

PASSION FOR GRINDING



THE COMPACT GRINDING

## ID CARD

**ERGON** is a round grinding machine for external or internal diameters with moving column, suitable for machining pieces up to 1,000 mm. of length and a rotating diameter of 360 or 460 mm.

## TECHNICAL SPECIFICATIONS

### GENERAL DATA

|                                      |            |     |
|--------------------------------------|------------|-----|
| Max. grindable length                | 1000       | mm. |
| Centres height (standard / optional) | 180 / 230* | mm. |
| Max. rotating diameter               | 360 / 460* | mm. |
| Max. load between centres            | 200 / 300* | kg. |
| Max load in overhang machining       | 100 / 200* | kg. |
| Machine weight                       | 8000       | kg. |

### WHEEL HEAD – “X” AXIS

|                     |                         |        |
|---------------------|-------------------------|--------|
| Axis travel         | 400                     | mm.    |
| Max. axis speed     | 12                      | m/min. |
| Axis resolution     | 0,0001                  | mm.    |
| Standard transducer | absolute linear encoder |        |

### MOBILE TABLE – “Z” AXIS

|                     |                         |        |
|---------------------|-------------------------|--------|
| Axis travel         | 1330                    | mm.    |
| Max. axis speed     | 12                      | m/min. |
| Axis resolution     | 0,0001                  | mm.    |
| Standard transducer | absolute linear encoder |        |

### UNIVERSAL WORHEAD

|                       |           |       |
|-----------------------|-----------|-------|
| Mounting taper        | 5 / 6*    | Morse |
| External taper        | 5 / 6*    | ASA   |
| Max. speed            | 800       | rpm   |
| Spindle torque output | 60 / 100* | Nm.   |
| Standard transducer   | encoder   |       |

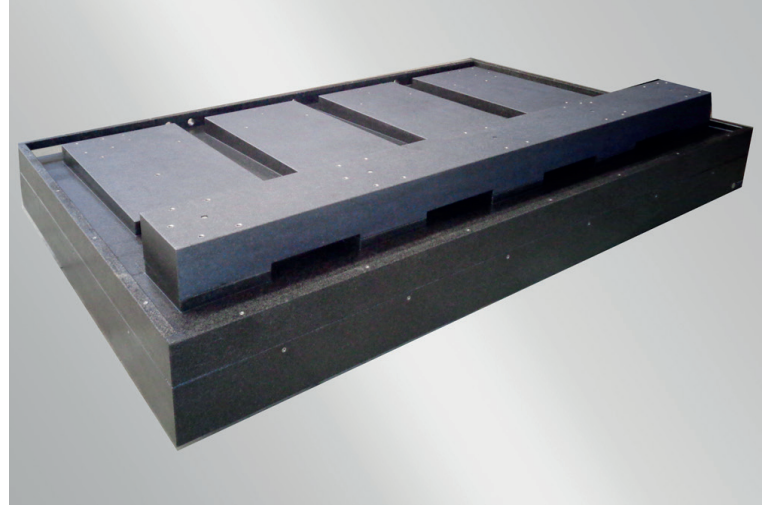
### TAILSTOCK

|                               |                                |       |
|-------------------------------|--------------------------------|-------|
| Sleeve diameter               | 55 / 80*                       | mm.   |
| Sleeve stroke                 | 45 / 120*                      | mm.   |
| Mounting taper                | 4 / 5*                         | Morse |
| Max. weight between pointes   | 60 (spring) / 300 (hydraulic)* | kg.   |
| Cilindricity correction range | + / - 0,15                     | mm.   |

\*Option

## THE STARTING BLOCK

A monoblock of natural granite is the excellent base of **ERGON**. Only with these kinds of machine bed we can get the best speed and quality of grinding, ensuring at the same time a long duration over the years. The granite is worked in Italy with exact precisions like a surface plate.



## SAVE MONEY WITH REDUCED FLOOR SPACE



The project was born from the desire to create a medium-sized machine in a contained space.

The solution of the mobile carriage allows **ERGON** to contain its footprint on the ground in a space of 3,200 x 2,400 mm, without losing a record rigidity.

