

T512

V0512 001

3-AXIS POLISHING & TEXTURING CENTRE



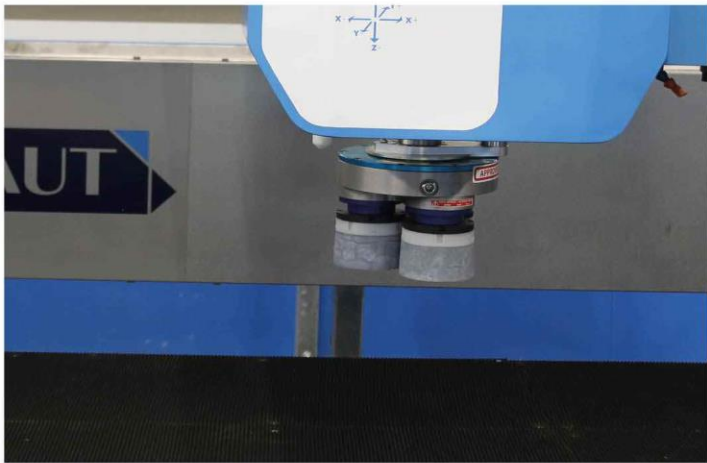
Together we shape innovation.

www.thibaut.fr

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APPLICATIONS



Polishing with AR-3 satellite head



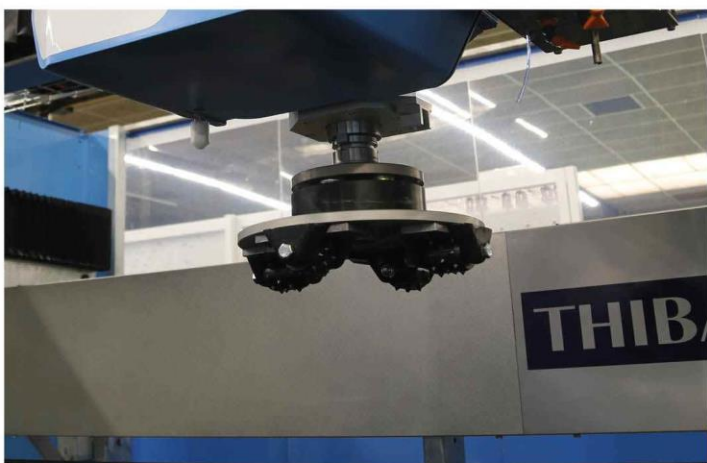
Brushing with AR-3 satellite head



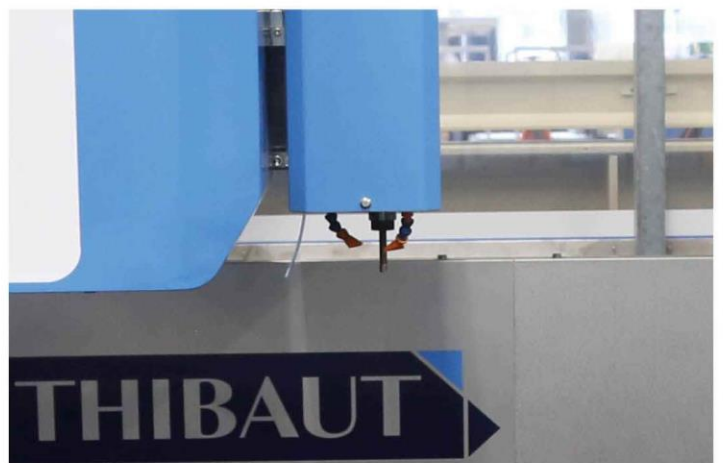
Polishing with Frankfurt flexible plate



Brushing with Frankfurt flexible plate



Bush-hammering with Frankfurt plate



Milling / Engraving

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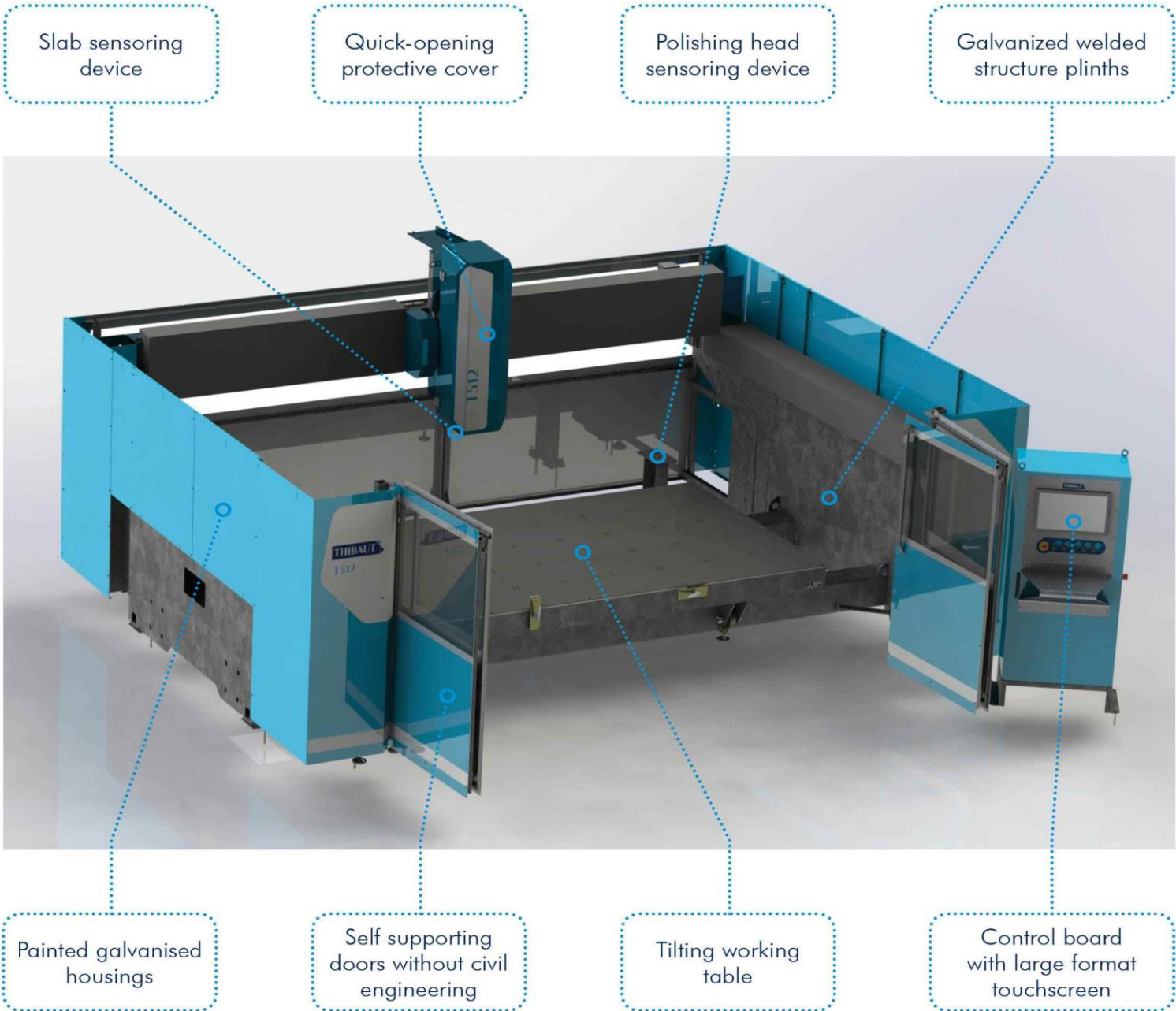
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At THIBAUT, experts in polishing since 1959, we are proud to present our brand new T512 3-axis polishing and texturing centre. Compact and powerful, our machine is equipped with a spindle of up to 9 kW (S6). It can perform a wide range of high-quality operations, such as calibrating, smoothing, polishing, brushing and bush-hammering, as well as milling, drilling and engraving as options.

