



Sägen
Hobeln
Fräsen

MARTIN

T27 F/x Spindle Moulder
T27 Flex Tilting Arbor Spindle Moulder



MARTIN sets standards

Why a MARTIN machine is something very special

Does quality machinery make for better results?

Is flexible manufacturing possible with a fixed spindle?

Can perfect moulding results be rewarding?

See for yourself: with the new MARTIN T27 premium shaper.

MARTIN



T27 F/x
Flexible manufacturing with a fixed spindle



T27 Flex
Creative moulding



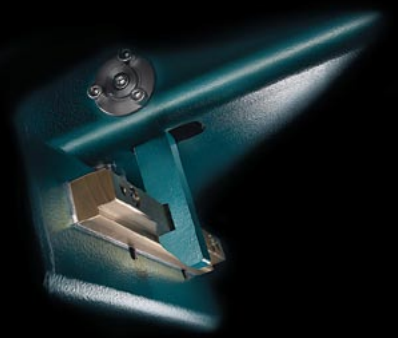
Accessories
Individual solutions for individual requirements



[▲1] [▼2]

[▼3]

[▼4]



T27's premium-class controls

The user-friendly, modern touchscreen controller of the T27 interfaces perfectly with the machine's various mechanical options. Moreover, the machine can be fine-tuned to individual company's requirements.

The MARTIN T27 shaper is perfectly suited for companies that depend heavily on efficiency, versatility, accuracy and reliability.

MARTIN sets standards.

Reduced set-up times thanks to state of the art technology

The main benefit of the new touchscreen controller is to reduce the set-up times by supporting the user. Instead of having to perform time consuming measurements and setup operations, the user can now benefit from an intuitive touchscreen system. With up to six electronically displayed and controlled axes, the T27 can contribute substantially to the increased productivity in the modern work environment. Setup time savings of up to 80%* for complex profiles with a tilted spindle mode are not unusual. Time savings of up to 20%* are possible even for simple profiles such as a rebate. Setups are no longer a matter of trial and error – even the first workpiece will be perfect!

(* compared to a standard shaper)

Touchscreen controller [1]

Every T27 is equipped with a modern, intuitive TFT touchscreen controller. All digital measurement displays on the T27 always show the real measurements of the tool in relation to the table and the fence jaws. Self-explanatory coloured icons, easy to read text messages, and a well-arranged menu structure support even the most inexperienced users and ensure top notch results. Up to six axes are displayed in a clear, easy to understand manner; up to 1,000 tools and 1,000 programs can be stored. As soon as the user stores tools or programs in the controller, they can be accessed and loaded whenever needed. "Group" and "Favorite" functions, make repeat selections as easy as can be.

Table rings [2]

The patented MARTIN electrically-adjustable eccentric table rings can be variably adapted to tools with diameters from 70 to 250 mm. This feature is especially utilized on the tilting T27 Flex, as the table opening is perfectly adjusted to the tilted tool as well.

Fence [3]

The newly designed fence with bilateral guides ensures maximum precision where it matters most. On the basic T27, the fence is adjusted via a handwheel in conjunction with a digital display in the overhead controller. The motorized T27 variant is entirely electronically controlled. The new fence system allows for quicker and more accurate locating of the fence and hood when taking it on and off to do radius or curved work.

Feed support [4]

The motorized feed support with its positive, snap-in mechanism (patent pending) is an option geared towards quick tool changes. The feed unit's height is easily adjusted via the ball bearing guide through the controller and integrated into the machine's programs. As with previous MARTIN shapers, if the feed unit is not required, it can be easily folded to the side – without losing the previously adjusted settings.

T27 F/x: Flexible manufacturing with a fixed spindle

A shaper must be efficient and versatile – just like every other production machine. A modern touchscreen control is exactly what is required in today's woodworking facility; minimizing set-up times and increasing production.

On the T27 Fix, you can easily adjust the cutting height via the electronic controller and the cutting depth via handwheel according to the digital display. As soon as you „activate“ a tool, both values will indicate the actual position in relation to the table and fence jaws. By adding further controlled

axes, you can upgrade the T27 Fix to a “profiling center” with up to 5 controlled axes. Every additional axis is fully integrated in the operating electronics and networked with the other axes, making it a true performer.

Ready to mould

The standard features of the T27 Fix include an automatic star-delta starter, two EMERGENCY STOP buttons, lockable main switch, and electric wear-free spindle brake. A 5-pole socket with plug for connecting a power feeder is also in-

cluded in the basic equipment. The machine is also supplied with a convenient switch to change the rotational direction of the spindle.

