



ERGON TWIN



# STRATEGY



The new Ergon Twin grinding machine from Sagitech SRL is born both from the ever-increasing demands of our customers, and from the needs and orientation of the market, which, while trying to achieve the reduction of cycle times and ever higher productivity to make up for the investments, still wants to maintain the constant flexibility and ease of grinding that Sagitech has always offered.

# ERGON TWIN



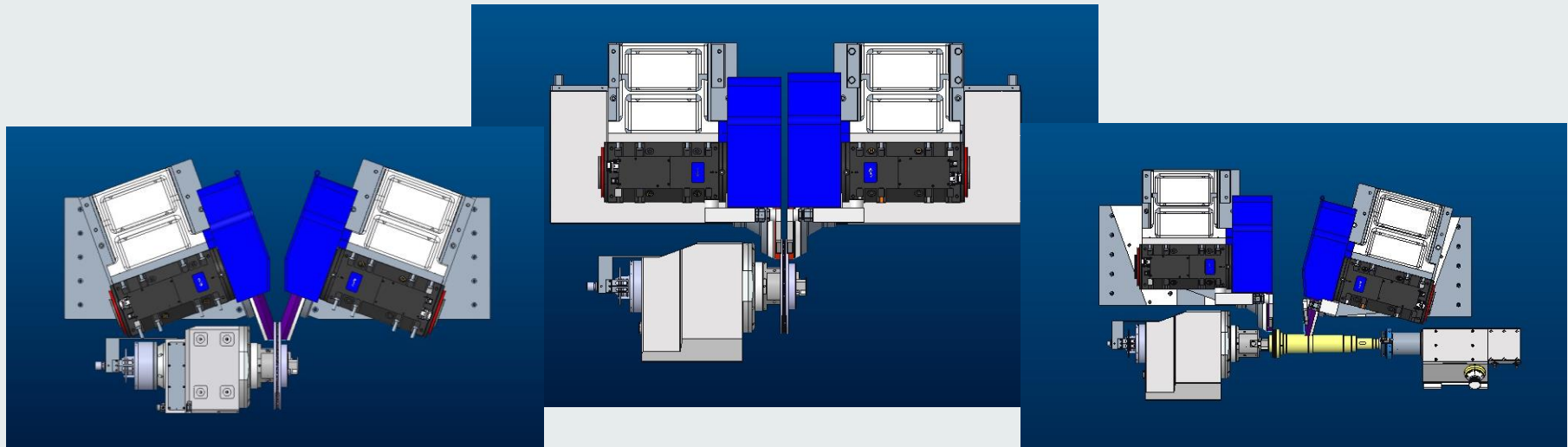
Ergon Twin is a double upright mobile machine with cross axes with single or double work station with very high working speeds, all integrated in the usual captivating aesthetic, and of course with 5.0 technology.