Combined with the camera, tool magazine and additional high-speed spindle options, it offers great autonomy and flexibility of use.

Our polishing centre is particularly well suited to the needs of the decoration sector, especially for changing finishes and retouching slabs in the event of scratches, as well as the funeral sector.

STANDARD EQUIPMENT



3

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STANDARD EQUIPMENT

WORK SAFELY

The design of the new polishing centre has been completely re designed to ensure your safety in all working areas.



Compliance with safety standard EN 15571.

The machine respects of occupational health and safety.



Protective cover

Self supporting doors

The **new self-supporting doors** (without civil engineering) and the **rear protection comply with the CE standards in force.** Composed of large transparent polycarbonate panels, **they offer enhanced security combined with a large glass surface.**



Rear protection

To protect the safety of your employees and visitors, rear protection is mandatory. However it is possible, in certain configurations only (installation of the machine against a wall for example), to do without it. Talk to our sales representative, he will be able to advise you.

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STANDARD EQUIPMENT

EASY MACHINE CONTROL

The control board with a **large format touchscreen** allows the operator to quickly access machine controls whilst having **good visibility of the machining area**.

Below the touchscreen there is an **ergonomic tablet** where documents can be placed.



+



Machine can be fitted with **signal tower to indicate the various states of the machine:**

- Machine on
- Programme in progress
- Machine in default
- Machine paused

Large format touchscreen

Electrical cabinet

Ergonomic tablet

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V0512 001

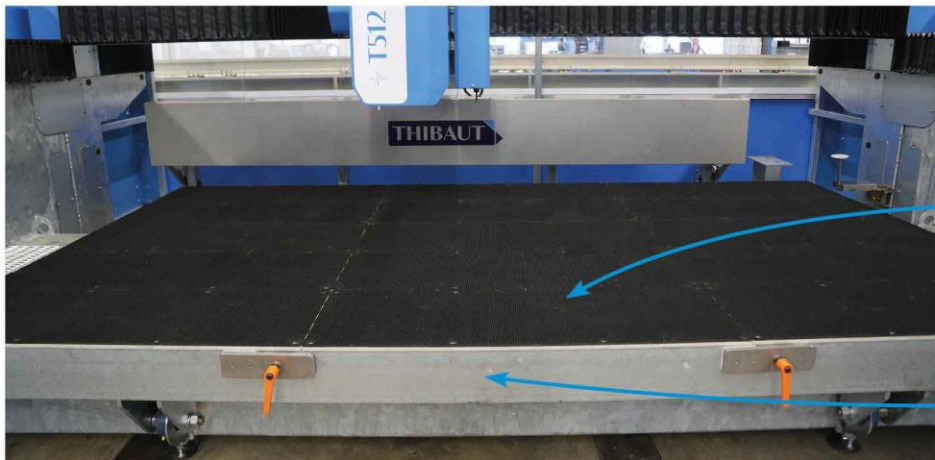
STANDARD EQUIPMENT

AN ENGINEERED WORKING TABLE

The large-capacity (3600 x 2000 mm) galvanised tilting work table is covered with 15 rubber tiles to ensure perfect table flatness and good workpiece grip. The rubber tiles are easily interchangeable and can be easily replaced in case of wear-off. Unlike wooden tops, which deform quickly, this solution is very economical in the short and medium term.



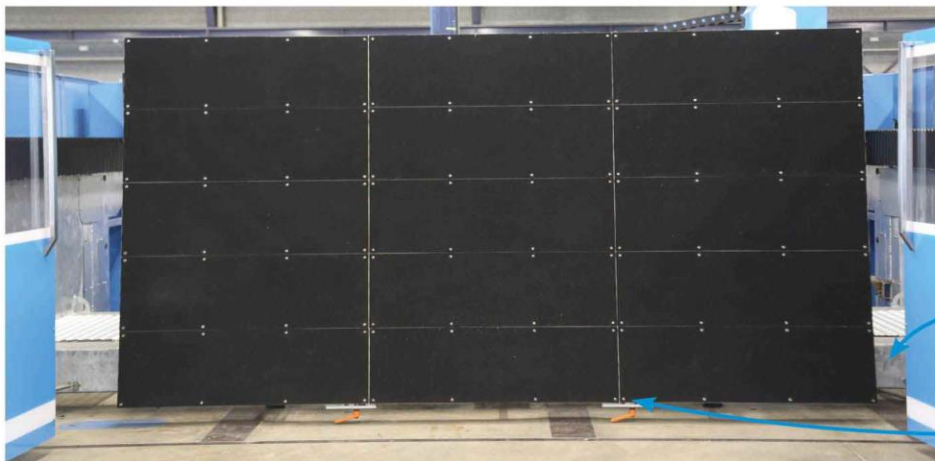
A fixed table or tableless machine is available on request.



Rubber mat

Galvanized tilting working table

The table is equipped with two retractable front stops, enabling a slab to be loaded vertically onto the table in a tilted position. They are also very useful for positioning the slabs on the table. The stops can be easily lowered before polishing.



Galvanized chassis

Retractable front stop

This table is fixed on a fully hot-galvanized chassis (ensures durability over time and perfectly protects from corrosion) in order to bring more rigidity to the machine. Good rigidity provides a high quality of machining and polishing.

It is possible to tilt the table from 0 to 80 °.