Options you will no longer want to live without

For curved moulding operations, the fence can be removed and later remounted in seconds. With the optional folding support, you can lift the fence from the table and fold it to the back of the machine, thereby reducing expensive set-up time. Thanks to MARTIN's exacting German tolerances, the time-consuming remounting of the



Quick setup for curved moulding



Short setup times thanks to modern technology



Tool changes made easy with the ProLock system

T27 Fix



T27 Fix with accessories

- T2702** Motor rating 7.5/9.5 kW (10 / 13 HP)
- T2711** Digital display of the infeed fence jaw position
- T2732** Table extension on the right side with extendable workpiece support
- T2740** Centrex guard
- T2741** Guide bars
- T2745** Foldable support for fence
- T2780** Sliding table

fence is no longer necessary because of the superior mechanical fit. The cutting height is automatically referenced without having to be recalibrated.

For mortising jobs, the MARTIN sliding table is an ideal option for every T27 shaper. The sliding table features a heavy, robust design, a work table that can be turned to 45° (fence up to 65°) in both directions, and many other unique details make this option an indispensable aid for cutting difficult mortises and tenons.

The basic T27 features the DornFix system, the

original MARTIN quick-change system. The Dornfix system allows the operator to change from a 30 mm to a 40 mm arbor in a matter of seconds. The optional ProLock system further facilitates quick tooling changes.

Tool memory:	500
Program memory:	100
Motor rating:	5 / 6 kW (6.8 / 8.2 HP)
Stroke:	150 mm (5.9")
Rotational speeds:	3,000 / 4,000 / 5,000 6,000 / 8,000 / 10,000 rpm
Weight	Approx. 1,200 kg (2,650 lbs)



T27 FleX: Creative Moulding

Setting up a tilting shaper can be a major challenge. Not so for the T27 FleX with its modern touchscreen controller. Thanks to the controller's integrated tool conversion, the operator can make efficient use of the wide tilting range of the T27 FleX (2 x 46°), allowing them to set up even complex moulding patterns with a tilted spindle in a flash.

No matter whether you work with the spindle tilted to the front or to the back, the controller prompts you in setting up the moulding process.

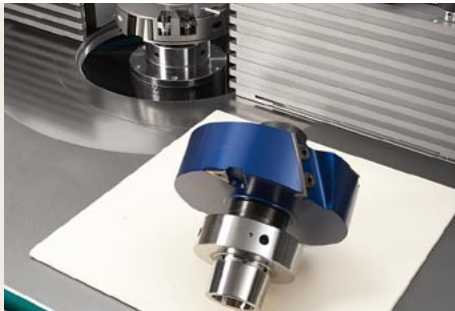
Cutting height, cutting angle – everything is structured in an obvious way for the operator. After activating the tool, the controller will indicate the location to reference the tool in relation to the table and fence jaws. In this way, setup procedures that used to be very time-consuming can be performed rapidly – a major step in the direction of more flexibility and efficiency for the operator.

Perfect results on six axes

On the T27 FleX, up to six axes can be motorized and controlled. In addition to the cutting height

and cutting angle, the cutting depth, the infeed jaw of the fence, the table opening, and the height setting of the feed support can be adjusted by the controller. Up to 1,000 tools and 1,000 programs can be stored in the controller. A powerful search function as well as “group” and “favorite” functions assist the operator in selecting the needed profiles.

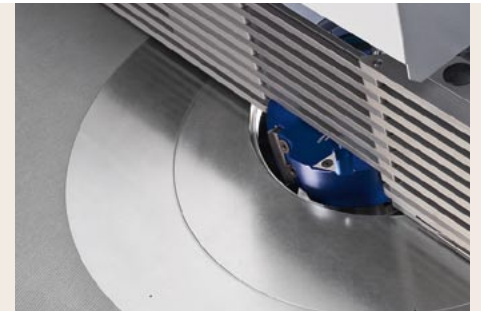
On the basic machine, the entire fence is adjusted with an easily accessible handwheel via a digital display; the infeed jaw is also adjusted with a



The modern HSK 85 interface



State-of-the-art technology for quick and effective setups



Eccentric adjustment of the table opening

T27 FleX



T27 FleX tilting shaper with accessories

- T2704** Motor with variable speed inverter control 9.5 kW (13 HP)
- T2710** 10.4" touchscreen control
- T2712** Motorized fence positioning
- T2713** Motorized positioning of the infeed jaw
- T2714** Motorized positioning of the table opening
- T2715** Motorized positioning of power feeder support (supplied without feed unit)
- T2731** Table extension on both sides with extendable support
- T2735** Stop for insert cutting, infinitely adjustable (mounted on both sides)
- T2740** Centrex guard
- T2742** Integral fence
- T2745** Foldable support for fence
- T2770_85** HSK 85 PowerLock quick-change tooling system

handwheel according to a Vernier scale.

