

OPTIMAB RANGE

SOMAB



250



350



450



550



700



900

Le constructeur se réserve le droit de modifier les caractéristiques mentionnées dans ce document

- GENYMAB Multi function machining center



400 / 630

- OPTIMAB Universal lathe



250 / 350
450 / 550
700 / 900

- DELTAMAB Multi-axis lathe



400 / 400 BR
600 / 600 BR
700 / 700 BR

- ALPHAMAB Production lathe



310Y / 320Y / 336

- MAXIMAB XL Flat bed lathe



1250 / 1600 / 1800 / 2000

- DIAM 3 to 5 axis vertical machining center



500 / 1000 / 1060
1270 / 1670 / 2290
620-5x

- French manufacturer of lathes, milling machines and multidirectional machines



- Dedicated After Sales Service Assistance and technical support provided by SOMAB

SOMAB

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Impression ALPHAMAB - Moulins - 03000

SOMAB

OPTIMAB RANGE

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OPTIMAB RANGE

250 - 350 - 450

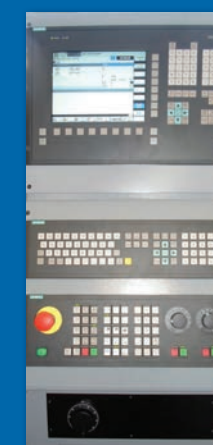
550 - 700 - 900

550 to 3300 mm
distance between centres

THE COMBINATION
OF A TOOLING LATHE
AND A PRODUCTION LATHE



FAGOR



SIEMENS

*Usability and simplicity
with the teach-in control*

OPTIMAB 250 2-3 axis

60° cast-iron slant bed supported by a monobloc frame structure
Roller-bearing guideways on X and Z axis
12 stations electric turret with plate for VDI 20 (or 30) or (MULTIFIX manual turret E type)
Ø 140 mm centering spindle - Ø 54 mm bore
Chip tray or (Chip evacuator)

U : Manual version

Ø 200 mm 3-jaws chuck with manual clamping
Tailstock with manual quill control Ø 52 mm travel 80 mm - MT3 tip

P : Automatic version

Ø 165 mm 3-jaws chuck with automatic clamping
Tailstock with automatic quill control Ø 52 mm travel 80 mm - MT3 tip

Ergonomic

- 60° inclined bed
- Back turret
- Front door with a large glass surface
- Sliding and swiveling operator console
- Two electronic hand wheels (Fagor)

Performance and accuracy

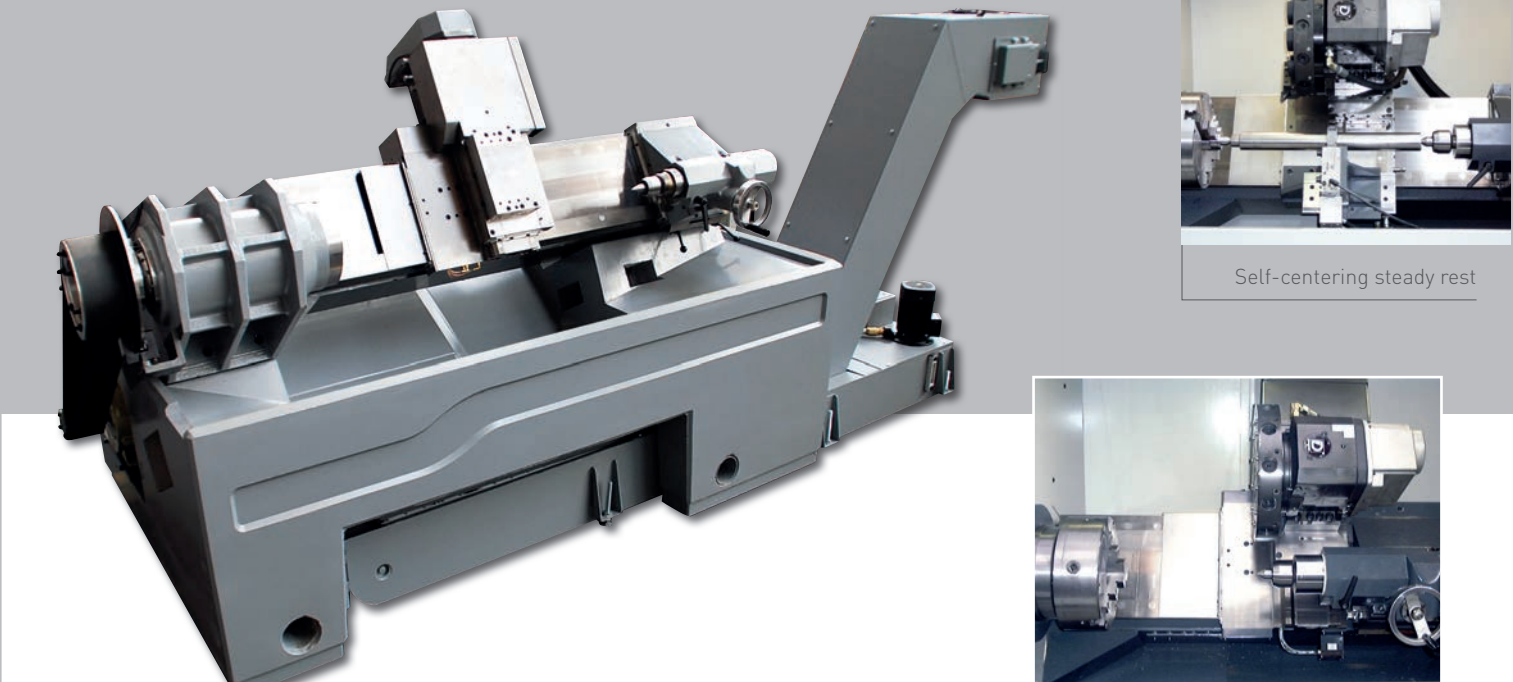
Granitan bed (artificial granit)