The maximum load on the tilting table is 1200 kg.

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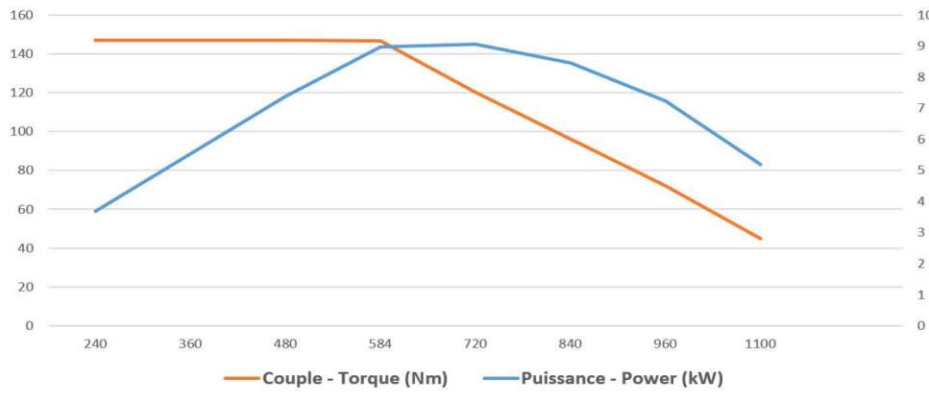
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STANDARD EQUIPMENT

A HIGH-PERFORMANCE THIBAUT SPINDLE

Our new polishing centre is equipped with a high-performance THIBAUT spindle designed for high torque at low speed.

S6 torque and power curves



Our machine is equipped with the exclusive THIBAUT pneumatic pressure. Programable and adjustable according to the grits of the tools, the pneumatic pressure ensures the perfect contact between the tool and the material by compensating the flatness defects. **The major asset of an exceptional polishing.**



The machine uses BT40 arbor compatible with most of our machining centers.

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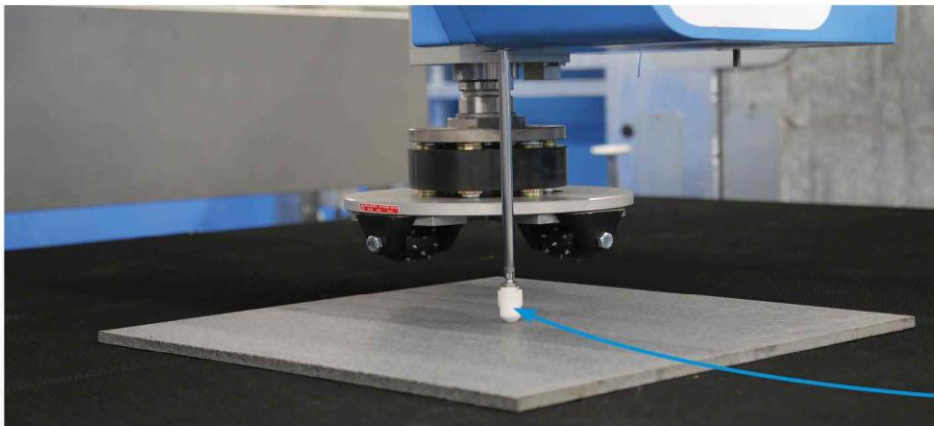
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ÉQUIPEMENTS DE SÉRIE

PROBES FOR PRECISION WORK

A slab sensing device is built into the machine.

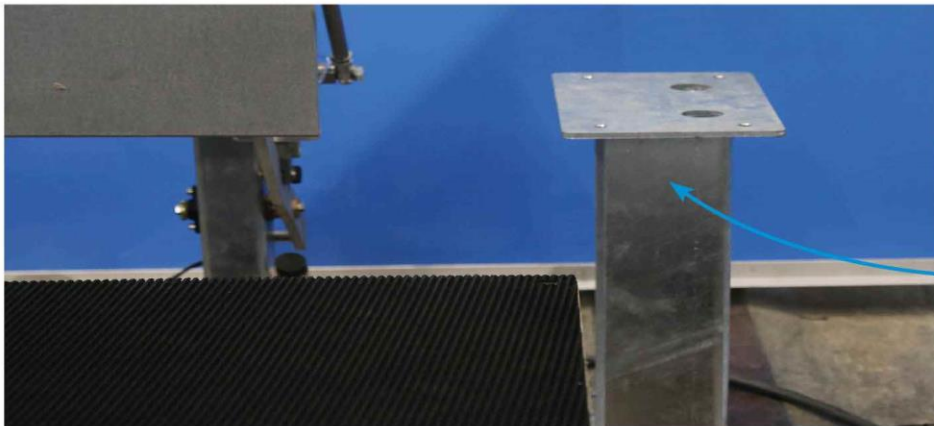
The automatically retractable probe measures any thickness variations on the slab to be machined.



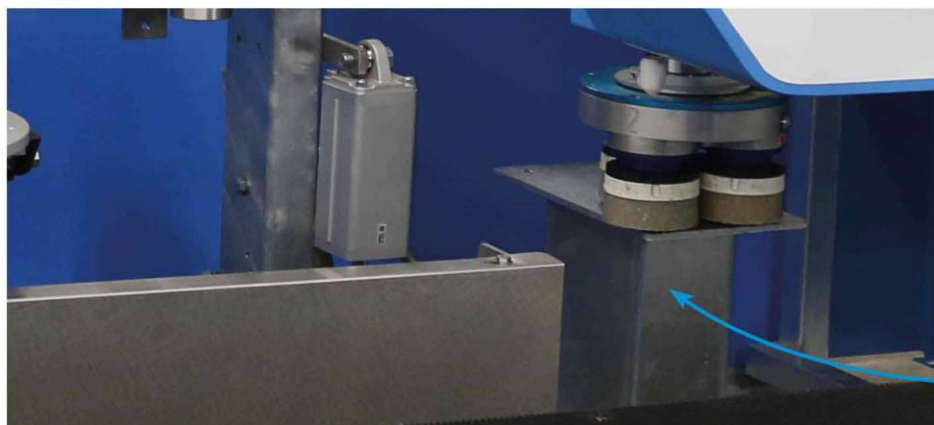
As standard, the **teaching of the slab** on the work table is made using the **internal watering**.

Slab sensing device

In addition, **a polishing head sensing device, positioned at the rear of the worktable, is included in the machine**, providing automatic measurement of tool characteristics such as height of grinding wheels. This feature contributes significantly to improving the machine's autonomy and precision.



