

# **SWT 500**

## **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 500 series

The BÜTFERING SWT 500 series combines innovative machine construction and the latest sanding technology in a conclusive total concept. Special attention was paid to the equipment of the models, and this is why the SWT 500 DIAMOND rightfully carries the slogan 'fully equipped as standard'.

The DIAMOND range always takes advantage of the latest sanding technology. Today's models utilise the magnetic pad system MPS and the unique moulded SORB TECH machine frame. The energy efficient ecoPlus and the trend setting X-Head are all available within the DIAMOND concept.

## Character

### Being adaptable...

Frequency controlled drives for variable feed speed (2.5 - 13.0 m/min.)

### Being powerful...

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

### Keeping calm...

Vibration-absorbing machine frame made of SORB TECH

### Providing standards...

Constant passline height

### Being easy...

Easy machine operation with touch screen control

### Simplifying...

Thickness caliper for radio transmission of workpiece thickness to machine

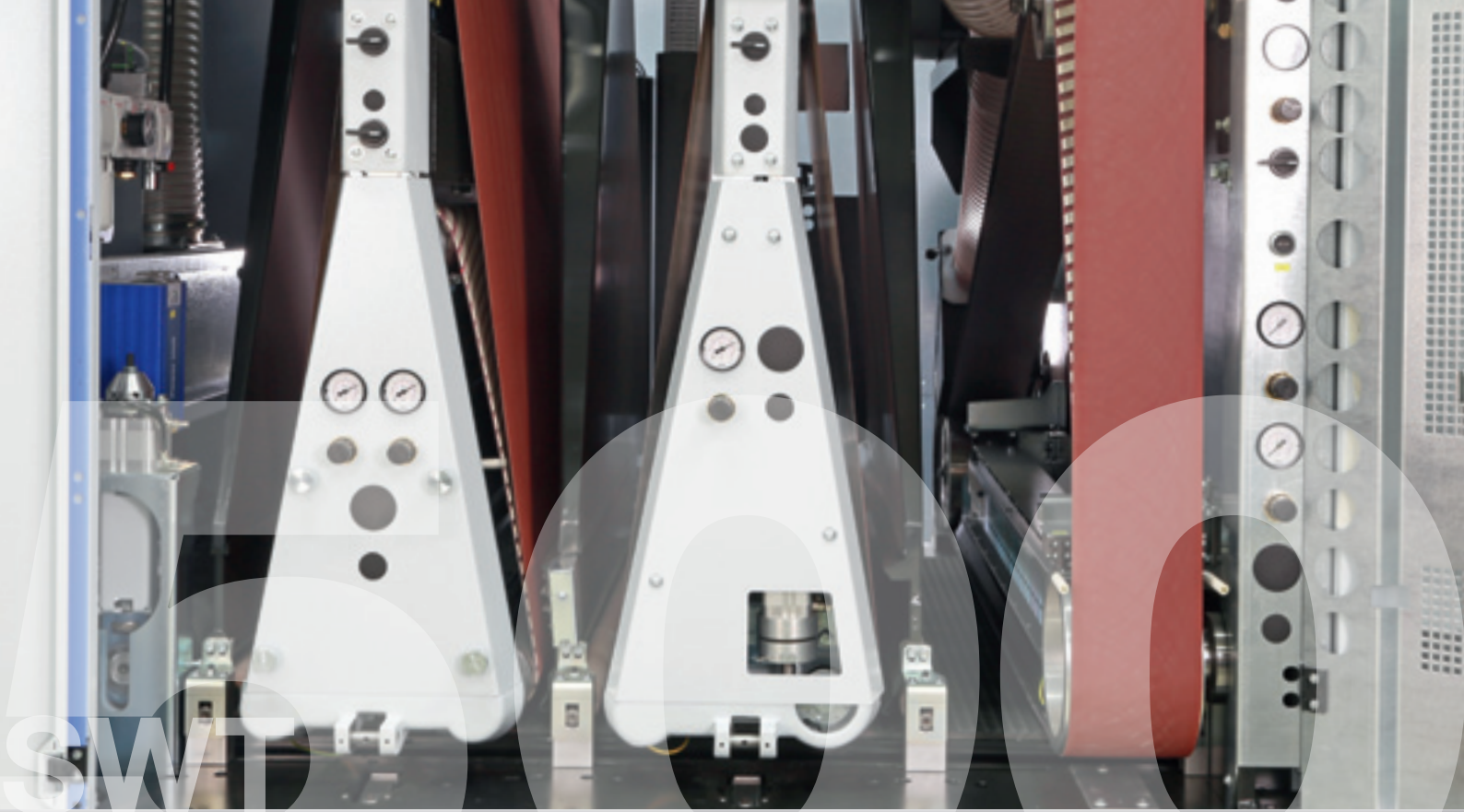
### Being flexible...