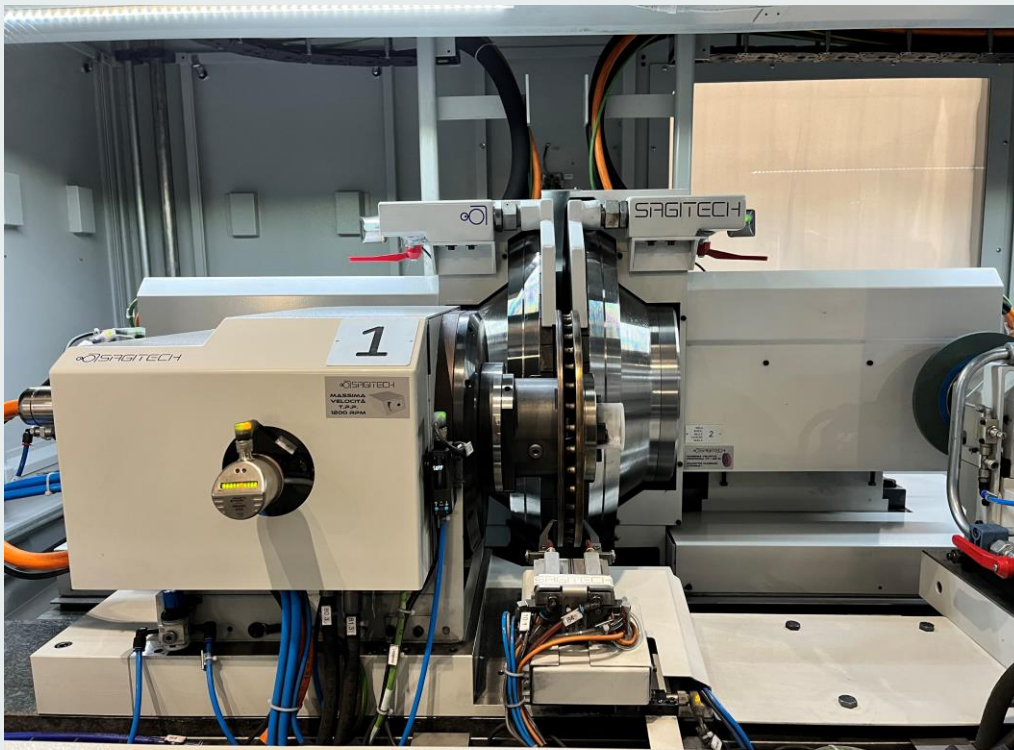
# CONFIGURATION

Each of the two cross axes is fully configurable according to the processing needs and requirements. The grinding capacity is really wide, as it can be up to 2 meters, with 1 Ton between the tips in the standard configuration.

The cross arrangement of the X and Z axes, combined with the movement by linear motors, allows the smallest possible footprint on the ground, combined with the highest speed and precision available on the market.



# SIMULTANEOUS WHEELS WORKING



Another real novelty is the design studied by Sagitech for simultaneous processing in a synchronized way of the grinding wheels together (hence the name Twin), both in configuration with angle wheels, and with straight wheels. The grinding wheels are able to get close until almost touching and the containment housings are designed to fit one inside the other one, in order to create a single closed chamber with a special shape.

# ERGON TWIN – TWIN PROCESS WHEELS



The lubrication of the grinding wheel is in fact carried out with a particular system, result of many studies, that, thanks to the shape of the coolant supply chamber, the shape of the grinding wheel support and the shape of the cooling nozzle, recovers the liquid sent between grinding wheel and workpiece and, by means of a centrifuge system, which creates a vortex, re-sends the same on the contact part grinding wheel/workpiece.



# DOUBLE WORKING STATION



The most characteristic use of Ergon twin to date is the possibility of adding to the double cross axes, a double work station, all served by a loading and unloading system integrated in the machine so as to avoid projections of fog on the outside.

This solution offers the possibility of supporting the supply of a 'Turn-Key' process that, in addition to optimizing grinding time, productivity and ease, provides the end customer with the guarantee of a stable and dedicated process, with zero set up philosophy, as always in SAGITECH style.

# BRAKE DISCS IN TITANIUM CARBRIDE



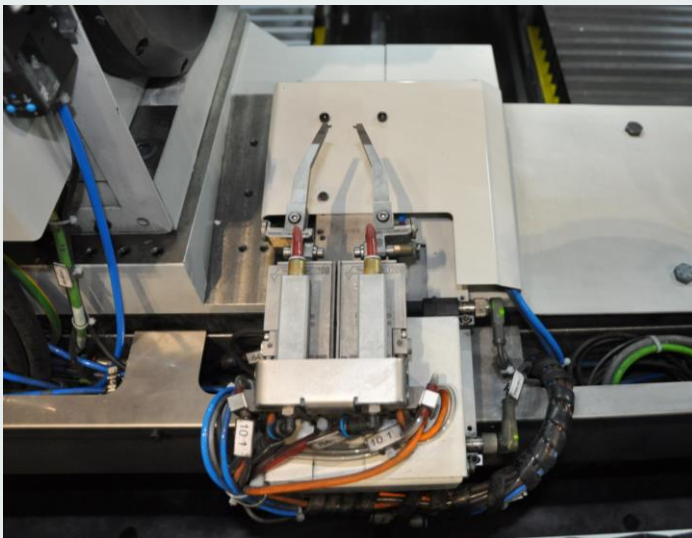
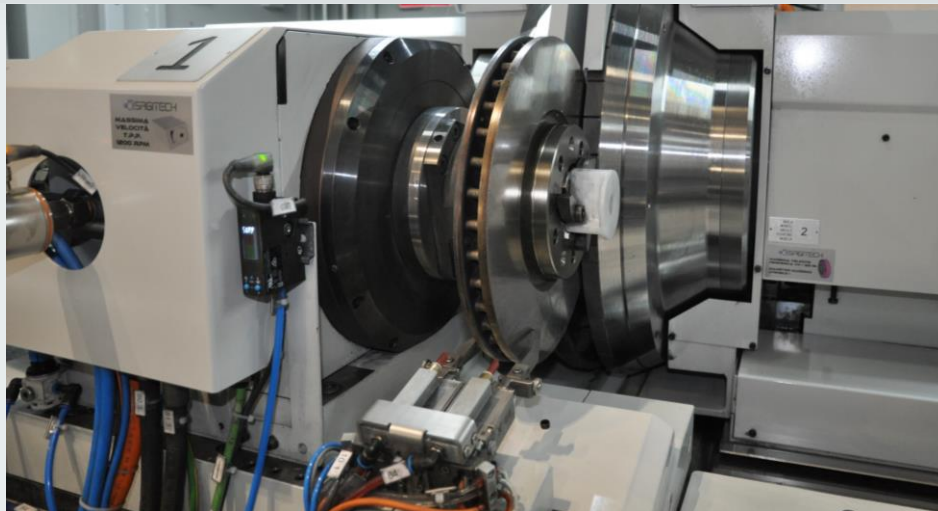
The machine under consideration, follows this philosophy of double working station, and is designed for the grinding of the tracks of brake discs in titanium carbide with different dimensions.

