



**STRONG
REASONS
WHY**

Easy & Responsive,
the new Industry 4.0
production system

Latest generation
Software and Technologies

2016 Case Histories,
our clients around the world





SCM

Aggro

UPR

R

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ANSWER**

STRONG REASONS WHY

world using an MSL Connector. The extensive experience accumulated over the years at SCM has enabled its engineers to develop the Maestro Apps, a one-of-a-kind professional library that speeds up considerably the design and production of furniture and doors and window frames.

Over 17,000 machines produced in 2015: a record number that demonstrates the continued trust and satisfaction of thousands of customers worldwide. These are 17,000 advanced solutions that make up the most extensive catalogue of machines produced today for the international woodworking industry; such a wide-ranging product line that one can easily state that "if a solution is not listed in our catalogue, most likely it does not exist."

Our **deep knowledge of production processes** and the strong partnerships we have established with our customers have allowed us to develop customised projects that provide answers to their specific needs by developing unique technological and efficient systems.

Among the "Strong Reasons Why" you should choose the SCM Group is **its team of specialists working within the Group to promote excellence that is all Italian and globally unique in quality, innovation and service.** A group that has chosen to integrate the entire production chain: a challenging choice to provide customers with greater control over quality and costs. SCM Group is the biggest Italian company in the industry and second in the world, producing woodworking machines and solutions and, in a word, offering truly good, solid and Strong Reasons Why you should choose it.

There are **strong and concrete reasons why SCM Group should become your technological partner for developing woodworking production processes.** Reasons that make the SCM Group stand out among all companies operating in this industry; reasons that, when considered as a whole, no other company can match.

Starting from its 65-year history and what it stands for. Suffice it to say that even today we service and maintain machines and systems we sold more than 50 years ago! SCM Group's history is the best guarantee for a long-term service of any technologies developed in our plants, a "long term" that goes well beyond the normal system lifetime and that guarantees efficiency and upgrades for decades. **Sixty-five years of history that make the SCM Group the most experienced company in the industry.**

Our customers are the first to recognise the importance of these reasons. Indeed, some of the leading furniture manufacturers have stated that the SCM technologies have proven to be of best value for money, considering their overall costs and excellent performance. And the extensive network of branches and dealers, which the SCM Group has established over the years all around the world, ensure **rapid service.**

The network of specialists does not only guarantee prompt service, it also allows establishing **close relationships with customers**, understanding the daily problems they face and their progress, all in order to provide feedback to the Group so as to recognise market needs and respond by introducing our new technologies and solutions into our customers' markets . It is thanks to our ability to recognise and respond to our customers' current needs that SCM has developed **Maestro**, a next-generation software suite that is unmatched in terms of ease of learning and of use, even by non-technical personnel, as well as being "open" to interact perfectly with the outside digital

Behind the global success of Italy's leading supplier of woodworking equipment are many strong reasons.

"EASY & RESPONSIVE" SOLUTIONS FOR AN AGILE, INTEGRATED, SCALABLE INDUSTRY 4.0

SCM GROUP PROVIDES TECHNOLOGICALLY ADVANCED SOLUTIONS CAPABLE OF ADAPTING TO FLUID MARKET TRENDS WITH LIMITED "COST OF OWNERSHIP".

**STRONG
REASONS
WHY**

"EASY & RESPONSIVE" THE NEW MANUFACTURING SYSTEM

THE NEW MANUFACTURING SYSTEM FOR THE INDUSTRY 4.0

“Where the dictates of an industry are now making way for the answers: this is the new industrial revolution the market is looking for, and the challenge that we at SCM have embraced for some time now. Our response is a new production system, “EASY & RESPONSIVE”, able to leverage automation and interconnection to drive the process renewal the market is demanding.” These words by Luigi De Vito, Director of Woodworking Machinery Division at SCM Group, explain the Group's vision on the “Integrated Manufacturing in the Woodworking Industries” feature discussed at the **Ligna 2016 Conference**.

The SCM Group vision on the future of the industry in the age of digitisation is based on the concepts of “dynamism” and “process intelligence” that production systems are increasingly required to adopt. *“The industry needs to be able to respond to consumers who demand solutions, performance, beauty and the right price, without settling for customary standards,”* goes on Luigi De Vito. *“Our system of technological solutions that we offer to the industry was designed therefore to be agile, integrated, easy to manage and control, ensuring low cost of ownership, and able to adapt to the sometimes unpredictable changes in ultimate end user requirements.”* Furniture manufacturers renew their collections frequently, almost as often as in the fashion industry, which means products with short life cycle that are increasingly more customised and thus hard to manage using rigid and standardised work flows. Hence, what is called for is **a technology that can render “mass customisation” competitive.**

The need for change applies to the entire industry, from big industrial groups to small carpentry shops. SCM Group, with its great expertise covering the entire range of machinery and production processes, develops EASY & RESPONSIVE solutions for any target sector:

- For **Big Industries**, integrated cell systems easy to programme and reconfigure, equipped with advanced storage areas that take up little space and consume less material, less energy, less investment. Advanced automation and sensor systems tailor-made for each company to help it seize market opportunities. Intelligent production process control with line configuration which collects data and optimises it faster and more efficiently.
- For **Small Joinery Workshops**, automatic cells with fast set-up times and user-friendly interface, fit for non-specialised personnel, compact and lightweight. Cells that are made of standard machines, easy to adjust to changes, and with simple interlocking systems.

At SCM Group we call the production system EASY & RESPONSIVE because it can respond to the wide variety of requests for personalisation by end consumers, a system made of “intelligent” technological solutions that combine investment sustainability with an ability to reconfigure production flows – that is, agile, responsive and ready for changes.

STANDARDISATION

INTEGRATED PRODUCTION

MASS PRODUCED

MADE TO MEASURE

TOP DOWN

RESPONSIVE

HIGH COST OF OWNERSHIP

LOW COST OF OWNERSHIP

COMPLEX INTERFACE

EASY INTERFACE

EASY &
RESPONSIVE

“EASY & RESPONSIVE” THE NEW MANUFACTURING SYSTEM

TWO INTEGRATED CELL SYSTEMS

TO ANSWER THE NEED FOR
PRODUCTIVITY AND FLEXIBILITY

1 > HIGH PRODUCTIVITY



2 > HIGH PRODUCTIVITY



STRONG REASONS WHY

FLEXSTORE EL

- Higher productivity with Batch One management
- More dynamic order management
- Greater flexibility with a streamlined and efficient production flow
- Greater integration in the sawing and nesting processes
- Higher general system performance and efficiency
- More efficient material logistics with consequent workforce reduction
- Higher end-product quality thanks to the “no-sliding” motion
- Savings in material use thanks to process waste management
- More available space thanks to the intelligent management of mixed stacks of materials



THE AUTOMATED STORAGE SYSTEM WITH A SINGLE TECHNOLOGICAL “HEART” FLEXSTORE EL

SCM Group Engineering presents at Xylexpo two integrated and highly-automated production systems that provide the best answers to the two main needs of the furniture industry: production optimisation for those seeking high production capacity, and competitive versatility to obtain the maximum out of “batch one” processes.

Serving as a hub for two production flows, the Flexstore EL automated storage system, a physical expression of dynamic and intelligent automation, can interlock with the various machines that are part of the process with high

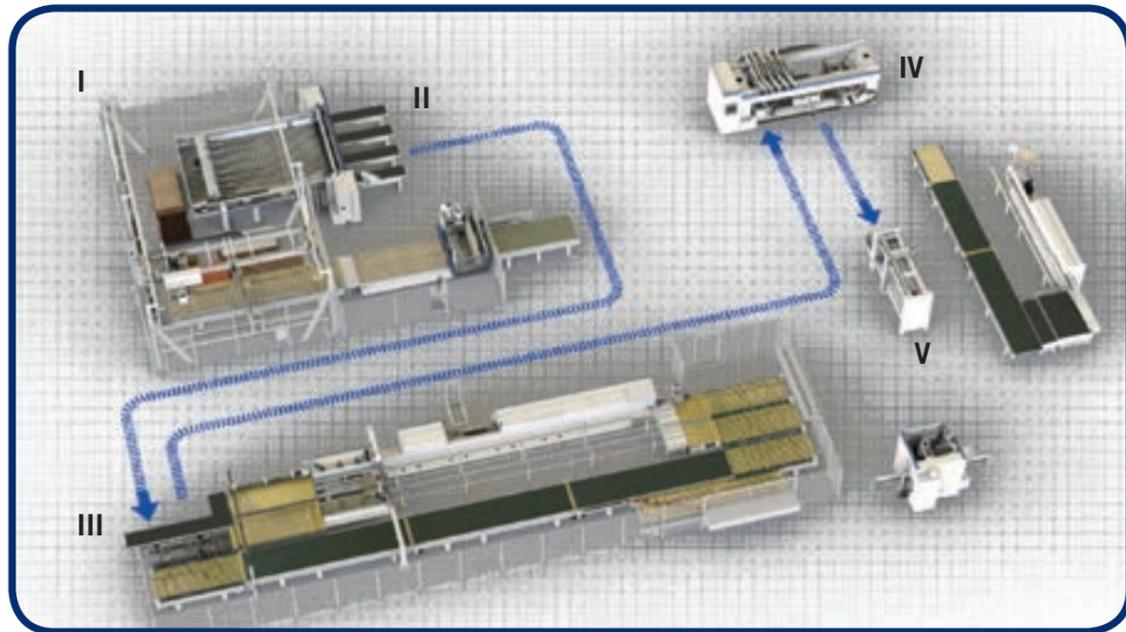
precision, careful handling of materials and optimised performance. **Managing a variety of panels of different sizes and materials**, now required from any type of company involved in the production of furniture, **has become easier today** thanks to the automatic handling offered by Flexstore which is run by the **Watch Store** storage management software application, developed entirely by the SCM Group. Using Watch Store, **space organisation and material storage are always under your control** and can be managed by any operator using a single front-end interface.

Flexstore is a fully-“responsive” solution which can adapt itself to run various flows in tight spaces, offered in a wide range of modular combinations to fulfil the needs of various types of industry. At Xylexpo, Flexstore EL will serve as a hub for production flows that favour, in one case, productivity and, in another, flexibility. A **technological “heart” that powers the modern production process with a versatile ability to adapt itself to any situation.**

EASY & RESPONSIVE

1

CELL SYSTEM WITH HIGH FLEXIBILITY AND HIGH PRODUCTION CAPACITY



PRODUCTIVITY: 1,000-1,300 PIECES PER SHIFT

The system consists of:

- I The integrated **Mahros Flexstore EL** automated storage system.
- II The **Gabbiani Galaxy 3 110** single-blade beam saw with the new **electronic carriage** offering extremely competitive performance. The saw comes with a **Flexcut 1/S** single-gripper unit, the perfect companion for achieving greater flexibility and higher performance, now also equipped with a rolling bed for delicate materials.

III **Stefani Easy Order** squaring-edge banding cell.

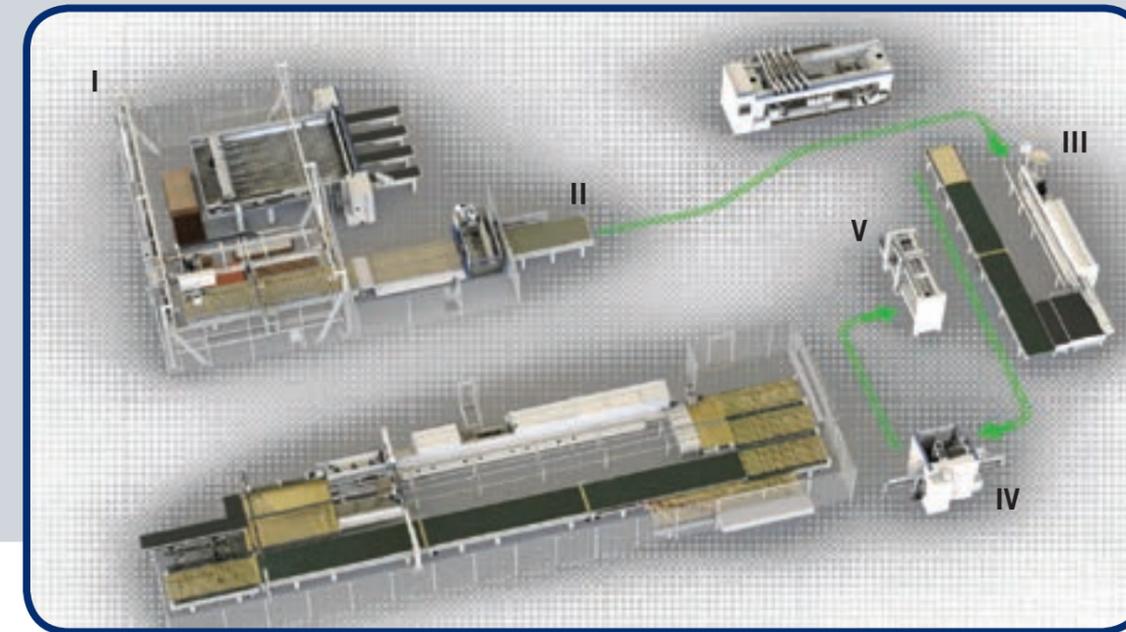
IV The **Morbidelli Powerflex S** line boring machine, a ground-breaking tool for the furniture industry setting new production standards: **up to 30 panels a minute.**

V **The CPC Action** clamp unit, a highly automated solution for furniture assembly.

2

CELL SYSTEM WITH HIGH FLEXIBILITY AND MEDIUM PRODUCTION CAPACITY

EASY & RESPONSIVE™ THE NEW MANUFACTURING SYSTEM



PRODUCTIVITY: 800-1,000 PANELS PER SHIFT

The system consists of:

- I The integrated **Mahros Flexstore EL** automated storage system.
- II The **SCM Pratis S** machining centre for nesting processes, offering such new **features** as the new labelling management controlled by the Xilog Maestro software application, which makes the entire process far easier to run.
- III The **Stefani Solution XD** industrial edge bander, ideal for producing high-design furniture

- IV The **Morbidelli Cyflex hp** drilling centre, **one of the most eagerly awaited products, with its promise of increased productivity.** This solution, which occupies a space of less than 10 sq. m., boasts shorter cycle times than any other product available on the market.
- V **The CPC Action** clamp unit, a highly automated solution for furniture assembly.

GAUTIER, 50 YEARS OF PASSION AND AUDACITY

The journey and evolution
of one of Europe's leading furniture makers.

Established in Vendée in 1960 by Patrice and Annick Gautier, the Gautier company underwent a strong expansion in its early days and soon became a leader in the children's furniture sector. Originality and quality are the marks of this brand.

Creativity is the driving force behind Gautier's development and diversification. The company has evolved with the times and, in the 1980s, created an innovative concept for the furniture industry: the bedroom as a personal space for children. At the same time, it began creating adult bedrooms and office furniture. The late 1990s saw the launch of the first living room collection, followed by walk-in wardrobes in the early 2000s, with collections becoming more and more popular with customers.

In 2005, Gautier revised its distribution circuit and launched its first franchise. A hundred or so more followed in France and abroad (Belgium, Saudi Arabia, India, Bulgaria, Morocco, Russia,...).

Gautier is in touch with the times and market requirements. In 2006, the company launched environmentally friendly design for its products. Furthermore, the 85,000 tonnes of wood consumed annually come from local sustainably managed forests or from recycling. Priority is given to ecological products in the choice of raw materials, transportation for the supply and delivery and recycling the waste wood material. etc ...

In 2007, Gautier became the first French furniture maker to receive triple ISO 9001, ISO 14001 and OHSAS 18001 certification for quality, the environment and workplace health and safety.

In 2010, Gautier had more than 50 franchised stores throughout the world and was continuing development of the scheme. In 2016, this number had already doubled, allowing Gautier to bolster its export success which accounts for 25% of the company's turnover.

Directed by Chairman Dominique Soulard and Managing Director David Soulard, Gautier today has approximately 930 employees and has 3 manufacturing sites, all located in Vendée, historic area, where the company was founded.

In terms of innovation, Gautier is always at the forefront and actively involves its employees in improving the production process and launching new products. **Innovation is also at the heart of its manufacturing process.**

In 2015, Gautier strengthened its industrial prowess by investing on its Boupère site in Vendée, mainly dedicated to the new FLEX machining line. Gautier entrusted most of this new investment, involving 1500 m² of the premises, to the Italian SCM Group. In particular, **the line includes two Morbidelli Author 924 drilling centres, one Morbidelli Author M600 machining centre and Mahros handling system.**

With this investment, Gautier's aim was to improve performance remaining always competitive. Target needs were flexibility, the ability to create more complex designs, improving quality, reducing the duration of the manufacturing cycle, increasing production capacity where necessary, consideration for working conditions and energy savings and, lastly, reducing batch size and manufacturing time for pieces.

One of the main objectives sought from this new line was **being able to dispense with the operator during adjustment phases.** Only one operator (excluding handling and programming) is required for this line, which has two main functions: shaping/routing and boring. Routing is also possible, as



"EASY & RESPONSIVE" THE NEW MANUFACTURING SYSTEM

Case History: GAUTIER (FRANCE)

well as dowel insertion. Stacks are conveyed and martyr panels are handled automatically. Production is according to models in order to best meet throughput optimisation constraints and assembly requirements.

Today, several skills work alongside each other on this new installation. The rigour and quality of training required to operate this unit are the keys to achieving the set objectives.

SCM GROUP also provided a custom software monitoring system to manage the unit and implement a production list as well as real-time monitoring of the flow of the various products on the line. This system optimises the intervals between pieces as well as feeding onto the line. The two islands (shaping and boring) are connected via an automatic handling device, enabling the feeding, accumulation and output of panel stacks. This intermediate conveyor has a monitoring system for communication between the shaping and boring stations. Martyr panels transport pieces between the shaping and boring stations. The martyr panels recovered from the start of the unit (shaping feed) are handled automatically by the monitoring system so they can be reused as they leave the unit (boring output) to be distributed with the stacks of finished panels.



Regarding this investment, Olivier Hulot, Industrial Director, says: "We chose SCM because the company's offer met our specifications most closely, providing relevant and innovative custom solutions. Moreover, we knew the reliability and quality of the SCM Group from previous investments.

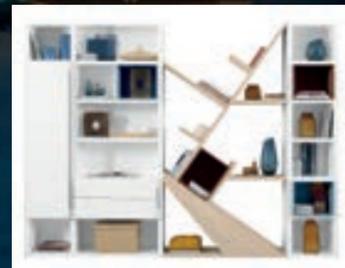
During the project, we particularly appreciated the ability displayed by the SCM design office to adapt and respond to our specific needs, particularly with regards to the advanced and complex functions for line monitoring."

This special project increased the know-how of both Gautier and SCM.

Acquisition of this new production tool is a further step in Gautier's development, with the company understanding that to stay on top of heap, it is important to be visionary, innovative and creative, while not forgetting the human touch. This is certainly the path pursued by the Vendée company, which, at the start of 2016, launched the online sale of its products for the French and English markets. Yet another way to move with the times.



morbidelli
mahros



WORK PHILOSOPHY OF PRODUCERS FOR THIRD PARTIES

SCM Group's technological treasure
in the service of panel processing
excellence

"EASY & RESPONSIVE" THE NEW MANUFACTURING SYSTEM

Case History: PANTAREI (ITALY)

Pantarei is one of the leading Italian panel processing companies that work for third parties. Meeting its owner, Domenico Londei, is like interviewing a "philosopher" in the field of furniture components: "The contractor," he says, "is at the forefront of technological research. Every day we meet with major technology producers, and out of this exchange with our partners, like SCM Group, technological progress is created."

"We work seven days a week to better serve both the Italian and foreign markets, and thus satisfy a very diversified demand: from companies that prefer high productivity and large numbers to those that focus on end-product customisation and consequently interested in Batch One processing."

"The relationship between the two companies was established years ago," recalls the SCM Group Area Manager, Gianluca Mattioli, "when SCM Group Engineering designed an innovative solution for the drilling process, based on experience accumulated with the Morbidelli machines. It was a powerful solution that was much appreciated, and that led to an order of a second drilling line, then to a third, fourth and fifth orders for lines of machinery." "Pantarei could assess by itself the level of reliability of our machines and efficiency of our very fast service, which guaranteed that the entire production system was always fully operational – a critical feature for a company that runs 24 hours a day with three shifts. The relationship between SCM Group and Pantarei is based on professional approach and guaranteed service: We don't just sell machines, we provide advanced solutions, designed with great expertise to meet every production need, even when dealing with the most ambitious projects."

Operating today at the Pantarei plant are drilling and boring solutions

that stand out for their technological excellence: two flexible Morbidelli Author 924 boring lines, with automated Mahros loading and unloading; a **Morbidelli Powerflex** boring line, **which is the top performer among all boring solutions on the market, with extremely high production capacity and great flexibility, producing up to 80,000 panels per shift;** currently being installed is the **Morbidelli Powerflex S** boring line, the **latest Morbidelli creation, a perfect solution providing both high production volumes and great versatility, required for "just in time" drilling.** To complete its process of customisation, Pantarei now operates a Morbidelli Author M400 machining centre with a 5-axis spindle head, used for drilling oversized pieces and folding joints; a perfect solution for customising kitchen shelves with automatic insertion of shelf supports.

Pantarei has decided to expand its ties with the SCM Group to include also panel squaring and edgebanding machines: soon a highly productive panel squaring-edgebanding line is to be installed at the Pantarei plant, offering a processing speed of up to sixty metres a minute, the finest Stefani edgebanding solution. It is the harbinger of a new technological season between SCM Group and Pantarei.

Written by Pietro Ferrari for Industria del Mobile





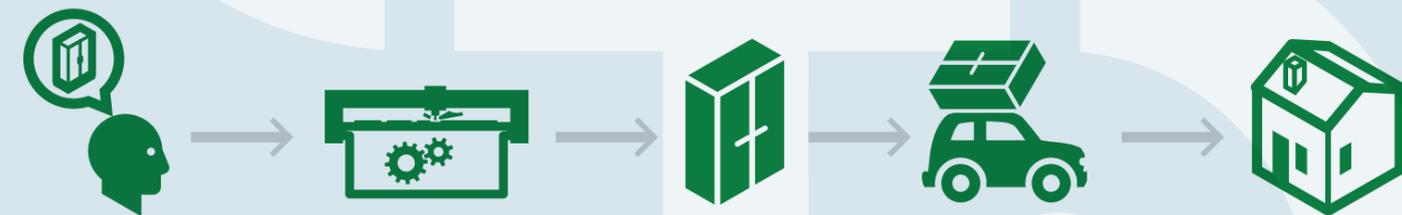
“CLOSE TO CUSTOMER” THE EUROPEAN PROJECT DEDICATED TO THE FURNITURE ON DEMAND

“EASY & RESPONSIVE” THE NEW MANUFACTURING SYSTEM

“Close to Customer”, a project financed by the **European Union**, is a product of over three years of research work performed with the participation of, besides SCM, ten European partners, including leading companies in their respective industrial sectors as well as universities (including the Rosenheim University of Applied Sciences, Milan Politecnico and SUPSI University).