Free configuration of head combinations

### Keeping it clean...

Programmable (5-level) belt cleaning device for increased sanding belt life time

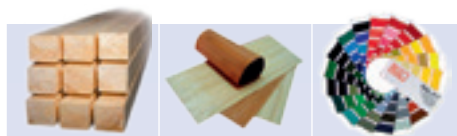




# The Diamond 500 Models

## Requirement for finish sanding:

- Multiple belt changes
- ■ max. one belt change
- ■ ■ Finish sanding in one cycle
- Available as option



		System	Solid wood	Veneer	Lacquer
SWT 515 C C		mps 2.0+	■	■	■ ■
SWT 515 X X		mps 2.0+	■	■ ■	■ ■
SWT 525 CC C C		mps 2.0+	■ ■	■ ■	■ ■ ■
SWT 525 CH C H		mps 2.0+	■ ■	■ ■	■ ■ ■
SWT 525 QC Q C		mps 2.0+	■	■ ■	■ ■ ■
SWT 525 QH Q H		mps 2.0+	■	■ ■	■ ■ ■
SWT 525 QX Q X		mps 2.0+	■	■ ■	■ ■ ■
SWT 535 RQE R Q E		mps 2.0+	■ ■	■ ■	■ ■ ■
SWT 535 RQH R Q H		mps 2.0+	■ ■	■ ■	■ ■ ■
SWT 535 QCE Q C E		mps 2.0+	■	■ ■ ■	■ ■ ■
SWT 535 QCH Q C H		mps 2.0+	■ ■	■ ■	■ ■ ■

mps standard

# C-Head | The 2 in 1 head

## C – 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



mps 2.0+



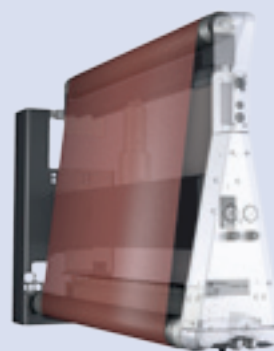
# E-Head | Optimal intermediate sanding

## E – Head:

- Tolerance compensation of up to 2 mm is easily handled by the using the mps 2.0 plus pad
- 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



mps 2.0+



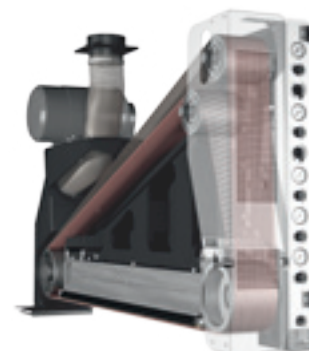
# Q-Head | Efficient cross sanding and high-gloss

## Q – Head:

- Tolerance compensation of up to 2 mm is easily handled by the using the mps 2.0 plus pad
- 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
- Intermediate lacquer and filler sanding (option)
- High-gloss preparation sanding up to P2500 grit (option)



mps 2.0+





# R-Head | Dimensional accuracy with tight tolerances

## R – 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 glueing



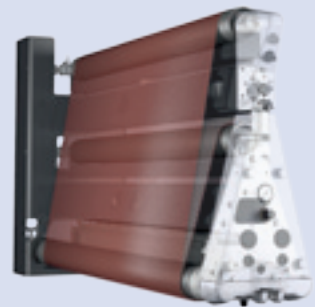
# H-Head | Perfect fine sanding

## H – Head:

- Tolerance compensation of up to 2 mm is easily handled by the using the eps or mps 2.0 plus pad
- 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



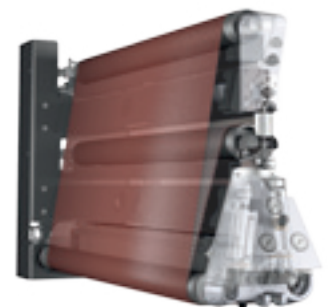
# X-Head | Multi-functional all-rounder

## X – Head:

- Tolerance compensation of up to 2 mm is easily handled by the using the eps or mps 2.0 plus pad
- 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:

- Fine sanding of wood and wood materials
- Calibration (chevron belt removed)
- Intermediate lacquer sanding



