

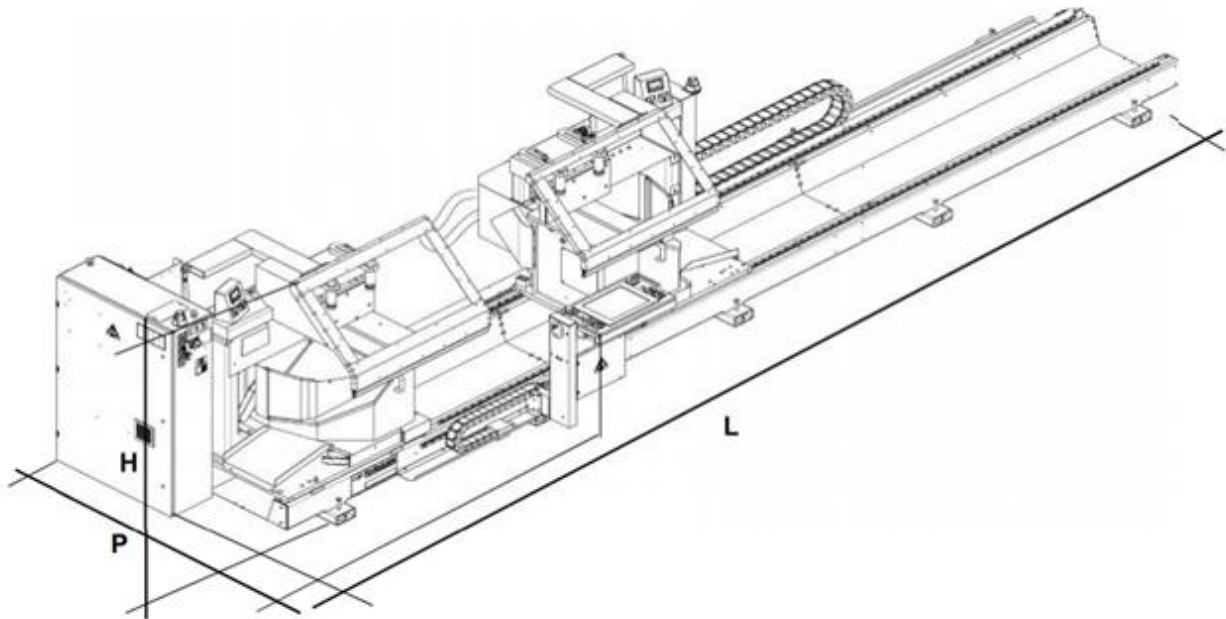
KEOPE

Double head sawing machine for compound angles with motorized movement of the mobile head



CE

Overall dimensions and weight



Version	L (mm)	P (mm)	H (mm)	Kg
5 m.	7330*	2100	1700	3280
6,6 m.	8930*	2100	1700	3500

Power supply	Total power installed	Air consumption for work cycle	Working pressure
3F - 380÷415 V - 50 Hz	8,4 kW	590 NL/min	7 bar



Technical specifications KEOPE	E1	E3	E5
Blade motors, three phase 5 HP (3.7 kW) - Eurovoltage 230/400V- 50Hz, 275/480V - 60 Hz	standard	standard	standard
Blade rotation speed 2400 RPM	standard	standard	standard
External manual head rotation between 90° and 140° (Y and Z axes) with degrees display and fixed positions for 45° - 90° - 135° cuts (vertical axis)	standard	-	-
Internal manual head rotation between 90° and 22.5° (Y and Z axes) with degrees display and fixed positions for 45° - 90° - 135° cuts (vertical axis)	standard	-	-
External head rotation between 90° and 140° (Y and Z axes) with controlled axis managed by C.N. (vertical axis)	-	standard	standard
Internal head rotation between 90° and 22.5° (Y and Z axes) with controlled axis managed by C.N. (vertical axis)	-	standard	standard
Internal blade inclination at 90° and at 45° (W and U axes)	via pneumatic movement (horizontal axis)	via pneumatic movement (horizontal axis)	with controlled axis managed by C.N. (horizontal axis)
Handling of mobile head (axis X) with controlled axis managed by N.C.	standard	standard	standard
Hydraulic tungsten carbide saw blade feed (adjustable blade exit speed – quick return)	standard	standard	standard
Minimum cutting capacity with heads at 90°	470 mm	470 mm	470 mm
Maximum cutting capacity (can be increased with specific software)	5000 mm o 6600 mm according to the version	5000 mm o 6600 mm according to the version	5000 mm o 6600 mm according to the version
No. 2 carbide tungsten saw blades	∅ 600 mm	∅ 600 mm	∅ 600 mm
Integral safety casing for cutting area protection	standard	standard	standard
Vertical vices	4	4	4
Minimum quantity lubrication (MQL) with pure oil	standard	standard	standard
Set up for the extraction of chips and fumes	standard	standard	standard
15" touch screen control panel (IP65) on linear guides	standard	standard	standard
PC operator interface	standard	standard	standard
Operating system Windows ®	standard	standard	standard
Real time numerical control	standard	standard	standard
FSTCUT4 software licence	standard	standard	standard
Teleservice for the first 12 months	standard	standard	standard
Potentially Industry 4.0 subsidizable asset			