Polishing head sensing device



Polishing head sensing device

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STANDARD EQUIPMENT

EASY MAINTENANCE



Centralised technical area

Electrical cabinet

We have gathered all the technical elements of the machine requiring regular maintenance or inspection **in one place**: the technical zone located on the right side of the machine.

Centralized automatic lubrication ensures optimal greasing. The machine has a lubrication circuit control that alerts you in the event of a fault. In addition, grease selection errors are avoided by filling a single container located in the technical area.

Result: time savings and reduced maintenance.



Quick access shutter

Quick and easy opening protective cover

We have also simplified the access to the spindle of the machine by installing a **system of hinges on the casing** allowing the cover to slide rather than be removed. When you need to control the lubrication of the guides, access will be easy.

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OPTIONAL EQUIPMENT

Options

Tools magazine

Camera

Additional high speed spindle

Additional high speed spindle sensing device



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OPTIONAL EQUIPMENT

Option

CAMERA

The camera facilitates the slab teaching carried out as standard with the internal watering. This option makes it possible to capture the slab on the machine's work table so that it can be marked on the touchscreen.

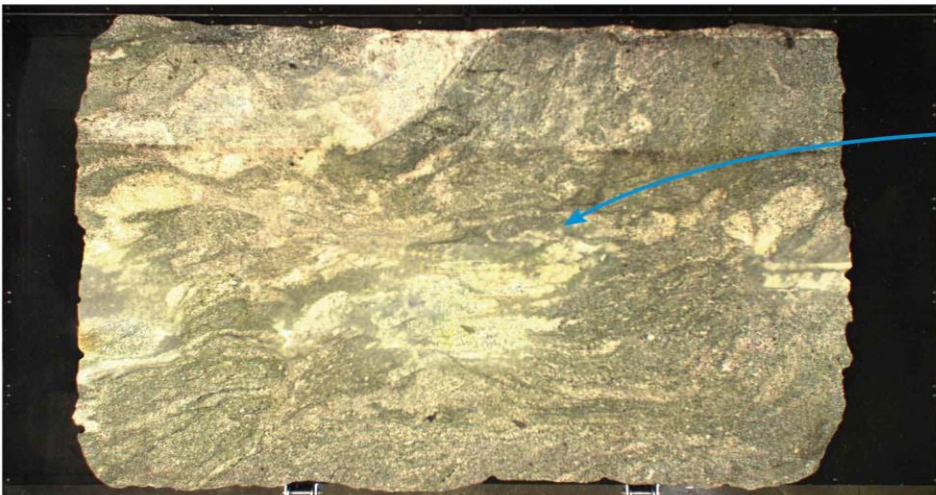


Photo of the slab positioned on the work table

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OPTIONAL EQUIPMENT

Option

LINEAR TOOL MAGAZINE

The machine can be fitted with a 10-position linear tool magazine positioned at the rear of the machine. It enables rapid, automatic tool changes during machining. The magazine is fitted with a retractable stainless steel protective cover.



Tool magazine open



Closed tool magazine

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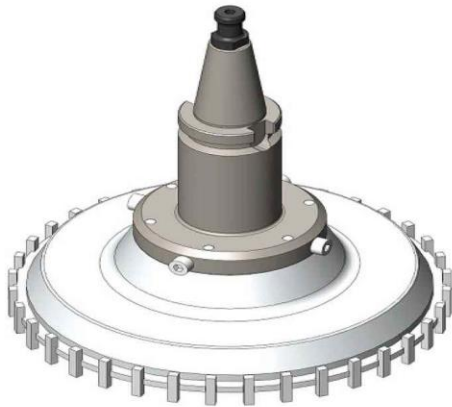
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OPTIONAL EQUIPMENT

Option

CALIBRATING PLATE Ø270 MM

Plate for dressing or calibrating rough slabs.
Dressing can be useful for improving polishing performance with rigid polishing heads.



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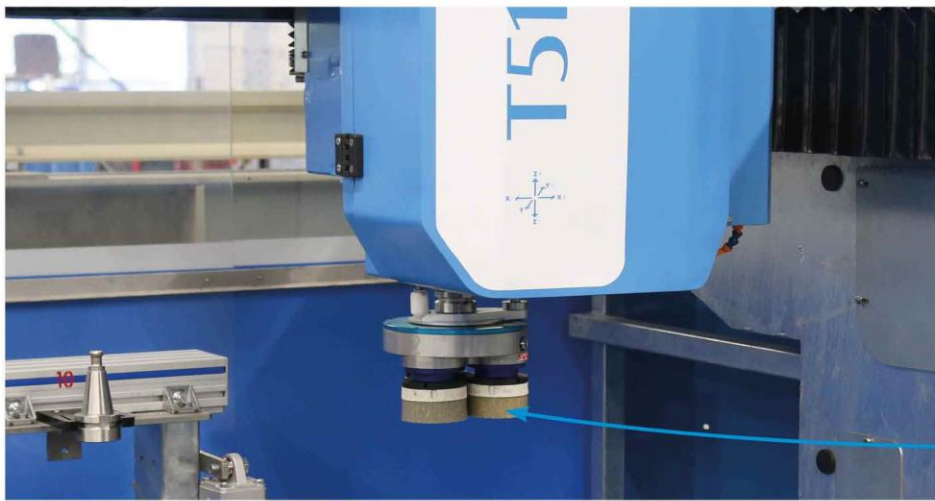
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OPTIONAL EQUIPMENT

Option

AR-3 SATELLITE HEAD

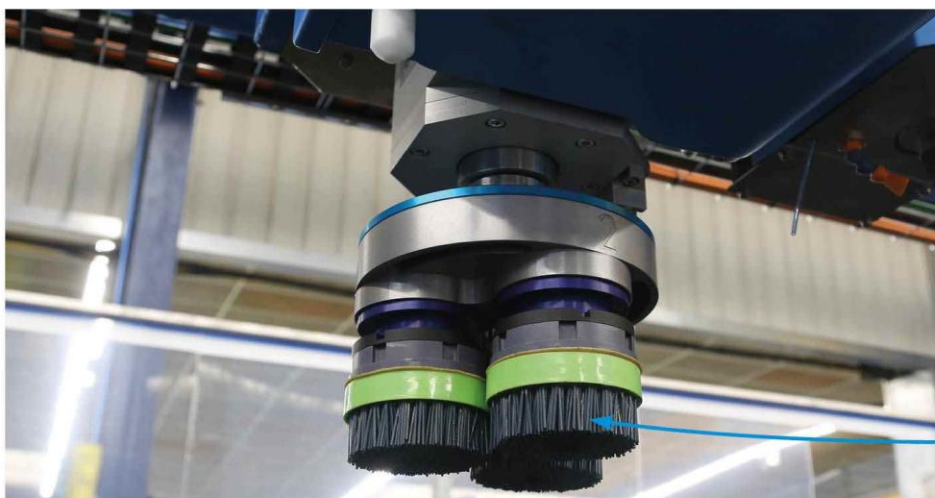
Our new satellite polishing head called «AR-3» is ideal for polishing flat surfaces. Combined with the exclusive THIBAUT pneumatic pressure, it provides for an unrivalled polishing quality on hard materials.