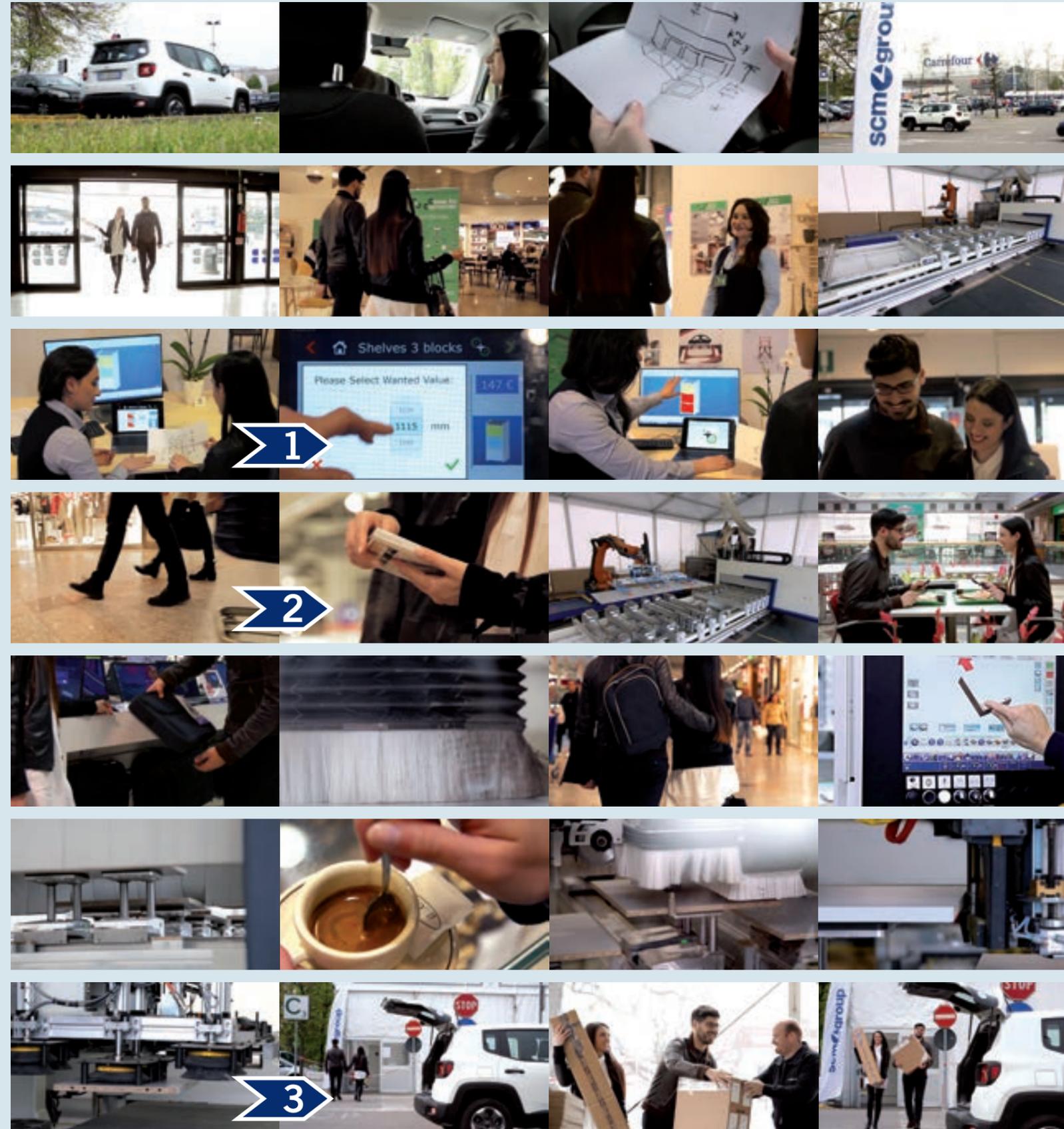
The project is based on the concept of **“live on demand” manufacturing** – that is, totally automated – of furniture products that can be configured directly by customers using an app to fit while visiting any specific shopping centre. It is all based on the **innovative Morbidelli Planet P800 machining centre** which can perform all the furniture machining phases – drilling, milling and edging – in tight production times, which the end-customer can dedicate to shopping.

<http://www.mckn.eu/projects/CTC/>




Close to Customer

-  **1** Choose the furniture item you prefer and its composition.
-  **2** Do your shopping while we make that item for you.
-  **3** Collect it when you leave the shopping centre.



**STRONG
REASONS
WHY**

```
le dblTemp;  
again = true;  
  
le (again) {  
iN = -1;  
again = false;  
getline(cin, sInput);  
system("cls");  
stringstream(sInput) >> dblTemp;  
iLength = sInput.length();  
if (iLength < 4) {  
again = true;  
continue;  
} else if (sInput[iLength - 3]  
again = true;  
continue;  
} while (++iN < iLength) {  
if (isdigit(sInput[iN])) {  
continue;  
} else if (iN == (iLength - 3) ) {  
continue;  
}
```

LATEST GENERATION SOFTWARE TO MAKE YOUR JOB EASIER

MAESTRO SUITE, THE ULTIMATE SOFTWARE PACKAGE, HAS SUCH POWERFUL FUNCTIONS THAT YOUR EVERYDAY TASKS WILL BECOME UNBELIEVABLY SIMPLE.

EASY &
RESPONSIVE

SOFTWARE SOLUTIONS

"EASY & RESPONSIVE" THE NEW MANUFACTURING SYSTEM

"The term that embraces all the developments currently underway in the Machinery and Automation sphere - including woodworking systems - is 'Industry 4.0'. This collective term that summarises the concept of digitalizing added manufacturing value is a process that will lead to completely automated and interconnected industrial production. Without doubt, one of the foundations of this 'revolution' is **HUMAN MACHINE INTERACTION** that includes increasingly common "touch" interfaces and augmented reality. At the Scm Group, we have been working to achieve this goal for some time now via a series of intermediate milestones that seek to significantly improve the software on our machines", explains Federico Ratti, the Scm Group Technical Director.

"Software plays a key role in deciding machine purchases and **the existence of an interface is a decisive factor** for production investment managers when choosing a product. Companies, whether they are major industrial enterprises or individual carpenters are in search of technology that is easy-to-use, intuitive, error-free and does not involve reading instructions. Production solutions also need to transmit a positive user experience and a look&feel in line with the technological design of today's consumer electronics" - continues Federico Ratti. "**High-powered software that has a poorly designed user interface loses most of its value.** As most of the user's interaction with the machine depends on the user interface. This means that the user interface determines how far users can do what they need to do with their machine in a way that is simple, easy-to-understand and effective."

"One of the main goals of the Scm Group's current R&D investment plan is to develop **new software equipped with interfaces that are as close to SMART devices as possible**, as machine operators are used to operating similar devices in their everyday lives. EASY & RESPONSIVE means user-friendly software that can meet the needs of constantly changing production requirements."

INTERVIEW WITH
Federico Ratti
Scm Group Technical Director

EASY &
RESPONSIVE

"EASY & RESPONSIVE" THE NEW MANUFACTURING SYSTEM

SOFTWARE

AN SCM SOFTWARE FOR EVERY KIND OF TECHNOLOGY

SOFTWARE SOLUTIONS



MAKING CNC WORK CENTRES EASY-TO-USE

The Scm Software Suite consists of specialised software that allows customers to program and use machines rapidly and intuitively. The world of CNC work centres is completely covered by the MAESTRO Suite, a product that allows machines to be commanded by designing the workpiece directly and programming it immediately, thanks to the creation of a general metalanguage that can be applied to any Scm machine. In other words, the customer can create a workpiece program in a centralised context and then apply it indiscriminately to any of the Scm work centres. The machine's configuration will then generate a work program according to how the system is set up (which operating units are included and which work and tool tables).

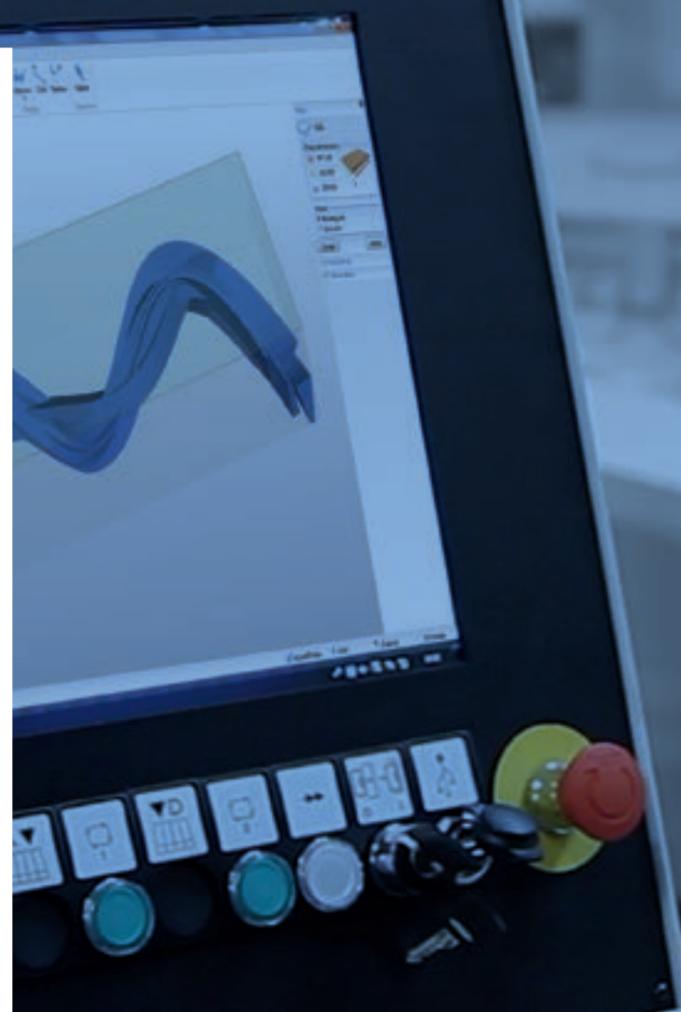
Maestro is not only a general software, it also features a level of scalability that offers a complete set of specialist functions that allow SCM customers to tailor machines to their specific requirements. Nesting features, window element processing, shaped panel edge-banding, drill hole optimisation and process simulation are just some of the

MAESTRO

software options that are ready to help operators achieve greater productivity from their systems.

Another distinctive feature of the **MAESTRO** software suite is the way it is completely open to specialist product third party house software used for making wooden windows and doors or which require vertical software for cabinet production. The overall aim is to guarantee customers the best and widest range of choice, an essential factor in a sector like that of windows and doors where the personalisation of the end product has always been tied to specific geographic markets.

The **'MSL Connector'** interface, developed by Scm, is a programming language available for house software that allows third party software to interface quickly and easily with MAESTRO and Scm Group machines.



SOFTWARE



MAESTRO NEST



MAESTRO EDGE



MAESTRO CABINET



MAESTRO 3D



MAESTRO APPS



MAESTRO LABEL



MAESTRO PRO VIEW



MAESTRO WD



MAESTRO MSL CONNECTOR



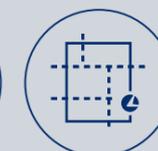
E-TOUCH

E-TOUCH – edge-banding under complete control

The edge-banding process is particularly complex and machine adjustments depend directly on the technological competence of the operator. Scm E-Touch software contains all the necessary process know-how and asks the operator to provide only the result they are looking for by entering a few simple parameters. The software defines all the machine adjustments that characterize the process required to obtain the highest quality with maximum productivity.



WIN CUT



OTTIMO CUT

WINCUT and OTTIMOCUT – Maximum efficiency every time

Optimising panel saw operation is a winning element for getting the best from this process. Minimum calculation times, a reduced number of cutting schemes and minimum scrap are the solutions that characterize the specific **WINCUT** and **OTTIMOCUT** software options for Scm panel saws.



QUICK LINK

QUICKLINK – From CAD to your home in just a few clicks

QuickLink is a 3D production woodworking software: an intuitive interface that combines user-friendly data input with rapid simulation and processing and a high degree of adaptability, thanks to different processing strategies. It also features the new **Nesting functions** for X-lam walls.



WATCH



WATCH STORE

WATCH and WATCHStore – systems and magazine optimisation are not a problem

Systems and, even more, automatic cells are the solutions most sought after by medium-sized companies who are looking not only for technical solutions and high production rates, but also support for highly advanced system management and material logistics.

Scm has invested in the development of **WATCH** and **WATCHStore** software that help customers optimise machine management by means of a line supervisor that can create competitive benefits with regard to dynamic workpiece tracking, production reports and alarm and maintenance management. Moreover, when the cell is fitted with an automatic horizontal Flexstore magazine at the start of the line, a specific line supervisor function is able to optimize the magazine by managing the stacks dynamically in relation to the panel rotation indexes and production order mixes.

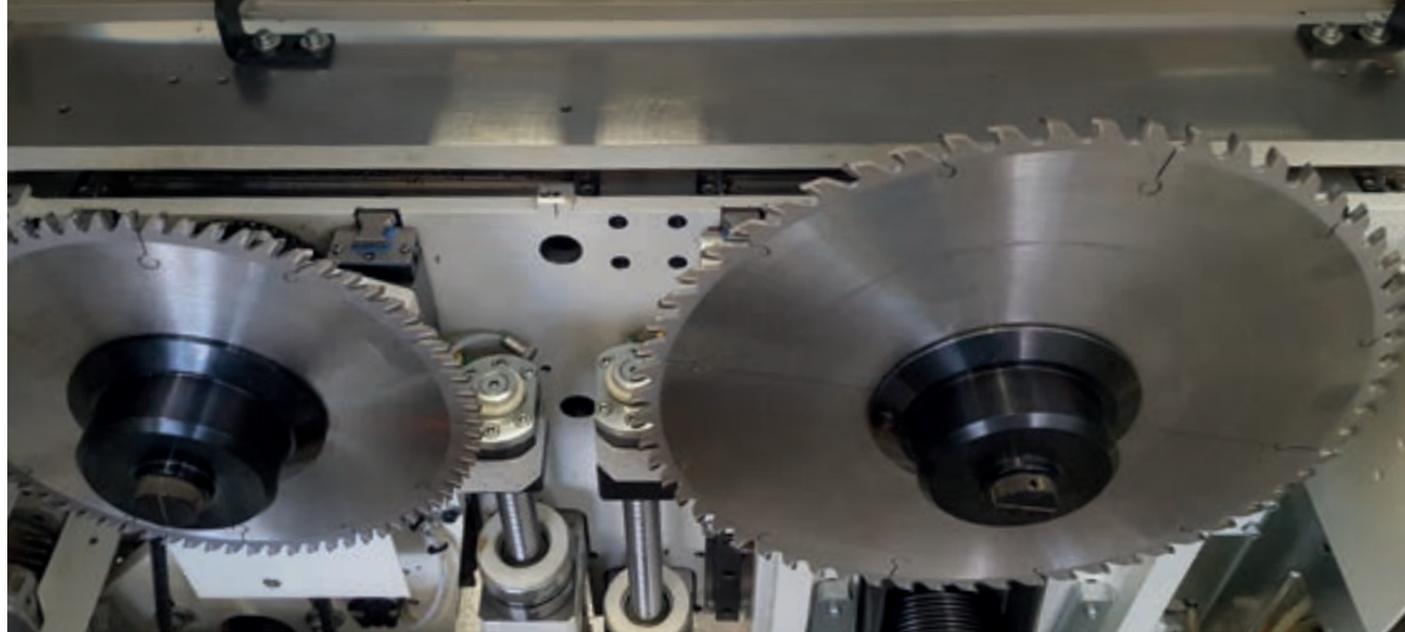
**STRONG
REASONS
WHY**

500 ENGINEERS BEHIND SCM MACHINERY

SCM GROUP BELIEVES IN HOW INNOVATION IMPROVES THE EFFICIENCY OF ITS CUSTOMERS. THIS IS WHY EACH YEAR 5% OF ITS TURNOVER IS INVESTED IN RESEARCH & DEVELOPMENT.

FURNITURE TECHNOLOGIES

NEW "HI-TRONIC VERTICAL STROKE" SAW CARRIAGE



Movement transmission	Rack and pinion
Sliding guides	Prismatic guides with recirculating ball
Main blade exclusion	With vertical movement driven by brushless motor
Scorer exclusion	With vertical movement driven by brushless motor
Max. blade diameter	430 mm
Scorer diameter	200 – 300 mm with postforming
Main blade motor power	15 -18,5 (50 Hz)
Scoring blade motor power	2,2 kW (50 Hz)
Scorer adjustment	Electronic vertical and axial
Max. feed speed	40 m/min (max. panel stack height 108 mm) 50 m/min (max. panel stack height: 90 mm) 60 m/min (max. panel stack height: 72 mm) 110 m/min (single panel)

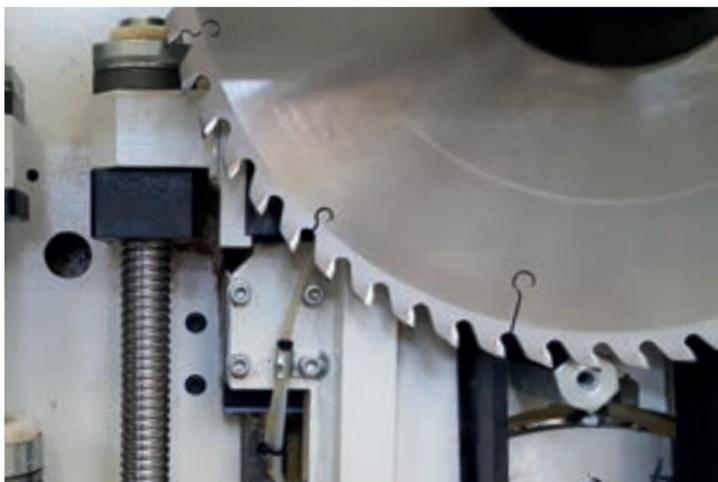
HIGH PRODUCTIVITY
thanks to the reachable high speeds

VERSATILITY
due to the possibility to accommodate

EASY MAINTENANCE
by the operator advanced options

COMPETITIVENESS
excellent price/quality ratio

- The device consists of:
- Optimized blade stroke
 - Rapid blades unlocking with "AKE" mechanical flanges
 - Pressure beam stroke with self learning
 - Post forming device
 - Electronic adjustment of the scoring unit
 - Execution of grooves
 - Slots execution device



THE PERFECT GRIP FOR ANY MATERIAL, EVEN THE SOFTEST ONE



The pressure beam with axis controlled by pc is positioned at the cutting height entered by the operator, ensuring a perfect grip of the pieces during cutting operations. The surfaces of materials to be processed (honeycomb wood, polystyrene, cardboard, plastic and other materials) will stay untouched. The new optional device is now available for the complete SCM and Gabbiani beam saws range.

CARDBOARDS



PLASTIC



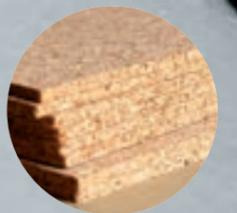
POLYSTYRENE AND SIMILARS



HONEYCOMB WOOD



CORK



PANEL SAWS



PANEL SAWS



ARKEN IN UK “MAKING AN IMPACT”



A two-year extension to a massive refit contract gave Arken the confidence to invest in new machines - but the company needed to be up and running fast.

Arken is a company that's expanding - and rapidly. A specialist in point of purchase displays, Arken has grown from its Newmarket site, equipping a new additional factory in Sandy in order to fulfil an extended contract for beauty displays for a major high street retail chain. The contract, which will see the company producing cabinetry for 6-700 shop refits over the next two years, provided the confidence and stability for Arken to invest in new machinery - but, having placed the order at the end of November 2015, it needed to be up and running by the middle of January.

“Arken already had Morbidelli in its Newmarket site, so when we were approached for a beam saw, a point-to-point and an edgebander - all to be commissioned by January - we knew we had to move fast,” confirms Roger Gabb, SCM's area sales manager. “The work Arken needed to do was very repetitive so, although they already had nesting in Newmarket, we conducted some trials in the workshop and it turned out that, although it meant more work for the operator, a beam saw with a pod and rail point-to-point was much faster.”

Arken decided on SCM's Sigma 90 Impact, a beam saw that Roger describes as a “solid, middle-of-the-range workhorse”. It's a substantial machine with a 4.5 metre x 4.3 metre bed - probably larger than Arken needs right now, but one that could be commissioned

within the timeframe and offered the all-important speed needed for the refit contract. *“Cutting 2.8 metre panels with a bed size of 4.5 metres x 4.3 metres means the operator can use one of the side tables as a storage point,” explains Roger. “But there is plenty of flexibility in the machine and it includes features that will help Arken reduce downtime. “Pneumatic blade unlocking is a key feature of the Sigma 90 Impact. It means no spanners and faster blade changing.”*

“Arken's machine is also fitted with double automatic side aligners that are ideal for cutting narrow pieces. The piece is pushed against the fence on both sides of the cut for greater accuracy. Especially if you are cutting a number of pieces, the automatic side aligners will reduce the likelihood of the workpieces wandering off as they are being cut.”

Most of Arken's work involves faced panels that benefit from the conical scoring blade on the saw carriage. However, should Arken's requirements change in the future, the carriage on the Sigma 90 Impact provides for independent raising of the scoring blade, reducing wear and blade changes when cutting unfaced panels. “There's another key feature to the saw carriage that also increases blade life,” adds Roger. “The main blade benefits from optimised height adjustment and rises to precisely the height required to cut the panel, or panels. Because the blade isn't made to work when it's not needed, blade life is increased.



Roger Gabb

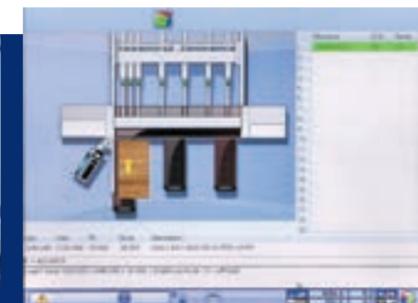
“This particular model is fitted with a bigger-than-standard 20kW motor, so if Arken wanted to cut a stack of panels, the saw will cope with it easily. It has a hard material locking device, too, so if they step up to harder materials, the machine will cut them easily. To cater for specific cutting patterns, it's also fitted with 13 places for grippers but, as Arken is using quite large panels and producing pieces down to only 140mm wide, the seven grippers the Sigma is fitted with are sufficient.”

With its clear display, the Sigma 90 Impact is easy to program. The operator works from his cutting list, entering piece sizes into SCM's 'Cutty' that produces a program for the number of sheets to be cut. A three-dimensional

simulation shows which panel is being processed. The software can be upgraded to an Office version of Ottimo if a full-blown sheet management system is required with spreadsheets. Arken's Sigma is equipped with air flotation tables that help with front loading. Grippers take the panel to the back of the machine and feed it forwards after each cut. Off-loading is also at the front. SCM has supplied a vacuum lifter that will be retro-fitted once the floor has been strengthened.

“Given the tight time frame, it's been quite a task to get everything installed and running,” added Roger. “And the Sigma Impact seems to have made an impact already.”

text and images by Melvyn S Earle, Furniture Journal copyright.



HIGH QUALITY EDGE BANDING

**Aesthetic perfection, high functionality,
endless benefits.**

The perfect aesthetics, “cost effective” production and maximum care and attention to the materials used, are the qualities common to all edge gluing technologies that SCM GROUP provides. Vision that is expressed in the new solutions AirFusion, PuBox L and SGP glue pot, that extend the already wide range of high quality technologies for the edge gluing, like SlimLine.

AIRFUSION

With **AirFusion** can be achieved an excellent finishing quality of the panel. This technology allows the edgebanding without the use of glue and makes **invisible the junction line between edge and panel** in an incredibly simple manner and with low investment. The AirFusion technology is compatible and can be PERFECTLY integrated with the traditional gluing technologies to allow maximum diversification of production in a single machine. It is available on the complete range of SCM GROUP's edge banders, starting from the Olympic K 360 range, with application speed up to 25 m / min.