It can receive discs from a minimum diameter of 200 mm to a maximum diameter of 465 mm, with different thicknesses and shapes. It mounts two 600 mm diameter grinding wheels capable of reaching 125Mt/sec.





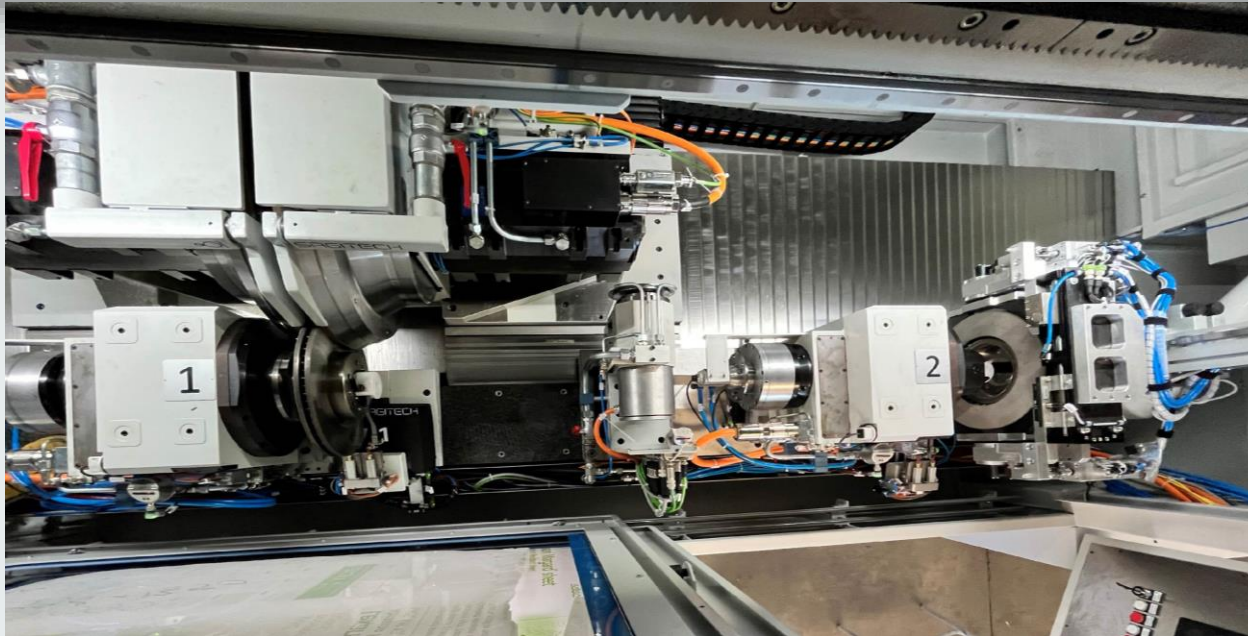
# MEASURING CONTROLLING



Each station is equipped with a measuring and positioning system in Process dedicated.