Polishing wheels

Powerful, the head is equipped with 3 quick fitting wheels and offers an excellent polishing quality with only five grits. It is also possible to obtain other finishes such as a brush finish by replacing the polishing wheels with diamond brushes.

Once the five «AR-3» heads have been positioned in the tool magazine, the polishing operation requires no intervention from the operator.



Diamond brushes

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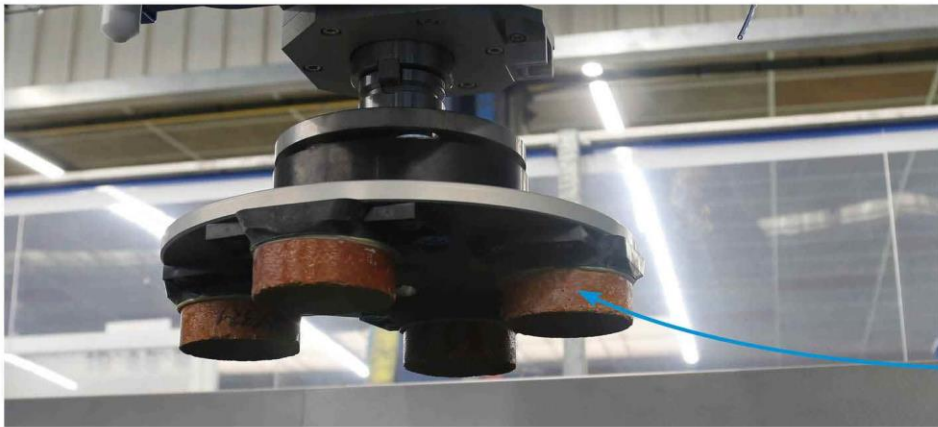
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OPTIONAL EQUIPMENT

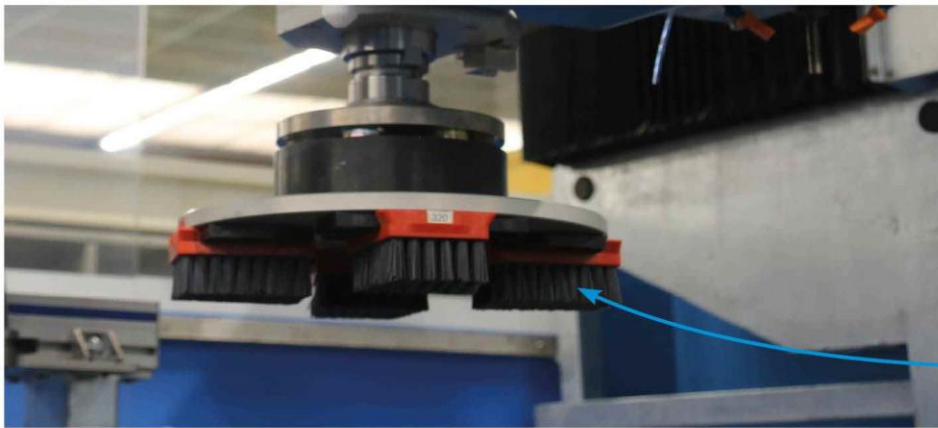
Option

FLEXIBLE PLATE Ø330 MM WITH 4 FRANKFURT SEGMENTS

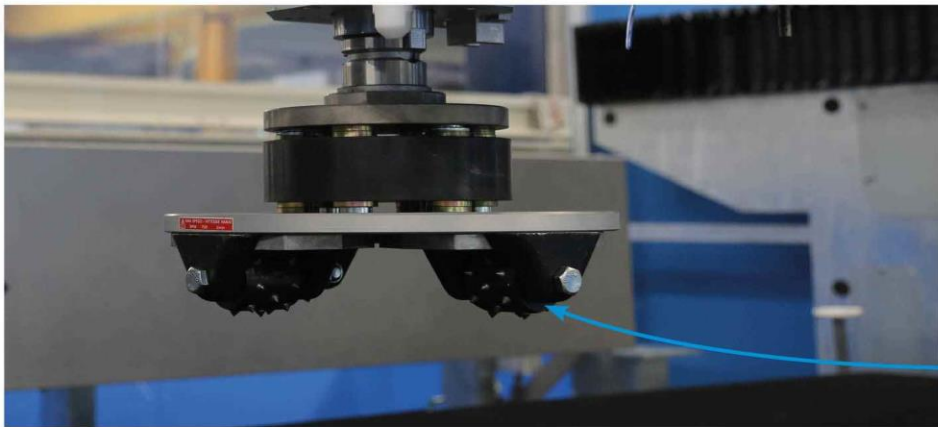
Our new flexible polishing plate is ideal for polishing flat surfaces on soft materials. Its Frankfurt fastening system will allow you to adapt different tools to get the desired finish (polished, brushed, aged, ...). Finally, its size will allow it to easily find its place in the tool magazine for an automatic change of tools.



Polishing wheels



Diamond brushes



Bush-hammering segment

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OPTIONAL EQUIPMENT

Option

FLEXIBLE PLATE Ø350 MM WITH VELCRO ATTACHMENT

This flexible plate is ideal for polishing Terrazzo/Granito type materials. Its Velcro fastening system allows you to adapt polishing plates to it. Its size makes it easy to fit in the magazine for automatic tool changing.



