SWT 300
Wide-Belt Sanding Machines

2015/2016
The world sands with BÜTFERING

For almost 70 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.
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The SWT 300 series

First-class sanding technology – attractive appearance. The best way to describe the Optimat SWT 300 series. Apart from its efficient high-tech equipment, this series is characterized by its modern, ergonomic design perfectly combining functionality with aesthetics.

✔ efficient
✔ versatile
✔ future-oriented

Character

Being adaptable...
Frequency controlled drives for variable feed speed (2.5 - 13 m/min.)

Being powerful...
Calibration roller heads with up to 30 kW, sanding pad heads with up to 22 kW per head

Being efficient...
Indipendently driven sanding heads for high processing quality

Going up to speed...
Poly V-belt drives for efficient torque transmission

Keeping it clean...
Programmable (5-level) belt cleaning device for increased sanding belt life time

Holding tight...
Vacuum table for a safe workpiece transport

Simplifying...
Thickness caliper for radio transmission of workpiece thickness to machine

Looking ahead...
Maintenance-free braking system for low maintenance costs
SWT 300 Wide-Belt Sanding Machines
### The SWT optimat series

#### Requirement for finish sanding:
- Multiple belt changes
- Max. one belt change
- Finish sanding in one cycle
- Available as option

<table>
<thead>
<tr>
<th>Model</th>
<th>Pad System</th>
<th>Solid Wood</th>
<th>Veneer</th>
<th>Lacquer</th>
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<tr>
<td>SWT 315 C</td>
<td>eps – mps</td>
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<td>SWT 315 X</td>
<td>eps – mps</td>
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<td>SWT 335 RQE</td>
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<td>SWT 335 RQH</td>
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<td>SWT 335 QCE</td>
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<tr>
<td>SWT 335 RRH</td>
<td>acp – eps – mps</td>
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mps – magnetic pad system
eps – electronic pressure system
acp – air cushion pad
C-/L-Head
The 2 in 1 head

- Head:
  - Calibration with precise tolerance at high removal rates
  - Maintenance free, profiled steel contact roller 140 mm diameter
  - No ‘wash out’ effect between early/late wood
  - Range of useful grit sizes P 40-120

Applications:
- Calibration sanding
- Veneer sanding
- Fine sanding of wood and wood materials
- Lacquer sanding (except heads with acp)

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E-Head
Optimal intermediate sanding

- Head:
  - Tolerance compensation of up to 2 mm within a part or between parts using the eps or mps 2.0 plus-system
  - Enables multi-track feeding to maximise production
  - Can adapt to most applications thanks to variable cutting speed (always standard on the last head)
  - Range of useful grit sizes for fine sanding P120-400

Applications:
- Veneer sanding
- Fine sanding of wood and wood materials
- Lacquer sanding (optional in some cases)

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Q-Head
Efficient cross sanding and high-gloss

- Head:
  - Tolerance compensation of up to 2 mm within a part or between parts using the eps or mps 2.0 plus-system
  - Enables multi-track feeding to maximise production
  - Can adapt to most applications thanks to variable cutting speed (optional)
  - Long abrasive belt, ideal for fine grit sizes

Applications:
- Veneer sanding
- Fine sanding of wood and wood materials
- Lacquer and filler sanding (optional)
- High-gloss preparation sanding up to P 2500 grit (optional)
R-Head | Dimensional accuracy with tight tolerances

- Head:
  - Calibration with precise tolerance at high removal rates
  - Maintenance free, profiled steel contact roller 240 mm diameter
  - No ‘wash out’ effect between early/late wood
  - Range of useful grit sizes P 40-120

Applications:
- Calibration sanding of wood and wood materials
- To produce a surface roughness suitable as a mechanical key for gluing

H-Head | Perfect fine sanding

- Head:
  - Tolerance compensation of up to 2 mm within a part or between parts using the eps or mps 2.0 plus-system
  - Can adapt to most applications thanks to variable cutting speed
  - No ‘sand throughs’ on the surface or at edges
  - Especially the Chevron belt provides a homogeneous and smooth surface. No oscillation marks. Lower sanding temperatures increase the sanding belt lifetime.

