

Combined machines

smart

CU 300 smart
CU 350 smart
CU 410 smart

FS 30 smart
FS 35 smart
FS 41 smart

ST 3 smart

MiniMax

MiniMax

A company of SCM GROUP



Factory



Foundry



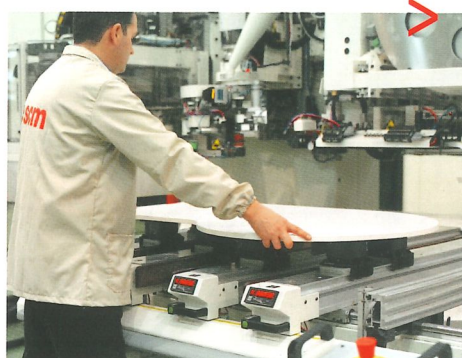
Sheet processing



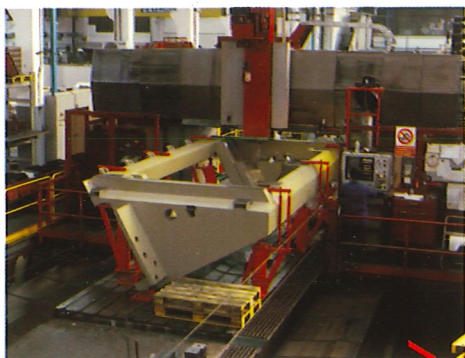
Assembly line



Component manufacturing



Testing



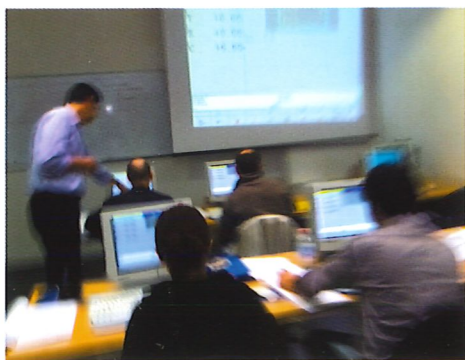
Mechanical processing



Painting



Groups assembly



Training

The SCM Group is a world leader for **woodworking machinery**. In its fifty-year history the Group has installed two million machines in 120 countries world-wide. Today, the SCM Group has 3.000 employees, 18 production facilities and 23 overseas branches. It exports over 70% of its production. The companies comprising the Group include some of the most prestigious names and brands in the woodworking machinery industry. **SCM**, founder of the SCM Group, produces machinery for small-, medium- and large-sized companies and has become the world leader for the production of CNC routing machines. **MINIMAX** is a group company manufacturing machinery for small carpentry workshops and the woodworker. **ROUTECH** specialises in CNC machining centres and is a leading innovator for routing technology. **CMS** is renowned for its high-productivity industrial machining centres. **MORBIDELLI** is a leading producer of industrial drilling machines and lines for the furniture industry. **GABBIANI** has been renowned since the sixties for its panel saw lines. **DMC**, originally the mechanical engineering division of furniture maker Castelli, was acquired by the SCM Group in the eighties and today is a world leader for industrial sanding machinery for the furniture industry. **IDM** and **STEFANI** are two major names for edge banding machinery and operate today as a single manufacturing company whose edge banders have become a bench mark for the European furniture industry.

MAHROS produces automated handling and conveying systems for integrated production lines and manufacturing cells. **SCM GROUP ENGINEERING** designs and develops integrated systems. Companies of the **CMS Group** have recently joined the SCM Group adding expertise in **woodworking machinery and glass and marble machines tools** to the Group's already broad range of talents. SCM Group has always implemented a **fully integrated manufacturing policy** to guarantee that our customers get total quality. We prefer to do everything in-house. The Group has its own division specialising in the **design and manufacture of electrical, electro-mechanical and electronic equipment**. Our two foundries, leaders on the Italian market, produce the small, medium and large size castings needed for our products. We have a company specialising in structural steel work. The SCM Group has 20 years experience in professional training for the woodworking industry. Today our training strategy includes close collaboration with the Faculty of Engineering at the University of Bologna, the Fontys at Eindhoven in The Netherlands, the Wood Institute at the British Columbia University, Vancouver (Canada) and the Georgia Institute of Technology in Atlanta (USA). All SCM Group production facilities have ISO 9001 quality assurance certification.

100% made in Italy

MINIMAX is a SCM Group company

Minimax has over 30 years experience in the **woodworking machinery** sector and today offers a wide range of products, **from universal combined machines through to single-function machines for the professional woodworker.**

Minimax joined **the SCM Group** in 1986 and ever since has been able to count on **the experience and expertise of this world leader for woodworking machinery.**

Minimax continues the great tradition started by **SCM in 1952 with the introduction of the first combined machine**, a machine that combined several woodworking operations in a single machine. The machine became famous, first in Europe and then world-wide, as a major innovation offering top level reliability. Today, the SMART range of combined machines produced by Minimax is considered the best of its kind.

Minimax has UNI EN ISO 9001-2000 quality certification. It operates from a 15,000 square metre production facility in the Republic of San Marino not far from Rimini on Italy's Adriatic coast. The production facility has five automated production lines.

Minimax produces 10,000 machines annually. Machines are designed primarily for the small woodworking company and the craft woodworker. Minimax machines are simple, reliable and incorporate the latest technical innovations. There is also a product range aimed specifically at the advanced DIY woodworker.

Minimax can count on the services of a well-established network of branches and distributors in 120 countries.

In 2002 the company opened its first branch dealing direct with the final customer - Minimax USA covering the entire American market. Our network of dealers offers a top quality after-sales service world-wide.



Quality control



Testing

Preassembly line



Assembly line



CSR (Reserch and development dept. SCM GROUP) – Semi-anechoic room.