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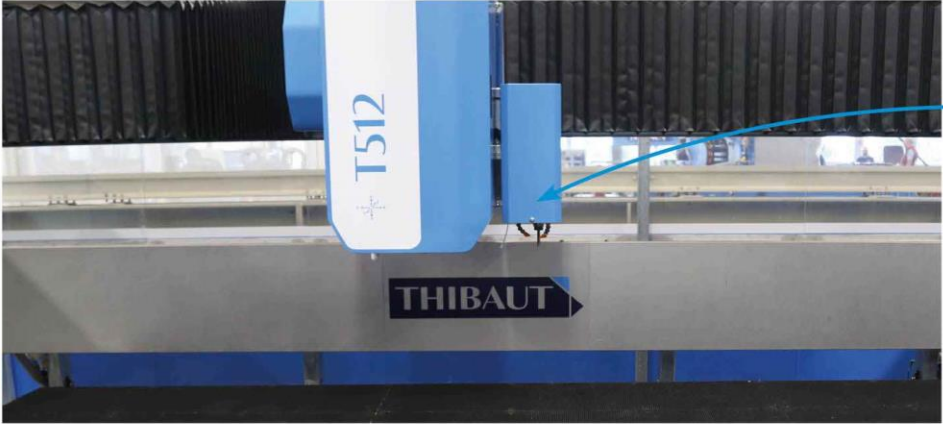
OPTIONAL EQUIPMENT

Option

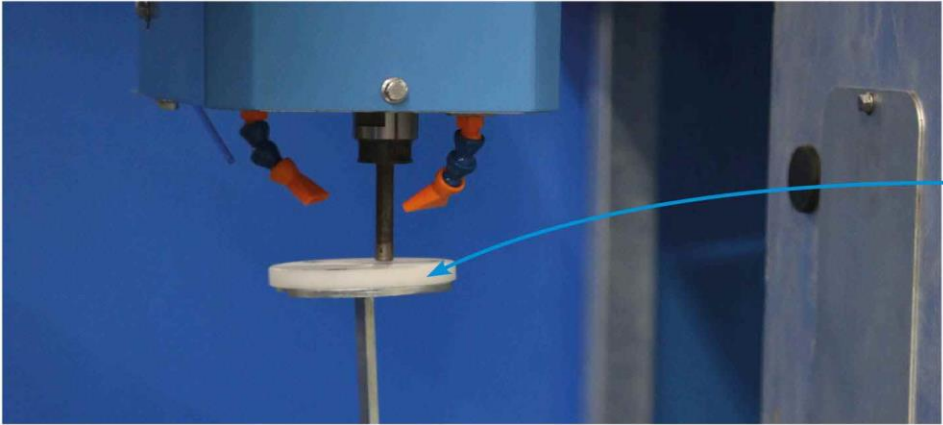
ADDITIONAL HIGH SPEED SPINDLE

The additional high speed spindle is particularly suitable for cutting sharp curves, grooving and engraving. This option makes it particularly easy to cut corners with very small radii.

The 3.3 kW spindle is equipped with a central and peripheral watering system. The tools (maximum length 70 mm) are easily fixed in 1/2 gas.



The option includes a sensing device.



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PROGRAMMING

PILOT : NEW INTERFACE DEVELOPED BY THIBAUT

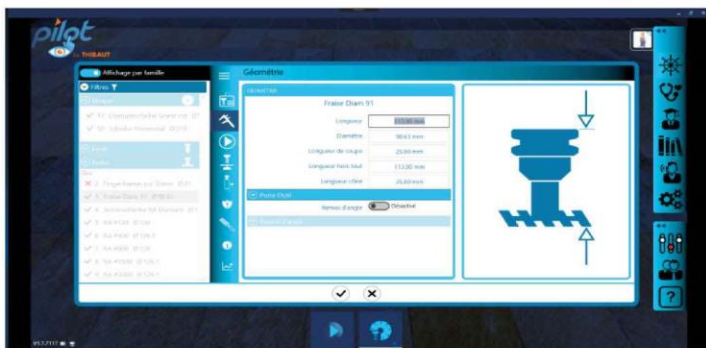


The machine comes with the very latest user-friendly «Pilot» interface, for more efficiency and speed. Thanks to the multi-touch screen and control panel, you will be able to command the machine at the touch of your fingertips - whilst still having visibility of the working area.

New functions have also been added with this THIBAUT Pilot such as configuration and control of tools according to materials, machining simulation and library of parametric shapes.

EXPRESS JOBS : INTEGRATED PROGRAMME

Easy cycle programming via the colour touchscreen and PILOT's built-in EXPRESS JOBS program. No additional software required.



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PROGRAMMING

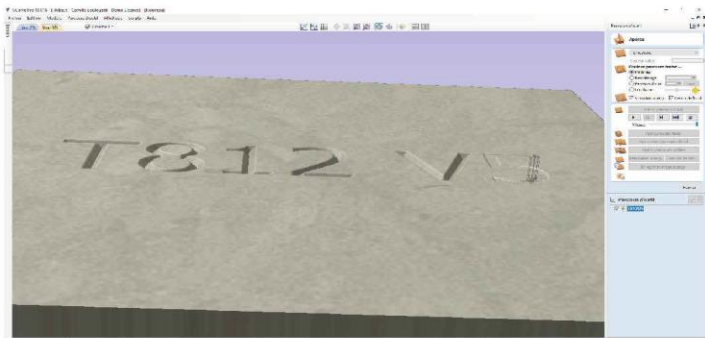
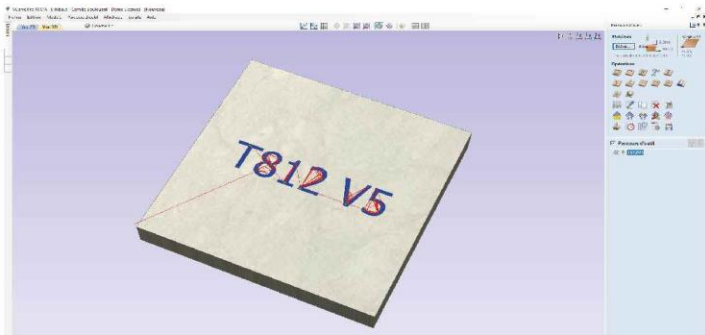
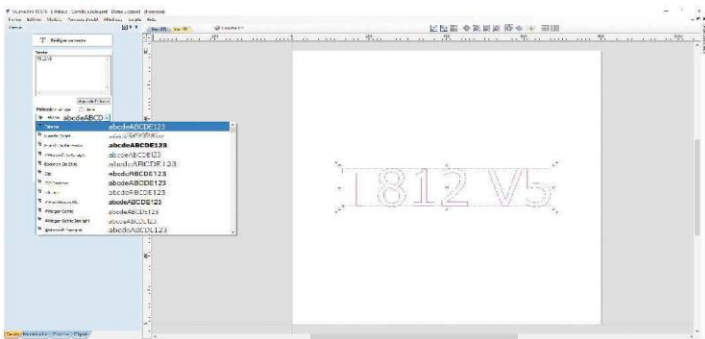
Option

T'ART : 2D SOFTWARE

2D software specially designed for engraving & bas-relief.



The **T'ART** software is **only compatible with the additional high-speed spindle option.**



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V0512 001

TECHNICAL DESCRIPTION

Working capacity:

- X transversal stroke:
3750 mm / 147.64'' (with/without option)
- Y longitudinal stroke:
2700 mm / 106.30''
- Z vertical stroke:
350 mm / 13.78''
- Precision pneumatique:
30 mm / 1.18''
- 275 mm with AR-3 heads or frankfurt plate.