\* Available as option

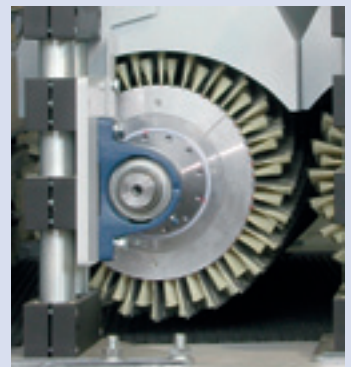


# Special heads for outstanding finish

## Barrel brush head B | Finish in 3D

### **B** – Head:

- 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



## 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 wooden materials as well as of 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







## Solid advantages with SORB TECH

**Vibration is the worst enemy of a sanding machine. Any resonance from motors, drives and even the sanding belts themselves can affect the finish result. A good way to reduce resonance is to increase the weight of the machine, a better method still is to use SORB TECH!**

The mineral composite material SORB TECH is characterized by outstanding vibration absorption – even superior to welded frame and cast iron constructions. The smooth running of this new sanding machine is unparalleled in the industry. This technology is unique, trend-setting and patented – world-exclusive innovation from BÜTFERING.





SWT

**mps**  2.0+

**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**

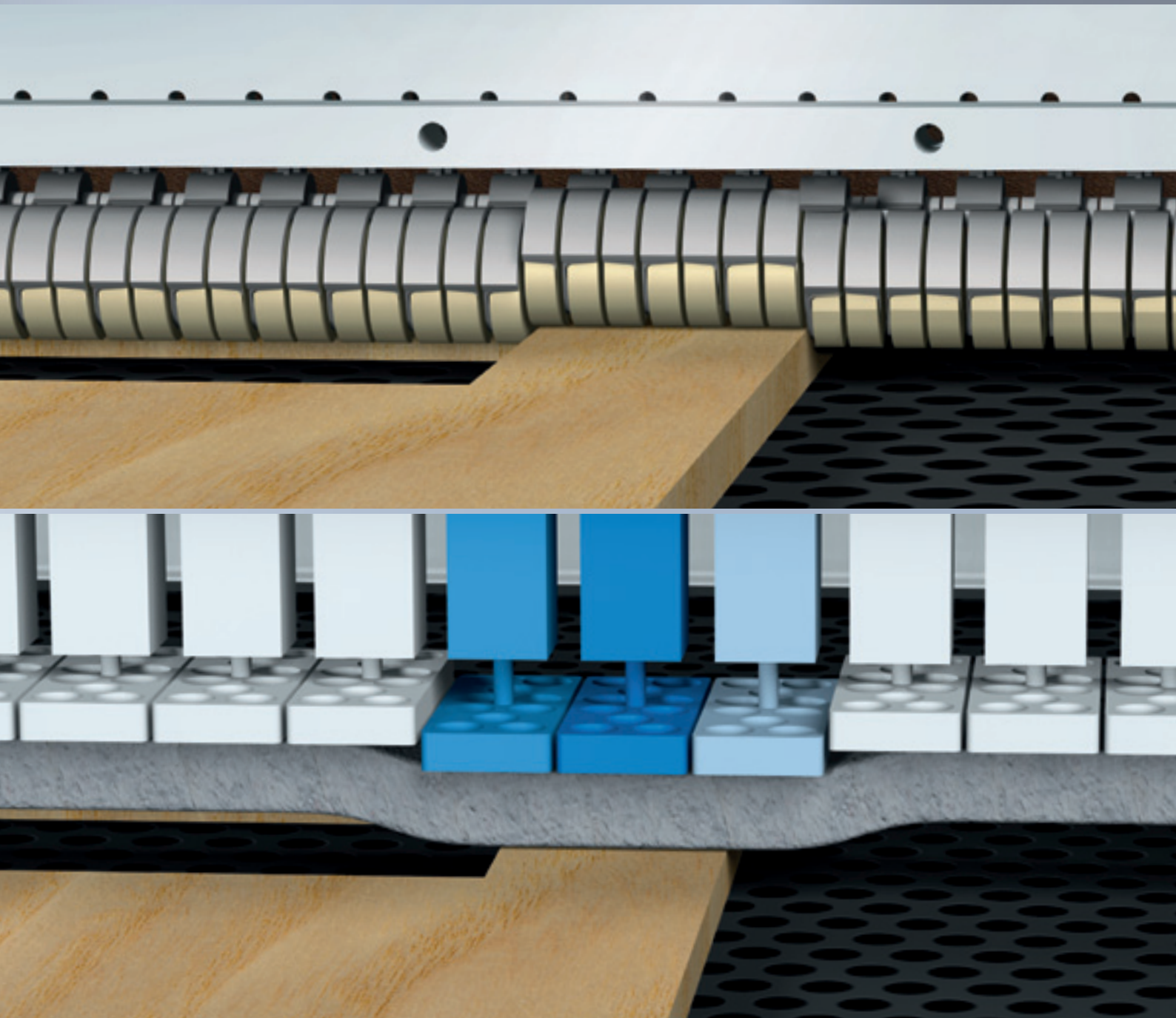


# Fascinating techniques for perfect surfaces

## 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 12.5mm sensing rollers!

The very fine workpiece recognition, combined with our fast and frictionless magnetic pad system, ensures a safe sanding process.



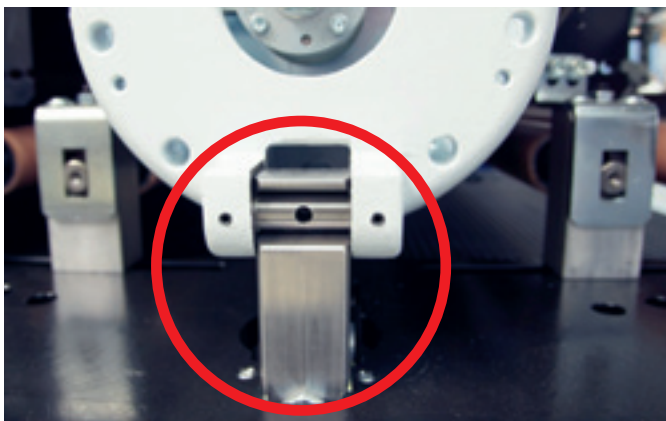
# All inclusive



With the SWT 500 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.

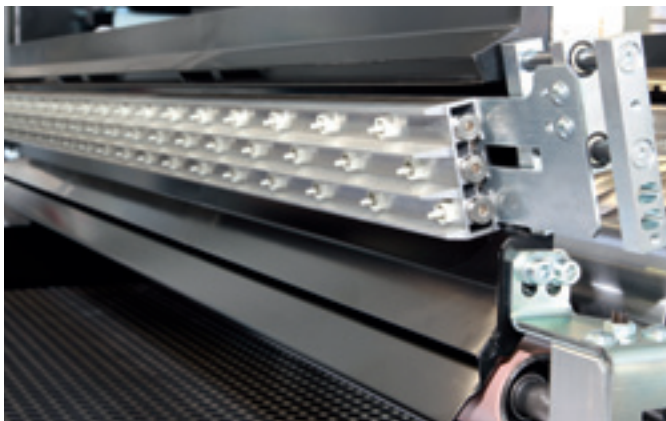
## Automatic unit locking

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



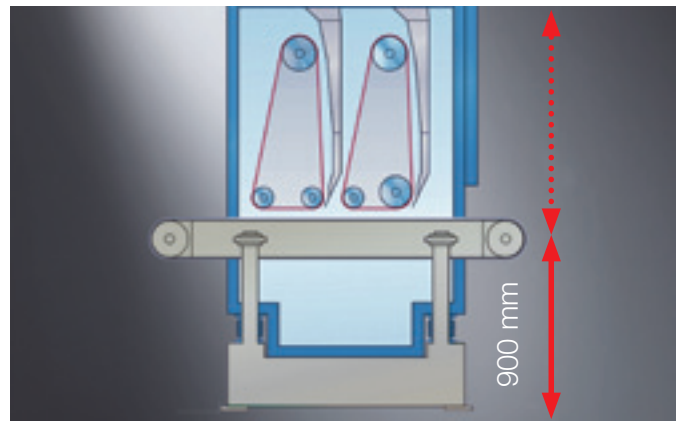
## Touchscreen operator terminal

- 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
- Intelligent air-jet placement and dust extraction openings allow to save up to 35 % of dust extraction volume