MiniMax

smart



ST3 smart



FS 30 smart



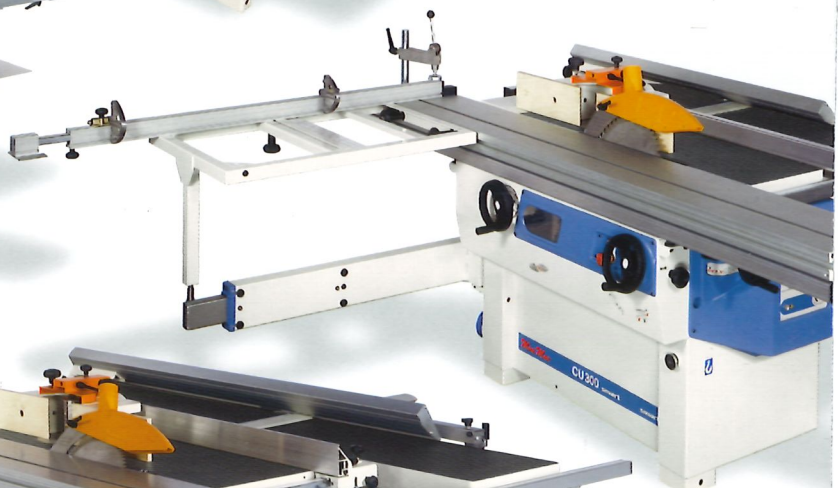
FS 41 smart



FS 35 smart



CU 350 smart



CU 300 smart



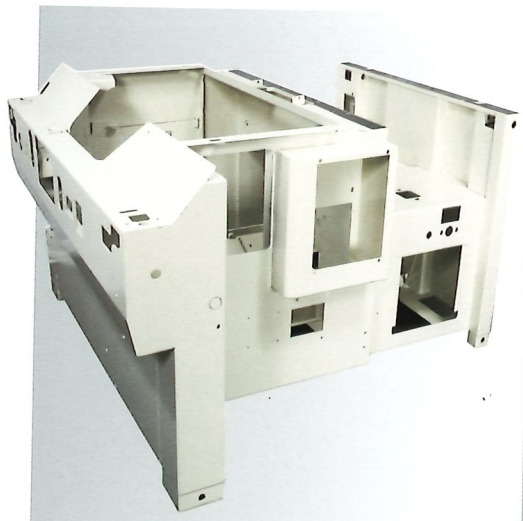
CU 410 smart

Smart range

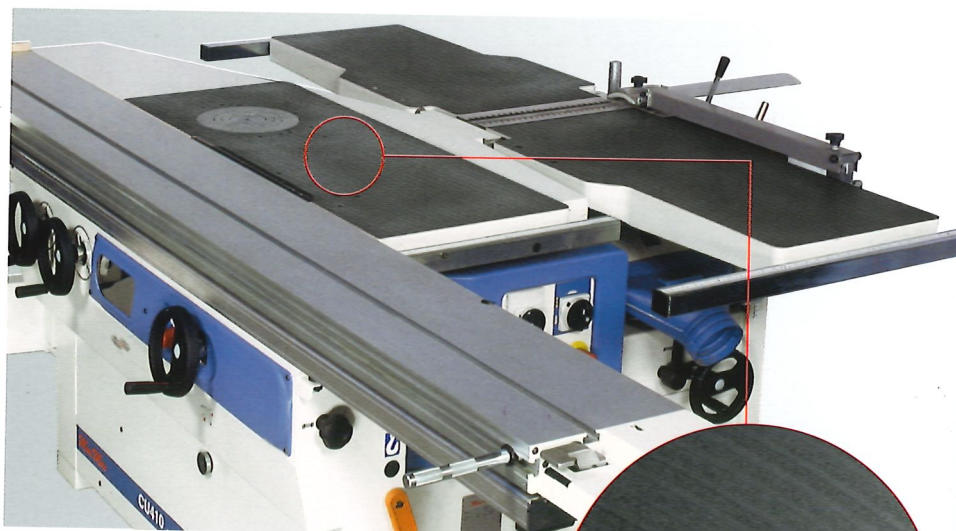
Solidity. Attention to detail. The right components for the job. These are the three things specified in the design brief for our machines. Durability. Reliability. Top performance. Ease of use. These are the four things that customers have come to expect from a Minimax machine. More and more woodworking professionals are choosing smart machines for their workshops.



smart



All Minimax machines have a **welded, single-piece steel base**. There are no bolted components to work loose. The base structure has been designed to guarantee strength, rigidity, resistance to torsional stress and the complete absence of vibrations.

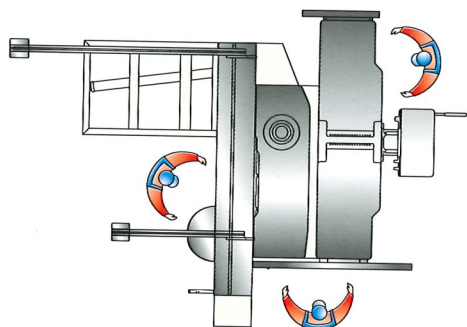


The **worktables** are made from heavily ribbed cast iron. Work surfaces are precision milled to ensure that they are perfectly flat and can guarantee long-lasting accuracy. The saw-spindle moulder table and surfacer tables offer a full support surface reaching a maximum length of 2000 mm.

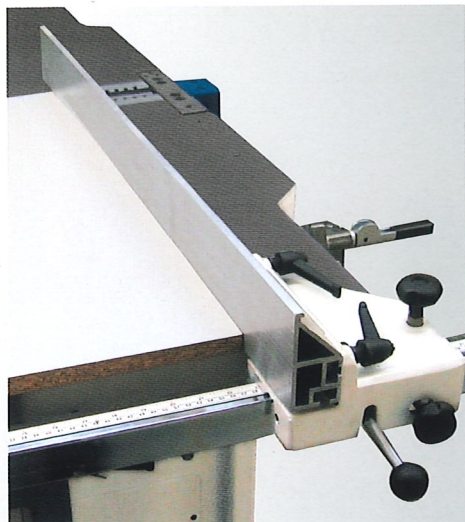
The special planing action aids workpiece feed and prevents any suction effect.

Unit operation.

On the Smart series the operator controls are in an ergonomic position. Machining units are all adjusted from the front of the machine. There are Start and Stop pushbuttons for each machining function.



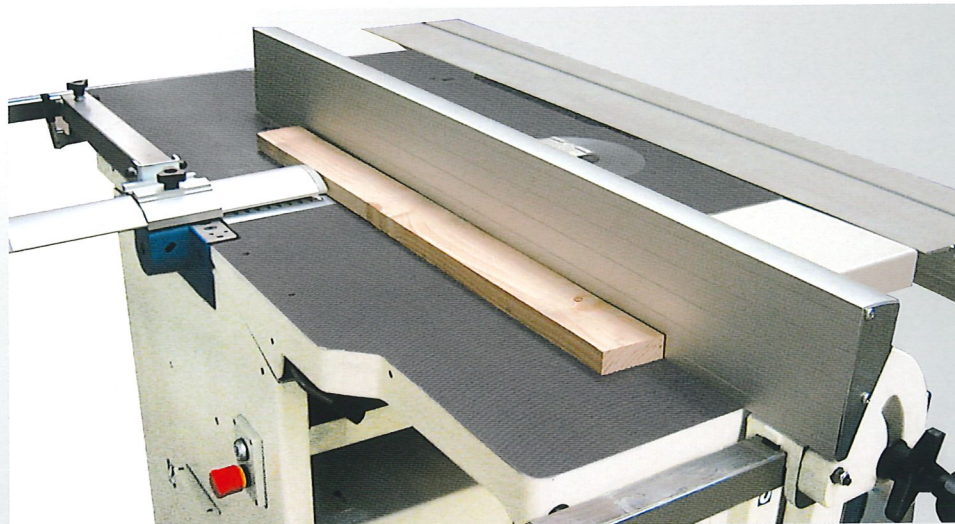
The quality shows in the details.