Applications:
- High-quality sanding on all surfaces
- Intermediate lacquer and filler sanding as well as very fine grit sizes
- Solid wood sanding, especially for frame parts
- High-gloss preparation sanding up to P1200 grit

X-Head | Multi-functional all-rounder

- Head:
  - Tolerance compensation of up to 2 mm within a part or between parts using the eps or mps 2.0 plus-system
  - Maintenance free, profiled steel contact roller 140 mm diameter
  - Enables multi-track feeding to maximise production
  - Especially the Chevron belt provides a homogeneous and smooth surface. No oscillation marks. Lower sanding temperatures increase the sanding belt lifetime.

Applications:
- High-quality sanding with and without lamellar pressure belt
- Calibration (chevron belt removed)
- Intermediate lacquer sanding
Barrel brush head B | Finish in 3D

- **B** – Head:
  - 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

Cutterblock head M | Maximum chip removal

- **M** – Head:
  - Planer head with chip removal of up to 2.5 mm
  - Four-sided reversible knives
U = universal head

U-Head |
Quick change cassette system

U – Head:
• Infinitely variable speed regulation
• Infinitely variable oscillation
• Easy tool change by cassette system
• Program-controlled operation
• Modular system allows positioning anywhere in the machine

Applications:
• Fine sanding of wood and wood composite materials as well as lacquered surfaces
• Improving and upgrading pre-sanded surfaces
• Suitable for processing three-dimensional workpiece surfaces
• Accentuating pores
• Structuring wood
• Smoothing surfaces
• Breaking and profiling edges
The electronic pressure system

eps – electronic pressure system

The machine’s electronics ensure the optimum sanding pressure on all areas of a workpiece, guaranteeing a perfect sanding result.

The eps® system developed by BÜTFERING ideally meets these requirements. Thus the individual segments automatically adjust to uneven areas in the workpiece within the tolerance range of max. 2 mm and ensure that the correct sanding pressure is applied everywhere on the workpiece.

Moreover, differences in thickness from workpiece to workpiece are easily handled. The eps® system works electro-pneumatically with a segment width of 25 mm.

Highlights:
• Electronically controlled segmented pad system for efficient sanding pressure
• 25 mm segment width for perfect sanding results on all areas of the parts
• Automatic adjustment of the segments to the workpiece surface
• Thickness tolerance compensation up to 2 mm

Pressure and compensation behavior of the individual segments for warped workpieces or workpieces with thickness tolerances. Within the tolerance range of max. 2 mm the same pressure is applied to different areas of the workpieces.
mps 2.0 plus: With the superior mps-technology you meet even the highest design requirements.

Benefits:
- Workpiece sensing to 12.5 mm
- Program controlled sanding force with proportional pressure application to guarantee optimum sanding results
- Non stick piston guidance results in fast operation and repetitive results
- Individual Actuator Control (IAC)
- Individual programming for extremely challenging sanding tasks
- Ensures perfect sanding “tip to tip”

☑ More precise
☑ More dynamic
☑ More powerful
A perfect team

Apart from the solenoid actuators used to apply proportional sanding pressure, workpiece scanning plays an essential role. To get an accurate ‘picture’ of the part we use narrow 12.5 mm sensing rollers!

The very fine workpiece recognition, combined with our fast and frictionless magnetic pad system, ensures a safe sanding process.
The highlights of the SWT 300 series include:

- Automatic head locking
- Constant passline
- Frequency-controlled variable feed speed
- Maintenance free electronic braking system
- Electronic abrasive belt oscillation
- Poly V-belt drive
- Protected sanding ‘insert’ storage compartment
- Separate drive motor for each head
- Free space for retro-fitting brushing and cleaning options
- Easily retro-fittable vacuum fan set, when not supplied as standard
- Automatic thickness measuring system (except cross belt models)
- Air-jet belt blower with 5 adjustable pressures (always on last head)

**Automatic head locking**

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

**Touchscreen operator terminal**

- 10.4” colour touchscreen for machine control
- User friendly graphic interface
- 200 programme addresses for repeatable surface quality

**Air-jet belt blower**

- Air-jet belt blower, adjustable in five steps
- Application optimized cleaning results with up to 40% saving of compressed air consumption
- Up to 35% saving of dust extraction volume by intelligent air-jet placement

**Electronic abrasive belt oscillation**

- The running of the sanding belt is controlled by large light sensors
- Thus, an extremely smooth oscillation is achieved
With the SWT 300 you are provided with top-quality equipment from the very beginning. By including elementary technologies already in the standard, highest processing quality is ensured in the long term.