PU BOX L

Thanks to a new compact design, the new PU BOX L premelter for polyurethane glue **guarantees the performance of the PUR glue at the highest level by optimizing the consumption with the melting of the glue only when requested.** The exclusive CFS cooling device prevents the undesirable increase in viscosity and, therefore, the progressive aging of the glue left in the melting chamber. The specific design of the melting chamber, as well as the direct hermetic coupling on the glue tank, allows the maximum degree of protection against humidity without the use of nitrogen gas, even in case of non-use of the device for several days. These solutions grant high performance of the glue and always perfect finish of the panels.

SGP GLUE POT

Smart dosage management, fast glue changeover, maximum ease of cleaning of all parts, are some of the features of the innovative SGP glue pot.

SGP has been designed to minimize the amount of recirculating melted glue, in order to prevent the undesired qualitative decay and favour the concept of **always new glue.**

The exclusive **SCM GROUP's patent** also allows to instantly stop the glue pot and the exposure of the glue to the roller, thanks to an efficient locking system.

Panels of different types or thickness, or with different types of glue, can be always **perfectly processed** with ideal glue dosage and minimal glue line.

A specific software and an application roller with a new and unique design optimize all the qualitative production parameters at any time.

The SGP glue pot allows an extremely flexible and lean production, as it can work with both EVA and PU glue; it can be loaded either manually or with automatic premelters depending on the required productivity and the glues can be interchanged between them thanks to the automatic cycle of glue exchange / cleaning with discharge on a removable collection box.



EDGE BANDERS

TONA BATHROOM FURNITURE HE WHO HESITATES IS LOST

Tona Bathroom Furniture waits for no one when it comes to a purchase that will thrust it ahead of its peers.

Like most astute businessmen, Frank Shen is not one to pass up on a golden opportunity when he sees it. It took him a mere 30 minutes—from the first contact to final purchase—to say ‘yes’ to the Stefani Solution, a new edgebander offered by the SCM Group that can create ‘J’, ‘L’, and 45-degree-angle profiles. There was no hesitation. The chairman of Tona Bathroom Furniture saw samples brought to his Taizhou City office and immediately liked the machine behind it. He hadn’t even seen the real thing. “Whatever it could do, I knew this was what I was looking for,” said Mr Shen, “the discussion after that was more about after-sales support.”



THE NEED FOR SPEED

Shopping for ideas at the Milan furniture fair last year, Mr Shen discovered that handle-less door panels were currently trending in furniture and interior design. Since then he had been on the move, looking for a realistic solution to reproduce this look for his range of bathroom cabinets, which are mostly exported to Europe.

The Stefani Solution achieves exactly this. ‘J’, ‘L’, or 45-degree-angle profiles can be done in one fell swoop, eliminating laborious procedures of cutting, routing and manual spraying. In doing so, the process not only saves time and labour, it also reduces harmful emissions from paint spray. Common edgebanders on the market can only process flat edges.



It arrived in late March and was installed by two engineers from Italy who took the chance to train and certify another 4 engineers from China, Tona will have a 24-hour remote assistance support guaranteed by the Chinese team at the Shenzhen service centre during the day and backed by the Italian team during the night shift”



from left: Giovanni Casadei, General Manager, SCM Group China Trading; Frank Shen, Chairman of Tona Bathroom Furniture; Marco Rampichini, APAC regional Manager, SCM Group; Peter Liu, Chief Marketing Officer, SCM Group

A DIFFERENT TYPE OF AMBITION

At 44, Mr Shen is a rare breed of bosses in China—where price is often the deal breaker when it comes to finalising a sale. But to him, money isn’t everything.

“There is so much potential in this investment,” he said. “I’m one step ahead of everyone in the industry, that’s an advantage isn’t it?”

Tona, founded in 2002, is one of the market leaders in China’s industrial cluster for bathroom furniture manufacturing. The region comprises Taizhou, Xiaoshang and Pinhu in Zhejiang province. By 2007 the company had fixed its vision on design-based, high-end bathroom furniture for the North American and European markets. In December last year, a new e-commerce channel was launched to tap into the domestic market. Its target audience is young families as well as the millennial generation of young, trendy consumers in pursuit of taste and style.

In 2015, Tona’s total sales reached RMB 173 million yuan (US\$26.8 million). This year’s target is set to increase 30%.

“I dream to be listed on the stock exchange one day,” said Mr Shen. 420 workers (including 12 designers) on Tona’s payroll are constantly working towards this goal. A lot also depends on equipment that can transform good design into reality whilst achieving better yield and efficiency. To this end, the Stefani Solution is one of the investments that will take this ambition forward.

Since the demand for handle-less doors panels is expected to accelerate, Mr Shen has already planned to buy another machine down the road.

He said, “Handle-less doors are going to trickle down to Asia, it won’t go out of fashion so soon. Anyway, if the design changes, the Stefani Solution can revert back to ordinary functions.”

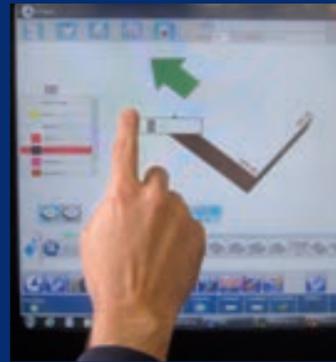
“It is certainly a revolutionary machine.”



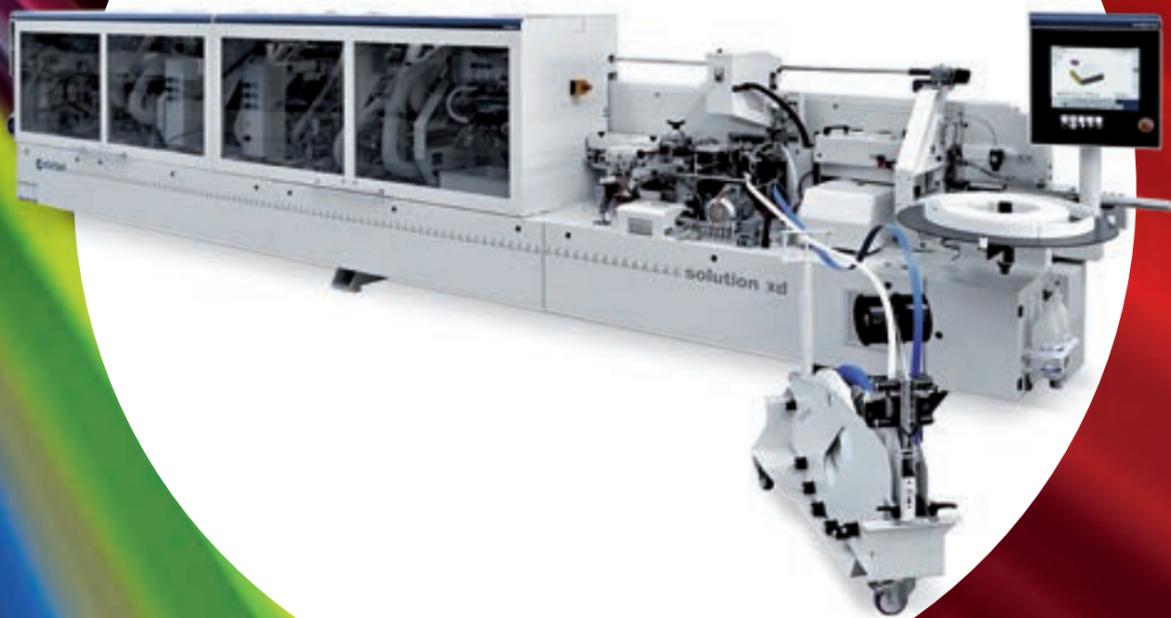
Text: Panels & Furniture Asia (PFA)
Images: Tona Bathroom/ PFA
This article was first published in Panels & Furniture Asia (May/June Issue)

J-shape panel processing

INSPIRING DESIGN AND CUTTING-EDGE TECHNIQUE



The new **E-Touch** interface is a veritable virtual operator that allows the machining of any size and mix of orders in incredibly short times, due to the self-learning function and the possibility of managing the entire process so that end users are free from thinking about how to produce something and focus on what to produce.



SOLUTION XD

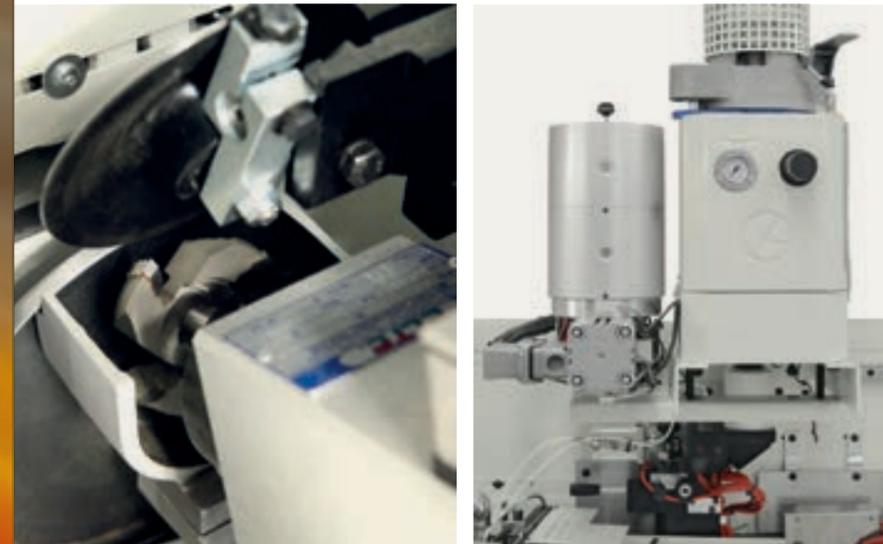
High productivity and low operating costs, profitable returns on investments, higher machining quality than any standard, technical perfection without compromises, maximum finishing quality, the possibility to contribute to the construction of high design furniture, utmost flexibility, software and Apps that allow for a very fast passage from programming to production. These are just some of the highlights of the new **SOLUTION XD range**, the most current synthesis of **Stefani Know How** in the industrial edgebanding sector.

SOLUTION XD is the perfect solution for super-optimised, highly integrated and extremely evolved production situations. Thanks to the new generation of **“Heavy Duty”** trimming, chamfering and edge scraper units, the more rigid supporting structures with **55%** lighter dynamic parts compared to previous versions, and also to the possibility of extra precise connection between tool and motor Zero-Lock, end users can generate a high quality production process with the utmost attention to the characteristics of the panels being machined, especially extremely delicate panels.

The new generation of corner rounding units with 2 and 4 motors, **Round 2** and **Round 4**, allow for the creation – with practically negligible set-up times – of furniture components for any aesthetic style, by being able to machine three different radiuses with speeds up to **30 metres per minute** on any type of material, including wood.

SOLUTION XD, offers the broadest range of finishes for the edge/panel joint, allowing end users to use EVA glue, optimised PU glue, and the **AirFusion** joint free technology.

THE INDUSTRIAL EDGE BANDER ALWAYS UP TO YOUR EXPECTATION



High performance and capability to process panels with **solid wood lippings up to 22 mm**. These are the main features of Solution MD, the Stefani edge bander designed for all companies who require continuous processing of small and large panel batches.

On top of the well-known strength points, the “SGP” glue pot and AirFusion technology, Solution MD also offers **greater versatility** with the two available pre-melting units: one for EVA glue and the “PU BOX L” for polyurethane glue. It is therefore always possible to use the two glue types achieving top gluing quality. Moreover, Solution MD ensures **high productivity** due to the automatic operating units, the **working speed up to 25 m/min** and the sturdy industrial machine structure. It is possible to **work edges with 3 different radii** with the use of fully automatic “Multiedge” operating units, that also allow error-free rapid setting-up amongst the different types of machining.

SOLUTION MD



MAIN PERFORMANCE:

Panel thickness:	10 - 60 mm
Edge thickness:	0,4 - 22 mm
Feed speed:	10-25 m/min

EDGE BANDERS



HIGH PERFORMANCE & COMPETITIVENESS AT ALL TIMES, NOW WITH NEW GLUING SOLUTIONS

Versatile and with good performance, Olympic k 560 is designed for all companies that require continuous and high quality production of a large number of panels even though they are all different from one to the next, and is now enriched with many solutions that guarantee always **the best machining on any panel type.**

Now available also for this model the "SGP" glue pot, the AirFusion technology and the **pre-melting unit for EVA glue** ensuring that "freshly" melted glue is always available inside the glue pot, for the best gluing of the edge to the panel. **Perfect results on all surfaces** are also obtained thanks to the controlled axes allowing all intermediate positioning of the **trimming and edge scraping groups**; this ensures an optimal edge banding even in the case of surfaces with different degrees of roughness, or panels covered with protective film. Controlled axes are also available for the upper presser, the infeed fence, the rounding group and the pressure rollers.

MAIN PERFORMANCE:

Panel thickness:	8 - 60 mm
Edge thickness:	0,4 - 8 mm
Feed speed:	12-18 m/min

EDGE BANDERS 



CHABROS INTERNATIONAL GROUP CHOOSES SCM GROUP

FURNITURE TECHNOLOGIES

Case History:
CHABROS INTERNATIONAL GROUP (QATAR)

Chabros International Group is a leading producer and supplier of wood, veneer and a vast range of products and materials for interiors and exteriors in the Middle East. With a wide range of specialised products, exceptional service and important know-how in the sector, the company is a market leader. It has a number of production units and many distribution points all over the Middle East, meaning that it can reach various types of customers, including joiners' workshops, carpenters' workshops, entrepreneurs and consultants.

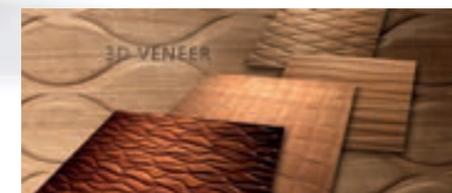
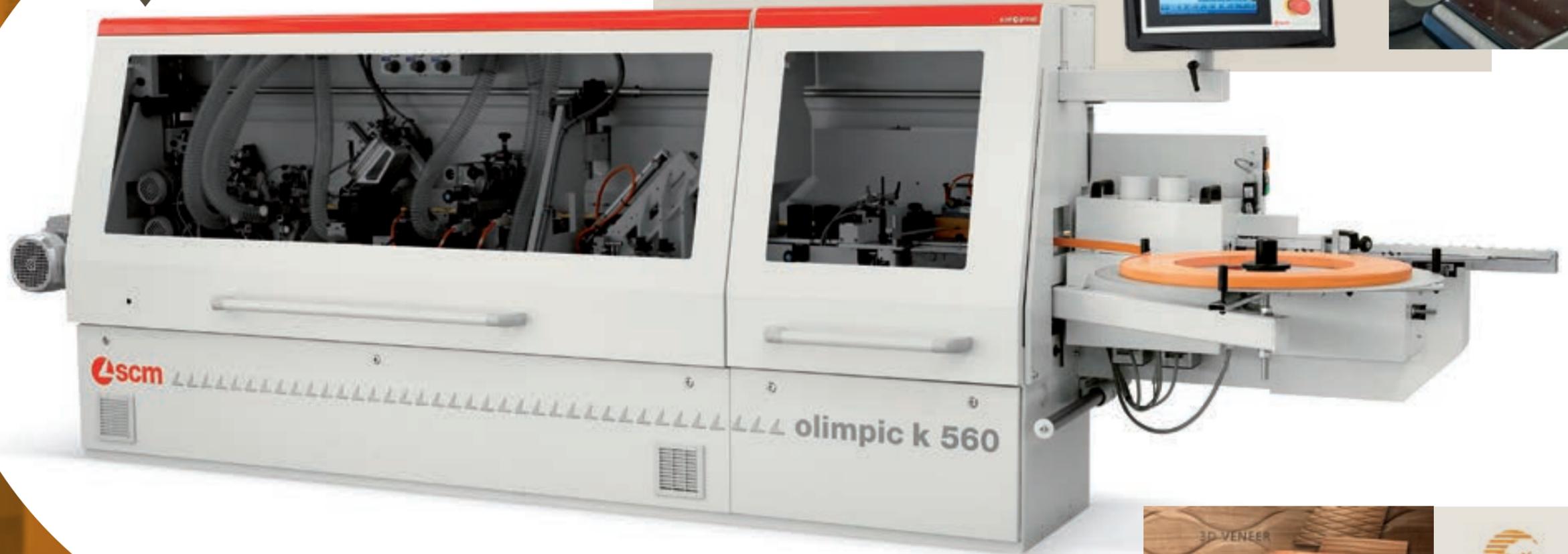
Established in the early 1960s, today the company offers an array of woodworking services, including sanding, pressing, parquet installation, and a wide range of interior and exterior products. The group's success is thanks to its ability to retain loyal customers and a strong focus on delivering results, always working responsibly and professionally.

Although maintaining that manual work is fundamental and therefore retaining a craftsman's quality in production, within **Chabros International** new technologies play a very important role in meeting market requirements. For this reason, the group decided to equip its workshop in Qatar with several solutions supplied by **Scm Group**, leader in the design, production and distribution of machines for the woodworking industry. Thanks to these technologies, **Chabros International** can reduce errors, optimise use of materials, cut costs, provide higher quality products, at the same time speeding up production processes. In particular, Scm Sigma Prima 67 and SI400 machines were chosen for panel sizing, two Olympic K560 for edge-banding and the Sandya 900 RRT for sanding. *"We decided to go to Scm Group and Basic Elements Solutions (Scm Dealer in Qatar), not just because of the wide range of high-tech solutions that it can supply, but also due to its reliability, safety and the excellent support that is guaranteed"* said Mr. Nicolas Allam (General Manager - Chabros International Qatar).

One of **Scm's distinctive features** is its **high level of specialisation**: the group has the widest range of solutions and technologies for the furniture industry, timber construction and craftsmen, covering all functions in the process and providing the catalogue with the largest number of products. Alongside this exceptional supply is the design of bespoke machinery and plants, the jewel in the group's crown, produced to satisfy specific market requirements. **Scm** also **provides excellent after-sales support**. This extraordinary service is the result of the know-how developed by **Scm** over its 65 years in business, the longest in the sector. It ensures a **lasting relationship** with customers and **long life** for the machinery supplied.



OLIMPIC K 560



THE REVOLUTION IN CNC EDGEBANDING

Morbidelli presents a **world exclusive: the latest edgebanding unit, installed on the planet p800**. The new unit optimises profiling and edgebanding operations of the most disparate types of edgings in the same program.

The new device, **revolutionary in its sector**, installed on a boring, routing and edgebanding centre, allows for the automatic change of the pressure and guarantees the fast and easy application of plastic and wood edgings, as well as soffforming machining operations, thanks to the **MAESTRO EDGE** software, which optimises all the machining phases and guarantees maximum productivity levels.

PLANET P800



The possibility of profiling minimum radiuses also inside the workpiece at high quality levels render **planet p800**, the highest performing workcentre on the market.

Planet P800, with Morbidelli technology, is the work centre designed with all the solutions to meet the client's future requirements. **We have designed and made available today what you will need tomorrow.**

- **5 times more productive** with the Matic worktables that require setup times of 4" to switch between machining operations.

- **zero limits** to the shapes that can be machined with the routing solutions with **4 and 5 independent and interpolating axes with continuous 360° rotation**. The production costs are lowered by 20%, with the **10 and 18 positions magazines** installed directly on the machine, as the tool replacements no longer affect machining times.

- **zero compromises** in the application of edgings with different thicknesses on the same panel. The edging feed system automatically and effectively adjusts to all edging thicknesses.

- **zero defects**, perfect edgebanding on complex profiles with the new gluing unit, which applies the glue directly on the edging and an exclusive **glue roller with integrated heating element** to guarantee gluing uniformity in any condition.

- **machining any type of edging in any situation**. The **numerical control Z axis** allows for the adjustment of the lower projection of the edging in relation to the worktable to centre it in relation to the panel, for example, to use dust edgings. The automatic adjustment of the height of the edgings feed system reduces unproductive times to zero, machining in batch 1. Utmost flexibility is ensured by the edgings magazine that can hold up to 12 different edgings.

**BORING, ROUTING AND
EDGE BANDING CENTRE**

morbidelli

THE KEY TO SUCCESS NOW AND IN THE FUTURE

As Sir Richard Branson once said: "Always give it a try. And even if you fail, pick yourself up and try again". This is the philosophy that guides Nikita Semenov, vice-president and member of the Board of Topol Group, a Russian company that is now the leader on the domestic children's furniture market, offering a wide range of solutions and having a large production capability.

"The history of the Group – says Nikita Semenov – begins in 1965 in the town of Votkinsk (in the Urals region, Russia), as a part of a huge military plant. Since Soviet times everything has been totally changed. It was a long path, along which Topol Group went through major transformations and extensions of the business. And now we can operate in different sectors, from oil&gas equipment to home appliances manufacturing, from construction and development to furniture solutions".

The jewel in the Group's crown is definitely the production of nursery and children's furniture, including cots and cot beds, storage units such as wardrobes, chests of drawers, baby-changing units, shelving, etc. A basic range of items has been created to meet the initial consumer demand, and this approach is being successfully used by the company focusing on pragmatic and affordable products. The company's best-sellers include a "convertible cot bed", which can be converted from a baby cot to a toddler's bed with a bedside table, chest of drawers and a shelf. Every month, Topol factories produce more than 10,000 different models of cots and cot beds and dozens of thousands of other products. These significant production volumes became possible not only because of favourable logistics with the factories' and warehouses' proximity to the raw materials and customers, but mainly because of huge investments in technology and high-performance equipment essential to the company's specific focus on consumer goods.

"Something on our factory that we're especially proud of – emphasises Nikita Semenov – is the **Morbidelli Author M600F CNC machine** with

mobile portal from SCM used for panel nesting machining". The machine belongs to the new generation of machining centres with a highly rigid gantry portal structure. It is essential in applications that require complex and high speed machining. The set-up that we operate may be unique in our country, with automatic loading and unloading and a single operator controlling the entire line. The **SCM Group special MAE-STRO software** makes machine programming fast and easy.

The factory uses other SCM Group solutions as well, including an SCM Morbidelli flexible "batch one" boring centre, also used for prototypes, and the Morbidelli Uniflex HP boring centre. "This – explains Nikita Semenov – is a recent model from the flexible boring machine range, very fast and fully automated". "HP" indicates a special configuration of the machining heads which allows productivity to be doubled when machining sides or elements with holes arranged in parallel lines. The machine can be used to bore two work pieces with a single "specular" positioning procedure. It can carry out boring at the sides of the clamps, any type of routing, and other machining operations. The machining centre is designed to work on "batch one" orders, small/medium-sized batches and even large batches of up to 300 work pieces.

Children's goods category has received additional support due to the economic crisis, the favourable Rouble exchange rate and import substitution policy, which became the Company's new incentive for diversification of marketing strategy and targeting new market segments. In the end of 2015, Topol Group has successfully launched a new brand "Polini kids". The product range guarantees the highest level of quality and safety, modern European design, as well as exclusive functionality of all the furniture items. All products are made of premium quality MFC series from Kronospan as well as of solid wood; top quality imported fittings are used. Polini Kids furniture is designed not only for the local market, but



Nikita Semenov
vice-president and member of the board Topol Group

"The history of the Group begins in 1965 in the town of Votkinsk"

also for the European countries, as the company's goal for this year is increasing export to this region.

"Last year we topped the symbolic threshold of 1 billion Roubles, and we are continuing our growth this year too! Furniture factory sales gained 50% comparing to the 1st quarter 2015, and we are determined to keep these growth rates for the rest of 2016. – says Nikita Semenov – We will launch at least 5 new collections this year. They are a part of our new multinational sales policy. In April 2016 a new sales representative office in Germany was opened. As far as I know, Topol Group at this very moment is the first Russian furniture company having its own sales office in Europe".