Structure of high stability :

- Rigidity structure : vibration damping 8 times more than cast iron
- Vibration amplitudes 3 times lower when machining
- Thermal conductivity 15 times lower than cast iron

Results of machining :

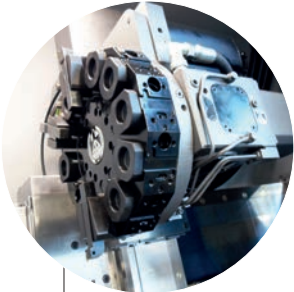
- Improved surface finishing
- Greater machining accuracy
- Increased tools life of 30%
- Precision stability over time
- Allows machining of hard materials



Self-centering steady rest



MUTIFIX manual turret



Mixed turret : VDI and rest plate



VDI turret



Tool probe

Technology

- Eco designed for machining cost efficiency
- Spindle with super precision angular ball bearing, greased for life
- Grinded ball screws with double nut
- Numeric technology motor with absolute position
- Annular encoder on spindle for C-Axis



Turning

Milling



3D graphic simulation



SIEMENS 840D sl with Conversational SHOPTURN

- 10.4" TFT flat color screen
- An electronic handwheel
- Rigid tapping for fixed and rotating tools
- USB connections on front panel
- Connection to ETHERNET network with RJ 45
- SHOPTURN Pack software, including:
 - 3 D simulation,
 - Real-time simulation
 - Remaining material recognition

OPTIMAB 350 2-3 axis

60° GRANITAN slant bed supported by a monobloc frame structure
Prismatic guideways on X and Z axis
12 stations electric turret with plate for VDI 30 or (MULTIFIX manual turret B type)
A1 6" spindle - Ø 52 mm bore
Chip tray or (Chip evacuator)

U : Manual version

Ø 200 mm 3-jaws chuck with manual clamping
Tailstock with manual quill control Ø 62 mm - travel 135 mm - MT3 tip

P : Automatic version

Ø 165 mm 3-jaws chuck with automatic clamping

Tailstock with automatic quill control Ø 72 mm - travel 100 mm - MT3 tip

OPTIMAB 450 2-3 axis (Y axis)

60° GRANITAN slant bed supported by a monobloc frame structure
Prismatic guideways on X and Z axis
12 stations electric turret with mixed for VDI 30 and rest plate or (MULTIFIX manual turret B or C type)
A1 8" spindle - Ø 73 mm bore
Chip tray or (Chip evacuator)

U : Manual version

Ø 250 mm 3-jaws chuck with manual clamping
Tailstock with manual quill control Ø 90 mm - travel 140 mm - MT4 tip

P : Automatic version

Ø 210 mm 3-jaws chuck with automatic clamping
Tailstock with automatic quill control Ø 90 mm - travel 125 mm - MT4 tip