Benefit from HSK technology

Besides the proven MARTIN DornFix quick-change system that is used on the basic T27 machine, two versions of pneumatically clamping HSK tools are also available. The HSK system is especially suited for those who want to use their shaper as an effective supplement to their shapers or CNC processing centers. Besides HSK85 „PowerLock“, we also offer the HSK63F system. Using this technology, you can easily adapt the tooling of a CNC

processing center directly to the shaper, freeing up your router from time consuming traverse moulding jobs, thereby reducing bottlenecks.

Tool memory:	500
Program memory:	100
Motor rating:	5 / 6 kW (6.8 / 8.2 HP)
Tilting range:	2x46°
Stroke:	150 mm (5.9")
Rotational speeds:	3,000 / 4,000 / 5,000 6,000 / 8,000 / 10,000 rpm
Weight:	Approx. 1,200 kg (2,650 lbs)



Accessories



Easy software update on the 10.4" Touchscreen Controller

10.4" touchscreen control for T27 Fix and FleX T2710

While machines with the standard 5.7" touchscreen facilitate the organization of up to 500 tools, the larger 10.4" touchscreen supports up to 1,000 tools. Apart from the easy to use search function, this electronic system enables the user to form "groups" and "favorites" within the tool database. This greatly accelerates the selection of the required tool. Once the optimum tool position has been found for a certain job, the settings can be stored. The 5.7" touchscreen has space for 100 programs and the 10.4"



Best control - best overview

for up to 1,000 programs. The tool that is utilized now becomes part of the program. Depending on the options that are ordered with the machine, up to six axes can be displayed on the HOME page and controlled from there.

Please find more information on www.martin.info



Digital display for the infeed fence jaw

T2711 Digital display in the controller of the infeed fence jaw position

The digital display of the infeed fence jaw position enables you to precisely adjust this setting according to the digital display. This system replaces the traditional Vernier scale system. The key advantage of this option is being able to recall the jaw position in the programs that have been entered. The operator benefits from having this adjustment linked to the controller; only the adjustment is done manually via handwheel. Thanks to the integration into the controller, incremental movement is now possible.



Motorized positioning of the infeed fence jaw

T2713 Motorized positioning of the infeed fence jaw

If the standard digital display for the infeed fence jaw is not enough, then the option for the motorized positioning of the infeed fence jaw can be added. This option, which is only available in connection with the T2712 motorized positioning of the fence, provides full control of the fence. All fence settings can be adjusted from the controller. This option is recommended for users who often perform extensive outside moulding operations.



Electronic fence positioning

T2712 Motorized fence positioning

The motorized positioning of the fence is probably the most useful option available with the T27 series shapers. This option allows the most common settings on a shaper, the cutting height and depth, to be performed fully supported by the controller. Tasks previously performed via handwheel can now be adjusted via the machine's electronic system. Due to the extremely high repeatable accuracy of ± 0.025 mm, the fence can move to the pre-defined positions extremely precisely. The cutting depth is incorporated in every program in the same way that the cutting height is and is positioned via the controller as specified by the program. Even critical settings for cope and stick operations, can be positioned precisely.



Variable speed inverter control

T2703/T2704/T2705 Variable speed inverter

The variable speed inverter enables the operator to adapt the speed of their tool to a range from 1,000 to 12,000 rpm, even when the machine is running. This large range of speeds allows the operator to use slow profile sanding heads as well as small diameter high-speed tools such as shank-type cutters and router bits. Thanks to a modern passive cooling system, the inverter does not require additional fans. Motors are available from 7.5 to 11 kW to provide the needed horsepower.



Motorized table opening

T2714 Motorized table opening

When setting up a shaper, providing the maximum amount of workpiece support always poses a challenge. The ideal solution to this is the motorized table opening option that is fully integrated into the controller. By simply entering values into the controller, the eccentric rings variably open or close the gap around the tool. The advantage: instead of having to use a standard fixed table ring at the beginning of the setup process, the gap can be finely tuned after the tooling setup has been completed. This option has been further improved on the T27, now providing adjustment for tools with diameters of up to 250 mm. Moreover, the new T27's motorized table rings are much less susceptible to dust contamination.