"All the markets, either in Russia or in Europe, are very competitive. And to be successful on them does not mean only to create a "beautiful product" which customers like. To be successful means to produce these products the most efficient way: quicker than the others, more flexible, with maximum automation, on the highest quality level and at a lower price. And all these are possible only with **reliable and sustainable partners like SCM Group!**"

From
LesPromInform,
article by editor in
chief Maksim Pirus



THE SOLUTION THAT COMBINES QUALITY AND TECHNOLOGY

Furniture manufacturers know the Morbidelli brand as a reference point for high performance drilling and routing CNC machining centres. The Author M range offers all the best technological know-how from the Morbidelli brand through highly productive and flexible machining solutions giving many capabilities to adapt to the different industry-standards required by the manufacturing environment.



MACHINING CENTRES 

The constant and continuous development of the range has led to the introduction of important innovations such as the **automatic TV FLEXMATIC worktable** that presents a new concept: **instant locking of the suction cups directly to the bar without the need of pre-installed supports.**

This solution allows the use of suction cups in a variable number, on each bar according to the size and shape of the piece to be processed.

With no room for errors, the automatic detection of suction cups number and position on the bars guarantees the best precision and quick set-up in any situation.

Absolute stability of panels during the working phase thanks to the mechanical locking of suction cups on the bars; the system is also ideal for the use of high holding pneumatic clamps when the size and type of the pieces require it.

These innovations combined with the sturdy structure and mobile gantry, are designed to ensure maximum rigidity, with the 5-axis machining unit ideal for any type of machining and the efficient safety systems, makes the Author M a real concentration of technology for those who are looking for high quality standards.



BORING WITHOUT LIMITS

FURNITURE TECHNOLOGIES

In line with its illustrious tradition Morbidelli presents its latest boring machines. Essential for the modern woodworking industry in order to meet the demands of small artisanal productions as well as industrial productions, they all maintain their renowned high quality standards. They all guarantee: Efficiency, Productivity and Reliability. A promise that all our boring machines maintain!



Cyflex S. A boring machine with the best price-performance ratio on the market. Developed from the long-term experience of the F900, today its performance levels have been increased further with the MAESTRO suite.

Cyflex HP. A vertical workcentre designed to handle all the boring and routing operations in less than 10 m². Small size, the shortest cycle times of any of its competitors on the market thanks to the two boring heads with RO.AX technology, independent spindles that optimise any boring layout, a powerful electrospindle and a tools magazine with automatic tool change make it the ideal solution for companies that require a **simple high technology machine to manage batch 1 orders with high productivity levels.**

Powerflex S. The evolution of the legendary Author 924. The powerflex s **guarantees production ranges up to 28 pieces per minute**, thanks to its high level of customisation and electronic automation. Extremely fast setup times (from 5 to 20 seconds) of the 12 machining heads, over 382 independent spindles, program changes in just a few seconds and an axes positioning speed of 80 m/min, are **the best solutions available on the market today, to handle small batch orders economically and efficiently.**

BORING CENTRES 

MONTANA COMPANY DESIGNS INTERIORS FOR HIGH-END CLIENTS

New design center, advanced CNC highlight capabilities.

Earth Elements has created a great design center for material and finish options along with a new modern cabinet shop to deliver cabinets, millwork and interiors to a wide-ranging clientele. The company is located in Southwest Montana near Bozeman, Montana. It is also 30 miles from Big Sky ski resort and the Yellowstone Club, an exclusive private ski and golf community. The cabinetry shop fabricates mostly residential custom cabinets, with some special commercial applications. They also make interior and exterior doors, as well as furniture. Mike Wolfe, cabinet shop manager,

said that each job is different. "We're often focused on cabinets and doors. Cabinets are heart of it." Earth Elements offers work ranging from the economical to the extravagant. "We are here to help our customers achieve the aesthetic they desire, no matter the budget" Wolfe said.

DESIGN PROCESS

"We have an extensive design process" Wolfe said. "We can design cabinets from the ground up, or take projects where a lot of that upfront

work has been done by an architect." Cabinet design is done in AutoCAD, and Cabinet Vision is used to get information to the shop floor in a format that can be used by the people there, and that ensures consistency. Earth Elements is capable of producing cabinets in any style. The company does a lot of veneer, some solid wood, MDF core, and lightweight composite cores. They are seeing a lot of grain matching and frameless cabinetry. Veneer may be used on MDF doors or composite core doors, which provide a stable core and weight savings for a high and wide door size. Wolfe said the company specializes in contemporary veneer work, as well as rustic reclaimed materials, appealing to different genres. "We've



noticed the market is shifting, to what they are calling mountain modern or mountain contemporary" Wolfe said. "It's that mix, the juxtaposition of old, raw natural materials, and refined."

STANDOUT DESIGN CENTER

The Earth Elements design center in Gallatin Gateway is a standout. Showcasing cabinetry, wood flooring, door hardware, natural stone and quartz slabs, tile, fixtures and appliances, all covered in natural light from floor-to-ceiling windows. The showroom itself has many wood samples to show customers that they can touch and feel, and is more in line with the contemporary, modern aesthetics of new plumbing, hardware, flooring, and bath fixtures. (The company has a separate stone fabrication shop). "Our design center customers are able to look at wood samples next to tile and stone samples, all under one roof," Wolfe said. "That's really unique. Homeowners, architects and interior designers have the ability to come to one place. It's beneficial for the client to see everything at once. We do that really well."

"We're unique in that we carry a lot of products no one else does. We try to present options: Door and finish samples, the whole standard scheme of a showroom. But we don't want to limit ourselves to that." The showroom is attracting business from returning clients, architects, builders, and designers to walk-in business. "We want to demonstrate the company's capabilities but also present different material and hardware options," Wolfe said.

CNC SHOP

The Earth Elements shop moved to its Gallatin Gateway location in 2014, and has been up and running for more than a year. Sixteen people work in shop on cabinet side, with 60 employees overall at the company. Shop space is 16,000 square feet, including the design center the building is 36,000 square feet. A **Morbidelli Author M800, Olympic k800 edgebander, and DMC Eurosand L widebelt sander** are some of the most relied upon machines in the shop. The Morbidelli was purchased for its large-scale capabilities. The table is 16 x 6 feet, so they can service large live-edge slabs. The five-axis router has many capabilities, and is used in many applications. "Most five axis routing is positional five-axis routing," Wolfe said. "We're machining the edge of the board. We're doing operations in that five-axis position, versus true five-axis routing where you're changing three axes at once. We have that capability and can machine three-dimensional parts, but from our end, at this



point it's being primarily used for five-axis positional routing." Wolfe dealt with the question of whether to have a pod-and-rail or nested-based router by having both. He designed a modification so that the Morbidelli can fulfill both roles. "It's a pod-and-rail router, and I've converted half of it to a vacuum table," he said. "This gives us the best of both worlds".

"It's nice to have both. We can machine all four edges on the pod side. We can cut big tenons, which you can't do on a table router. On the table side, we are able to do all of our nested-based routing. This is how we process all of our case parts for any cabinet job we are working on." Wolfe, who has 12 years of experience in cabinets and furniture, said he is excited about the growth of Earth Elements. "Being a new business, there are a lot of relationships that are being developed." He is looking forward to see where they go from here.

Text and images: Karl D. Forth for FDMC

TINO SANA AN "INDUSTRY OF CRAFTSMEN" WORKING ON CONTRACTS PLUS LUXURY CRUISE

A company that is intriguing not just due to its capabilities and the products it can make, but because it is a kind of "city of wood" where economic rules, attention to the territory and to young talent, sharing of values and memories all come together...

A company, a museum, a school, a laboratory, a centre of studies... all built by the enormous passion of Tino Sana, who this year celebrates his eightieth birthday. He was the driving force, year after year, behind this stronghold of wood located in Almenno San Bartolomeo, a few kilometres from Bergamo. And his four children ensured that this economic and cultural asset kept on growing: **Guido Sana**, "general manager" of Tino Sana; a **Gianpaolo Sana**, sales director; **Aurora Sana**, in charge of the museum, and **Chiara Sana**, involved in the administrative side of the business.

These are the figures for Tino Sana: **160 workers**, a turnover of approximately **€ 35 million** depending on the orders that come in and which, being linked to ship and contract work, may even be very significant. A factory covering **25,000 square metres**, rationally organised: around the area where the panels are processed into semi-finished products, sized, veneered and edged, and the two carpentry workshops into which the different types of jobs are divided, ship/yacht and contract work. There is also a mechanical workshop where metal parts are made and a painting department fully equipped with all of the necessary technologies.

AT TINO SANA THEY DO EVERYTHING, FROM PANELS AND BOARDS TO THE PAINTED FINISHED PRODUCT.

Guido Sana welcomes us to the factory one Saturday morning. There's a lot to do. In fact, every department is bustling. "What you see – he tells us – is the result of fifty years of commitment from my father and our family. Recent years have been quite tough, but we've done everything possible to keep working with all of our collaborators, a precious asset, and to meet the needs of customers who keep working with us.

We kept going and we're still here, doing what we do best, work to order. We are craftsmen with great manual skill and we recognise the enormous value of technology, how it can make some operations easy, fast and inexpensive. **We have machines for every requirement, because we do everything in-house, so we have to know how to**

do everything – from Rei certified doors for hotels to the ballroom of a transatlantic cruise ship – using the necessary technologies".

It seems to be a huge challenge, but the Sana family are relaxed about it. "50 percent of our work now is fitting out ships, the rest is for hotels and furniture for points of sale or commercial spaces. We work for Missoni or Panerai, just a couple of examples. In the past, until the 1990s, we supplied Armani, Trussardi, Ungaro... then we focused more on ships, the shipbuilding industry, which is very demanding. Now we're branching out again in this area, because it's so important to diversify..."

BUT WHAT DO YOU MEAN BY "SHIPS"?

"Mostly large cruise liners, big lounges, communal spaces... all bespoke. We're known for our ability to make large-scale furniture, fully bespoke fitting out of entire enormous rooms, right down to the smallest detail. We are the point where the expertise of the craftsman meets the advantages of industry, finding ways to use the most modern tools to make unique pieces. **Computers and technology have helped us a lot: we've moved past the time of the chisel and plane...** Fincantieri is an important "reference point": the Italian shipbuilding industry is famous worldwide. The shipyards of Ancona, Monfalcone, Marghera or Genoa, all yards where we have a presence, produce the most beautiful and biggest ships for all of the world's leading ship owners. And, as I already said, there are the **hotels**, a considerable part of our work, but definitely simpler and faster, sites where the order is completed in 120, 150 days."

YOU MENTIONED TECHNOLOGY...

"...we made a "clear choice" many years ago. In the sense that most of our machines, our systems, were made by **Scm Group**. They have been our supplier since my father purchased the first "L'Invincibile" machines, and have worked with us on many projects, even our school" In the factory we have **Gabbiani panel sizing machines, nesting machining centres**, the former with automatic loading and unloading, purchased years ago. I think it was one of the first "high-tech" machines brought out by the group. We have a **Stefani double-sided squaring and edge banding machine**, compact and highly automated; Scm Olympic S1000 single-sided edge bander with return; an Scm "Pratix S" machining centre; a **Morbidelli "Author M400** machining centre with extremely fast automatic worktable and, alongside it, a Morbidelli "Author

X5 67 Evo", from 2009, still perfect for machining large panels, thanks to the seven-metre worktable; a **Dmc "System" sanding machine** for finishing and many traditional machines.

We're very happy with those technologies, whether working on panels or top quality wood or special materials for ships".

WHAT ABOUT THE MUSEUM?

"In 1984 my father had the insight to use part of the free space at our company to put some historic pieces on display.

Three years later, in 1987, the museum was created. A decade after that, it was temporarily transferred, because we needed to put up a building that could hold everything we had found: the **Fondazione Museo del falegname Tino Sana (carpenter's Museum Foundation)** was established and we inaugurated the new building in the year 2000.

Not everyone understood – and, I have to admit, even we didn't fully appreciate – the importance of my father's decision: they weren't just memories, it was an investment in history, our history, raising the profile of the business, making culture. Today it is an officially recognised museum, internationally renowned and open every day, with a collection of more than seven thousand pieces spread over 3,500 square metres, plus another 1,500 items that we rotate on display. We're really proud of it and it is an essential part of what Tino Sana is today and of the values it represents all over the world".

written by Luca Rossetti for Xylon



TRAINING EVOLVED CRAFTSMEN

One source of pride for Tino Sana is unquestionably its long, historic, splendid commitment to **training young people, a proper school** today housed in a building built from scratch in under six months, an extension entirely financed by the company. "We support woodworking, which in our territory boasts a long tradition", says Guido Sana. "Today there aren't many industrial companies in the sector, but there are more than 1,500 businesses run by craftsmen".

It's a sector that, despite changes, is still going strong. For example, on the first day of school, all of the students have already got a company ready to take them for their internship, which is an essential part of the training.

Scm Group has always given the school solid support. "We have always been happy to have the opportunity to accompany the development of this institution", **Giovanni Gemmani**, Scm Group Chairman told us. "Today more than ever, it is indispensable to train evolved craftsmen, people who understand wood and the chance to work it using new tools, high-tech machines that – in fact – create new business opportunities in a sector where there is still a lot to offer".

The school currently takes one hundred young people every year, which is why it needs a suitable space and Sana family investment in the new building. "At the moment we have 600 square metres, half workshop and half classrooms", continues **Guido Sana**. "As well as traditional machines, which we acquired with help from Scm Group, the jewel in the crown is the focus on the most advanced technologies, thanks to the computer room, courses on how to use Cad and the chance to try all of this out with a Morbidelli "Author M200" 5-axis machining centre that Scm Group gave us free of charge, on loan for use".

morbidelli
scm
dmc





↑↑
SYSTEM

FURNITURE TECHNOLOGIES



SANDERS 

THE EXCLUSIVITY OF FINISHES

In order to compete in today's market it is essential to provide one's clients with products that have superior specifications enabling them to manufacture exclusive products.

In the furniture sector, quality and aesthetic components require a strategic position to achieve success. DMC has, since its beginning, focused on this target with a continuous research and development, aimed to improve products quality for the System range of flexible sanders and it has created a series of **technology innovations**, unique to the industry, enabling customers to produce high quality textures and surface finishes.

Recent technologies aimed at texturing solid wood and related materials are some examples of development and research: these new technologies allow users to achieve finishes found in artisan products that will enhance the raw nature of wood by introducing surface textures such as Band Saw Cutting Effect, Worm-Hole Effect and the Carving Effect, longitudinal and transversal Waves Effect, as well as the widest variety of distressing and brushing effects.

The carving unit is the **super advanced technology developed by DMC** (patent requested), a multifunctional solution creating the look of a truly carved surface on solid wood, veneer and MDF, this technology can be applied to many application sectors such as parquet flooring, home furniture and internal wall manufacturing.

Creative ideas for drawing paths and trajectories that follow and overlap each other either uniformly or totally at random, are easily transferred by the user to the product to be processed thanks to the highly flexible working unit. This grants almost the same flexibility as a CNC working center but with lower price and higher productivity.

THANKS TO THE CARVING UNIT

The innovative **carving unit**, allows the reproduction on an industrial scale of the artisan finishing effects obtained with a hand scraping tool. This highly in-demand finish emulates manual woodworking processes and provides an authentic and valuable characteristic to wooden furniture.

The system of vertical and transversal tool movements allows users to freely reproduce unlimited **carving effects** that differ in depth, direction and shape of the pattern grooves. Any effect can easily be achieved due to the translation system which is controlled by brushless servomotors that guarantee fast and precise movements and the Hydra-PC control that allows for simple and intuitive programming of the machining unit.

For the finishing of cabinet doors or MDF internal walls, the machine is programmed with synchronized movements of the various operating units which grants the reproduction of repetitive trajectories. In this way, real drawings can be realized even with the 3D effect that is much appreciated by the market.

Inside a single machine, the carving units can be paired with abrasive brushes units. It is possible to realize configurations that, in just one step, allows the creation of 3D surfaces, followed by sanding, making the panel ready for painting, laminating, papering or veneering.

The **complete modularity of the System range** allows end users to freely combine machining units to **achieve the most varied effects and to replace them quickly and economically to adapt the machine composition to market requirements.**

The **innovative range of DMC "System"** sanders has been designed and constructed as a veritable **"technological container"** capable of housing up to 10 machining units in a single machine, resulting in an extremely advanced solution that can meet even the most complex surface effect requirements.

MATRIX LED UV SYSTEMS

THE NEW FRONTIER IN SUPERFICI UV POLYMERISATION

In the sector of development of UV driers towards the use of LED systems in place of conventional lamps, Superfici has devised its own LED UV solutions, with performance perfectly suited to the most innovative UV coating cycles. Thanks to intensive work with leading coating manufacturers, Superfici has optimised the various systems in its range to meet the applied energy, emission wavelength and efficiency requirements for the different coating products.

LED UV system applications, widespread in particular in the digital printing sector and graphics industry, are now available to use in the coating of wood, partly thanks to the increasingly strong development of suitable coating products at increasingly attractive prices.



Advantages obtainable with LED UV systems:

- Significant energy saving
- No more heating the workpiece during processing, because of LED emission, without infrared, allowing considerable benefits in terms of finished product quality, energy savings and lower investment. With LED UV technology there is no need for the expensive workpiece cooling systems that are often necessary above all for heat-sensitive materials
- No more expensive and noisy extraction systems, LEDs do not produce ozone gas
- Solves the problem of disposing of mercury UV lamps.

FINISHING
SYSTEMS

superfici

The Superfici range of solutions includes both low-/medium-powered systems used mainly in pinning stations, and high-powered systems for total polymerisation. The LED UV system can be used on its own or with hybrid systems in combination with other UV sources. Such combinations are often an excellent compromise for entering the new era in order to benefit from the major energy saving and reduced temperature build up on the workpiece treated, without having to use expensive, highly specialised chemicals for inks and paints.

Superfici's team of specialists designs modular, customised solutions for every need and application. They use advanced know-how gained concerning every aspect of the LED system, from perfecting cooling devices to control drivers, feed, control software and its graphical interface.

Visit the Superfici laboratory in Monza for tests and demonstrations on LED UV modules.



OVER 40 YEARS OF UNIQUE PRESSING TECHNOLOGY

The Las 230 is Sergiani's press with continuous cycle and electronic control for hollow core doors used by hundreds of satisfied customers across Europe and the world. A solution designed for large industrial productions with specific specifications to achieve.



HIGH PRODUCTIVITY LEVELS, UP TO 1000 DOORS PER SHIFT

The continuous cycle allows the **door to be loaded immediately after assembly**, eliminating waiting times and the risk of pre-catalyzation of the glue. While a door is being loaded/unloaded from one opening SERGIANI's patented system **maintains the pressure constant on the other openings**, thus **reducing down times and allows the use of FAST DRYING GLUES** to further increase productivity. High speed: up to **1 cycle every 20 seconds**, equal to **one or two doors every 20 seconds**.

QUALITY PRESSING

High thermal performance platens, featuring SERGIANI's exclusive design, allow for a **reduction of the pressing times**, also with **low temperatures**, whilst maintaining productivity levels and pressing quality high. Moreover, the Las 230 presses one door per opening, thus eliminating marks and gluing defects due to the thickness tolerances of the components.

SPACE SAVING

Compared to single or multi opening presses with simultaneous loading, the LAS 230 with continuous cycle **reduces the space occupied by the line by a third**.

GREAT GLUE VERSATILITY

LAS 230 uses a wide range of high-performance water-based glues such as Ureiche (U), or vinyl (PVAc), liquid EVA or PUR.

Line control and production management software order by order, with barcode or RFID.

SERGIANI produces a **vast range of complete systems** for assembling and pressing hollow core doors: semi-automatic or completely automatic lines, without operators, for **large batches and "Batch 1" productions**.



RAPID AND PRECISE CASE ASSEMBLY



ACTION P

ASSEMBLY



FURNITURE TECHNOLOGIES

- High productivity, low operating cost
- High Speed beams closing by means of Brushless motors, the only way to KEEP PRESSING the cabinet during the pre-set clamping time
- Touch Screen Panel, excellent clamping and pressure cycles, the best solution for cabinets with 45° mitre joints
- Horizontal and vertical pressure elements with single bars and "comb" system.

ACTION P, the electro mechanical cabinet clamp with manual loading and is suitable for all cabinet manufacturers, with low productive volumes (starting from 30 cabinets/day).

THE NEW CARDOBOARD BOX PACKAGING SOLUTION: VARIABLE SIZE OF PARCELS ARE NO LONGER A LIMIT!

GREAT PRODUCTIVITY EVEN WITH VARIABLE-SIZED PRODUCTS (BATCH ONE)
minimizing the number of operators needed.

CARDBOARD CONSUMPTION OPTIMIZATION
This solution reduces the space required for storage of cardboard, and its handling. On the other hand, allows you to maximize the flexibility of work in terms of dimensional variation of the product, having the necessary size box in real time.

BETTER QUALITY OF FINAL RESULT
First impression is the product packagin so neat, exquisite and firm packaging to enhance corporate image. Traditional hand folding cartons, non-standard corner rough, internal work loose easy to cause the damage to the goods during transportation process.

The solution is an entirely automated process, which includes these stages:

- automatic dimensional measurement of product (single or in kits);
- automatic preparation of its cardboard box, with consumption optimization;
- facilitated preparation of the box and its operators fill;
- automatic closing of the box with hot melt glue

This solution is suitable for customers who need to manage big volumes of production on a batch one basis, like kitchens, bathrooms and living rooms industries.



CRT 2400

MAIN PERFORMANCES:

Box Dimensions:
MIN 400mm x 250mm x 22mm
MAX 2400mm x 1050mm x 250mm

Productivity:
up to 9 boxes per minute (according to the line configuration)

PACKAGING



**STRONG
REASONS
WHY**

**65 YEARS OF
EXPERIENCE
SECURING YOUR FUTURE**
65 YEARS ALONGSIDE OUR CUSTOMERS PROVIDING
SERVICE AND LASTING PRODUCTION LINES.

SOLID WOOD TECHNOLOGIES

NEW ACCORD 50 FX MACHINING CENTRE

*Larger machining volume,
more opportunities of use*



GREAT FINISH QUALITY

The machining capacity is more than 6 cubic meters, with all tools available on the machining head, while maintaining precision and finish quality at the highest level. The machining head is equipped with an electrospindle developing an output of **17 kW from 12000 up to 24000 RPM**, ensuring maximum performance supported by a sturdy aluminium structure, integrated with powerful drive units setting the rotary axes.

UNLIMITED POSSIBILITIES

Tool stores positioned on the machining head, the mobile gantry and to the worktable side, make available **up to 72 tools**, reducing downtime.

RELIABLE TECHNOLOGY

The **aluminium multi-function worktable ensures a perfect lasting planarity**, despite changes in ambient factors such as temperature and humidity. Direct integrated vacuum system and specially designed T-shaped grooves allow an **optimum locking of the work pieces** and the positioning of any type of mechanical locking equipments. The machine is available also with bars worktable, equipped with suction cups and pneumatic clamps with manual or automatic positioning, for easy and quick set-up.



ERGONOMICS AND SAFETY

Ergonomic use and high productivity of the machine are a perfect match.

Thanks to the exclusive **Pro-Speed safety system**, the machine detects the operator's presence, allowing maximum access during work piece loading/unloading and giving high travel speed.

SMART PROGRAMMING

Thanks to the **Xilog Maestro software suite developed by SCM**, Accord 50 FX programming is easy, intuitive, effective.

Maestro 3D integrated module for 5-axis machining of 3D surfaces.
Maestro Pro View simulator, for visualizing in advance the machining operations to be carried out on the machine on a PC in the office.