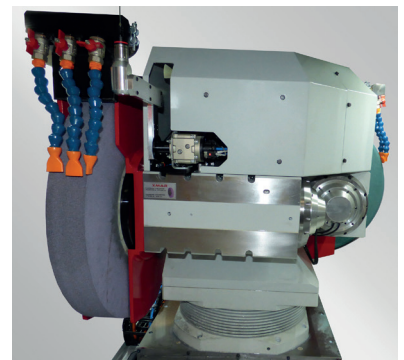
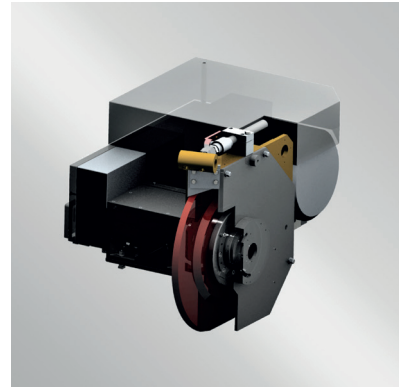
**ERGON** it is also available with a dedicated piece loading system, to better optimize the occupied space., all managed by our operator interface.

## FLEXIBLE UNIT

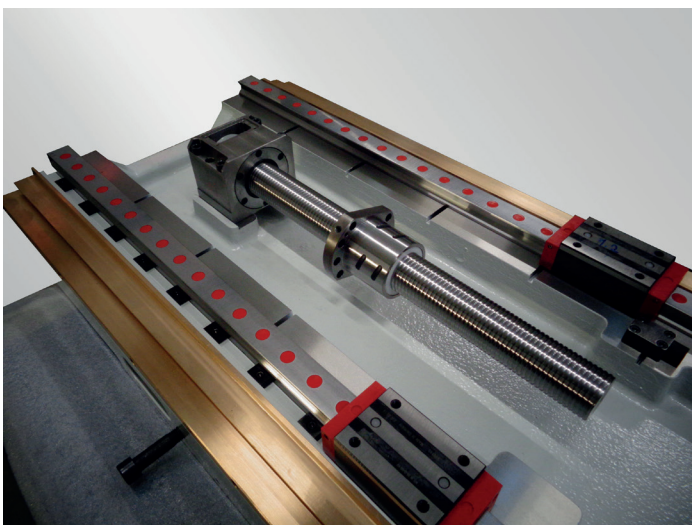
In the standard configuration, **ERGON** uses a left straight wheel spindle or a right swivelling spindle with several possible dimensions:

- Electerspindle on bearings 508 x 80 x 203.2 mm.
- Electerspindle on bearings 610 x 80 x 203.2 mm.
- Spindle on hydrodynamic bushes 508 x 100 x 203.2 mm.
- Spindle on hydrodynamic bushes 610 x 100 x 203.2 mm.
- Spindle on hydrodynamic bushes 610 x 130 x 304.8 mm.
- Spindle on hydrodynamic bushes 610 x 190 x 304.8 mm.

The peripheral speed is managed by the CNC for all versions, as well as the automatic wheel balancing integrated in the spindle together with a gap elimination sensor.



## THE KINEMATICS AS YOU WANT



Whether you prefer a traditional kinematics, with brushless motors coupled to a recirculating ball screw, or a more powerful kinematics, with linear motors, the modularity and the flexibility of the support groups installed on **ERGON** guarantee your favorite version for both the transverse axis (X) and the longitudinal axis (Z).

## WITH YOUR RIGHT HEAD

**ERGON** can be equipped with 2 types of work head: with belt or with Torque direct drive. In the belt version, the spindle is universal and has a Morse 5 - ASA 5 cone for fixing any clamping devices. In the Torque version, a micrometric angular control is added for the execution of complex profiles or profiles tracking operations. In both cases, two different heights are possible: 180 and 230 mm. The group is moved along the fixed bench by means of a rack which facilitates the operator in the setup operations.