Motorised Feed Support

T2715 Motorized feed support

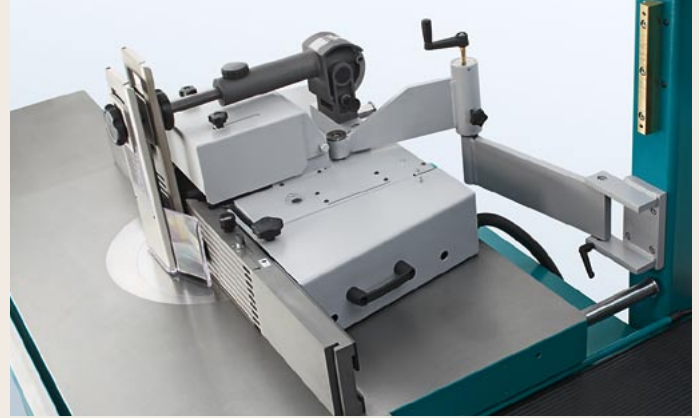
On a conventional power feeder support stand, the exact positioning of the feed unit takes a lot of time. To save the operator time, MARTIN offers its motorized feed support with snap-in mechanism (patent pending). The height setting of the feed unit can easily be adjusted through the controller and stored as part of any program. The ball-bearing guide system makes the adjustment of the depth setting of the feed unit smooth and flawless. During a tooling change, the feed unit can easily be moved out of the way and moved back to its original position; without losing your settings.



HSK cutter arbor quick change system

T2770 HSK cutter arbor quick change system

For those who regard their shaper as an effective complement to their shapers or CNC processing centers, the two new HSK tool interfaces are an ideal upgrade. Optionally, basic T27 machines with the proven DornFix quick-change system can be equipped with the pneumatic HSK system. Using this technology, you can easily adapt the tooling of a CNC processing center directly to the shaper, freeing up your router from time consuming traverse moulding jobs, thereby reducing bottlenecks. Note: supplied only in conjunction with the T2703-a, T2704-a, or T2705-a variable speed inverter drives.



Swinging support for fence

T2745 swinging support for fence

The more that you perform curved or radius work, the more you will appreciate the benefits of this accessory. The folding support assists you in removing the fence from the machine table, saving your back and preventing your MARTIN fence from being dropped and damaged. With this support, you simply remove the fence from the table, lift it with the handwheel, and move it out of the way to the rear position. The machine table is cleared in no time, allowing you to mount your hood for curved work without any clutter in the way.



Stop for insert cutting

T2735 stop for insert cutting, infinitely adjustable

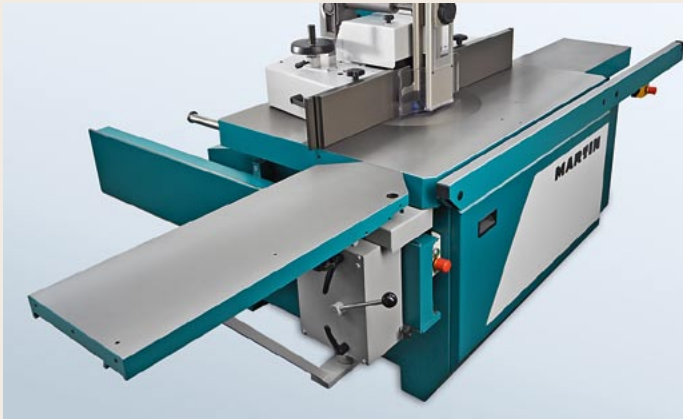
This optional, retrofittable stop is a useful aid for hazardous insert cutting operations. It allows you to perform these operations in a precise and safe manner. This accessory can also be attached to the left table extension in order to precisely machine grooves. The positioning of start and end points is simple and precise with a very high repeatable accuracy. When the stop is not in use, it can easily be folded out of the way under the table extension.