Launched at Holz-Handwerk, Accord 50 FX is the new Scm machining center allowing to perform routing and drilling of **work pieces up to 500 mm in height**. In recent years, the development of the machining centers affected mainly the 5-axis technology, a topic in which SCM Group has always been the champion: from the first applications born over twenty years ago to today's widespread use. Today, the business sectors for a 5-axis machining center are multiple: panels, curved plywood, traditional elements in solid wood, design objects in wood, plastic, composites, resins, light alloys, prototyping, modeling and molds.

In order to meet the needs of the new 5-axis applications, it was necessary to increase the maximum machining capacity and allow the tool to move freely around complex-shaped work pieces; that trend has led to the design of **Accord 50 FX**.



ACCORD 50 FX

BELGIAN COMPANY DE WIN: “THE ACCORD WD CNC MACHINING CELL PERFORMS COMPLETE PROCESSING FOR OUR WOODEN DOORS AND WINDOWS”

In order to last, cooperation has to be built on solid foundations and requires constant, daily commitment. That is how the partnership between Belgian company DE WIN, specialised manufacturer of doors and windows, and Scm Group began.



scm

Scm's in-depth know-how in technologies for doors and windows and ability to work alongside customers providing, through the trustworthy Belgian dealer **Rogiers, excellent pre- and after-sales service** played a decisive part in DE WIN's choice for the Italian company, explains Mr. Tom De Win: *"We spent a lot of time researching the best machine responding to our needs, even comparing several manufacturers. We opted for the Scm Accord WD machining cell. We were able to see this technology first hand at the factory in Rimini and test its effectiveness, thanks to specific demos carried out with the company engineers. It was a chance to get to know the company staff really well. They made us feel very welcome. Also, when the machine was ready, prior to delivery we ran tests using our materials, tools and software, which meant that we were able to minimise installation time. It's normal for unexpected issues to crop up during the start-up phase, and that's why it's essential to have a partner able to support you in every step of the way, like Scm did for us".*

Established in 1945, DE WIN is now an important player in the window market situated between Antwerp and Bruxelles, two biggest city's of Belgium . With a turnover of € 4.5 million and 20 employees, the company covers the contract and private market mainly with two types of products, a window made of aluminium and one of wood and aluminium.

Accord WD machining cell is the **key technology** in the wooden door and window frames production process – carried out entirely in-house.

It is the optimum solution for achieving the goals of higher productivity and greater flexibility, characterised also by reduced overall dimensions. **Fitted with automatic loading and unloading**, it allows productions in batches and in single units without ever interrupting the work cycle and always feeding at the maximum speed. It can also be used with manual loading and unloading, thanks



to complete free access to the worktable for manufacturing special frames or other types of products, exploiting the full potential of an SCM machining centre.

A technology thanks to which, says Mr. Tom De Win *"We have been able to concentrate all machining steps in a single machine (internal and external profiling, drilling and hardware routing on each window element), significantly reducing errors, giving higher quality and increased productivity. The software is just as important. It allows quick, easy programming of different machining profiles, which can then be reproduced on windows in various sizes. It also guarantees that our production know-how becomes an asset shared throughout the company, rather than knowledge that stays with individual operators.*

We are certainly satisfied with the way we have been able to work with Scm. Not just because of the technology that we have purchased, but also due to the extraordinary precise, professional support that Scm continues to offer us".

WINDOW HOLDING CHOOSES SCM GROUP

Window Holding a.s., the Czech Republic's largest producer of windows, has achieved a leadership position through the merger of the Country's three leading manufacturers and thanks to its company philosophy focusing on customer satisfaction.



Since its start the company has produced over five million of doors and windows. Window Holding's range includes products in aluminium, plastic, wood and a combination of materials, which can be used in numerous types of buildings, from private homes to complex public and commercial projects.

Today **Window Holding** boasts five production units located across the Czech Republic, with almost one thousand employees. Its products are sold through three important brands: **Vekra**, with over 70 single-brand shops across the Country, providing a complete range of products and services; **Othern**, specialised in the

production of plastic and aluminium windows; **Tww (Top Wood Windows)**, for wood and wood/aluminium windows and custom solutions.

In order to guarantee the maximum quality of its products, the company has decided to follow all the machining stages in-house: components manufacturing, sanding, painting, assembly and installation of the glass. The use of technologically advanced machines, whilst still keeping particular attention to manual work, is the key aspect that allows the company to not only meet the increasing demands of the market, but also guarantee superior product quality and a high level of customisation.

This approach has seen the SCM Group used by **Window Holding** take centre stage. Between 2005 and 2007 the company has purchased the CNC working centre Windor 40 and the integrated line Windor 100, which have ensured the achievement of high productivity and flexibility targets, necessary to produce different types of windows, such as the "Castel Window", designed for renovated historical buildings, therefore respectful of the exterior aesthetics with all the specifications of a modern product.

The company has recently purchased two **Accord 40 fx** CNC machining centres, fitted with state of the art technology: MA-



TIC automatic work table equipped with hold-down clamps of 145 mm in height, Prisma KT 5-axis machining head complete of BRC unit for accessorial machining operations.

Both machines are controlled by a specialised supervisor software with online data output directly in the machining centre.

"We chose SCM Technology based on our excellent experience with the Windor 40 and Windor 100 solutions, which we have used for many years. We appreciate the brand's high degree of specialisation, the technologically advanced solutions and their reliable and prompt after sales support, which is for us fundamental in a

supplier. Thanks to the versatility of the SCM solutions, we have been able to significantly increase the production of different products: front doors, sliding doors and arc windows. As a result, we have also achieved an almost unlimited degree of flexibility in the production of highly customised solutions".

Explained Ing. Vojtěch Mařák, member of Supervisory Board.

"MATIC" AUTOMATIC WORKTABLE: THE ULTIMATE TECHNOLOGY ON ACCORD FX MACHINING CENTRES

Our history

In **1995** SCM designed the first automatic worktable: the prototype was delivered to the Milan based company Fras in 1996, assembled on a Record 240 cnc machining centre. In 2003 it was presented "Autoset", the first worktable manufactured on an industrial scale. **In 2010, with the launch of the new range of machining centers Accord FX, was born "Matic" worktable**, featuring innovative solutions result of the experience gained with high-level customers.

Construction technology

The Matic worktable is made of large section extruded aluminum bars, on which the work piece locking devices move automatically (clamps and suction cups), thanks to **motors integrated in each base of the locking devices**. Exclusive design solutions, at high technological level, allowing fast and precise positioning.

Technical features

The worktable is of fundamental importance in the purchase of the machining centre. The solutions and arrangements characterizing the worktable are the elements that make the machine optimal for each application in various sectors.

1. Speed:

Positioning in maximum 5 seconds.

Time savings and increased productivity, especially in batch-one production.

2. Reliability:

- Strength of the bars structure.

- Movement of the bases supporting the work piece through rack and pinion (no use of belts).

- Cleaning through automatic blowing system, removing dust /chips from the sliding area and from the work piece support surface. Ideal for prefinished elements processing, where it is necessary the repositioning of the clamps within the same program.

3. Versatility:

- **Independent drive units** thanks to which it is possible to perform automatically also the most complex machining operations (windows, doors, stairs, tables, etc.), requiring work piece or locking devices positioning.

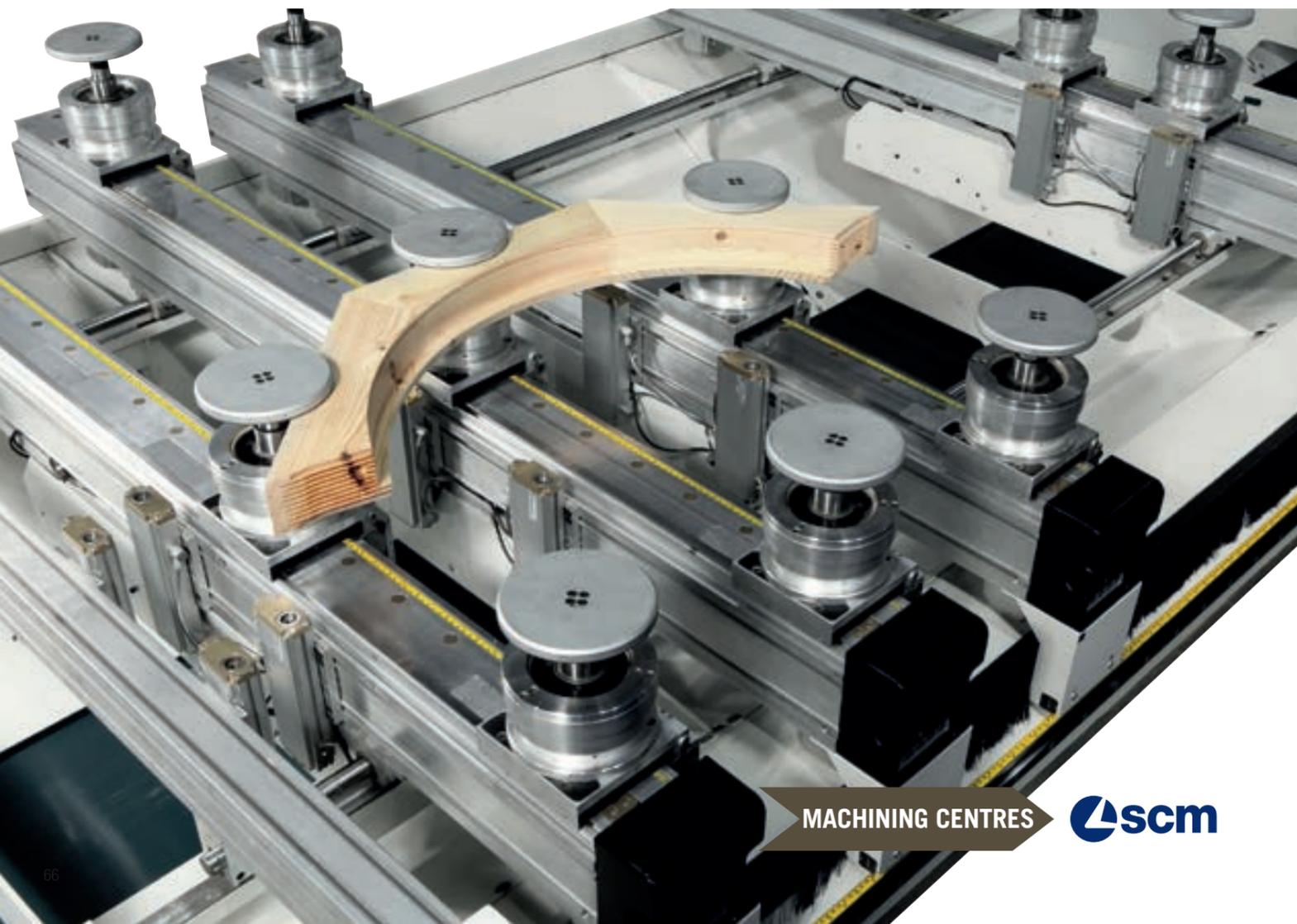
- **Scm Quick release system** for the substitution of clamps and suction cups. High reduction of machine downtime and high locking precision, to ensure perfect finish quality of products. It allows manufacturing of a rich typology of products, even different in shape and size.

4. Ergonomics and safety:

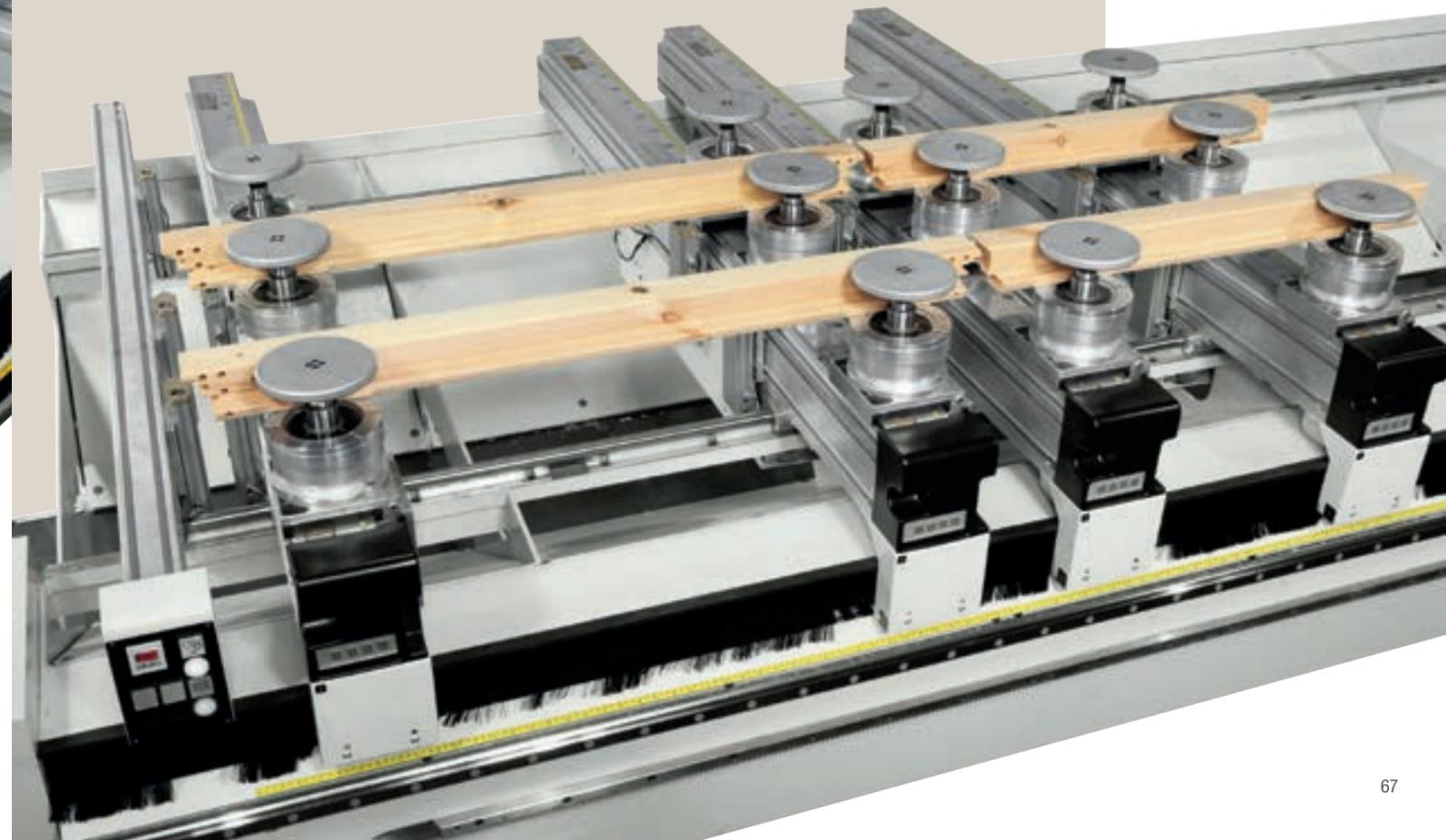
Automatic worktable repositioning in work position, with consequent maximum ease during work piece loading and unloading.

5. Programming:

Thanks to the Xilog Maestro software suite developed by SCM, the management of worktable set up is easy and effective. The innovative Maestro MSL Connector allows the customer or any external software house to program the full positioning cycle of the worktable with ease. It eliminates the customization costs for the external software house, resulting in a considerable saving for the customer.



MACHINING CENTRES



Turnkey companies, private individuals and also carpenters look to the Belgian company Gebrola of Bocholt. Managing Director, Martin De Laat, has invested in passion and know-how for more than thirty years. Nevertheless the construction of stairs has become increasingly complex. That is why Gebrola has recently invested in a 5-axis Scm CNC machining centre and a software program for stairs, Staircon. This is an improvement not only for production. "Sales have also been boosted."

STAIRBUILDING IN HIS GENES

Martin De Laat comes from a line of carpenters. "Everything is about passion with us. I learned the profession from my father who had a general construction company. At the time, we still built staircases by hand, but I've witnessed how it has become an increasingly complex process. Especially since the introduction of CNC machines."

Martin and his two brothers created Gebrola (GeBroeders De Laat) in 1978, but in 1985 he took over the business with his wife Christianne Brinkmans, while keeping the original name of the company. Gebrola does not focus on only one type of staircase.

The company carries out bespoke projects in various materials and a wide range of styles of staircases from the sober to classic designs in exclusive wood.

COMPLEX STAIRCASES, AN ADDITIONAL CHALLENGE

Gebrola considers complex projects, such as floating staircases or stairs against curved walls, as an extra challenge. "We build standard staircases and special ones and therefore have customers from all over the place. We shy away from nothing. If it can be done, we do it. This is also possible thanks to our staff, a mix of young and older employees. The more experienced professionals have excellent manual skills and sound know-how, whereas the younger ones are more skilled in CNC production. So they complement each other perfectly."

PROFESSIONALS AND PRIVATE INDIVIDUALS

Gebrola builds 250 staircases per year. Professionals and turnkey companies account for 60% of these. De Laat: "They take all the measurements and give us the production and installation". Private individuals account for 30% of staircases built. They find examples of Gebrola know-how in the 190 m² showroom. The growing number of carpenters having their staircases built by Gebrola is also considerable. "Today, our business today has a very high capital coefficient. Numerous carpenters prefer to focus on the areas in which they excel. They leave stairbuilding to us. That's our strength".

STAIRCASES FOR GREAT PROJECTS AND PRIVATES: A NEW CHALLENGE FOR CNC MANUFACTURING TECHNOLOGY

Gebrola optimises production and sales with the SCM CNC machining centre



NEW CNC MACHINING CENTRE

Martin De Laat knows how important it is to stay up to date in this sector. - "In 1995, we were the first carpentry business in Belgium to buy a CNC machine, a 3-axis machining centre by SCM, which we still use today." However, a change was due. Last summer, Gebrola purchased a new CNC machining centre Scm Accord 25 fx. "The 5-axis router is unavoidable for the construction of modern staircases, for manufacturing increasingly customized and complex products with speed, precision and quality. We have been satisfied with SCM in the past, hence our decision to choose them again."

written by Tom Mondelaers



ACCORD 25 FX HIGH TECHNOLOGY AND UTMOST EASE OF USE FOR THE LATEST SCM MACHINING CENTRE

The latest Accord 25 FX model was designed with the needs of small and medium-sized companies in mind. SCM has developed a 5-axis machining centre that provides utmost performance with minimum investment. Accord 25 FX, available with bars table and multi-function table, combines state of the art performance with extreme ease of use for flexible productions of doors, windows, stairs, solid wood parts, wooden and extra-wooden panels.

VARIED PRODUCTION

With Accord 25 FX is possible to produce various types of products thanks to the increased machining dimensions and 44 tools always available on the machine. The new chain store, combined with the traditional lateral store, guarantees fast tooling times and the machining of many different profiles: the new locking clamps with 145 mm height and increased vertical stroke up to 70 mm, available both on MATIC automatic worktable and manual worktable, allow the use of double profile tools without risk of collisions with the other machine parts. It is possible to manufacture elements with different thickness (from 60 up to 120 mm), without the necessity of manual set up operations.

ERGONOMICS AND SAFETY

The new "ProSpeed" system with horizontal pho-



"The 5-axis router is unavoidable for the construction of modern staircases"

SOLID WOOD TECHNOLOGIES

Case History: GEBROLA (BELGIUM)

tocells and new bumpers on the mobile protection (SCM patent), marries maximum accessibility to the work table and safety for the operator in the work piece loading/unloading operations, whilst maximum speed and productivity are reached during machining.



SMART PROGRAMMING

Thanks to the Xilog Maestro software suite developed by SCM, programming Accord 25 FX is easy, intuitive and effective.

The Maestro 3D module allows the programming and 5-axis machining of three dimensional surfaces; Maestro WD, developed specifically for the production of door and window frames, allows users to design starting from the architectural light to the individual frame elements to be produced. The Maestro Pro View simulator provides clients with considerable advantages by previewing the actual machining to be carried out in the machine on the office PC, in order to eliminate any errors and collisions and calculate production times and costs. The Maestro MSL Connector module allows external management software to interface with Xilog Maestro. The machining strategies are managed based on the dimensions of the work pieces and the operations to be carried out, in order to optimise the position of the blocking systems and the tool paths.

Furthermore, the Xilog Maestro software of Accord 25 FX includes Maestro APPS: a library of functions developed by SCM thanks to the experiences matured with the manufacturers of windows, doors, stairs and furniture. The Maestro APPS functions are immediately available, simple to use and allow clients to save time when designing the work piece.

GROWING WITH DOOR AND WINDOW TECHNOLOGY

The Falegnameria Bussi has always entrusted its production to Scm specialists

It is always a pleasure to go back every few years to visit the Falegnameria Bussi company in Santa Sofia, near Forlì and Cesena in the Romagna region of Italy. With over thirty years of specialised experience in window and door frame production, it goes without saying that the Scm “family” in its production area has grown over the years. After all, Claudio and Caterina Bussi, who have now been joined by their children, Elena and Marco, have always been extremely loyal to the Scm Group.