## ALL-IN-ONE TAILSTOCK



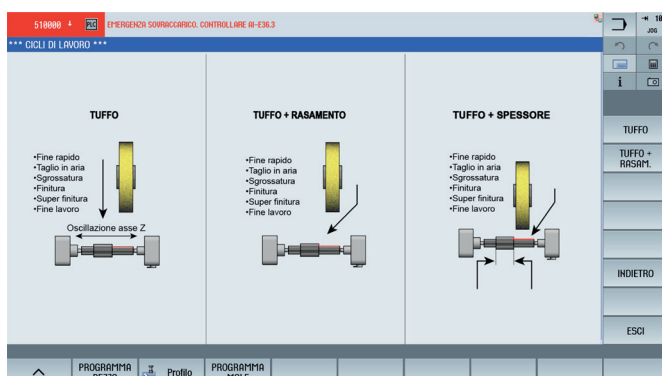
The **ERGON** tailstock unit has everything you need: movement manually controlled by lever or automatically by pedal; the centre pressure can be adjusted by spring or hydraulic force. The cylindricity correction of the pieces is made by a practical knob equipped with an optical scale. The movement of the group along the table takes place through a rack that facilitates the operator in the setup operations.

## PROCESS CONTROL

The hardware of the CN package can be Fagor or Siemens, and includes motor drives, drives and machine management peripherals. Digital technology always integrates free telerdiagnosis, so that we can be by your side without making you wait either a second. Industry 4.0 has never been so close!



## THE SOFTWARE FOR EVERYONE



We have developed our management software internally, to provide you a simple, complete and reliable user interface. To use **ERGON** you do not need high mechanical skills, our software with touch screen interface simplifies the programming of work cycles.

## ACCESSORIES FOR EVERY NEED



**SAGITECH** collaborates with the most important companies in the market to provide you with all the devices that make the difference. Whether it's integrated measurement systems, equipment for workpiece or loading processes, on **ERGON** there is space for everything.

## CUSTOMER CARE

On **ERGON**, attention to the customer goes from different points: a pleasant and simple design, a great machine inspectability and a simple and clear arrangement of all components.

In addition to this we continuously improve the best technologies on the market, with the intent to free the customer from complex and confusing operations.



Thanks to the field buses and the on-board diagnostics we can communicate in real time with the customer to identify and correct every problem of use.

We also offer a scheduled maintenance service to maintain the quality of your machine over time.

## HISTORY

SAGITECH was born in Alessandria in 2015 providing technological support in the sector of cylindrical grinding machines. In 2021 it expands with a new operating form and becomes part of a group of companies all operating in the sector of cylindrical grinding machines and special applications. In addition to Sagitech, the group also includes FEF di Concorezzo ([www.fefrettificatrici.com](http://www.fefrettificatrici.com)) and the company MAR ([www.mar.sm](http://www.mar.sm)). As part of group synergies, SAGITECH operates mainly in the sector of cylindrical grinding machines for production with high-speed tools, FEF manufactures customer-specific vertical and tangential grinding machines and MAR covers with its range both internal and external grinding machines with tools conventional. The strategic location of the 3 structures allows a wide territorial coverage that is responsive to market demands.

## THE STRATEGY

Democratic precision. Maximize customer satisfaction by providing adjustments designed for ensure high quality and a rapid return on investment, made with excellent skills, with innovation and with attention to design, always supporting the customer, even in the re-engineering of the installed machinery.

## THE TEAM

The team is made up of highly specialized expert technicians who deal with design, construction, revision / re-engineering, and technical assistance of cylindrical grinding machines. SAGITECH strongly believes in value of people, and each of our employees is constantly trained by more experienced technicians to create a cohesive and autonomous group in their skills. Each individual employee, with their own acquired experience, allows SAGITECH to operate on each specific sector of machines, both in the mechanical, electronic and software sectors.

## HEADQUARTERS

About 1,500 square meters are allocated to the production area, divided into several areas used for specialized assembly and a tool room equipped with the machine tools necessary to carry out the most important and delicate processes. A large automated spare parts warehouse to meet the needs of our customers and an office area modern and functional for designers, commercial and administrative, complete the location.

CIRCULAR ECONOMY  
VALUE DURABLE  
INNOVATION  
EXCEPTIONAL COMPETENCES  
PEOPLE, NOT NUMBERS