Characteristics	OPTIMAB 250	OPTIMAB 350	OPTIMAB 450	OPTIMAB 550	OPTIMAB 700	OPTIMAB 900
Swing over bed (mm)	350	410	500	620	700	930
Distance between centres (mm)	550	730	1100	1500	1750/2500/3300	1750/2500/3300
Swing over cross slide (mm)	220	290	320	430	520	690
X-axis transversal travel (mm)	160	200	240	330	435	510
Z-axis longitudinal travel (mm)	500	550	950	1300	1450/2200/3000	1450/2200/3000
Spindle nose (mm)	Ø140	A1-6"	A1-8"	A2-8"	A1-11"	A1-11"
Spindle bore (mm)	54	52	73	105	120	120
Maximum spindle speed (rpm)	5000	5000	4500	3200	2000	1300
Spinde power (kW)	7,5/11	9/13	20/30	22/33	28/43	30/45
Gearbox	no	no	no	option	2 speed	2 speed
Automatic turret	12 stations/VDI20	12 stations/VDI30	12 stations/VDI30	12 stations/VDI40	12 stations/VDI50	12 stations/VDI60
Manual chuck (mm)	200	200	250	315	400 (500)	400 (500)
Automatic chuck (mm)	160 (210)	160 (210)	230	280 (315)	350 (400-500)	350 (400-500)
Weight (kg)	2600	3400	5300	7500	7500/8500/10500	7500/8500/10500
Width (mm)	1500	1600	1800	2000	2480	2480
Height (mm)	1700	1850	1970	2000	2460	2460
Length with chip tray (mm)	2000	2000	2770	3400	/	/
Length with chip evacuator (mm)	3100*	2900*	4300*	4900*	5650/6400/7200	5650/6400/7200
Live tools turret*	12 stations/VDI20	12 stations/VDI30	12 stations/VDI30	12 stations/VDI40	12 stations/VDI50	12 stations/VDI60
Power (kW)	4	4	4	7	15	15
Speed (rpm)	5000	5000	5000	4000	4000	3000
C-Axis (annular encoder)	continuous	continuous	continuous	continuous	continuous	continuous
Y-Axis*	no	no	30 mm	50 mm	no	no

* Option

OPTIMAB 550 2-3 axis (Y axis)

60° GRANITAN slant bed supported by a monobloc frame structure
Prismatic guideways on X and Z axis
12 stations electric turret with mixed for VDI 40 and rest plate or (MULTIFIX manual turret C type)
A1 8" spindle - Ø 105 mm bore
Chip tray or (Chip evacuator)

U : Manual version

Ø 315 mm 3-jaws chuck with manual clamping
Tailstock with manual quill control Ø 110 mm travel 160 mm - MT5 tip

P : Automatic version

Ø 315 mm 3-jaws chuck with automatic clamping
Tailstock with automatic quill control Ø 110 mm travel 160 mm - MT5 tip

OPTIMAB 700 2-3 axis

60° cast-iron slant bed supported by cast-iron frame structure
Prismatic guideways on X and Z axis
12 stations electric turret with plate for VDI 50 or (MULTIFIX manual turret D1 type)
A1 11" spindle - Ø 120 mm bore
2 speed gearbox
Chip evacuator

U : Manual version

Ø 400 mm 3-jaws chuck with manual clamping
Tailstock with manual quill control - Ø 150 mm - travel 160 mm - MT6 tip

P : Automatic version

Ø 400 mm 3-jaws chuck with automatic clamping
Tailstock with automatic quill control - Ø 150 mm - travel 160 mm - MT6 tip

OPTIMAB 900 2-3 axis

60° cast-iron slant bed supported by cast-iron frame structure
Prismatic guideways on X and Z axis
12 stations electric turret with plate for VDI 60 or (MULTIFIX manual turret D1 type)
A1 11" spindle - Ø 120 mm bore
2 speed gearbox
Chip evacuator

U : Manual version

Ø 400 mm 3-jaws chuck with manual clamping
Tailstock with manual quill control Ø 150 mm - travel 160 mm - MT6 tip

P : Automatic version

Ø 400 mm 3-jaws chuck with automatic clamping
Tailstock with automatic quill control - Ø 150 mm - travel 160 mm - MT6 tip



SOMAB PL+S vT assisted control CNC

- 15" color touch screen
- Two electronic hand wheels
- 3 working modes :
 - manual teach-in mode
 - Conversationnal mode
 - ISO mode
- USB connections
- ETHERNET network connection with RJ 45 plug-in connector
- Minimum 4 GB memory
- 3D graphic simulation