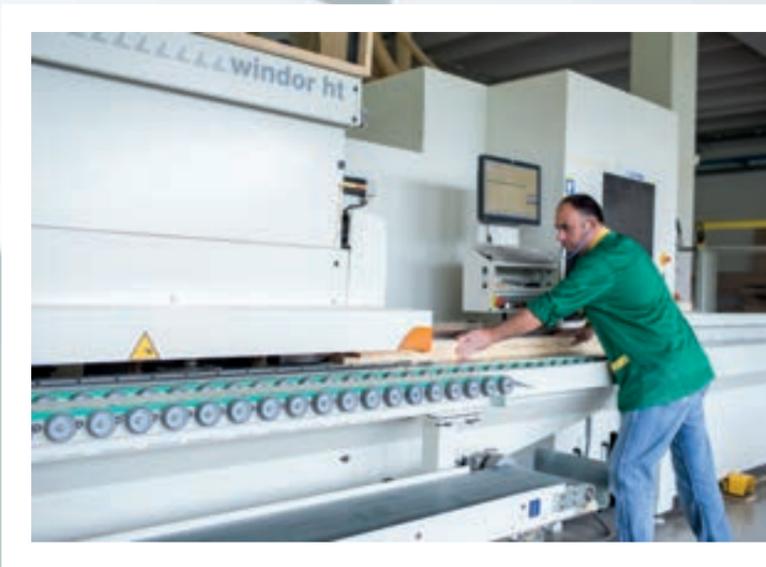
*“I began work in the carpentry sector with a second-hand P75 spindle moulder - Claudio Bussi told us - bought from a local dealer. I then went on to buy a number of manual and combined machines, including a circular saw and a new spindle moulder. **When I bought the P75 I felt like I'd bought a Ferrari.** After that we visited Scm whenever there was an event or open house - I never missed one - and I always kept in touch with Scm technology dealers. As the years went by, though, and our business expanded, **I decided that I wanted to create a direct relationship with Scm.**”*

*“When you start using more advanced machines in your production processes, you need **direct contact with the machine manufacturer** - continued Bussi - and since then I've always had that. It was a decision that has allowed us to renew our machines over the years and we have always relied on SCM's extremely competitive solutions.”*

*“All the members of our team find the Scm machine interface easy to operate. And for small businesses, like ours, having one supplier for all our technological requirements and the diverse production situations we face every day is both a guarantee and an added value. That's why, in addition to our **Scm Superset NT** throughfeed moulder, **Scm Record NT** machining centre and the **NC integrated Scm Windor line** for door and window frames, we have recently added a **DMC System T3 1350 wide belt sander**, that not only sands the frames, but also creates brushed or rustic effects.”*

SOLID WOOD TECHNOLOGIES

Case History: **BUSSI** (ITALY)



Loyal to Scm and... to wood

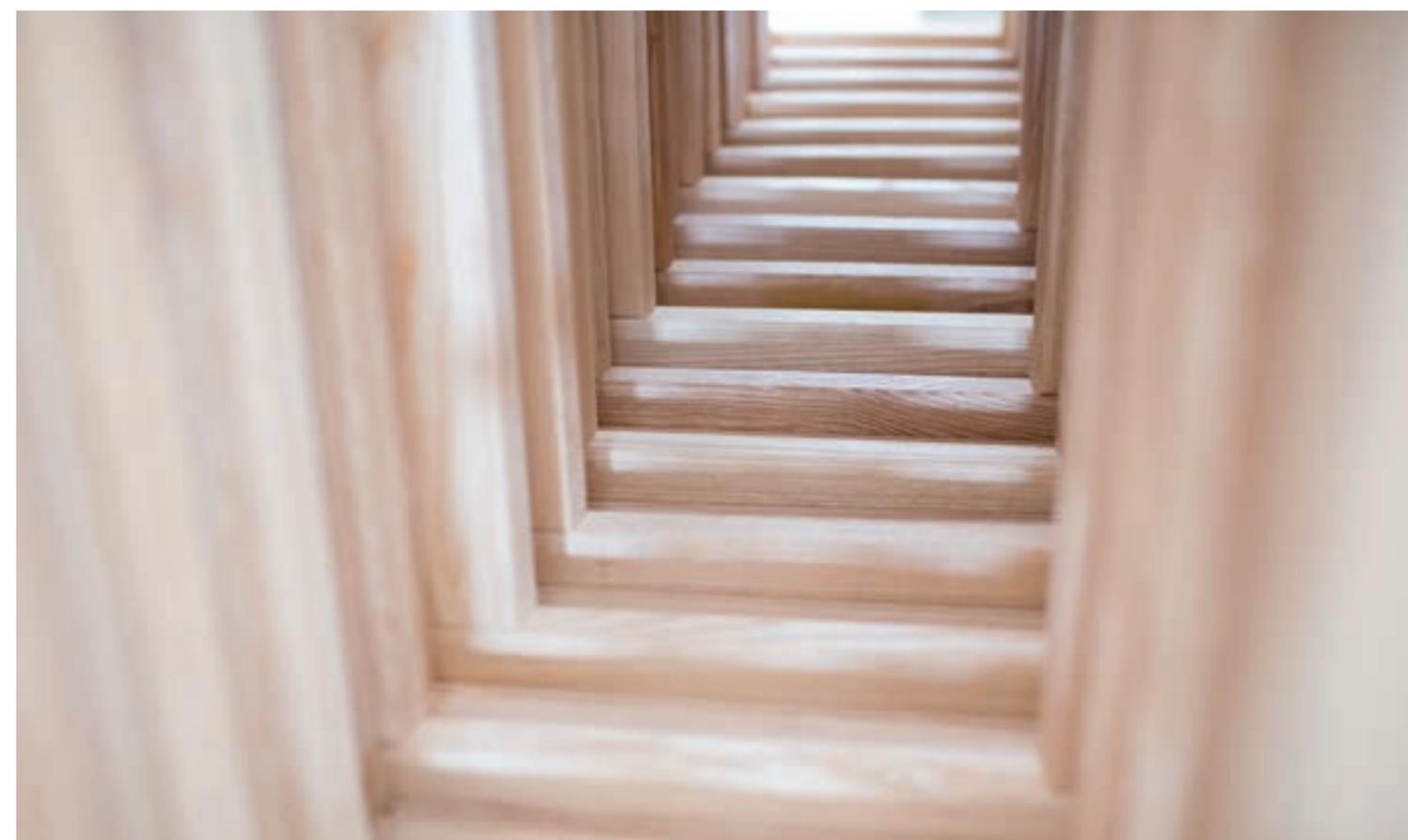
“Do you feel as loyal to your main material, wood, as you do to the Scm Group?” we ask.

“Today the world has changed,” replies Claudio Bussi. “The door and window sector is constantly evolving, which encourages us to look ahead and experiment with other products, but our main material is still wood.”

“Have recent years been a difficult time for woodworking companies?”
 “Yes, without a doubt, even if in our case we have succeed in maintaining positive market results thanks to the quality of our products and because we have focused more and more on foreign markets. Today, my children look after the sales area that is the heart of the company. We have also always been popular with private customers who have high standards but are willing to pay the right price for a quality job. Italian window and door frame manufacturers have got everything it takes to be successful both nationally and internationally.”

Our visit to Falegnameria Bussi confirmed that the factory has grown in constant synergy with the development of Scm Group technology. And this was backed up by Marino Cabassi who has always worked for the company: “These are safe, easy-to-use machines. I began working here in 1985 so I have grown up with Falegnameria Bussi and Scm. And I have seen them both develop in line with changes in production times and costs. Doors are an essential part of a home’s furnishings and we can certainly guarantee a high quality product thanks to CNC machines that carry the product directly through to the painting area.”

written by Pietro Ferrari
 for Sistema Serramento



THE TECHNOLOGICAL THROUGHFEED MOULDER SO SIMPLE TO USE

The Scm throughfeed moulder **Superset NT** range allows to manufacture a wide variety of different profiles for doors, windows, stairs and furniture.

STRONG POINT OF THE RANGE IS THE GREAT VERSATILITY

From machines with manual management, to fully electronic configurations. Machine compositions from 4 up to 7 spindles, increased axial strokes, heavy stock removal and HSK technology: technical features that allow a high variability of the profiles with rapid set-up, then **a fast and richly diversified production**. For Superset NT are also available customized compositions, which fully meet the specific customer requirements.

HIGH PRECISION AND RAPIDITY

Very simple and quick profile change, thanks to the **SET-UP** system, making **set-up time up to twenty times faster** and eliminating any possibility of errors.

EASY CONTROL

The **electronic control Mobile 10** guides the operator in a **very intuitive way** during all phases of the machine setting, for a quick and easy set-up. The innovative **MDI function** allows the control of manual axes, thanks to the display of the actual-quota and the target-quota provided by the program for a correct positioning. Mobile 10 also enables the complete integration of all management machine functions: electronic axes, feed system and machining units motors.

EXTREME VARIETY IN TERMS OF PROFILES

The **HSK technology** provides the user with a wide variety of tools for manufacturing different profiles, ensuring very flexible productions also for smaller batches. The tool change is fast and precise and takes place in conditions of maximum ergonomics for the operator. **The downtimes are drastically reduced and the perfect quality of the finished product is ensured.**



TECHNICAL DATA:

- Machining width **15 - 260 mm**
- Machining height **6 - 200 mm**
- Vertical spindles axial adjustment **80 mm**,
- Horizontal spindles axial adjustment **45 mm**
- Moulding capacity **50 mm**

SUPERSET NT



THROUGHFEED MOULDERS



PROGRESS ALWAYS AHEAD IN TECHNOLOGY!!

PROGRESS is the double-end tenoner of high-technology and high performance that finds application in various sectors, from the production of solid wood and hollow core doors to the windows, furniture, kitchen elements and, also, garden furniture, tables, flooring, partition walls, insulating and sound-absorbing panels.

Designed to work on more shifts per day, it executes solid wood and panel processing in each type of material (PVC, fiber-cement, rock wool / glass, insulation, gypsum, polyurethane, etc.) and perform different operations: tenoning, sizing, profiling, drilling, cutting, shaping, grooving, sanding, chamfering.

Progress meets the productivity and flexibility needs required by the market, with innovative solutions like **the new CR43 feed chain**, thanks to which it is possible to process **work pieces with a minimum width as from 90 mm** without the use of raised chain pads.

HIGH PRECISION AND RELIABILITY: the "ALL SYSTEM" work piece transport system allows high machining precision and long lasting reliability even in heavy duty conditions.

It is characterized by **high feed rates of up to 250 m / min**, automatic dogs for the work piece reference and top hold down pressure beams with numerous adjustment possibilities.

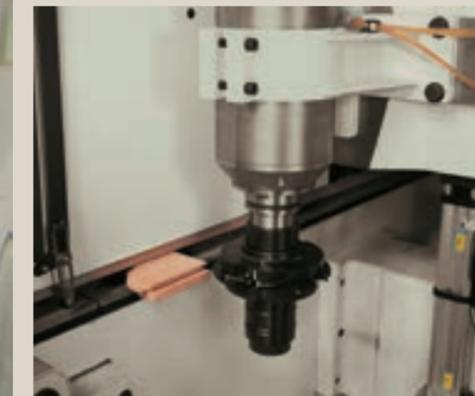
LARGE VARIETY IN TERMS OF PROCESSING, SIZES AND SHAPES: the Progress modular structure includes compositions from 2 up to 12 positions, **different machining units** available (scorers, hogs, cut off saws, profiling units, HSK 63F, HSK 85S electrospindles with tool stores, special drilling units) and the **complete electronic integration of the machine**.

AUTOMATION AND INTEGRATION: Work piece feed systems and automatic loading and unloading systems are available to **reduce labour costs and errors**.

Moreover Progress can be integrated with other production phases (sanding, painting, packaging etc) thus **eliminating the need for intermediate magazines and therefore of downtimes**.



SOLID WOOD TECHNOLOGIES



PROGRESS

TECHNICAL DATA:

Working width: 90 - 6100 mm
 Working height: 3 - 200 mm
 Height of adjustable reference dogs: 10 - 14 - 20 mm
 Feed speed: fino a 250 m/min
 Mobile beam movement speed: 2,8 m/min

DOUBLE-END TENONERS

celaschi

MAESTRO

THE HIGH LEVEL COMPLETE SOLUTION FOR COATING DOOR AND WINDOW FRAMES

The window frame production market demands ever increasing flexibility. The introduction of a versatile, reliable robotized system like Maestro from Superfici simplifies small batch management. It also guarantees the continuity typical of robotized solutions. Add to this the possibility of fast colour changes with reduced coating wastage, and it is clear how a robotized system is perfectly suited even for production with custom finishes, managing numerous different small orders. The robot can be used with pneumatic or electrostatic application systems and easily adapts to any coating requirements.

Main benefits of a Maestro anthropomorphic robot spraying line:

- reduced production times
- uniform and continuous application quality, which is difficult to achieve manually.
- improved control of product quantity, creating savings in terms of paint/coating consumption.
- easy, flexible robot control.

The spraying robot fits perfectly in coating lines that can, for example, include rotation of workpieces on the conveyor system to allow spraying of both faces, or the use of two opposite robots, where this is justified by the capacity required. The robot is often used in lines complete with drying systems, even sophisticated ones with microwave technology that considerably shorten production cycles, further extending the flexibility of the entire plant.

Maestro Highlights:

WIDE SPRAYING AREA

The system was specifically designed for spraying large items, typically door and window frames. Working area size: 3000 x 3000 mm. If necessary extendable by adding a 7th axis.

KAWASAKI ANTHROPOMORPHIC ROBOT

The Kawasaki high-performance anthropomorphic robot is perfectly integrated in the system, guaranteeing build quality and reliability. The robot has 6 axes, which can be extended up to 11 if necessary.

OPTIMISED SPRAY GUN HOLDER TOOL

The spray gun holder tool is designed for fast gun positioning that is always precise, allowing uniform application in the various areas of the frames to be coated.

PRECISION WORKPIECE SCANNING DEVICE

The frames are scanned using a reading bar, to adapt the movement of the spraying arm accordingly.

FLEXIBLE, USER-FRIENDLY SOFTWARE

The control software easily manages recipes and colour changes: defining distances, angles and spraying speeds is possible for any operator, using an intuitive program interface to save and retrieve the types of processing.

FINISHING SYSTEMS



« MAESTRO



TOTAL QUALITY MADE IN ITALY AROUND THE WORLD

**STRONG
REASONS
WHY**

WITH 20 SUBSIDIARIES AND OVER 350 DEALERS
IN THE WORLD, SCM GROUP HAS THE LARGEST
DISTRIBUTION NETWORK FOR WOODWORKING
MACHINERY

TIMBER CONSTRUCTION TECHNOLOGIES

WHERE QUALITY COUNTS

Wooden houses and roofs constructed with all the care and craftsmanship of prestige furniture. This is what **Oikos** machining centre has achieved at **Vibroloc**.

At Vibrobloc, a company based in Montese, in the heart of the Apennines between Emilia and Tuscany, we met the company sales director, Claudio Leoni, to talk about the dynamic company dedicated to timber construction and the new Oikos cnc machining centre manufactured by Routech, a brand of Scm Group.

"It all started when we met Paolo Forza, the Scm area manager, at the "Legno&Edilizia" Verona trade fair in 2015. He invited us to see and test the Oikos at the Routech factory in Sinalunga. We had actually been studying this machine for some time as our competitors had already bought it and were extremely satisfied with the results."

"We make **high quality products, so the standard of the machining and finishing is essential. This meant we had to select a form of technology that would guarantee a superior level of performance.** The highly skilled engineers from our technical office identified a series of customized technical features, which Routech gave us immediate assistance on and that led to the manufacture of a version of the Oikos machining centre with six interpolating axes satisfying all our needs perfectly."

What benefits has the Oikos brought to your company?

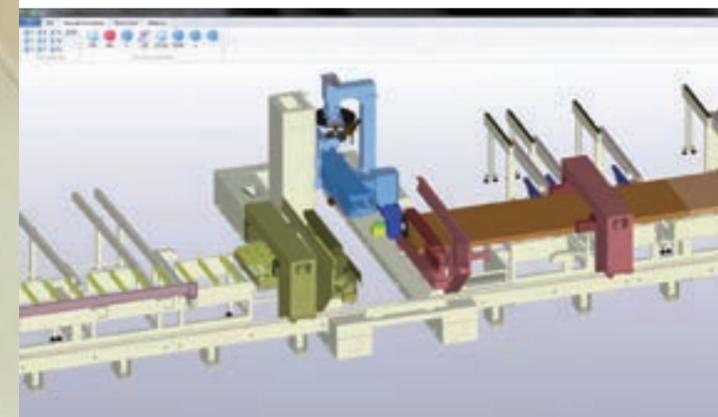
Claudio Leoni **"Without doubt, the real turning point this machining centre has brought about is that now we can make our own 1.250 mm X-Lam walls.** At Vibrobloc we have always used two techniques to build our houses: the frame technique and the X-Lam wall technique. We used to buy X-Lam walls ready-cut, but now, with Oikos, we buy the raw material in blocks and cut it ourselves. This allows us to operate with greater independence, speed and flexibility, as we keep enough material in our warehouse to ensure that we can be flexible, especially in terms of response time. This is particularly important today, as the market moves extremely rapidly and when a customer is in a hurry to complete a construction project, we have the materials ready, so all we have to do is engineer them and starting production."

"One of the Oikos features we have been particularly impressed by is **its fast and high precision processing,**" continued Claudio Leoni. "In addition to timber construction, our reference market includes exposed beam floors and roofs, where a high finish quality of the beams is fundamental. **Roofs with exposed beams are a classic feature of modern housing and the aesthetic effect of high precision beam profiles means attention to detail that can only be achieved with state-of-the-art technology.**"

Vibrobloc originally started out in the traditional building sector and today it boasts two factories, plus third premises specialised in metal carpentry. The technical office also engineers the necessary assembly components, like plates and brackets.

"Keeping Vibrobloc in Montese was a deliberate decision - concluded Leoni - to guarantee the continuity of human resources, which is the company's founding value, as it allows us to guarantee skilled labour and a strong team spirit. We are well-known in the local market for the high standard of our work and this competitive edge is partly due to the skill of our team." A context with this level of professional expertise is the ideal workplace for a Routech Oikos machining centre.

text by Pietro Ferrari
for Struttura Legno



LES CHARPENTIERS DES ALPES ET PROVENCE

TIMBER CONSTRUCTION TECHNOLOGIES

Case History: CAP (FRANCE)

A combination of wood construction art, technique and know-how

“Les Charpentier des Alpes et Provence” is a company specialised in the design, research, production, machining and assembly of laminated timber structures.

EXPERIENCE AND ENGINEERING

With over 50 years' experience in wood construction, the C.A.P. design office offers highly skilled engineers and designers and the most modern design equipment available. It can therefore calculate stress loads on highly complex 3D structures (with Eurocode 5 and 3 calculations), conduct seismic studies (with Eurocode 8) and create 3D carpentry drawings with CATIA V5 software.

Thanks to this technological expertise, C.A.P. can design any kind of structure, from large gymnasiums, to covered stadiums, swimming pools, industrial buildings and even bridges.

WORKSHOP: 6 AXES CNC MACHINING PRECISION AND QUALITY

Thanks to a workshop measuring over 5500 m² equipped with machinery specifically designed for laminated timber construction, the company is able to conduct all necessary woodworking operations in-house.

Framework machining and complex high-precision operations are carried out using a **Routech OIKOS HT 12 6-axes work centre** with optimal machining capacities.

- max. cross section: 300 x 1250, max. length: 19 metres, max. beam weight: 2.5 tonnes,
- high production capacity
- interface with CAO software and QuickLink software developed by Scm and already installed on the machine.

GREATER PRODUCTIVITY = NEW MARKETS IN FRANCE AND ABROAD

The modern and compact Oikos machining centre has allowed C.A.P. to become more competitive and satisfy the requirements of a constantly evolving market.

This increase in productivity has allowed the company to open new markets abroad and strengthen its position in France.

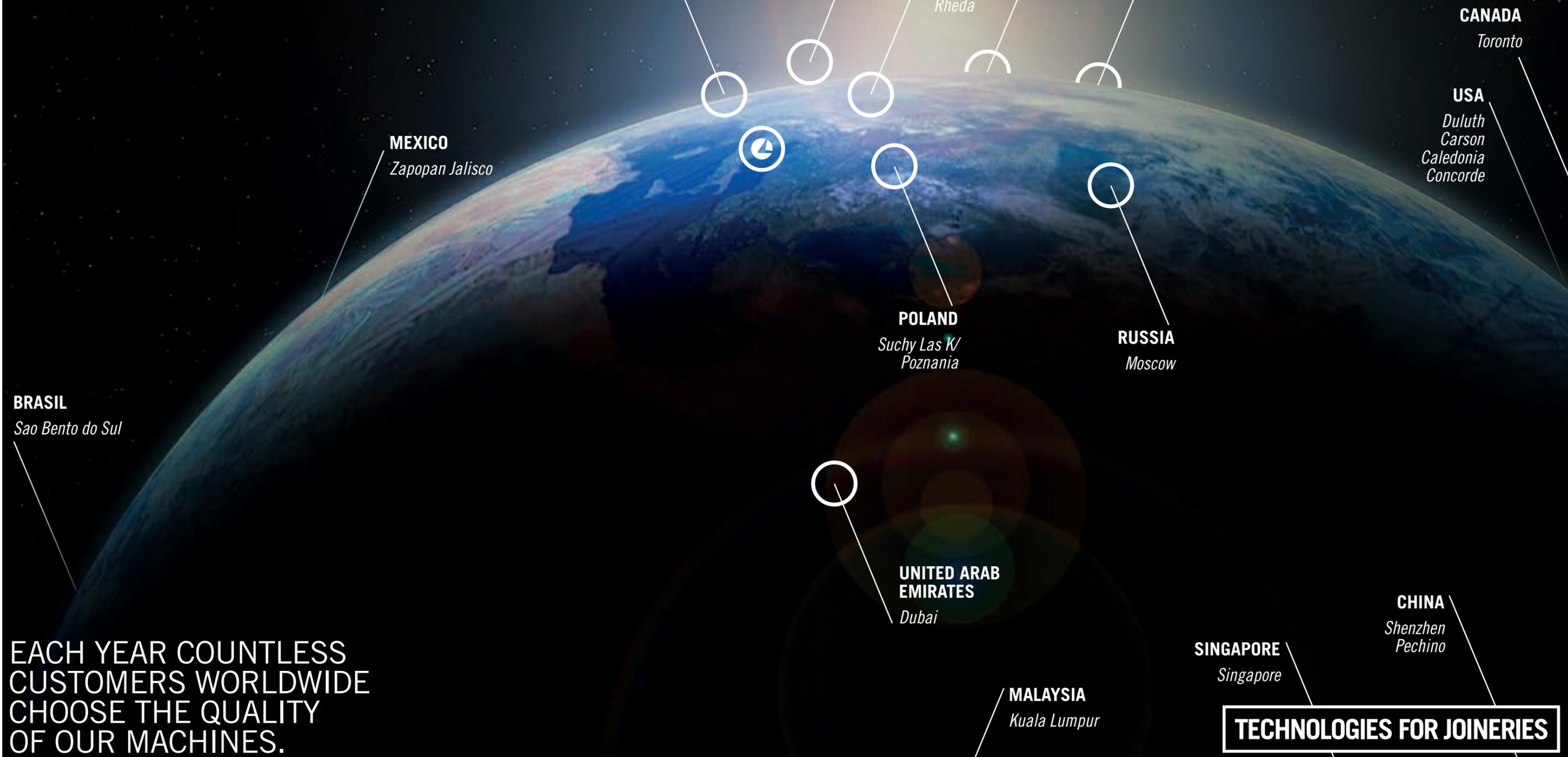


Ben Aknoun Stadium,
Alger (Algeria) – Architect: ATSP
Wooden structure machined by C.A.P.
with Routech Oikos

17,000 MACHINES PER YEAR

YOU'LL FIND
AN SCM EVERYWHERE

STRONG REASONS WHY



EACH YEAR COUNTLESS
CUSTOMERS WORLDWIDE
CHOOSE THE QUALITY
OF OUR MACHINES.

TECHNOLOGIES FOR JOINERIES

THE "EXCELLENCE" OF THE CIRCULAR SAWS

ced "patented" technological solution; the exclusive **AP System**. The system allows the automatic positioning of the overload protection according to the blade tilting. This makes faster and safer the change of cuts with different tilting without that the operator has to change the machine set up.

All the machines of "L'invincibile" range are "intelligent" and understand in real time the instructions coming from the operator, and assisting him by eliminating the possibility of error and risks of accidents - **Just one cut, the right one!**

The Scm sliding carriage of the SiX circular saw does not require adjustment and it has **10 years guarantee, confirming its reliability and the high quality with which it is built**; furthermore the carriage grants the best cutting precision thanks to its extremely smooth sliding due to:

- the steel hardened guides adjusted in rhomboidal position in order to avoid dirt to accumulate
- the ball sliding system with self-cleaning system

L'invincibile SiX is the result of years of research and development and long experience associated to a history of success, which confirms Scm Group once again among the worldwide main players on an international level.

The SiX circular saw is the top range of the L'invincibile machines and it is the most effective and safe answer for all the woodworkers looking for a powerful solution to cut veneered panels and solid wood material.

SiX offers a unique cutting capacity in its class in both straight cuts (90°) in which it is possible to have a cutting height up to 200mm and oblique in both directions (+/- 46°) with a tilting range of 92°, all without removing the scoring blade.

A new blade unit allows the simultaneous use of the main blade (up to 550mm) and scoring blade (160mm), obtaining maximum performance and flexibility on all machining.

In fact, one of the main SiX advantages is the capacity to cut veneered panels thicker than 100mm with $\pm 46^\circ$ tilting. This feature, in addition to the time saving guaranteed by not having to change the blades, allows the easy processing of panels with a greater height than the standard; strong demand from a market more and more focused on the use of large panels.

The trend, in fact, in the design objects and furniture is the recall to the solid wood robustness, shapes and styles obtainable thanks to the possibility to section larger and larger work pieces with the exclusive L'invincibile SiX circular saw.

Due to the double blade tilting, the operator can carry out tilted cuts on both panel sides, without the necessity to overturn it, thus preserving the surface or in case of complex shapes which cannot be overturned (i.e. frames or handrails) always with the maximum safety and guaranteeing the best finish quality with a minimal waste.

