

TECHNICAL DATA

Precision-Surface Grinder

manufacturer	GER Maquinas Herramienta SL
type	S-150/80
control	Fagor NV 300G
built	2002



Grinding range

Max. Grinding length	1.500	mm
Max. Grinding width	900	mm
max. distance table to spindle center	900	mm
max. table load (on table)	2.000	kg

Magnet clamping plate

Clamping surface	1.500 x 800	mm
Height (approx.)	80	mm
Design	Cross pole pitches	
Pole pitch	6 / 20	mm

X-axis - table longitudinal movement

Work piece table		Meehanite cast iron
Guide system		V-Prism & flat guides
guideways		Turcite coated
Table clamping size	1.500 x 800	mm
Travel distance	max. 1,660	mm
Drive system		hydraulically
Grinding stroke adjustment		Manual by sliding parts
Table feed rate	2 - 25	m/min

Z-axis - cross adjustment of the grinding wheel

Cross slide		Meehanite cast iron
Guide system		V-Prism & flat guides
Guideways		Turcite coated
Travel distance	max. 800	mm
Drive system		Electro-mechanic: threaded spindle with polyphase induction motor
Measuring system		Encoder
Handwheel resolution	0,01	mm
Table reversal incremental feed	0,6 - 60	mm
rapid traverse	max. 2.000	mm/min.

Y-axis - vertical adjustment of the grinding wheel

Grinding column		Meehanite-Cast-Iron
Guide system		V-Prism & flat guides
Travel	660	mm
Automatic feed	0,002 - 0,1	mm
Drive system		Electro-mechanic: precision threaded spindle with polyphase induction motor
Measuring system		Direct, glass scale
Minimum automatic feed increment	0,001	mm
Automatic vertical feed	0,002 – 0,1	mm
Feed rate	max. 200	mm/min.

Straight dressing unit

Positioning Mounted	above the headstock
Dressing width	140 mm
Diamond feed travel	110 mm
Dresser diamond	1,25 Karat
Incl. dressing compensation	

Grinding spindle head

Motor design	Three-phase current asynchronous motor
Power	18,5 kW
Grinding spindle speed	1.000 min-1
Max. Peripheral speed	32 m/s
grinding wheel dimension	500 x 100 x 203 mm
Spindle supported on life greased, high-precision EP7 angular contact bearings (Two on the rear and four on the front)	

control FAGOR NV 300G

General description

Modular design with central unit, monitor and control panel. Display of vertical axis position.

- Control panel with numerical keyboard and screen operation.
- 2 independent programmable axes with the programmable parameters::
 - traverse limits
 - roughing depth
 - Finishing depth
 - quantity of excess material
 - number of burnout strokes
 - Retract position
 - Machining depth between dressing passes
 - Dressing pass
 - Percentage of wheel wear
 - Compensation for wheel holder sag
 - Compensation for lead screw backlash
- Customized machine control panel, electromagnetic table control, grinding head on/off, mode selection (square, continuous, manual), cross feed adjustment

Digital interface

- - Outputs 24V
- - Operator display for machining (roughing)
- - Operator display machining (finishing)
- - Dressing command
- - End of firing
- - +/- transverse axis limits- Inputs
- - Reset axes
- - Firing passes

Dimension, weight, connected load

Length x width x height	6 x 4,4 x 3,5	m
Weight ca.	15.000	kg
Total connected load	38	kW
Operating voltage	400	V

Equipment

- Electromagnetic table 1.500x800mm
- Wet grinding device with coolant tank, tank capacity 250l, coolant pump, capacity 80 l/min, splash water protection, cooling nozzle with holder
- Universal paper filter device, filter paper width 710mm, cleaning capacity 100l/min.
- Straight dressing unit
- Internal flushing with spray gun
- 1 pc. grinding wheel flange