## Workpiece thickness setting

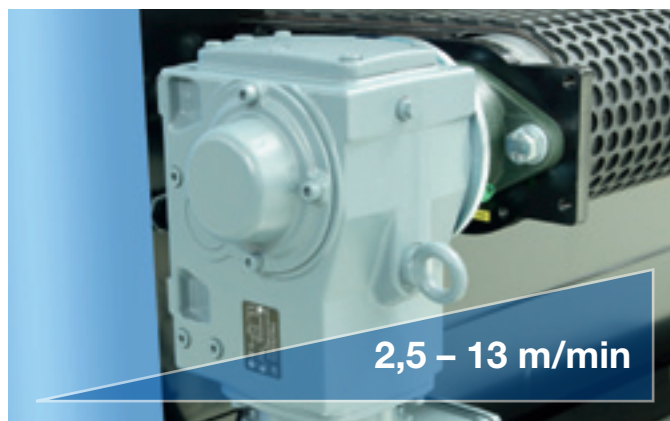
- Thickness adjustment (3-200 mm). Four large jackscrews (40 mm diam.) adjust the upper frame of the machine, giving constant passline operation (900 mm)





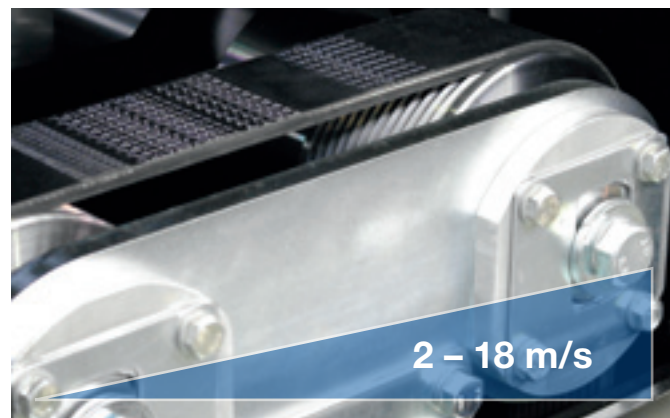
#### Variable feed speed

- Extended conveyor unit for simplified integration into lines with high-quality conveyorbelt and large rubberized drive drum



#### mps 2.0 plus – magnetic pad system plus

- High-precision activation of actuators
- Workpiece recognition with a grid of 12.5 mm
- Individual programming for extremely challenging sanding tasks



#### Variable cutting speed

- Speed control via frequency inverter
- Power transmission via Poly V-belts

#### 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

# All inclusive



## Vacuum table for secure part feeding

- High-performance fan built into the machine frame with flow control valve
- Table segmentation for small workpieces (option)



## Electronic abrasive belt oscillation

- The running of the sanding belt is controlled by large light sensors
- Thus, an extremely smooth oscillation is achieved
- Emergency power supply in case of power failure



## Telescopic infeed extension

- Helpful when feeding larger parts



## Driven finish brush and free space as standard

- Space available to fit one of the following options:
- Satinising or structuring brush
- Cleaning system with ionisation device and rotary air-jet parts cleaning system, activated by the workpiece



# 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



## Wireless thickness caliper ME 5000

- An innovation from BÜTFERING
- Cable-free transmission of workpiece thickness measurements to the machine
- Various measuring modes



## Structuring brush

- Cleaning brush equipped with Anderlon or stranded wire brushes
- Diameter 150 mm
- Pneumatically controlled
- Main motor 5,5 kW