Integral fence jaws

T2742 Integral fence jaws

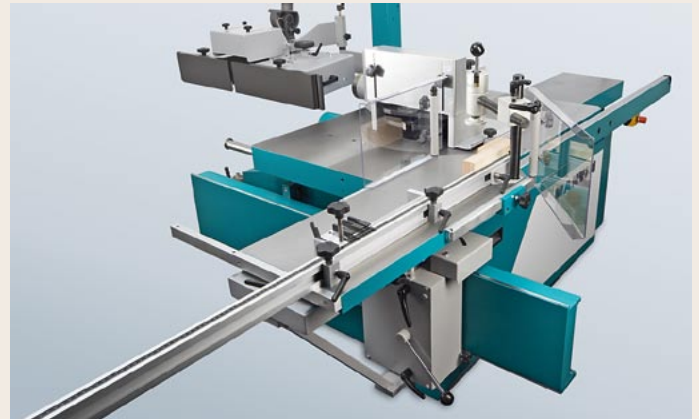
The fence opening should always be closed in around the tool as much as possible in order to provide the maximum amount of support for the workpiece. You can achieve both by means of the proven integral fence. The bars of the anodized aluminium jaws can easily be lowered to the needed position, released, and height-adjusted. The bar cassettes can also be removed to facilitate the use of a wooden insert.



Sliding table used as table extension

T2780 Sliding table

The sliding table is the ideal solution for cutting difficult mortises, tenons and counter profiles. Designed mainly for the production of European-style windows and doors, the sturdy table provides a large, secure surface and can be turned by up to 45° in both directions; the fence can be turned by up to 65°. In this way, even diagonally cut workpieces like special window profiles, can be clamped and machined safely. The sliding table has a large stroke of 1400 mm, allowing the safe processing of large workpieces. With



Sliding table prepared for tenoning work

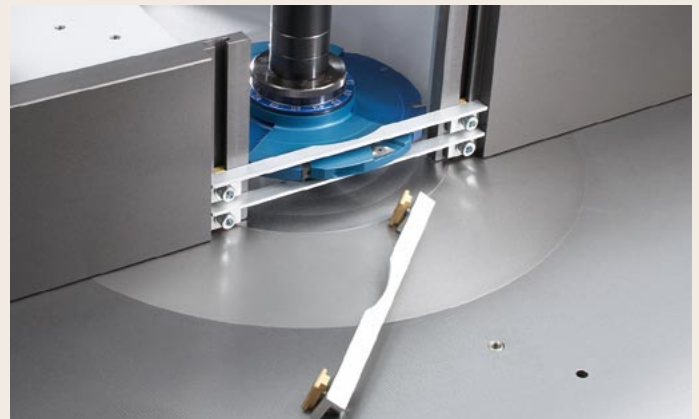
the accompanying hood, tools with a diameter of up to 350 mm can be safely and securely mounted to a 40 mm or 1-1/2" dia. arbor. When the sliding table is not being used, it acts as the perfect left side table extension, since the sliding table can be lowered to the same level as the machine table. The guide bar can easily be moved to the back where it is flush with the machine front.



Spring collet arbor

T2763 cutter arbor with exchangeable spring collet

If you plan to use router bits, usually shank-type cutters, on the shaper, the spring collet arbor is the ideal solution. The easily exchangeable spring collets are available for cutter shanks with diameters from 3 to 25 mm. The fence of the T27 can also be installed 125 mm further to back to facilitate cutting of dovetail joints. For small tool diameters, we recommend the optional T2703/T2704/T2705 variable speed inverter drive in order to achieve the correct rpm.



Guide bars

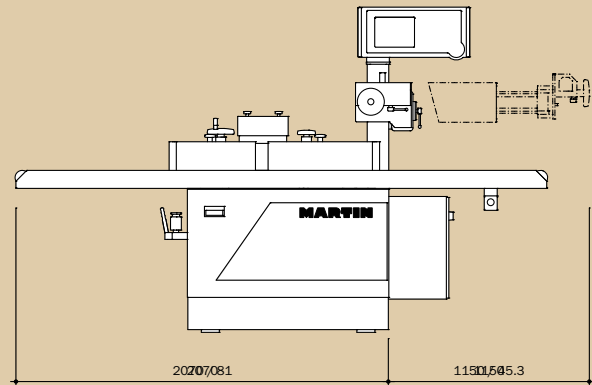
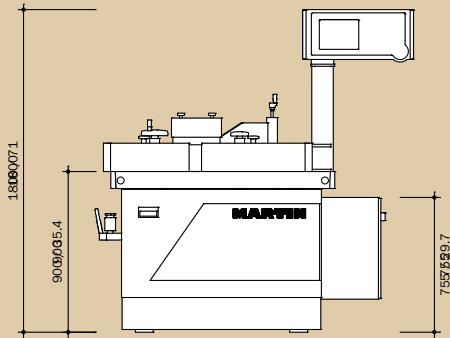
T2741 guide bars for standard fence jaws

The guide bars offer perfect support, preventing the workpiece from falling into the fence opening. The anodized aluminium bars are simply inserted from the top into the T grooves of the fence jaws and positioned. The standard bars measure 260 x 3 mm and are also available with the measurements of 260 x 6 mm and 300 x 6 mm. Due to their slim design, they can be utilized in almost any application.

