

ZAYER

www.zayer.com

KAIROS

MOVING COLUMN



ALWAYS IMPROVING

KAIROS

MOVING COLUMN



TECHNICAL SPECIFICATIONS

KAIROS		
Longitudinal travel	mm	3000-4000 ... -15000 ...
Cross travel	mm	1200 (1600-2000)*
Vertical travel	mm	1600 (2000-5000 ...)*
Working feed	mm/min	hasta / up to 10000
Longitudinal rapid feed	mm/min	hasta / up to 30000 ⁽¹⁾
Cross rapid feed	mm/min	30000
Vertical rapid feed	mm/min	hasta / up to 30000 ⁽¹⁾
Drives of X-Y-Z axis	mm	X: Two motors rack and pinion Y / Z: ball screw
Power	kW	40 60* (2000 mm cross travel)
Speed of the spindle head	RPM	3000 (4500-6000)*
Positioning and repeatability accuracy	mm	0.008/4000-0.005
Tool magazine		30 (40-60-80-100-120)*
Approx. net weight	kg	24000-120000

⁽¹⁾ **Depende del recorrido vertical** / Depending on vertical travel
* **Opcional** / Optional



Modelo KAIROS con mesa elevada
KAIROS model with elevated table

ACCESSORIES

	KAIROS
45° automatic head 360.000 pos.	●
45° automatic head 360 x 1° - 360 x 1°	●
30° automatic head, 360.000 pos. / continuous rotation	●
30° automatic head with electrospindle	●
Direct outlet head	●
Change of heads	●
Chip conveyor	●
Coolant equipment 22+5 bar	●
Fixed floor table	●
Rotary table	●

● Standard ● Optional - Not available



APPLICATIONS

-  AERONAUTIC
-  HYDROELECTRIC
-  GENERAL MACHINING
-  WIND ENERGY
-  LARGE COMPONENTS
- 

ZAYER

30° HEAD



CONTINUOUS ROTATION // POSITIONING EACH 0,001°

It is a two CNC axis controlled head that can work in 5 axis machining both positioning and continuous. The arrangement of the two axis allows to machine in **negative angles up to 30°** with regard to the movement of the ram.



Watch this video



HEADS



45° head



Direct outlet head



30° head with electrospindle



45° HEAD (Patented)

0.001°

Automatic rotation head, positioning each 0,001° / continuous rotation

- Automatic indexing of the cutting tool at any position, positive angles.
- Easy programming.
- High machining performance.
- Machining rigidity.



30° HEAD (Patented)

Automatic rotation head, positioning each 0,001° / continuous rotation

- Automatic indexing of the cutting tool at any positive angles and up to 30° negative angles.
- Easy programming.
- Short distance to the center of rotation, improves accuracy.
- Machining of complex areas with difficult access.
- High capacity for working.
- Machining rigidity.



GUIDEWAYS WITH LINEAR ROLLER PACKS WITH ADJUSTABLE PRELOAD

ROLL

- Great rigidity.
- Easy geometric adjustment of the machine.
- Simple preloading.
- Simple and reliable exchanging roller packs.



EXCHANGING OF DIFFERENT TYPES OF MILLING HEADS

- Possibility of exchanging milling heads keeping the zero part.

ZMH



RAM GUIDED IN THE FOUR SIDES

BOX

- Great rigidity.
- Symmetry: keeps the geometry and improves the dynamics.



CALIBRATION OF THE HEAD (Patented)

ICAL

- Checking at any time the milling head geometry.
- Easy to use.
- Automatic offset of the dimensions of the milling head and the differences between heads.
- Geometric verification of the head according to standards in force.



DESIGN OF MACHINES KEEPING THE GEOMETRY IN THE COMPLETE MACHINING VOLUME

VDP

- Very accurate machine in volume with no need for electronic offset.



DYNAMICS SELECTION

D/S

- Machine set for different machining strategies, selected by a cycle.

▼ **EXACT** ACCURACY machining
▼ **ROUGH** ROUGH machining
▼ **SMOOTH** FINISH machining



MACHINE DESIGNED CONSIDERING THE ENVIRONMENT

ECO

- Long-term lubrication with grease.
- Weight reductions.
- Driving systems optimized to reduce energy consumption.
- Using coolant liquids with low impact to the environment.



APPS // APPS

APPS

- Simple technological applications for complex machining.

ZAYER

www.zayer.com

CENTRAL HEAD OFFICE

Pol. Ind. Betoño Portal
de Bergara 7 01013
Vitoria-Gasteiz Spain

Tel.: +34 945 26 28 00
Fax: +34 945 28 66 47
zayer@zayer.es

UNITED STATES OFFICE

Lagun Engineering 800
Sprucelake Drive, Harbor City,
CA 90710

WWW.LAGUN.COM
(310) 518-1100