The new L'invincibile SiX includes an advanced



CIRCULAR SAWS



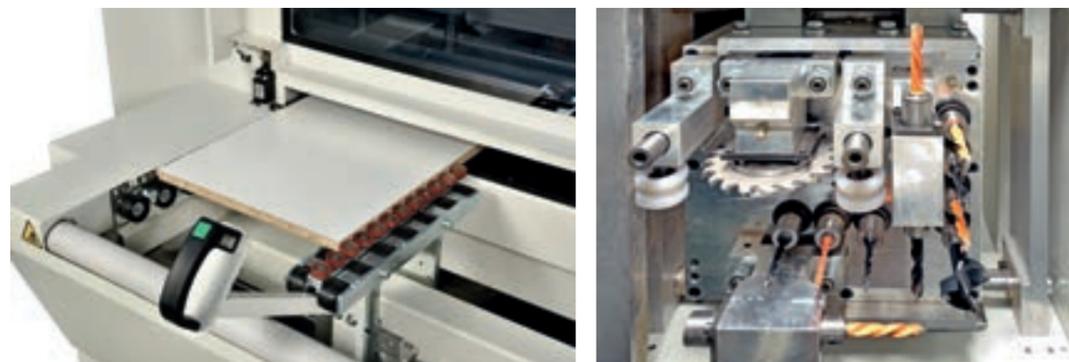
L'invincibile SiX

STARTECH CN, NC UNIVERSAL DRILLING AND GROOVING MACHINE

STARTECH CN has been designed for the **small-medium woodworking workshops** but also for **larger companies** that produce customised products, with in house prototype development departments. Thanks to the 7 independent vertical spindles, the spindle and the blade in "X", the possibility to drill in "Y", finished furniture elements can be produced without having to adjust the bits with no operator's intervention for the worktable and machine set-up according to the panel dimensions.

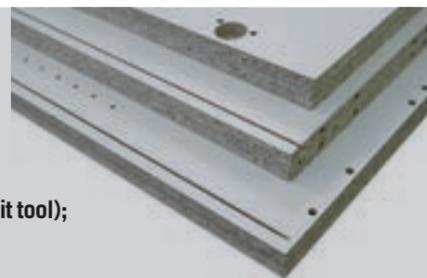
STARTECH CN is a user-friendly compact drilling machine (only 4 m²) which can be installed in a reduced space. This new SCM machine is ideal for **flexible production**: a real advantage as it allows a combination of customised craftsmanlike machining with the speed and precision of semiautomatic production.

The new STARTECH CN machines work pieces up to 3050x800 mm through the progressive and sequential panel positioning by a suction cup with intake air vacuum; furthermore the right and left guide facilitates accurate machining utilizing the 2 stop arrangement, similar to that used on high end CNC's. The drilling head positioned above the panel allows a precise machining with a reliable reference: thanks to the distinctive drilling from the top, the Startech CN gives a **high and steady level of precision which can be verified in the panel assembly phase**; in fact the system uses the outside of the panel as a reference and thus any differences in thickness are on the inside of the cabinet.



The STARTECH CN operating group allows extreme flexibility in processing on the 4 side faces:

- Dowelling holes, upper surface (vertical spindles, bit tool);
- Lateral dowelling holes, lateral surfaces (horizontal spindles, bit tool);
- Horizontal grooves (blade);
- Hinges holes (vertical spindles, tool tip countersink)



The machine is controlled by an NC with touch-screen colour display and self-diagnosis/signaling system of errors or damages, simple head tooling and machining cycle programming with automatic optimization. The possibility to save and import working programs allows the machine to repeat complete drilling cycles with absolute precision and rapidity eliminating possible errors.

STARTECH CN



BORING MACHINES



THE CRAFTSMEN CRITIQUE

Workshop East chose SCM machines for their features and reputation - and on many occasions they take them well beyond normal limits.

Workshop East is a rather special place. Bringing diverse talents from architecture and furniture-making to sculpture under one roof, the demands placed on its workshop range from rough-shaping of characterful, large section timber to fine finishing of custom-made commissions for discerning clients. Designer-makers Mauro Dell'Orco and Steve Cook thought long and hard about which machines would best suit their needs and their budget before settling on a sliding table saw, a bandsaw, a spindle moulder, a planer thicknesser and a surface planer from SCM.

• "I worked in a company in Italy that had SCM," says Mauro, "Then I had a course about programming CNC machines in Pesaro that had SCM. We looked at other machines but **SCM was the best solution for us**. We have a small space so we needed a table saw that would fit. The Si 300S Nova is perfect and I really like that it's easy to set and easy to use. The Ti 120 Class spindle was the right choice but we also needed an industrial bandsaw and a heavy duty planer and thicknesser. SCM had everything we needed at a price we could manage."

• It's been 18 months since Workshop East took delivery of its SCM and Minimax machines and things are going well. "The saw is great," says Mauro. "It's fitted with a scoring blade, which helps with precision cuts, and it has the 400 mm main blade I was looking for so I could make compound angle cuts without worrying about depth. The table is smooth and it can be locked in three different places. The machine is equipped with a long squaring fence that's very easy to flip to gain access if you run small pieces through it. There is no digital adjustment on this model but the tapes give accurate measurements. There are lots of safety features - everything is micro-switched and there are stops at both sides. They are really useful if you're cutting a long, narrow piece that tilts as it drops. The blades stop very quickly and I am very satisfied of the overhead blade protection"

• Steve Cook is very impressed with the Ti 120 Class spindle moulder. He uses it both as a spindle and as a router: "I particularly like the fence," he enthuses. "It has a mechanical memory with readers on the front that adjust to within 0.1mm and everything works on positive-feel screw threads. Having three extraction ports in the head is a big plus if you want to take big chips off. The spindle moulder unit tilts by up to +/-45 degrees so you can use 320mm discs and you can reverse the rotation and flip the tools - great when you reach end grain, or for working internally. The spindles are quick to change over with no unscrewing."

• Mauro and Steve chose a Minimax-SCM S700P band saw. "Mauro really likes this," says Steve. "I like the texture it leaves on wood and it's seriously heavy duty and has a big, 465mm cut height," confirms Mauro. "You can run a log on it but I also make tenons on it." Steve adds, "It's easy to make adjustments to the belts as they wear to maintain startup and braking speeds. The electronic brake stops the saw within 7 seconds."

• It's not just the bandsaw Mauro and Steve have explored the limits of. They also have high expectations of the heavy duty S520 Nova Planer/Thicknesser - in particular the finish they expect from it. "Sometimes we're taking off just 0.2mm. It has four speeds but we like to run it at 8m/min, as this gives a very fine finish," says Steve. In six months, they've never had to recalibrate the S520. "It's never gone out," says Steve.

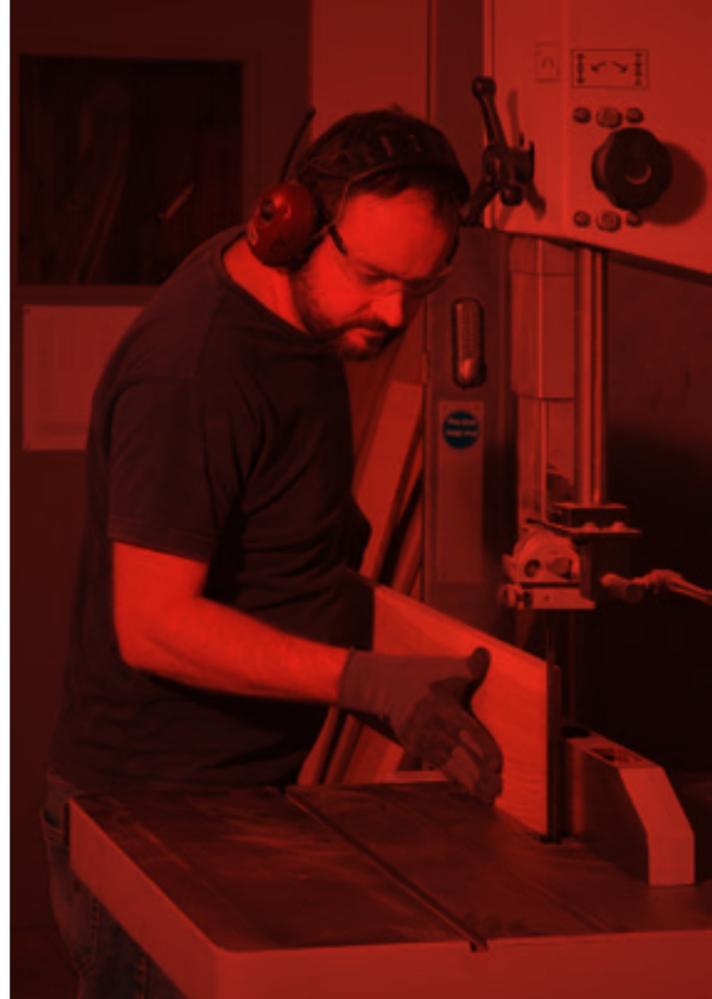
• The surface planer Mauro and Steve chose is SCM's F410 Nova. "Everything goes through it," says Steve, "We even use it for getting a straight edge on ply. We're using finishing blades, mostly on hardwood. Changing is really easy and the blades can be adjusted to within a fraction very easily. The bed is a good length and I like the flip on the microfence that allows you to run thin pieces safely. The fence is easy to angle and goes back to zero, which some machines don't."

• So, after 18 months, what's the verdict on their investments? "I knew SCM was good from when I was in Italy," says Mauro. "The

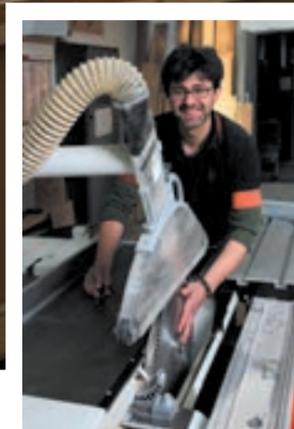
machines are very reliable. They work well. They are easy to use."

text and images by Melvyn S Earl, Furniture Journal copyright.





Steve Cook working on the Minimax-SCM S700P Bandsaw. It's a machine Mauro really likes. "You can run a log on it but I also make tenons on it," he says.



Above. The Si 300S Nova is fitted with a scoring blade, which helps with fine cuts, and it has the 400mm main blade Mauro was looking for to make compound angle cuts without depth issues.

Steve uses the Ti 120 Class both as a spindle and as a router.



The S520 Nova Planer/Thicknesser provides a "very fine finish".



Below. Steve: "Adjustment on the F410 Nova is up to 8mm"



A COMPLETE EDGE BANDING

The Minimax ME 35 is the edge bander for the conventional workshop with the best performance/price ratio on the market. It has been enriched with a series of additional operating groups which further facilitate and enables a very high quality finish of product, thus reducing to the minimum the operator's need for re-finishing and ensures a considerable amount of time saved. This technological solution is unique in its category, where such operations are normally associated with machines of larger dimensions and higher cost.

THE MAIN NEWS OF THE ME 35 WHICH WILL BE PRESENTED ON SHOW ARE THE FOLLOWING:

- the **glue pot rapid unlocking** (very useful during cleaning and maintenance operation) together with **possibility to use polyurethane glue**: a unique feature for machines with reduced dimensions that aims to eliminate downtime when substituting the glue and to increase the edge banding flexibility.
- For edge banding requirements with particularly delicate edges (for example high gloss) a further optional device for the trimming unit has been developed; this is dedicated to the **delicate edges treatment**, with "rolling" copiers instead of the "sliding" ones.
- the **end-cutting unit with "Radius"** the optional unit which allows you to make a radius on the corners of the edged panel without the need for the operator to have to finish by hand at a later stage.
- the **grooving unit** that is able to execute a slot on the panel directly during the edging process (usually this operation is carried out by a circular saw) and without having to sacrifice the finishing and cleaning units.

Minimax me 35 is the perfect solution also in markets with particularly demanding weather conditions. Due to a heating device, the joineries with colder work environments can count on a pad that heats the panel improving the edge gluing effectiveness.



ME 35

SI 400 ELITE S



TECHNOLOGICAL SOLUTIONS

An even more intuitive use of the “Elite S” machines range

The “Elite S” is the “superior” range of the professional machines manufactured by Minimax. Thanks to the exclusive Scm know-how in the field of machines for the general woodworker, the “Elite S” range presents at Xylexpo some important news:

- the **new squaring frame with the CompeX device** (Scm Patent), that allows to carry out tilted cuttings (acute and obtuse) on the **same squaring fence profile** without having to reposition it and maintaining the fence always close to the operator, with a stable work piece support thanks to the support bars and a constant and total cutting control.

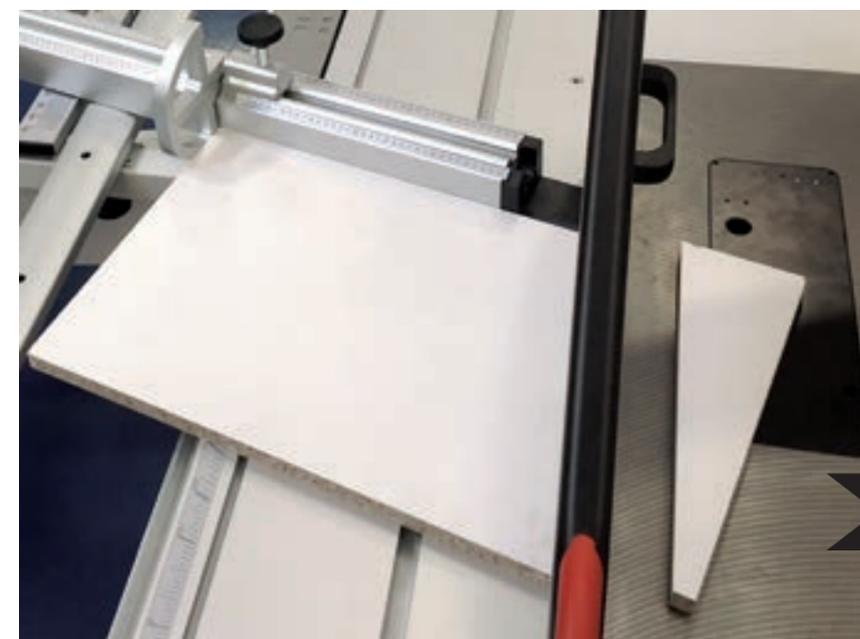
Furthermore the device is equipped with a **mechanical automatic self-adjustment** of the stops position of the squaring fence when varying its tilting

- the **new digital readouts** for the squaring fence stops that allow their immediate and easy visualisation.

The Minimax “Elite S” range is preparing to confirm the success of last year at the LIGNA in Hannover with:

- a **fully renewed design**, more simple and ergonomic with a strong structure that makes the machines of this series even more practical and safe;
- a **360 mm wide sliding table** made of extruded anodised aluminium with a closed honeycomb structure, that grants an optimal support also for **larger panels**;
- the **sliding table runs on an exclusive slideway system** consisting of calibrated and hardened guides which are secured to the carriage itself with a procedure for aluminium reveting. It is the result of 50 years’ experience and expertise at Scm that grants a perfect sliding due to absence of fixing glues absence that could create inaccuracies;
- the **saw unit** with a strong **cast-iron structure** with **closed ring** that is supported under the table by two side trunnions giving a high rigidity support and tilting to the unit, for a higher cutting precision in every situation;
- The start and stop **pushbuttons** for the saw blade and scoring blade **integrated in the saw carriage** (optional), very useful in processing larger panels that could hinder and prevent an easy and safe access to the main machine control panel.

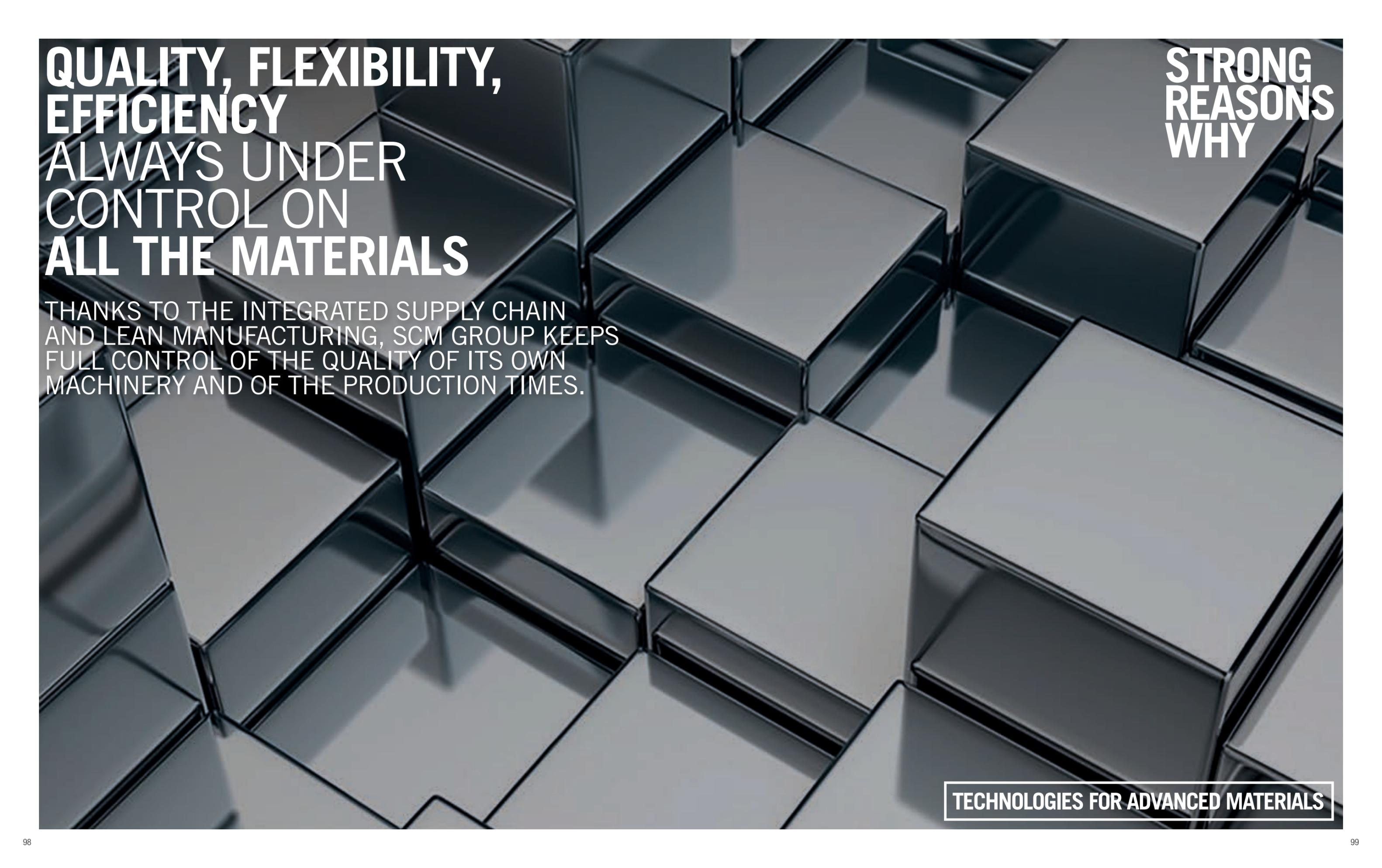
FOR THE WORKSHOP



Minimax,
the best combination
in absolute **safety** between
performance and **technology...**
from today even more easy-to-use!

CIRCULAR SAWS

minimax



QUALITY, FLEXIBILITY, EFFICIENCY ALWAYS UNDER CONTROL ON ALL THE MATERIALS

THANKS TO THE INTEGRATED SUPPLY CHAIN
AND LEAN MANUFACTURING, SCM GROUP KEEPS
FULL CONTROL OF THE QUALITY OF ITS OWN
MACHINERY AND OF THE PRODUCTION TIMES.

STRONG REASONS WHY

TECHNOLOGIES FOR ADVANCED MATERIALS

DILPLAST HAS CHOSEN TO WORK WITH A UNIQUE PARTNER FOR ITS VARIOUS PRODUCTION REQUIREMENTS

TECHNOLOGIES FOR ADVANCED MATERIALS

Case History: DILPLAST (ITALY)

"The after-sales service is really valuable: divided by sectors - thermoforming and cutting/milling – it allows, via an initial web link to the machines, identification and prompt solving of various operating problems, or assessment of the need for on-site action by Scm technicians. It was an essential element in our choice of professional partner: machine down times have to be minimised for obvious cost and delivery delay reasons."

"Today Scm Group is the go-to organisation for machining "plastics" thanks to the prestigious expertise of CMS and to the in-depth know-how developed by Scm in the woodworking sector and increasingly directed towards high-tech materials. This meant that we were able to go to this unique organisation, able to deal with our various production requirements." Enrico Ternelli finishes by saying "our aim for the coming years is to keep growing. We are able to count on technologies and software that can guarantee us a competitive edge both in domestic and international markets."



Established in 1976 in Montecchio Emilia (Reggio Emilia province), Dil Plast supplies services for consulting, design and production of any type of moulds and parts for thermoforming. Now run by Dante and Enrico Ternelli, the main business is contract thermoforming of products made of polymers, such as ABS, PS, PC, PMMA, for a variety of sectors: industry (casings for machines in general), agriculture (bonnets and dashboards for agricultural machinery), construction (sanitary ware for prefabricated single-block structures), automotive (ski boxes, underpan and boot sill protectors for cars), industrial cleaning (covers and dashboards for sweeping and floor washing/drying machines), earth movement (dashboards, cab interiors and guide columns).

A very dynamic company employing 24 people and which over the years has grown considerably, supported by the recent expansion of the factory and large investments in new technologies. The expansion project will allow a 20% increase in production capacity, even thanks to industrial restructuring based on lean production principles.

For more than 25 years Dil Plast has been using **CMS** technologies. In particular, its machines include: an Athena machining centre, high performance and providing high quality at an extremely competitive price, a Sintesy, the ideal machine for cutting medium and large workpieces, a Sintex, small cutting machine, compact and highly versatile and 3 BR series thermoforming machines with very high productivity and fully automatic operation.

More recently Dil Plast decided to use other **SCM Group** machines, such as the **Scm Sigma Prima** beam saw, which with its dedicated set-up is perfect for precision cutting on non-wood materials and the Scm Pratix S numeric control machining centre with multi-function aluminium table for sheet nesting machining. Thanks to its unique design and exclusive safety system, the Scm Pratix S CNC centre is compact but guarantees working areas suitable for machining an entire sheet. The operator can easily load and unload materials and components on both sides of the machine.



scm
CMS Cms



MAXIMUM FLEXIBILITY IN DRY DEBURRING FOR METALS

Thanks to the choice of a new deburring and satin finishing machine from DMC, part of SCM Group, Bergamo-based Ambrosini G.T. is improving the quality of its products by making full use of the performance, reliability and the various operating options.

Now approaching 60 years in business, Bergamo-based Ambrosini G.T. has always had considerable production and professional resources available to it, specifically so that it could offer many industrial sectors solutions in terms of machining rolled metal sections intended for all kinds of use, even the most structured and creative. **Experience and expertise** that today mean that the company can supply a top quality service not just for large-scale production, but also for small batches or batch one, to customers from such diverse sectors as fashion, furniture, lighting, design, as well as the food and medical sectors, to name the most frequent customers.

Dario Ambrosini, co-owner with his brothers Massimo and Fabio, explains “*Every day we try to combine a craftsman’s skill with the use of advanced, innovative technologies, to provide customised and flexible solutions, turning every design idea into reality*”.