Professional fences

Standard equipment includes two dedicated fences, one for the saw and another for the surfacer unit. MiniMax fences are designed to be easy to remove so that the changeover from one type of operation to another is quick and easy.

The saw fence has a quick-release lock and micrometric adjustment. Maximum cutting width is 1050 mm.

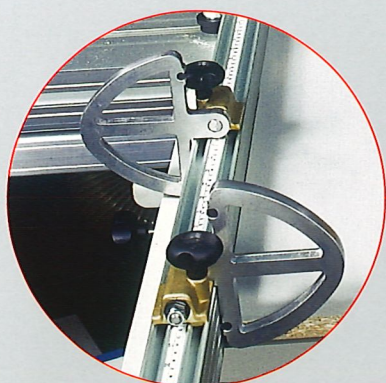


The surfacer fence is made from anodised aluminium and is large-size (1700 x 150mm) to ensure a solid, rigid support surface for the workpiece. This fence can be tilted from 90° to 45° and comes complete with a support and a clamping mechanism.

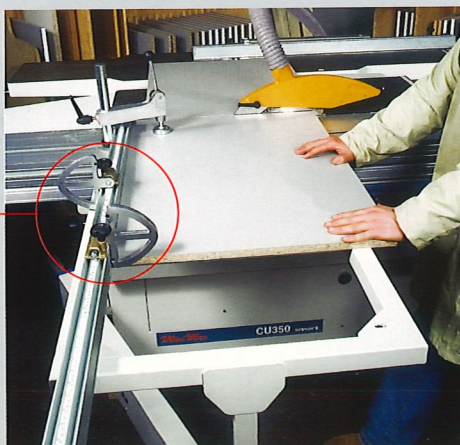
Sliding table

The Smart combined machine has a sliding table with the following features:

- telescopic fence with graduated rule, two flip-over stops and work clamp
- telescopic support
- the fence is easy to adjust in both directions from 90° to 45° for mitre cuts on large panels.



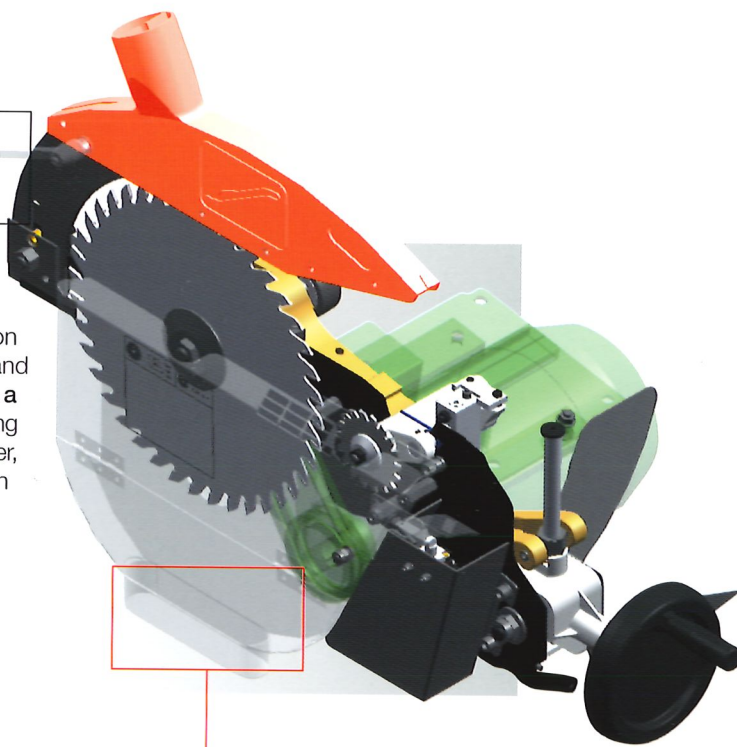
Crosscut flip-over stops



smart

Circular saw unit

The **Smart circular** saw unit is firmly anchored to the cast-iron worktable at two points. This ensures the maximum rigidity during cutting and reduces vibration to the minimum. This is a large-size unit and will take a **315 mm diameter blade with a scoring saw** mounted. The optional scoring saw unit is complete with a 80 mm diameter, Z 12 blade and guarantees a perfect finish on veneered panels.



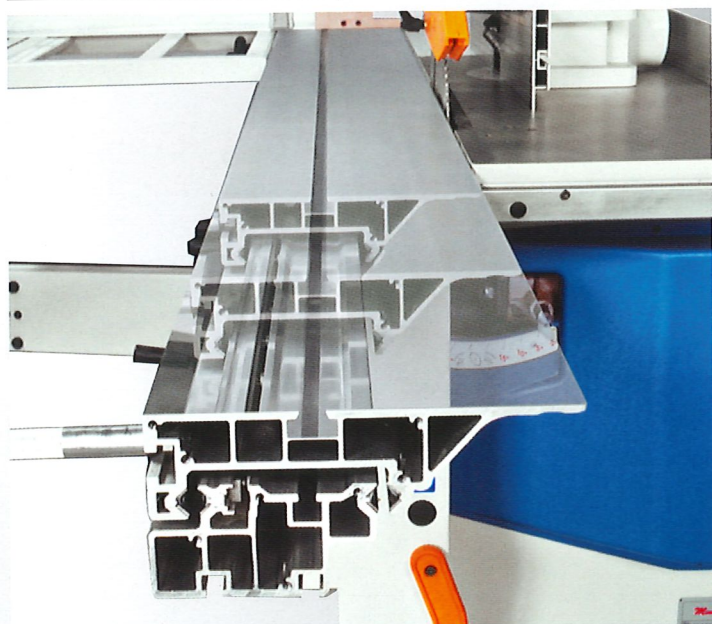
The saw unit has a guard hood which is designed for connection directly to extraction equipment to ensure that sawdust and shavings do not drop down inside the machine.



The max. saw blade projection is 103 mm

The heart of a combined machine: the machining units

Carriage unit



The **MiniMax carriage** is made from extruded anodised aluminium with a closed, honeycomb structure. The carriage runs on an exclusive slideway system consisting of guides made from calibrated and hardened F550SX steel. The carriage is the result of 50 years' experience and expertise at SCM and include:

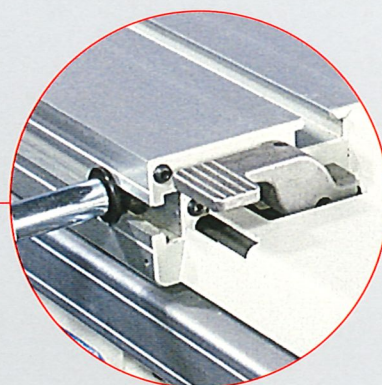
- top quality precision.
- smooth, silent action.
- self-cleaning dustproof system.
- long lasting accuracy, no adjustments required.