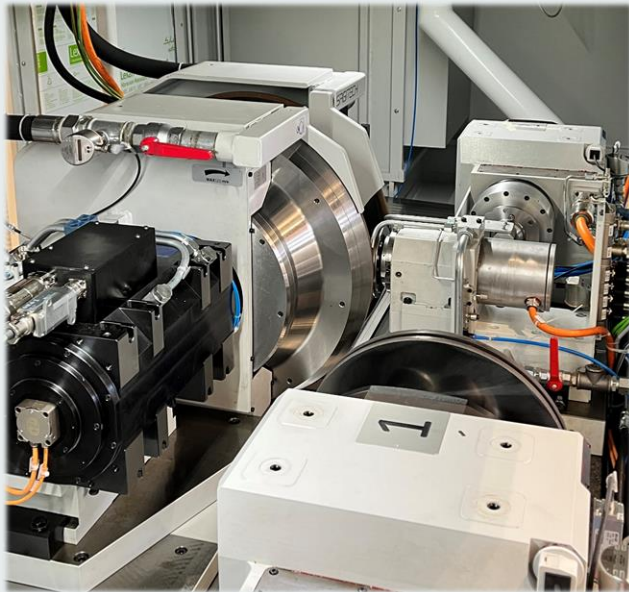
This unit is able to managing the grinding operation and ensure a constant process performance and also allows the identification of the type of workpiece and the setting of the work program, all fully automatic and with zero set-up by the operator.

# AUTOMATION AND ZERO SET-UP

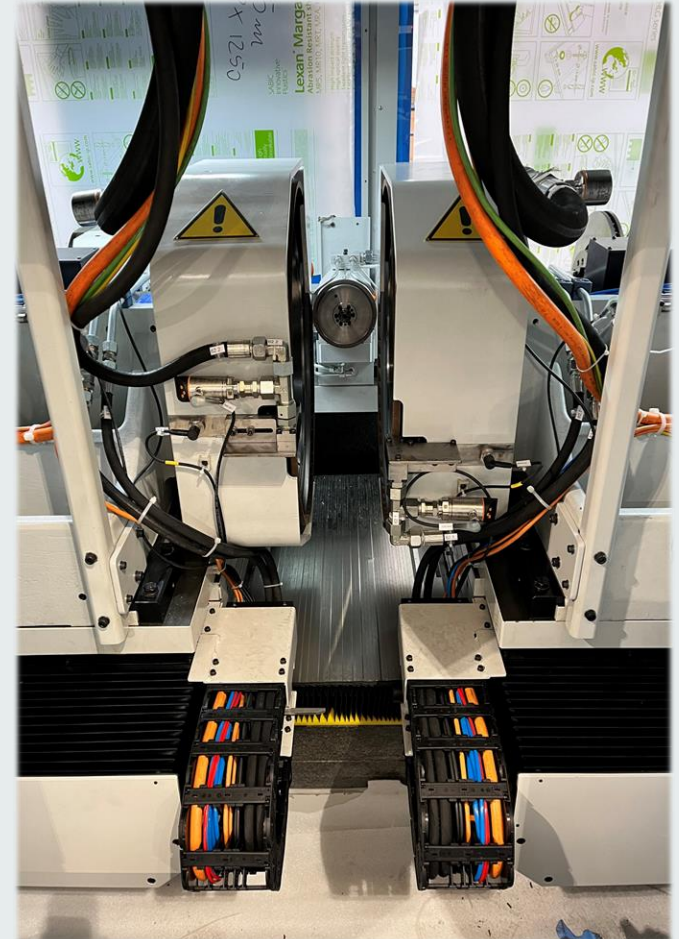


The automatic workpiece loading and unloading system integrated in the machine, supplies parts to the working station which comes to be free, picking up the finished and loading the raw, while the machine is performing grinding on the other station, all simultaneously and in masked time. The loader is also able to identify the type of workpiece, the family and the code of membership for further verification and to provide autonomously all the data for the statistics related to production and productivity of the machine.

# DRESSING UNIT



The dressing spindle unit is specially designed and positioned between the two stations to allow the machine to dress while the loader loads and unloads parts into the stations' work heads.





# SOFTWARE

The software is created by SAGITECH to be very simple and to allow the operator to feel comfortable using it.



# ERGONOMIC



Ergonomics are also designed to clever facilitate all the operations necessary for use, maintenance and programming.

In fact, we have the possibility of rotating and moving the CNC display along the entire length of the machine to be able to easily approach the work area that most needs attention.

# ERGON TWIN – A GREEN IMPACT



All these novelties are obviously added to the already known features always used by Sagitech. In fact, we also find here the machine block base of natural granite, the height of the axes reduced thanks to the use of magnetic linear motors and, last but not least, the complete abolition of the use of oils and oil-powered units to get closer and closer to a 'green' machine concept, especially at this time when we are increasingly trying to protect the planet going towards a future with zero emissions.