Technical Data

T27 Fix Shaper

T27 FleX Tilting Shaper



Specifications

T27

Motor rating

5 / 6 kW (6.8 / 8.2 HP)

Optional

7.5 / 9.5 kW (10.2 / 12.9 HP)

7.5 kW (10.2 HP) variable speed inverter drive

9.5 kW (12.9 HP) variable speed inverter drive

11.0 kW (15 HP) variable speed inverter drive

Spindle height adjustment

150 mm (5.9")

125 mm (4.9") (motor 7.5/9.5 kW - 10.2 / 12.9 HP)

160 mm (6.3") (HSK - interface T2770)

Spindle tilt (T27 FleX only)

+/- 46,00°

Rotational speeds

3,000 / 4,000 / 5,000 / 6,000 / 8,000 / 10,000 rpm

Optional

Variable speed inverter drive from 1,000 to 12,000 rpm

Table openings

255 / 205 / 161 / 106 / 74 mm; 10.0 / 8.1 / 6.3 / 4.2 / 2.9"

Optional

Motorized variable table opening for tool diameters from 70 to 250 mm

Control console

At eye level, tilted, can be turned in 2 positions

Controller

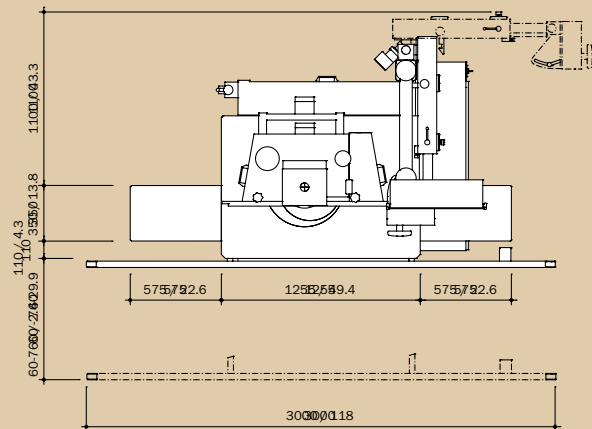
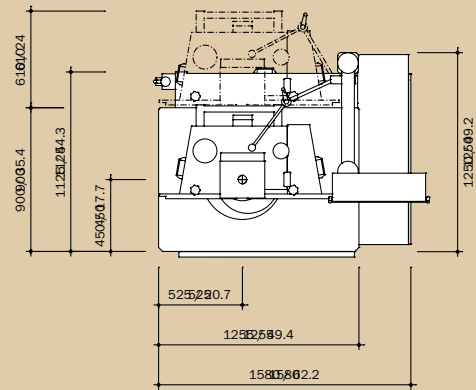
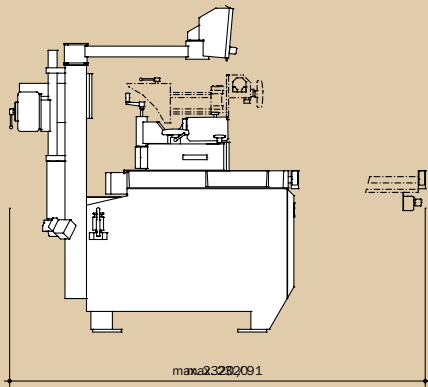
PowerPC

Dimensions and specifications are subject to technical innovation and change without prior notice.

Please refer the valid price list for information on technical characteristics and equipment details.

All measurements in mm / inches.

Made in Germany



User interface	Touchscreen 5.7" (145 mm), TFT, 8-bit colour depth
Optional	Touchscreen 10.4" (264 mm), TFT, 16-bit colour depth
Display resolution	0,05 mm / 0,01°
Repeat accuracy	± 0,025 mm / ± 0,005°
Dust Ports	
Machine	120 mm (4.75" 850 cfm @ 4,500 fpm (V))
Fence	120 mm
Dust emission pursuant to DIN 33893:	
Input side	0,34 mg/m ³
Output side	0,28 mg/m ³
Noise emission pursuant to DIN EN ISO 11202	
Idling	78,0 dB(A)
In operation	84,5 dB(A)
Weight T27	Approx. 1,200 kg - 1,600 kg (2,650 - 3,520 lbs)



MARTIN

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