Guaranteed for 5 years!

Available strokes:

- 1600mm (standard)
- 2250mm (option)
- 2600mm (option)
- 2800mm (option)



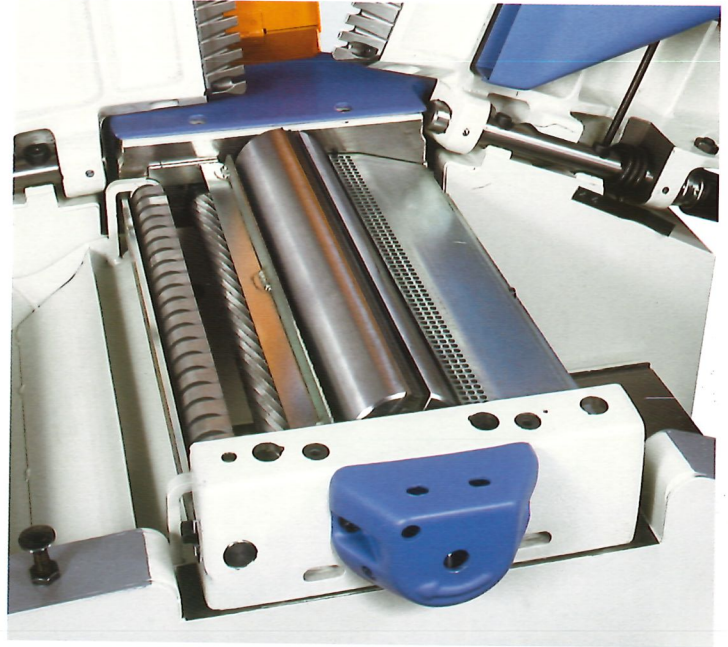
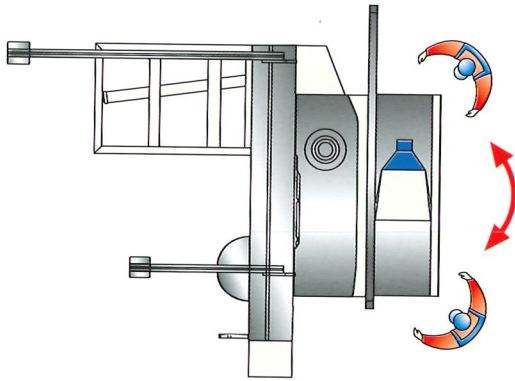
The carriage locking system makes it easy to load panels.

smart

The heart of a combined machine: the machining units

Surfacer-thicknessing unit

The Smart surfacer-thicknessing unit features a cutter block with three re-usable knives and two feed rollers. Cutter blocks with Tersa disposable knives are also available. The exclusive thicknessing feed system makes it possible to adjust feed roller pressure to match the type of wood being machined. The infeed roller has helical toothing to guarantee perfect workpiece feed. The outfeed roller is made from sand-blasted steel to leave a perfect finish.



The surfacer unit tables open up towards the saw-spindle moulder unit thus reducing overall dimensions and ensuring easy access to the thicknessing unit.

Spindle moulder unit

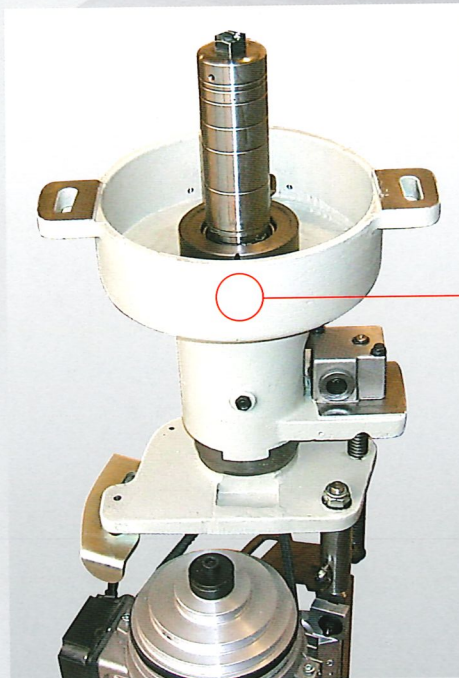
The Smart spindle moulder is designed to provide the maximum stability and rigidity under all working conditions.

Top performance features include:

- large-size, cast-iron moulder spindle.
- large distance (230 mm) between the two bearings on the moulder spindle.
- tools can be mounted at a minimum distance (5 mm) from the first bearing.

The Smart spindle moulder with tools up to 275 mm for tenoning and up to 215 mm for moulding; tools retract under the worktable. 4 standard speeds (1400, 3500, 6000, 8000 rpm) are ideal for all types of machining operation: sanding, moulding, routing against the grain.

A tilting spindle moulder is available as an option. This tilts 45° forwards and 5° backwards to meet all machining needs in complete safety.



The spindle moulder spindle is closed off by a cast-iron plate to protect mechanical components inside the machine from sawdust, shavings and dirt.



Spindle moulder fence with millimetre adjustment for moulding profiles.

CU300 smart - CU350 smart - CU410 smart

Professional
squaring frame

Unit controls on
machine front.

CU410 smart

The best investment
for the craft woodworker

Combined universal machine with 6 functions

Start and Stop
buttons in all
operator positions.

Tilting saw unit. 315 mm
saw blade diameter with
optional scoring saw
mounted. Maximum
cutting depth: 103 mm.