Variable feed speed
- Extended conveyor unit for simplified integration into lines with high-quality conveyor belt and large rubberized drive drum

Variable cutting speed
- Speed control via frequency inverter
- Power transmission via Poly V-belts
- Standard on single head models. Standard on the last head of multi-head machines

Part guidance by rubberized pressure rollers
- Spring-loaded pressure rollers with stable guidance
- Pressure rollers placed close to the sanding heads
- Adjustable spring tension

ECO mode
- Machine will stop automatically after a long idle period advanced warning is given
- With frequency-controlled drives, decrease of the idle power by 50% – as standard

2,5 – 13 m/min
2 – 18 m/s
Options

Would you like something extra? Our options provide all opportunities for perfect adjustment of your wide-belt sanding machine to your production.

Workpiece cleaning device
- Workpiece cleaning system with rotating nozzles

Transport safety by vacuum table (in connection with cross belt head already as standard)
- High-performance fan built into the machine frame with flow control valve

Driven panel cleaning brush
- Provides cleaned workpieces for further treatment directly after the processing

Structuring brush
- Cleaning brush equipped with Anderlon or stranded wire brushes
  - Diameter 150 mm
  - Pneumatically controlled
  - Main motor 5.5 kW
Wireless thickness caliper ME 5000
- An innovation from BÜTFERING
- Cable-free transmission of workpiece thickness measurements to the machine
- Various measuring modes

Workpiece thickness measuring ME 200
- Device for automatic thickness measurement
- Including automatic setting of the machine to the required workpiece thickness

Fold-away outfeed table
- Solid workpiece support table - extends outfeed area by 900 mm when needed

Telescopic infeed extension
- Helpful when feeding larger parts
# The technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>SWT 315</th>
<th>SWT 325</th>
<th>SWT 335</th>
<th>SWT 345</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of heads</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Working width mm/inch</strong></td>
<td>1350/53&quot;</td>
<td>1350/53&quot;</td>
<td>1350/53&quot;</td>
<td>1350/53&quot;</td>
</tr>
<tr>
<td><strong>Width of sanding belt mm/inch</strong></td>
<td>1370/54&quot;</td>
<td>1370/54&quot;</td>
<td>1370/54&quot;</td>
<td>1370/54&quot;</td>
</tr>
<tr>
<td><strong>Length of sanding belt mm/inch</strong></td>
<td>2150/85&quot; (2620/103&quot; optional)</td>
<td>2150/85&quot; (2620/103&quot; optional)</td>
<td>2150/85&quot; (2620/103&quot; optional)</td>
<td>2150/85&quot; (2620/103&quot; optional)</td>
</tr>
<tr>
<td><strong>Workpiece thickness min. – max. mm/inch</strong></td>
<td>3-160 / 1/8&quot; – 7&quot;</td>
<td>3-160 / 1/8&quot; – 7&quot;</td>
<td>3-160 / 1,8&quot; – 7&quot;</td>
<td>3-160 / 1,8&quot; – 7&quot;</td>
</tr>
<tr>
<td><strong>Length / Width / Height mm</strong></td>
<td>1625 / 1956 / 2190-2350</td>
<td>1880 / 1956 / 2190-2350</td>
<td>2290 / 1956/ 2190-2350</td>
<td>2290 / 1956/ 2190-2350</td>
</tr>
<tr>
<td><strong>Weight approx. kg</strong></td>
<td>2.800</td>
<td>4.000</td>
<td>5.600</td>
<td>6.000</td>
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Focusing on the essential
Choose the Original
Choose Success!
For the Success of Original Technology
A campaign of the VDMA

Member of the HOMAG Group

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