X axis (transversal movement):

- Welded structure transversal carriage
- Transversal movement thanks to a brushless gear motor
- Transversal drive achieved using a precision pinion/rack system with inclined teeth
- Speed 33 m/min / 108 ft/min.

Y axis (longitudinal movement):

- Welded structure
- Welded structure beams with linear rails and protection bellows
- Longitudinal movement via 2 brushless gear motors with electrical synchronisation
- Longitudinal movement using two servomotors and precision pinion/racks systems with inclined teeth
- Speed 33 m/min / 108 ft/min.

Z axis (vertical movement):

- Vertical movement with ball screw using a brushless gear motor.
- Precision linear guiding protected by bellows.
- Speed 10 m/min / 33 ft/min.

Spindle motor:

- Spindle motor power 9 kW (S6).
- Torque: 144 Nm (S6).
- Automatic tool change with BT40 cone.

Power supply:

- Voltage 400 V / 50 Hz.
- Central watering.

Automatic centralized greasing system:

- Greasing system feeding the linear X, Y, Z guidings as well as the ball screw of the Z axis.

Automation and control of the machine:

- Ventilated electrical cabinet located on the right side of the machine.
- NC control panel equipped with a large format colour touchscreen.

Safety :

- Safety doors on the front of the machine prevent access to the working zone.
- Rear protection

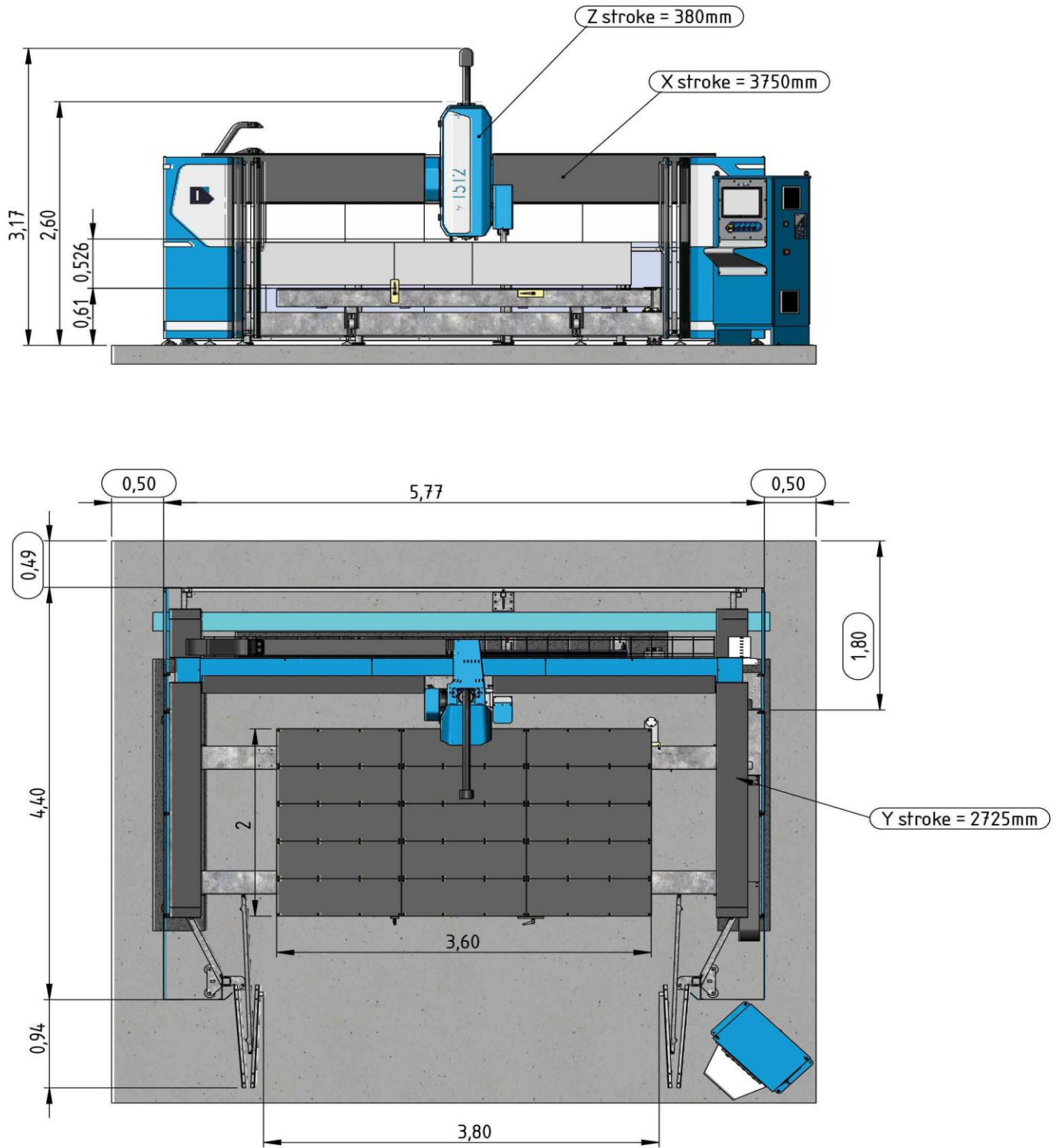
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V0512 001

DIMENSIONAL DRAWINGS



In order to improve continuously the quality of our machines, the characteristics given in these pages may change at any moment and without previous notice. All the pictures and sketches of this document are used for illustrative only.

T512 3-axis

V0512 001

THIBAUT SERVICE

**BECAUSE YOUR PEACE OF MIND MATTERS TO US,
WE REMAIN AT YOUR DISPOSAL**



THIBAUT CUSTOMER AREA

In order to continuously improve our service, we have created a space for each of our customers that is accessible via a PC, table or smartphone.

This space will give you a global view of your Thibaut machine fleet, as well as to the documentation available concerning your machines: hydraulic, pneumatic and electrical diagrams.

You can also create your service requests in the same space. These will be taken into account automatically and without waiting. A specialized technician will then get back to you as soon as possible. You can follow up your requests from your customer area and communicate easily with our technical services. A follow up will be provided until the resolution of your request.

ASSISTANCE AND DIAGNOSIS BY REMOTE DISTANCE

Remote diagnosis allows our After Sales Service Team to intervene and take control of the machine from any computer via the internet. The machine is equipped with remote connection and firewall software.

