts

Customer Benefits:
- Thickness tolerance variations of up to 2 mm in veneered and lacquered parts are easily handled by the use of the segmented pad
- Wide contact zone produces very uniform surfaces
- Can adapt to most applications thanks variable cutting speed
- Enables multi-track feeding, thus optimal use of the working width
- Chevron belt benefits:
  1. Reduced “sanding temperature”
  2. Increased sanding belt life time
  3. Enhanced uniformity of scratch pattern
  4. Elimination of belt tracking marks
- Best results for high gloss sanding
- Range of useful grit sizes: P 120 - 1200
Further fascinating components

Cutter spindle aggregate M

Applications:

- Chip removal 1-8 mm
- Rough hogging of solid wood (hard and soft) with high chip removal

Barrel brush head B

Applications:

- Fine sanding of wood and wooden materials as well as of lacquered surfaces
- Improving and upgrading pre-sanded surfaces
- Suitable for processing three-dimensional workpiece surfaces

Universal brush head U

Applications:

- Fine sanding of wood and wooden materials as well as of lacquered surfaces
- Improving and upgrading pre-sanded surfaces
- Suitable for processing three-dimensional workpiece surfaces
- Structural unit included in the top brush can be reached by simple rebuilding
- Multi-functional by cassette system: pre-setting of different change-tools, e.g. top brush, round brush, structuring brush, finish brush (Scotch Brite)
Modern sanding line – Combination of surface processing from top and bottom

The Wide-Belt Sanding Machines SWT 900 and SWB 700 can be combined with each other and thus easily offer sanding from top and bottom in one process. For a continuous transport of the workpiece they can be directly connected.

Alternatively, a connection via an intermediate transport belt is possible, offering among others the advantage of a better access to the machines. The modern sanding line possesses an external switch cabinet and requires just one terminal for the complete control. Here it is, however, possible to enter separate data for every machine.

The inclined installation of the bottom sanding heads of the SWB 700 offer a working height of 900 mm and provide an even higher operational safety than heads in triangle positioning.
The SWB 700 –
precise sanding from bottom

For the SWB 700 the bottom sanding heads E, R and M can be used.

Compared to conventional systems, belt cleaning and dust removal are considerably more efficient with the SWB 700.

The SWB 700 impresses by excellent mechanic features.
Outstanding basic equipment

1. External terminal
   - For easy access to the control of the machine, especially for interlinked machines
   - Laterally tiltable up to the first third of the machine length

2. Touchscreen Operator Terminal
   - 10,4” colour touchscreen for complete machine control
   - 200 programmable memory slots for repeatable surface quality
   - Error messages in plain text, machine parameters relevant to sanding can be stored
   - Very fast program change during running operation by pre-set-activation (exclusive BÜFTERING development)

3. PC 22 powerControl
   - Modern control system based on Windows PC
   - Hard- and Software: SPS control according to international standard IEC 6113, Operating system Windows XP (US) embedded, Industrial PC with at least 2 x 1,6 GHz and 1024 Mbyte RAM, TFT-Flat Screen 17 Inch, PC-keypad and mouse, 1 integral fixed disk, 1 fixed disk for data back-up, 1:1 back-up, USB connection, Digital field bus system for input/output and decentralising units, Network connection ETHERNET via additional card and network software (option), Antivirus protection

4. Solid guidance by spring-loaded pressure rollers
   - Eccentrically guided, adjustable pressure rollers for perfect guidance at high feed speeds and minimum wear
5. Variable feed speed

- Extended conveyor unit for simplified integration into linkings with high quality conveyor belt and large rubberised drive drum

6. Automatic head locking

- The head automatically locks and unlocks when the door is opened or closed

7. Contact-free sanding belt oscillation

- Contact-free oscillation control for keeping the abrasive belt on track
- Optical system to control the belt edge
- Emergency power supply in case of power failure

8. Feed belt control

- Continuous adjustment of feed speed
- Position of belt remains central
- Assurance of processing quality
Customer-specific accessories-options

1. Extension of applicable belt length from 2620 to 3250 mm
   - Reduces the total amount of required belt changes
   - Including extractable handling device for easier and faster belt change

2. Variable cutting speed
   - Speed control via frequency inverter
   - Power transmission via Poly V-belts

3. Vacuum table for secure part feeding
   - High-performance fan built into the machine frame with flow control valve
   - Activatable table segmentation

4. External switch cabinets
   - Simplified and fast access to all electronic units
5. Sanding heads with air-jet belt cleaners

- Pneumatic oscillating air-jet belt cleaning device with integrated dust hood
- Activated by the workpiece, with programmed stopping time, protecting resources

6. Additional, versatile heads

- Satinising or Structuring brush
- Cleaning system with ionisation device
- Rotary air-jet parts cleaning system activated by the workpiece
- Feed belt cleaning device with special intervalic brush to ensure the adhesion on the belt

7. Wireless thickness caliper ME 5000

- Faster measuring process incl. data transmission into the system
- Cable-free transmission of workpiece thickness measurements to the machine
- Various measuring modes
Fast and easy belt change
### Technical data:

<table>
<thead>
<tr>
<th>Machine type</th>
<th>Maximum number Sanding heads</th>
<th>Working width</th>
<th>Machine length</th>
<th>Machine width</th>
<th>Machine height at sanding belt length 2620 mm</th>
<th>Machine height at sanding belt length 3250 mm</th>
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<tr>
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</table>
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Choose Success!

For the Success of Original Technology
A campaign of the VDMA

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