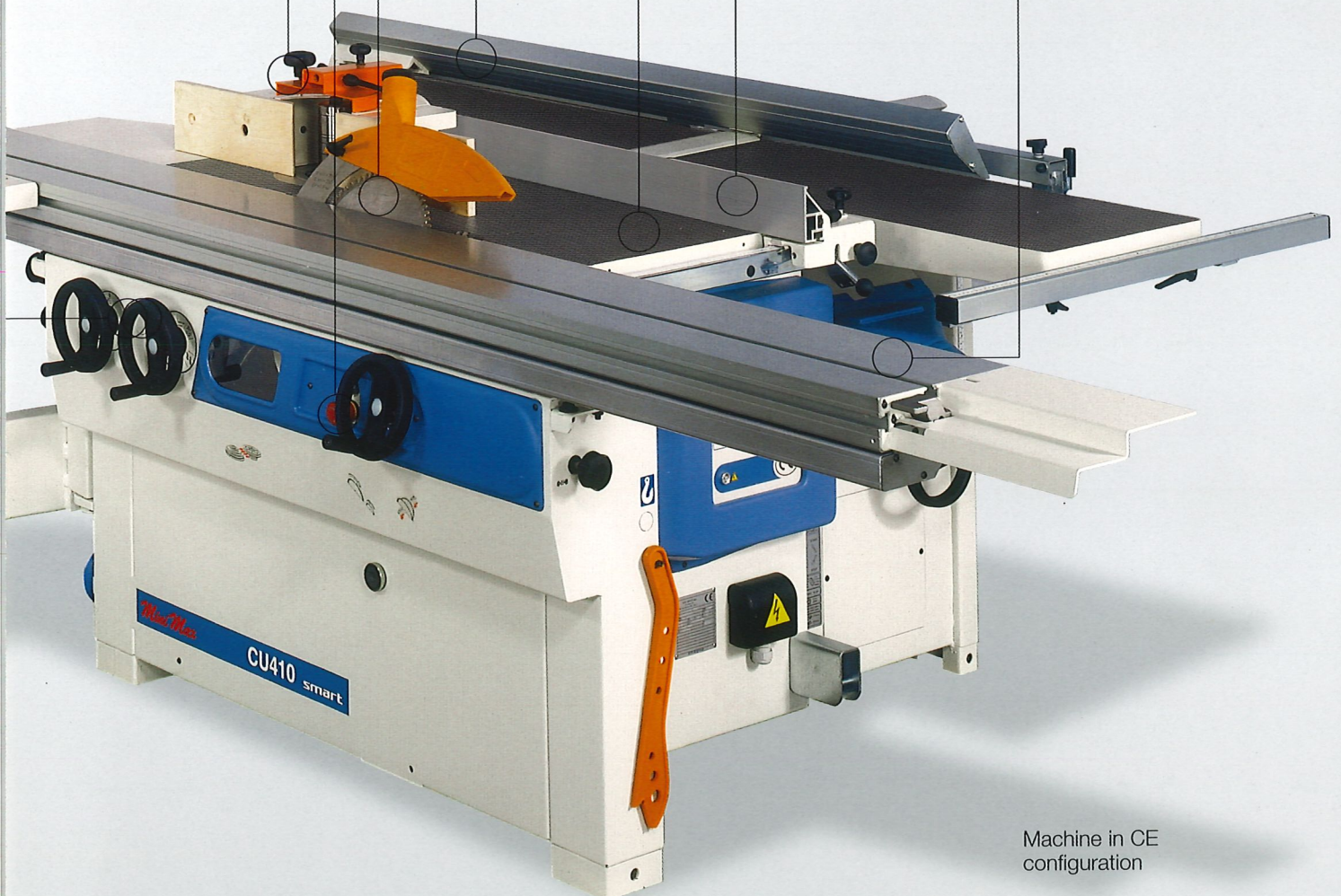
Four-speed spindle
moulder also available
with fixed or tilting
moulder spindle.

Anodised
aluminium
surface fence.

Large-size,
cast-iron worktables.

Special rip cut fence.

Anodized aluminium wagon with:
- stroke 1600mm (standard)
- stroke 2250mm (option)
- stroke 2600mm (option)
- stroke 2800mm (option)



Machine in CE
configuration

CU300 smart - CU350 smart - CU410 smart

CU350 smart

Machine in CE configuration



Combined universal machine with 6 functions

CU300 smart

Judged the best combined machine in its class.

"...the latest version of MiniMax's combination machine. In many ways—fit and finish, ease of tune-up and adjustment, quietness, Tersa cutterhead for easy planer-jointer blade changes, among others — this was the most refined design in its price range..... MiniMax handled each of its tasks well..... I'd go with the MiniMax because of its overall performance and small footprint..."

From: Christiana Asa contributing editor of Fine Woodworking Magazine
 "Tool Tests on combination machines" (January/February 2003).

MINIMAX CU300 SMART
 Source: Made by SCHI in Italy, distributed by Minimax USA (800) 925-9263 www.minimax-usa.com
 Price of model tested: \$7,495, with scoring blades and motorist standard
 Weight: 1,200 lbs.
 Minimum width: 42 in.

This is the latest version of MiniMax's combination machine. In many ways—fit and finish, ease of tune-up and adjustment, quietness, Tersa cutterhead for easy planer-jointer blade changes, among others—this was the most refined design in its price range. Its lightweight design (a strong shaper fence assembly was easy to take on and off the machine. Like the Rejok, the MiniMax accepts a full-depth head and offers a router option, but top speed is not enough for most bits. Other than routing, the MiniMax handled each of its tasks well.

However, like the others in its group, the MiniMax has a few manufacturing wrinkles. The jointer tables sagged 0.010 in. away from each other over the entire length—definitely not difficult to fix, but it would bring them level. In fact, I noticed that the factory support had inserted a few. Also, the extruded aluminum bottom, enough to leave jointed edges just slightly convex as the Knapp, due to a similar design, but a few details slowed it down.

The MiniMax has the shortest outfeed travel, a drawback because it does not allow very wide cuts when the crosscut force is in its normal, forward position.

Quickest planer-jointer conversion in its group. As on the Knapp (p. 39), the planer dust hood is located, making the planer not move back to move the jointer. The dust hood over the rip saw jointer does not have to move or convert.

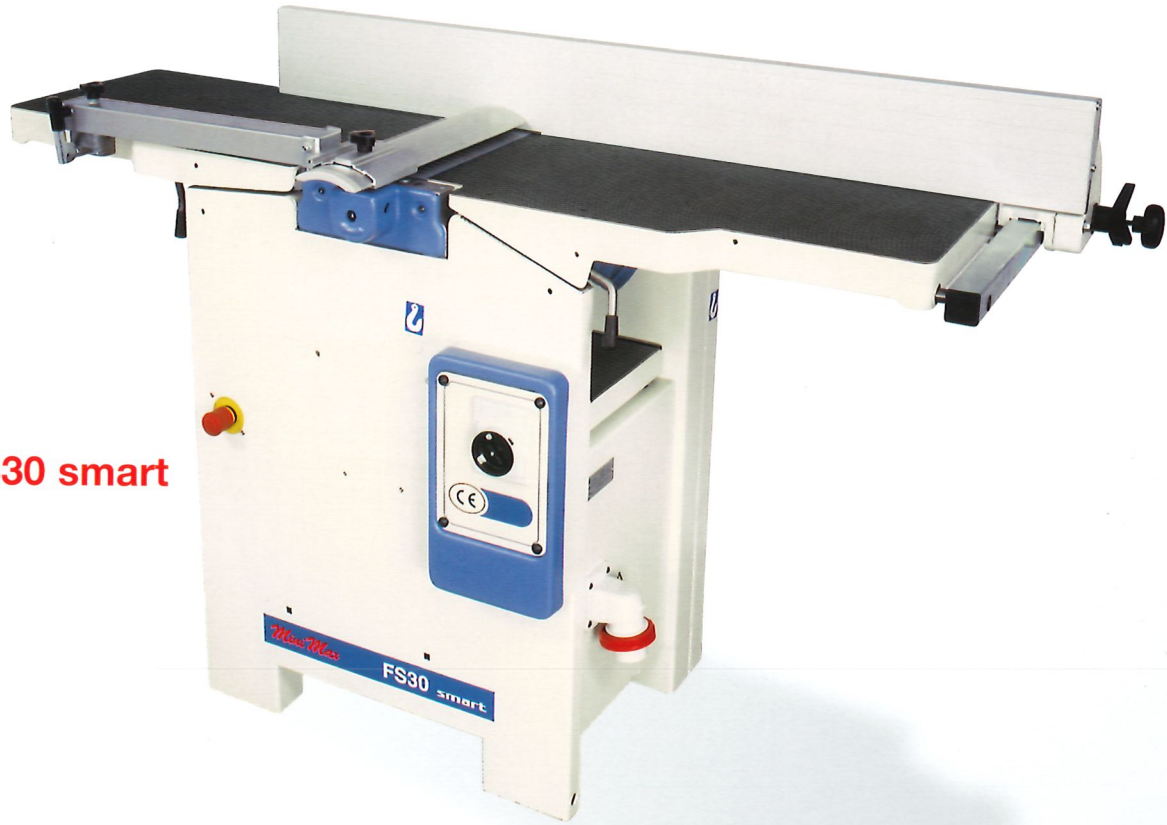
Overall, this is a worthwhile investment, especially considering the overall price tag, and more than 90% of folks I have chosen this option, according to the company. Laguna also offers this service for its Knapp machine. You cover the cost of a technician's skills in the shop, in both cases.