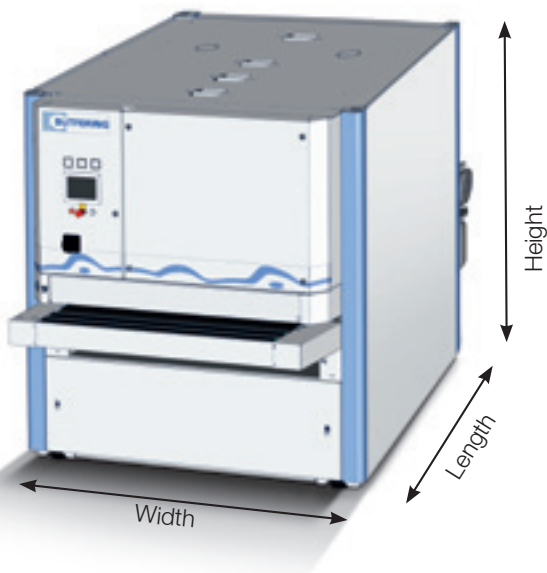


## Fold-away outfeed table

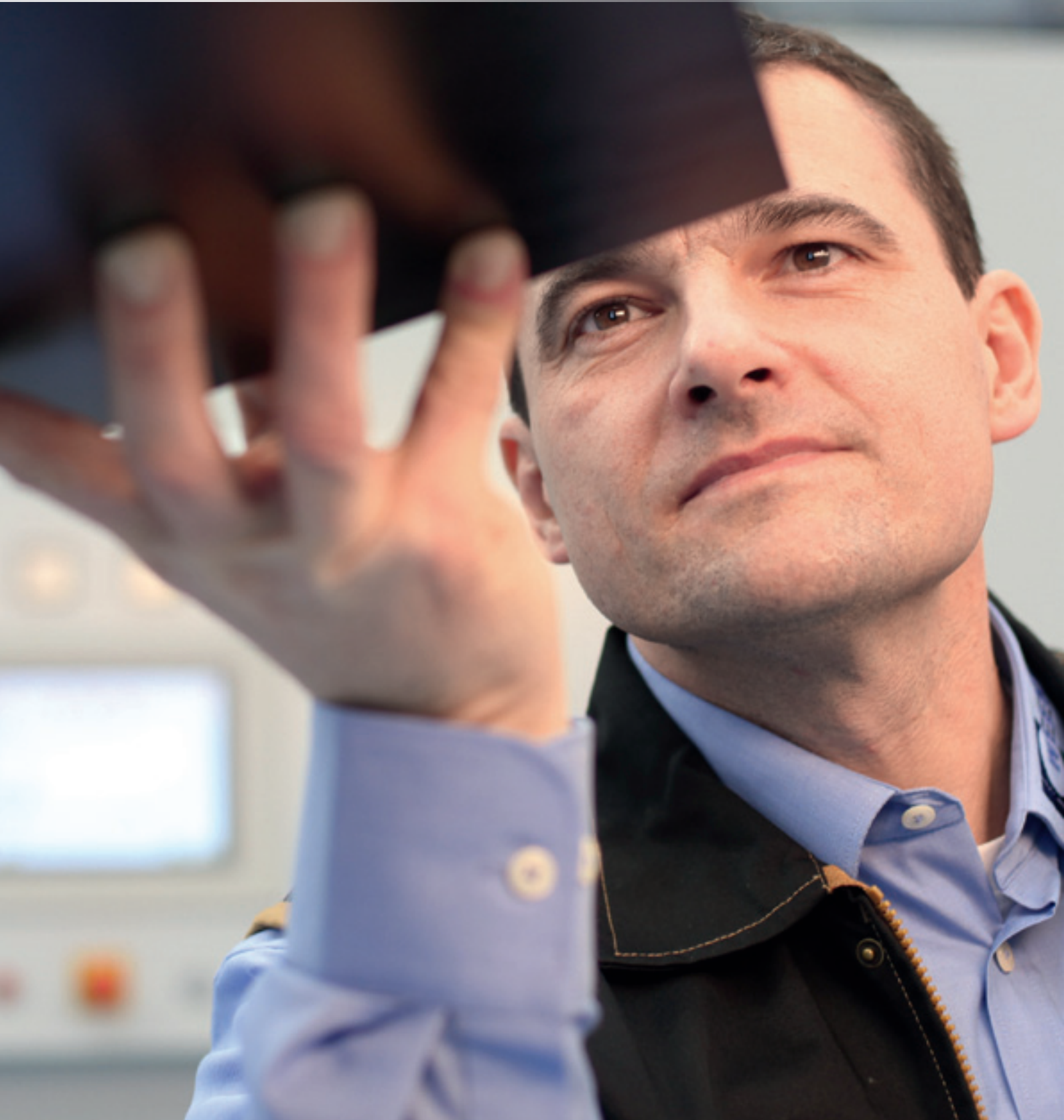
- Solid workpiece support table – extends outfeed area by 900 mm when needed

# The technical data

Model	SWT 515	SWT 525	SWT 535	SWT 545
Number of heads	1	2	3	4
Working width mm/inch	1350/53"	1350/53"	1350/53"	1350/53"
Width of sanding belt mm/inch	1370/54"	1370/54"	1370/54"	1370/54"
Length of sanding belt mm/inch	2620/103"	2620/103"	2620/103"	2620/103"
Workpiece thickness min. – max. mm/inch	3-160 / 1/8" -7"	3-160 / 1/8" -7"	3-160 / 1/8" -7"	3-160 / 1/8" -7"
Length / Width / Height mm	1625 / 1956 / 2190-2350	1880 / 1956 / 2190-2350	2290 / 1956/ 2190-2350	2290 / 1956/ 2190-2350
Weight approx. kg	5.000	7.000	9.000	11.000



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