Note: The internet connection and network security (Firewall and antivirus) must be supplied by the customer. There is no additional communication costs apart from your internet subscription.



ALARM NOTIFICATIONS BY SMS

Thanks to this option, all alarm notifications can be sent by SMS: eg machine breakdown, electrical default, lack of water supply etc. It is compulsory to have a machine which is connected to the internet for this purpose.

TOOL MAGAZINE

LINEAR TOOL MAGAZINE 10 POSITIONS MAXIMUM

Hybrid aluminium alloy/steel chassis.
Stainless steel protective cover.

Important:

Tools Ø330 mm (12 63/64") and length 250 mm (9 53/64") maximum.

Maximum weight 20 kg.

1 V0512 100



TILTING TABLE FROM 0 TO 80° WITH PLATE 3600 × 2000 mm (141 47/64" × 78 47/64")

- Dimensions 3600 x 2000 mm (141 23/32" X 78 3/4")
- Galvanized plate
- Top plate 3600 x 2000 mm (141 23/32" X 78 3/4") covered with rubber mat

Important:

Maxi. load 2000 kg (4400 lb).

Tilting maximum load 1200kg (2650 lb).

1 V0512 101



5 FLEXIBLE PLATES Ø330 mm (12 63/64") WITH 4 SEGMENTS FRANKFURT

To honed, brush all material and polish soft materials like marble and limestone.

- 5 Ø 320 mm (12 19/32") flexible plates for 4 Frankfurt segments ref. AS 00 343

1 V0512 105



OPTIONS

SLAB PHOTOGRAPHY TAKEN DIGITAL CAMERA FIXED ON THE Z-CARRIAGE OF THE MACHINE

Allows to position the slab on the table, identify eventual defects to optimize material and facilitate operator job.

Equipped with:

- 1 post support
- 1 numerical camera
- 1 protection box
- 1 wire between camera and customer's computer 20 m length (65' 7 13/32")

1 VTC04 121



Important:

To achieve the best picture quality, it could be necessary to change the configuration of the picture capturing zone (against light, shadows...etc.). Chargeable to the customer.

Allows to take pictures on a table with a maximum depth of 2400 mm (94 31/64").

Note:

For a distance superior of 20 m between camera and customer's computer (65' 7 13/32"), please consult us.

To be used with T'Cut software.

NON INCLUDED OPTIONS

SIGNAL TOWER: REMOTE DISPLAY OF MACHINE STATUS

0

V0001 071

Signal tower to indicate the various states of the machine:

- Machine on
- Programme in progress
- Machine in default
- Machine paused



MACHINE REAR PROTECTION

0

VTC04 123

2000 mm high (78 3/4") protective rigid panel fixed at the rear of the machine.

Galvanized post in the center to assure the overall stiffness.



Important:

This equipment is mandatory if the machine is not installed alongside a wall.

Prevents access of the operator to the working area and protects from projections.

10.000 rpm VERTICAL ADDITIONAL HIGH SPEED SPINDLE

0

V0512 102

Allows for corner cutting requiring radii, e.g. for ceramics, grooving operations as well as engraving operations

3.3 kW spindle with central and peripheral watering.

Tool mounting in 1/2 gas.



Important:

Option supplied with an automatic tool sensing device.

Length of the 1/2 gas routing cutter: 70 mm (2 3/4") maximum.

5 AR-3 SATELLITE HEADS WITH 3 ABRASIVES FOR POLISHING, BRUSHING, HONING

0

V0812 147

For polishing, brushing, honing and calibrating flat surfaces, straight or inclined edges, straight or tapering chamfers.

- 5 Ø 215 mm (8 15/32") heads equipped with BT 40 arbor, FRF rapid attachment screw type for 3 abrasives (resin or diamond) Ø100 mm (3 15/16")
- 5 pinches for positioning the head in the magazine
- Wrench for abrasive coupling included.



Important:

Maximum abrasives height 70 mm (2 3/4").

Note:

This head is used only for polishing, brushing and honing of granite.

FLEXIBLE PLATE Ø330 mm (12 63/64") 4 SEGMENTS FRANKFURT

0

V0812 145

To surface, brush any material type and polish the soft material.

- 1 flexible plate Ø 330 mm for 4 Frankfurt segments ref. AS 00 343
- 1 80mm wrench ref: 9005 05 00 000



Important:

Mounting in the magazine 36 tools only on the T858 V2.

AR-3 SATELLITE HEAD WITH 3 ABRASIVES FOR POLISHING, BRUSHING, HONING

0 **V0812 146**

For polishing brushing and honing flat surfaces, straight or inclined edges, straight or tapering chamfers.

- 1 Ø 215 mm (8 15/32") head equipped with BT 40 arbor, FRF rapid attachment screw type for 3 abrasives (resin or diamond) Ø100 mm (3 15/16")
- 1 pinch for positioning the head in the magazine
- Wrench for abrasive coupling included.



Important:

Maximum abrasives height 70 mm (2 3/4").

Note:

This head is used only for polishing, brushing and honing of granite.

Ø270 mm (10 5/8") CALIBRATION PLATE

0 **V0512 104**



SET OF SPARE PARTS T512

0 **V0001 069**

This set includes:

- 1 cartridge for water filter ref. 017637
- 2 filters for electrical cabinet ref. 019111
- 1 filter cartridge ref. 022547
- 1 ball sleeve ref. AS 01 399
- 1 spare parts kit for water swivel ref. AS 01 962
- 5 tool forks ref. PP 01 291
- 1 key for ball sleeve ref. PP 04 406



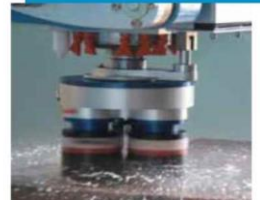
NON INCLUDED TOOLING

POLISHING TOOL SET FOR SATELLITE HEAD WITH Ø90/100 WHEEL - GRANITE +

0 **K0000 616**

INCLUDING :

- 3 x 026562 WHEEL Ø100 H40 - GRIT 30D FRF ATTACHMENT - GRANITE
- 9 x 026563 WHEEL Ø100 H40 - GRIT 200 FRF ATTACHMENT - GRANITE
- 9 x 026564 WHEEL Ø100 H40 - GRIT 400 FRF ATTACHMENT - GRANITE
- 6 x 026565 WHEEL Ø100 H50 GRIT 800 FRF ATTACHMENT - GRANITE
- 6 x 026566 WHEEL Ø100 H20 BUFFER FRF ATTACHMENT - GRANITE



SURFACING STUBBING WHEEL Ø270 REVERSIBLE - ROUGHING - Ø180 BORE - GRANITE

0 **027454**