Machine in CE configuration

FS30 smart - FS35 smart - FS41 smart

FS30 smart



FS35 smart

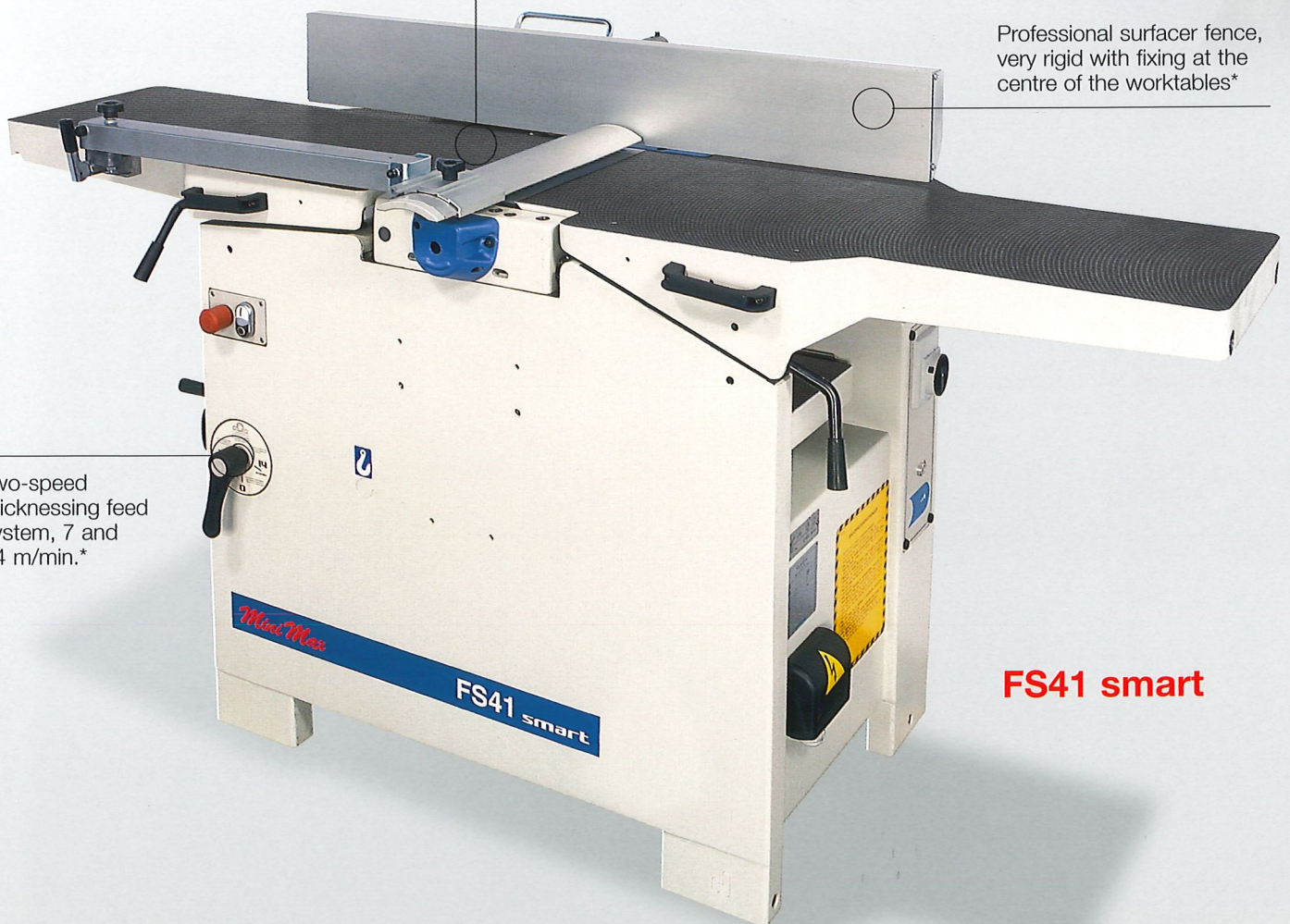


Combined surface-thicknesser and mortiser

Large cast-iron worktables, up to 2000mm

Professional surfacer fence, very rigid with fixing at the centre of the worktables*

Two-speed thickening feed system, 7 and 14 m/min.*



FS41 smart

* not available on FS30 smart



ST3 smart

Combined circular saw – spindle moulder

Professional squaring frame

Tiltable saw blade unit.
Saw blade 315mm with scoring saw (option).
Max cutting height 103mm.