Optionals KEOPE E1-E3-E5

Special power supply with 11 KVA voltage transformer inclusive of electrical frequency switch to 60 Hz
Special power supply with 11 KVA voltage transformer frequency 50 Hz
Electrical frequency shift for operation at 60 Hz
Additional charge for electrical version UL-CSA
Additional charge for EAC (Eurasian Conformity) certification
Electric cabinet cooling system Voltage 230 V 1 ph. 50/60 Hz UL
Electric cabinet cooling system Voltage 115 V 1 ph. 50/60 Hz UL
Blade exit position transducer
Customised devices to clamp special profiles
Profile lifting kit (No. 2 total)
400 Roller table loading/unloading side 2,8 m
400 Roller table loading/unloading side 4,7 m
Loading roller conveyor 400 (Useful length 2,2 m) (mobile head)
Swarf conveyor belt with tilted end (for 5 m version) (Unloading height 700 mm)
Swarf conveyor belt with tilted end (for 6,6 m version) (Unloading height 700 mm)
Centre machine chip conveying system
Additional horizontal clamps (max clamping capacity 290 mm) on fixed and mobile head (90° cuts) No. 2
Intermediate pneumatic retractable support (max 3 supports or 4 supports for the 6,6 m version)
Note: if one chooses 1 or 2 supports indicate whether to position them as 1st, 2nd or 3rd (or 4th)
Manual stop for recovery of short extruded pieces
Equipment for machine handling with bridge crane (for non-faired versions only)
Licence for step-by-step cutting software, complete with 1 extra surface on fixed head, horizontal clamps on fixed and mobile head (no. 2), 90° cuts, two-hand control
Paper roll for printer min. n. 10 pcs (100x36 mm)
Paper roll for printer min. n. 10 pcs (58x35 mm)
Teleservice contract for one user

PC + TEX CONTROL



Electronic equipment description:

- Personal computer
- Touch monitor 15" LED backlighting
- Internal USB ports plus one IP65 on front panel and internal USB ports
- RS232 serial port
- SSD solid state hard drive
- PC with Operating System Windows 10
- 3-year international "on site" warranty for PC
- FSTCUT4 software
- Direct connection to FOM technical support via the remote assistance service

Description of functions and characteristic FSTCUT4 program:

FSTCUT4 is the new and advanced management program for double-head sawing machines. In fact, it manages all the operations that can be carried out on these machines. It allows a cut to be made in managed mode and can receive a cutting list directly from the office, while it uses the Industria 4.0 environment to transmit the production data back to the office itself. It reduces the use of materials to a minimum by optimising the cut.

- Semiautomatic cutting function with automatic profile height compensation and piece counter with cutting disabling
- Direct import of the profile section from file in DXF/DWG ® format
- Classified profile archive graphic management by brand and series with working parameters associated to each profile and image display
- Management of list filing folders with paths that can also be configured online
- Cutting lists imported via network or USB memory stick
- Coating thickness and extrusion tolerance automatic corrector function
- Displaying 3D of profile
- Import of cutting lists in FOM format (protocol P2K2)
- Managing of users
- Display of profile sections while executing cutting lists with indications of piece positioning on the machine
- Display and print of frame image with the part being machined highlighted (only with cutting lists from the design software ProF2)
- Direct connection to FOM technical support via the remote assistance service
- 3D cutting simulation
- Automatic import of cutting list from network folder
- Integration with LOLA
- Industry 4.0 ready

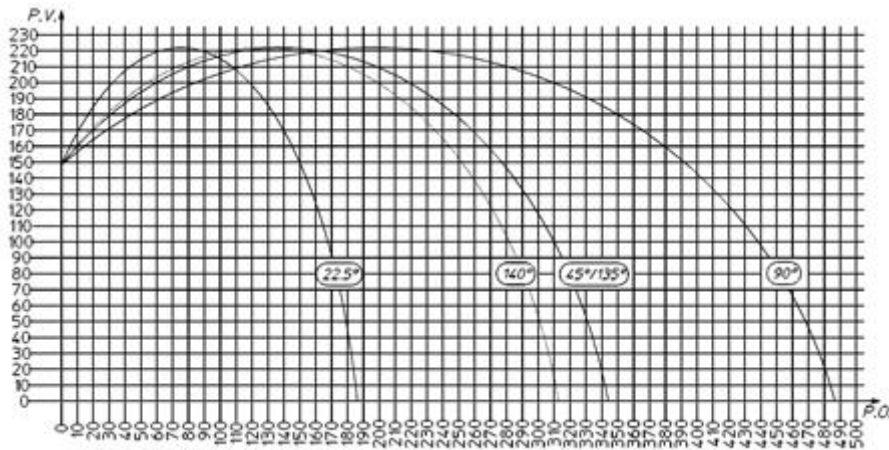
On request:

Formulas and Types module, to create parametric articles and generate the resulting cutting lists
 Cutting lists optimization module
 SOLID PLUS CUT software licence
 Licence for FST STATISTICS C4 program
 Licence for FSTCUT4 program for office
 Management of cutting statistics and blade wear (FST STATISTICS C4)
 Wireless optical barcode reader and relative management software for work lists
 Label printer with option to printout of the profile section and personalise the label layout
 User licence for step-by-step cutting (no optimisation necessary for fixed distance parallel cuts)
 Software user licence for special length cutting (extra-length and super-minimum) and bevel cuttings at variable angles.
 SW license for cutting list FSTConverter from Schuco format to P2K2 format
 SW license for cutting list FSTConverter from Wiktop format to P2K2 format
 SW licence for cutting list FSTConverter from CSVFOM format to P2K2 format
 SW license for cutting list FSTConverter from WinPro format to P2K2 format
 SW license for cutting list FSTConverter from Dubus format to P2K2 format
 SW license for cutting list FSTConverter from ALICAD/MBCAD format to P2K2 format

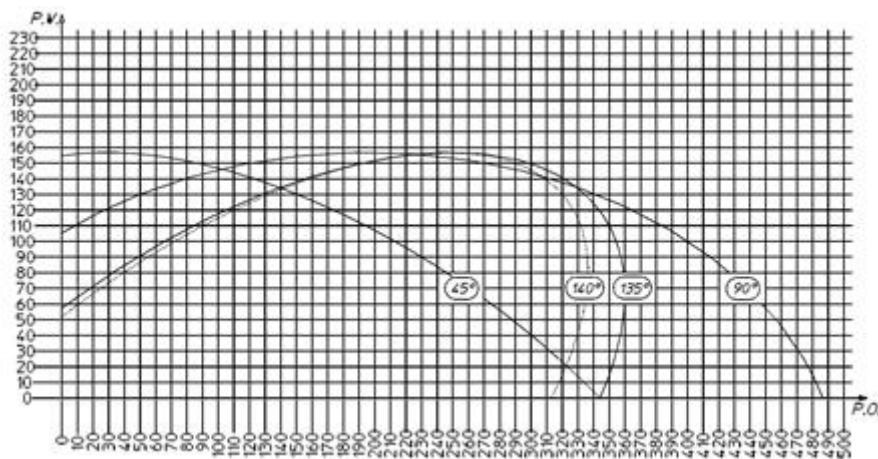
CUTTING DIAGRAM

See attachments

Blade pivoting from 22,5° to 140° (vertical axis). Blade tilting at 90° (horizontal axis)



Blade pivoting from 45° to 140° (vertical axis). Blade tilting at 45° (horizontal axis)



LOLA



LOLA is the cloud based IoT platform created by Fom Industrie for Industry 4.0, with the aim of monitoring and increasing productivity and efficiency.

The LOLA web application can be accessed via browser (Safari, Chrome), on a PC or mobile device.

LOLA receives data from the FOM Industrie machine tool, via internet connection, and generates statistics that can be consulted by the end user, regarding:

- productivity
- efficiency
- diagnostics
- scheduled, periodic and predictive maintenance
- alarms, push notifications and predictive warning

Characteristics

- Developed in responsive technology, which adapts the graphic layout to the device being used.
- Plant Manager for grouped display of your machines and alarms, based on factory or manufacturing department
- Timezone/DayTimeSavingLight Management
- LOLA application users (unlimited, until expiry of the license) with two privilege levels, to define criteria for hierarchical content visibility.
- Various machines can be associated with a single operator, or several operators can be associated with various machines.
- LOLA is now available in 5 languages: Italian, English, French, Spanish, German

LOLA allows control of the following with a single glance:

- machine status and efficiency
- machining statistics
- diagnostics for key machine components (e.g. electrospindles, tools, sensors..)
- alarms and warnings log for the individual machine or the factory (*for FOM LOLA compliant machines)
- push notifications for periodic and predictive maintenance events. Log of operations confirmed in LOLA.

The data indicate every time a key component is coming to the end of its lifecycle, so that it is possible to plan the replacement operation with the FOM service department or independently, thus minimising machine stoppages.

Export of data for integration with MES systems

With the additional Lola Exporter license it is possible to export the data collected by LOLA in CSV format locally, allowing subsequent integration with the most common MES systems