Anodized aluminium wagon
- Stroke 1600mm (standard)
- Stroke 2250mm (option)
- Stroke 2600mm (option)
- Stroke 2800mm (option)

Spindle moulder with 4 speeds, available fix or tiltable

Special rip cut fence (900 mm standard, 1270 mm optional)

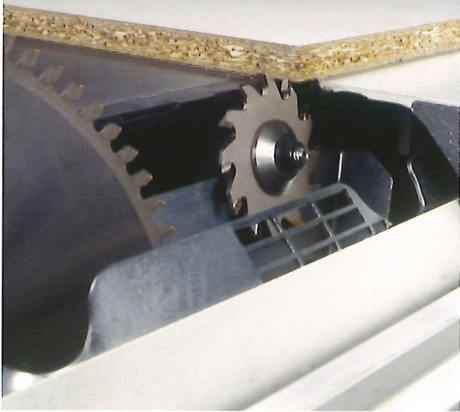
Frontal operating units movement



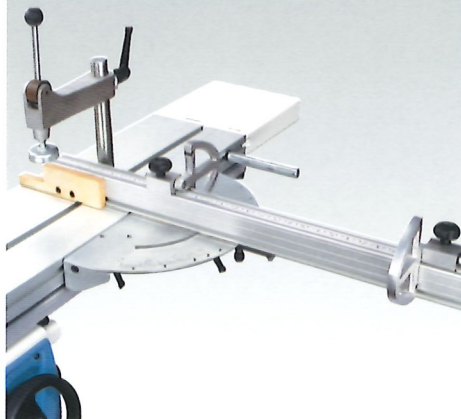
ST3 smart

Machine in CE configuration

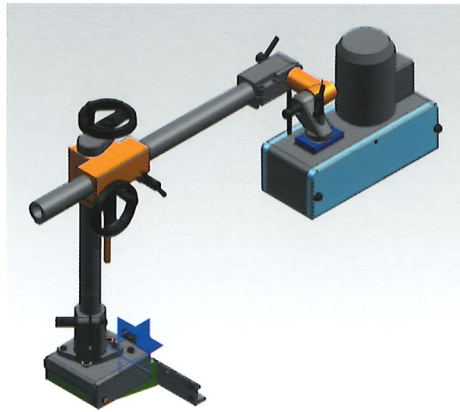
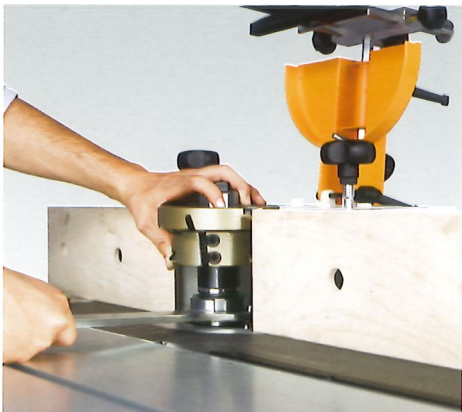
Options



Scoring saw unit complete with 80 mm diameter blade (arbor hole 20 mm), Z12 tapered, 7.600 rpm. Easy height and sideways adjustment.



New **mitre cut unit** with telescopic fence rule and flip-over stops. Selecting an angle is quick and precise.



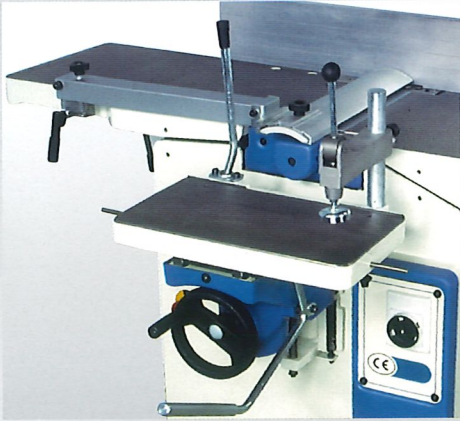
Removable support and electrical fittings for a **feeder unit**



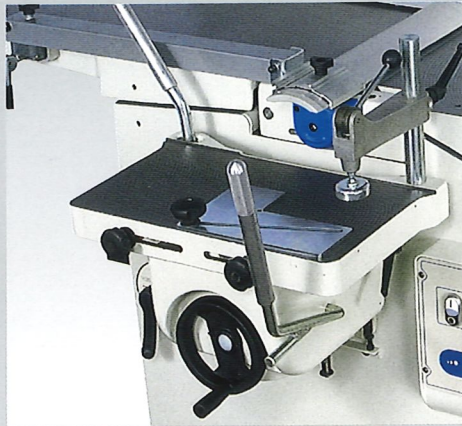
Tenoning unit consisting of a tenoning table, guard for tools with diameter up to 275 mm and an extractor hood (diameter 120 mm)



The interchangeable moulder spindle and the Minimax spindle clamping system make tool changeover on the spindle moulder quick and easy. The interchangeable spindle enables greater flexibility in tool changeover.



Smart cast iron mortiser with 16mm chuck, table dimension 430x220



Elite cast iron mortiser with 16mm chuck, table dimension 490x270



Mortiser trolley to facilitate assembly and disassembly of the machine.

Cutter block with quick-fit "Tersa" disposable knives. Knives are available world-wide

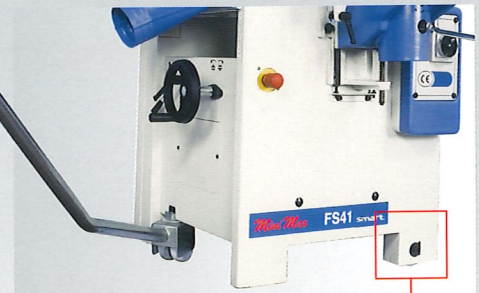
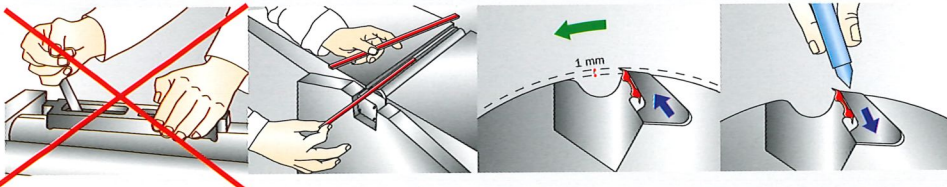


A revolutionary system for fitting the knives to the cutting block. Knives adjust automatically at startup thus eliminating knife setup time.

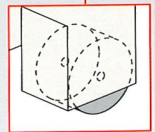
Inserting the knives in the cutter block is easy.

When the machine starts, centrifugal force locks the knives in position automatically. Knife projection from the block is adjusted automatically.

Changing the knives is quick and easy. Just release the pressure bars.



Castors built into the base make moving the machine around easy.



Surface unit

working width of surface tables	mm	300	350
total length of surface tables	mm	1510	1900
tiltable surface fence	degrees	90-45	90-45
no. of knives	n°	3	3
spindle speed	r.p.m.	5200	5300

Thickening unit

saw-spindle moulder table dimensions	mm	585x300	775x363
feeding speed on thickener	m/min	7	7
min./max. working height on thickener	mm	3/230	3/230

Circular saw

saw-spindle moulder table dimensions	mm	430x1112	430x1112
saw blade tilting	degrees	90-45	90-45
max. saw blade diameter with installed scoring unit	mm	315	315
max. saw blade projection at 90° from table with blade diameter 315	mm	mm	103
max. saw blade projection at 45° from table with blade diameter 315	mm	mm	80
cutting width at rip fence	mm	820/900	1050
rotating speed	r.p.m.	4000	4000

Spindle moulder

max. spindle working height	mm	125	125
tiltable spindle moulder 95-45 degree		●	●
spindle moulder speed (50 Hz)	r.p.m.	1400/3500/6000/8000	1400/3500/6000/8000
max. tool diameter lowered under table	mm	210	210
max. tool diameter when tenoning	mm	275	275

Wagon strokes

1600 mm stroke to saw blade		○	○
2250 mm stroke to saw blade (2450mm not CE)		●	●
2600 mm stroke to saw blade		●	●
2800 mm stroke to saw blade		●	●

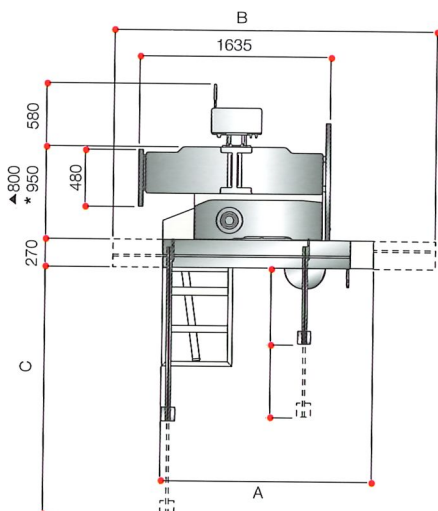
Motors

3 motors hp 4 kw 3 Hz 50 three-phase		○	○
3 motors hp 5,5 kw 4 Hz 50 three-phase		●	●
3 motors hp 2,5 kw 1,5 Hz 50 single-phase			●

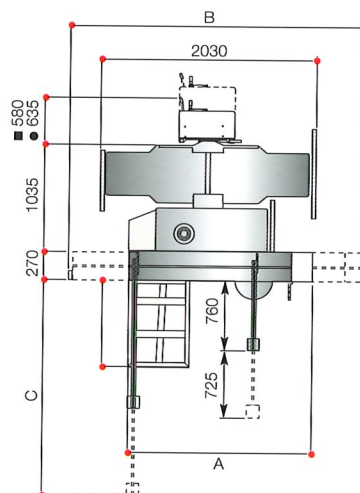
net weight	kg	570/615	700
spindle moulder shaft available with following diam.: 30 - 35 - 40 - 50 mm, 3/4" - 1" - 1 1/4"		○	○

● option ○ standard

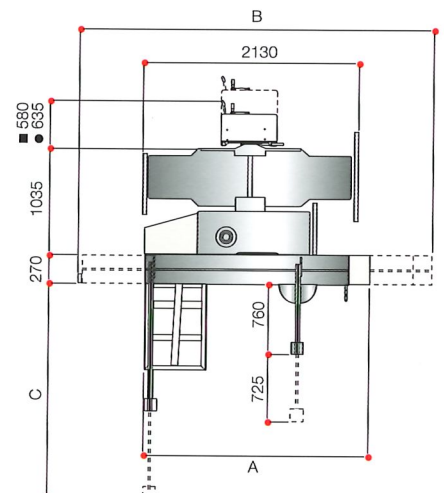
CU300 smart



CU350 smart



CU410 smart



CU410 smart

FS30 smart

FS35 smart

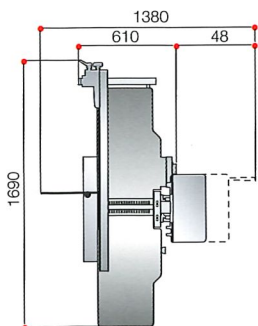
FS41 smart

ST3 smart

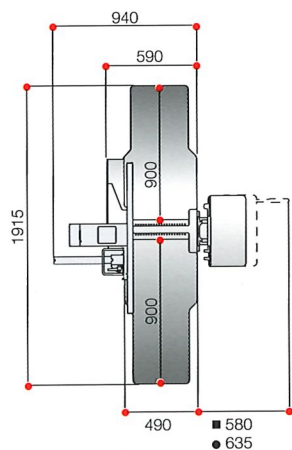
410	300	350	410	-
2000	1510	1900	2000	-
90-45	90-45	90-45	90-45	-
3	3	3	3	-
5300	5200	5300	5300	-
775x423	585x300	775x363	775x423	-
7	7	7 / 14	7 / 14	-
3/230	3/230	3/230	3/230	-
430x1112	430x1112	-	-	430x1112
90-45	90-45	-	-	90-45
315	315	-	-	315
103	103	-	-	- 103
80	80	-	-	- 80
1050	-	-	-	900 (1270)
4000	-	-	-	-
125	-	-	-	125
●	-	-	-	●
1400/3500/6000/8000	-	-	-	1400-3500-6000-8000
210	-	-	-	210
275	-	-	-	275
○	-	-	-	○
●	-	-	-	●
●	-	-	-	●
●	-	-	-	●
○	○	○	○	○
●	●	●	●	●
●	●	●	●	● ●
750	300	390	450	430/480
○	-	-	-	○

	A	B	C	■	Smart cast iron mortiser
1600 mm	1935	3805	2260	●	Elite cast iron mortiser
2250 mm	2585	5210	2260	▲	Fix spindle moulder
2600 mm	2935	5895	2910	*	Tilttable spindle moulder
2800 mm	3135	6200	2910		

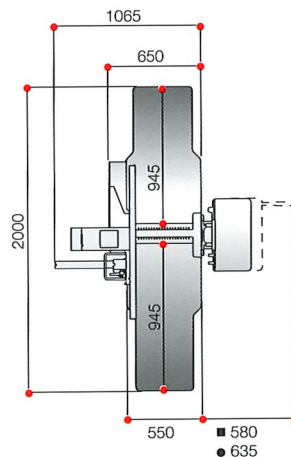
FS30 smart



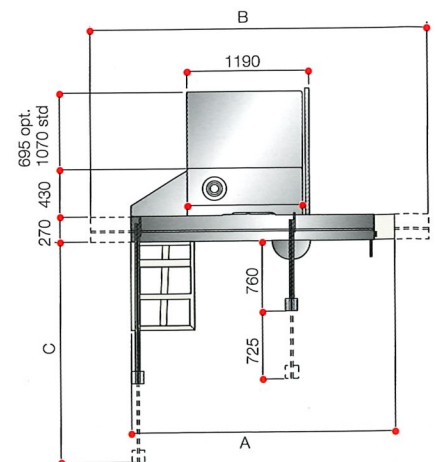
FS35 smart



FS41 smart



ST3 smart



Mini Max



In this catalogue, machines are shown with options. The company reserves its right to modify technical specifications without prior notice, provided that such modifications do not affect safety as per CE norms.

The widest range of machines for the small woodworking workshop





0000552052H



MiniMax

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