In this context, over the years the company has acquired significant knowledge of the machining that can be carried out on different types of materials. Today, it can manage processes on noble metals such as steel, brass, copper, and also on aluminium (even pre-painted), iron and black iron, plus plastic materials (including PVC, Lexan, Fo-

rex, Plexiglas), galvanised sheet metal and Alucobond. An operating flexibility based on constant updating of the company’s machines. Amongst the latest investments is a new **Metal System deburring and satin finishing machine**, purchased from **DMC**, a well-known brand operating in the development of high-tech solutions for finishing surfaces, which since 1987 has been part of SCM Group SPA.

“We try to combine a craftsman’s skill with the use of advanced, innovative technologies.”

dmc

The satin-finished parts of this sculpture for a big name in fashion were machined by Ambrosini G.T. using the new DMC Metal System deburring and satin finishing machine.

DMC SYSTEM

Modular, productive and reliable



Compact and versatile, the DMC Metal System deburring and satin finishing machine in the Ambrosini G.T. factory in Bergamo.

MODULAR, PRODUCTIVE AND RELIABLE

A heavy-duty solution, for dry machining, the **DMC Metal System deburring and satin finishing machine** purchased by Ambrosini G.T. is designed for companies who have to be able to combine productivity, reliability and flexible use. In fact, in a single pass it is possible: to eliminate burrs from cutting, effectively remove cutting edges, clean and smooth the edges of holes, even small ones and remove the oxides created by cutting, both on the outer perimeter of the workpiece and inside holes.

Available with load-bearing structures capable of housing up to 10 machining units, to meet any deburring and satin finishing requirements, the machine boasts a modular structure and new-concept machining units (each incorporating its own electro-

nic and pneumatic components), so that its makeup can always be kept in line with changing production demands. In fact, substituting the individual units (or just swapping around their internal order) is fast and inexpensive.

Ambrosini points out that *“The machine has been set up according to precise specifications, based on our operators’ experience. For example, the need for a worktable with improved workpiece hold-down, or the addition of auxiliary pressing rollers. These requirements were met and supported by Dmc, and make it easier for us to manage even small workpieces, which are very common in our orders”*.



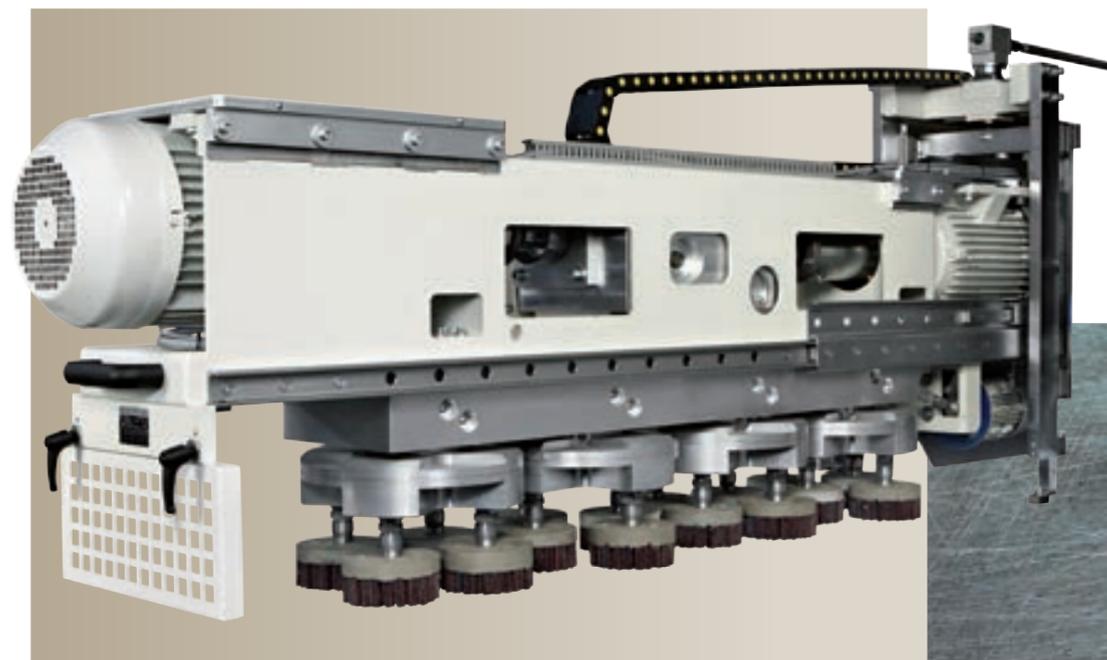
View of a group of operators setting up the DMC Metal System deburring and satin finishing machine.

HIGH PERFORMANCE, CUSTOMISABLE MACHINING UNITS

For the new **Metal System**, **DMC** makes available many types of contact rollers, depending on the specific deburring or satin finishing needs, with 250, 320 and 400 mm diameters. The rollers are made of oil- and heat-resistant rubber, with hardness of 20 sh to 90 sh. They have a grooved helical surface for improved cooling and effective expelling of machining dusts if necessary. The unit height adjustment range allows the use of both traditional abrasive belts and belts made of “surface conditioning” abrasive cloth.

In contrast, the innovative **DP planetary unit** was developed to meet the more complex requirements of deburring and rounding of edges. All motion transmission in the unit occurs using gears in an oil bath, not using belts. Therefore, this is a high-tech unit, able to machine at high torques, even for 3 work shifts. What makes this unit unique and particularly effective is the absolute multi-directional nature of its action: the unit’s three movements (brush rotation, head counter-rotation and transversal oscillation) are managed by independent motors, all inverter-controlled. The most suitable speed combination can be selected, depending on the specific type of operation to be carried out.

“Fitted with the appropriate types of abrasive brushes to suit our needs - adds Ambrosini - even the translating unit with vertical



brushes guarantees excellent results in our machining: from removing cutting edges and rounding edges to removing burrs from holes, and any oxides from thermally cut edges”.

“User-friendly and easy to programme - concludes Ambrosini - the new deburring machine also allows maximum flexibility when setting parameters and for process control. An added value very much appreciated by our operators, who can use their experience to maximise machining output based on the product. In other words, they can give the workpiece or workpieces machined the precise finish requested by our customer”.

So, it is another operating opportunity for the Bergamo-based company. For them, the new DMC deburring and satin finishing machine is a valid tool in addition to those already available for giving machined workpieces the finish quality needed for the specific application. And this can be done while counting on maximum reliability and the highest level of process flexibility.

by Gianandrea Mazzola
for Lamiera

“The machine has been set up according to precise specifications”

can offer expertise and support, making it the go-to firm in the sector. It has around fifty workers, required to meet the needs of the most diverse application sectors in a structure that is organised and divided into operating departments which, as well as offices (admin, technical, sales) include: the cutting and bending workshop, the laser/punching/milling department, the welding and finishing department, the warehouse.

THE COMPANY AT A GLANCE

From cutting (laser and with shears) to bending, from punching to welding, from drilling to deburring and satin finishing. These are some of the steps involved in machining rolled metal sections that Bergamo’s Ambrosini G.T. can carry out to meet the most diverse requirements. With an annual turnover of around € 6 million, the distinctive feature of the company is first and foremost its ability to machine all types of noble metals with a variety of finishes, as well as plastic materials, together with modern techniques both for design and machining. This flexibility and versatility means that the company



Massimo Ambrosini, co-owner with his brothers Fabio and Dario, of Bergamo-based Ambrosini G.T.



The new DMC Metal System 1350 deburring and satin finishing machine purchased by Top Laser of Marano sul Panaro (Modena province)

MORE COMPETITIVE WITH DRY DEBURRING AND SATIN FINISHING

The integration of a new deburring and satin finishing machine made by DMC, part of the SCM Group, means that Modena-based company Top Laser can supply “ready to use” stainless steel components without any need for additional operations. This is an added value which for the end customer results in process optimisation, both during assembly and, if necessary, delivery.

Young and dynamic, Top Laser of Marano sul Panaro (Modena province) is still to celebrate two years in business, but boasts in-depth experience in the sector gained by its 4 founding partners: Matteo Manni, Fausto Galli, Elia Tommaso and Andrea Trenti. With great entrepreneurial far-sightedness, in June 2014 they decided to take over the company from the previous owner and to embark on their own path to growth.

“It wasn’t easy and instant – explains Matteo Manni – but we were able to provide continuity for our customers. For them, in terms of operations, there was no noticeable change”.

Specialising in the design and construction of machines, conveyor belts, sealable tanks, plus various products made of stainless steel, galvanised iron and aluminium, the company can count on a large and diverse portfolio of customers, which it serves by emphasising its rapid response and quick supply times. This is the strong point, based on shared expertise and interchangeability in their roles.

“We have three CAD 3D design stations – says Manni – which three of us can use independently to develop orders according to requirements. We use the same method to manage the machines in the workshop, where we have a laser cutting machine, a shearing machine, three bending machines, of which one is a 230-ton model recently

purchased, stations for wire and TIG welding, both stainless steel and iron, as well as equipment for various machining operations”.

They have added to their machines with a new Metal System 1350 deburring and satin finishing machine from DMC, a well-known brand operating in the development of high-tech solutions for finishing surfaces, which since 1987 has been part of SCM Group SPA.

EASE OF USE AND EFFICIENCY IN A SINGLE PASS

Designed based on more than fifty years of experience manufacturing machines with a flexible abrasive component, the DMC Metal System 1350 guarantees maximum ease of use and powerful, reliable mechanical functions for machining metal. In fact, in a single pass in the machine it is possible to eliminate burrs from cutting, effectively remove cutting edges, clean and smooth the edges of holes, even small ones and remove the oxides created by cutting, both on the outer perimeter of the workpiece and inside holes.

“What convinced us to buy the machine – continues Manni – was the precise aim of expanding not just our collection of machines, but also developing a new idea in terms of supply. All benefiting our customers thanks to process optimisation. The stainless steel products that we make no longer need any final finishing and don’t have a protective film. This makes assembly and, if necessary, delivery faster”.

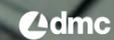
We overcame the challenge by obtaining a first important order to supply stainless steel components, for which further deburring operations were no longer necessary.

“After assessing the solutions available on the market – continues Manni – we identified DMC as an expert, knowledgeable partner, which listened to our requirements and came back to us with a real solution. A direct approach, showing us all of the distinctive features



TECHNOLOGIES FOR ADVANCED MATERIALS

Case History: TOP LASER (ITALY)



Thanks to its diverse machines, Top Laser can supply workpieces and components that have been cut, bent, deburred, satin finished and welded



(from left) Elia Tommaso, Andrea Trenti, Galli Fausto, Matteo Manni, the Top Laser owners and founders.

and strong points of the machine and the operating opportunities that it could offer for our company”.

This careful analysis also involved the **DMC Hi-Tech laboratory** in Thiene (Vicenza province), which was sent several samples prepared by Top Laser. The machining did not disappoint.

“Actually – explains Manni – whilst in the beginning we were only interested in purchasing the deburring machine, having weighed up the options with the DMC technicians we decided to opt for a more complete machine, that was also able to produce a satin finish and Scotch Brite finish”.



The “Hydra V-Pad” control allows use of a touch screen to set all machining parameters, and to carry out a real-time check that the machine is operating correctly

THE ADDED VALUE OF MODULARITY

More generally, the machine supplied to Top Laser is available in various configurations, with load-bearing structures capable of housing up to 10 machining units, to meet any deburring and satin finishing requirements. The machine boasts a modular structure and new-concept machining units, so that its makeup can always be kept in line with changing production demands. In fact, substituting the individual units (or just swapping around their internal order) is fast and inexpensive.

There are many types of contact rollers, depending on the specific deburring or satin finishing needs, with 250, 320 and 400 mm diameters. They are coated with oil- and heat-resistant rubber, with hardness of 20 sh to 90 sh. Use can be made of either traditional abrasive belts, or belts made of “surface conditioning” abrasive cloth.

Electronic adjustment of the position of the above-mentioned machining units is performed using linear stepping motors, managed by the machine PLC via a Can Bus connection: this is the best solution for fast, precise positioning of the machining units, with lasting precision. The position of the rollers can be saved in the individual machining programs, so that it is possible to retrieve the one best suited to every type of machining, depending on the thickness of the abrasive belts used and the desired machining pressure.

Able to process workpieces up to 1,250 mm wide, with a thickness of between 0.6 and 170 mm, the machine installed at Top Laser was set up with 4 machining units, that is to say, one with a deburring roller, one satin finishing unit, one final Scotch Brite unit and one central translating unit with vertical brushes. The latter, fitted with the appropriate types of abrasive brushes, guarantees excellent results in a wide range of operations, in particular: removing cutting edges and rounding edges, removing burrs from holes and removing any oxides from thermally cut edges. The simplicity and speed of abrasive disk replacement makes machine setup fast and easy for any type of application and provides locking with maximum safety. The motor power drive system is effective and quiet, even in heavy duty working conditions, thanks to the Poly-V multi-rib belts of the drive system and use of an automatic tensioning device.

The fixed work bench is also greatly appreciated by the Modena-based company: “A feature that isn’t common on these machines – says Manni – which will let us make our process even more efficient, because in future we can fit a workpiece return conveyor belt. The idea is to connect the workpiece infeed and outfeed, to make process management even faster with a single operator”.

MAXIMUM MANAGEMENT SIMPLICITY

Fitted as standard on all DMC Metal System deburring machines is the “Hydra V-Pad” control, with a touch screen that allows users to set all machining parameters, and to carry out a real-time check that the machine is operating correctly.

“Simple management – adds Manni – allows the operator to check all operating parameters and edit them in real time depending on the workpieces processed. At the same time, we can save the settings so that they can be retrieved for repeat batches, ensuring top quality workpieces”.

In this case, the operator’s experience is crucial, with sensitivity increasing over time, as certain requirements are met.

“Thanks to this new technological addition – concludes Manni – and to the new operating possibilities, we can provide our customers with a higher quality product. They receive machined workpieces that are ready to use, without needing any additional operations”.

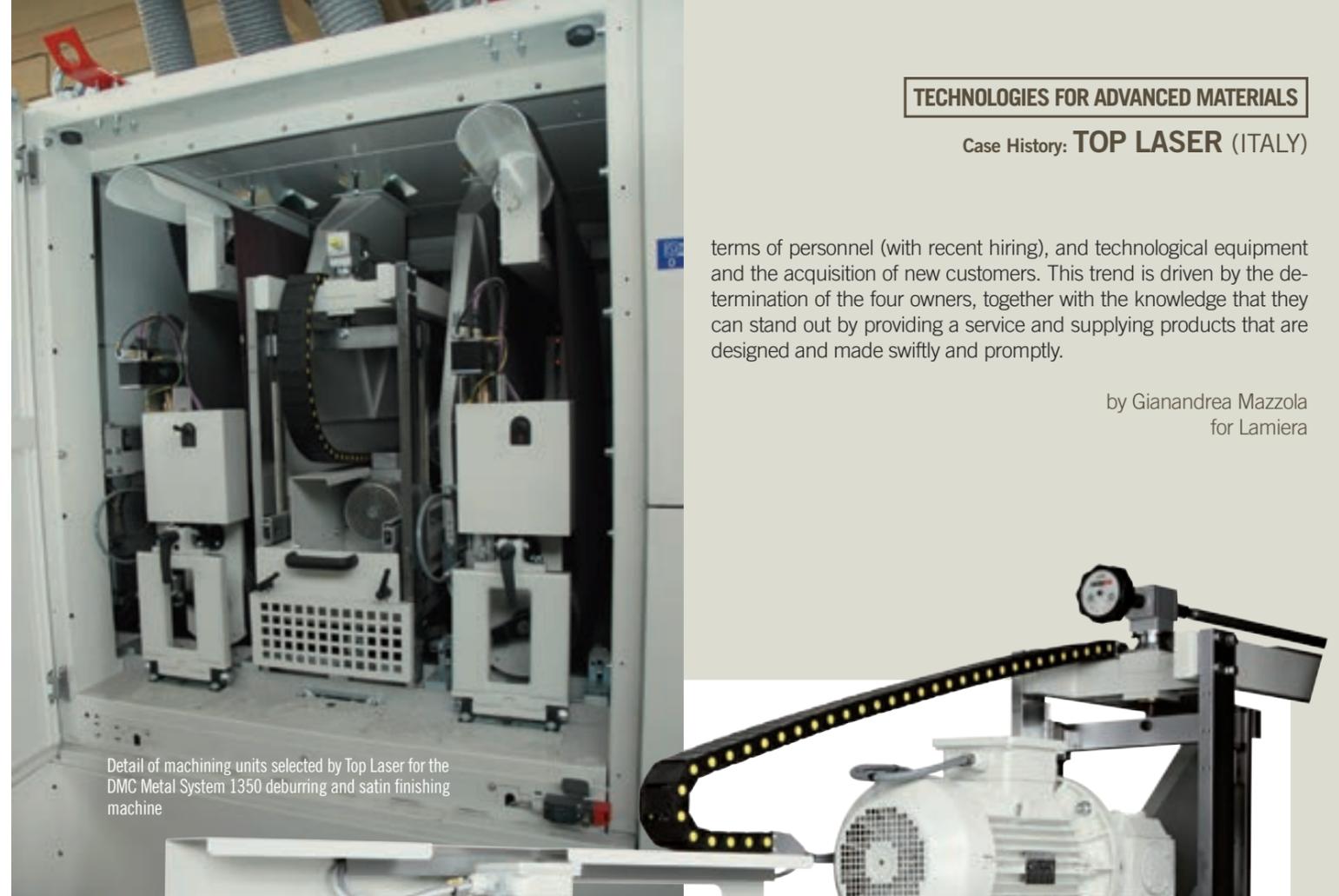
Young and dynamic, Top Laser is growing in every sense, even in

TECHNOLOGIES FOR ADVANCED MATERIALS

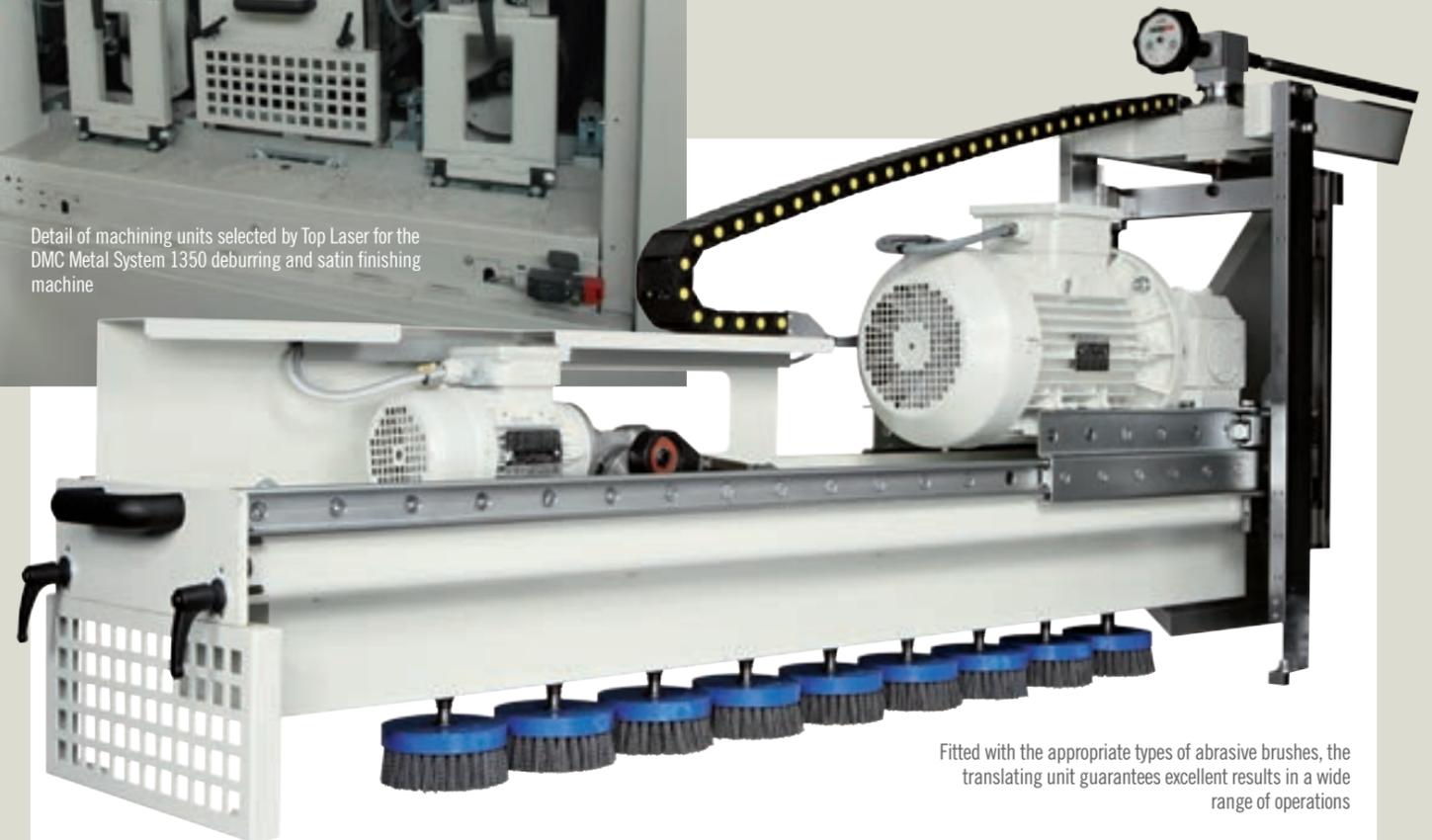
Case History: **TOP LASER (ITALY)**

terms of personnel (with recent hiring), and technological equipment and the acquisition of new customers. This trend is driven by the determination of the four owners, together with the knowledge that they can stand out by providing a service and supplying products that are designed and made swiftly and promptly.

by Gianandrea Mazzola
for Lamiera



Detail of machining units selected by Top Laser for the DMC Metal System 1350 deburring and satin finishing machine



Fitted with the appropriate types of abrasive brushes, the translating unit guarantees excellent results in a wide range of operations

THE IMPORTANCE OF A TECHNOLOGICAL RESEARCH AND DEMONSTRATION CENTRE

Top Laser’s purchase of the new DMC deburring and satin finishing machine was the result of an informed decision, after assessing the solutions available on the market. Tipping the balance in favour of this new investment was not just suitable technical support, but also the opportunity to see up close the operating possibilities, thanks to the availability of an advanced technological research centre, the DMC Hi-Tech laboratory at the centre in Thiene (Vicenza province). The operating unit is managed by highly specialised personnel, and is equipped with sophisticated instruments for analysing the materials to be processed and the various types of abrasive components. Thanks to the many demonstration machines, the centre can perform any deburring and satin finishing test, quickly providing detailed information about the best way to handle new machining issues, and to obtain the new finishes requested by the market.

A NETWORK OF 1.000 TECHNICIANS, 36,000 SPARE PARTS FOR PROMPT, QUALIFIED ASSISTANCE

HIGHLY SPECIALISED TECHNICIANS, EFFICIENT
MANAGEMENT AND 6 SERVICE CENTRES AROUND
THE GLOBE ENSURE YOU CAN COUNT ON CLOSE,
EFFECTIVE SUPPORT.

SERVICE: A CONTINUOUS COMMITMENT, TO PROTECT YOUR INVESTMENT

SUPPORT SERVICE

SCM Group provides a service that goes beyond the purchase, to guarantee the long term performance of your technological production system and peace of mind for your business.

A COMPLETE RANGE OF AFTER-SALES SERVICES

- installation and start-up of machines, cells, lines and systems;
- tailored training programs;
- telephone support to reduce times and costs when machines are not working;
- preventive maintenance programs to guarantee long term performance;
- complete renovation of machines and plants to renew the added value of the investments;
- custom upgrading to update machines and plants and meet new production requirements.

SPARE PARTS SERVICE

SCM Group can count on 140 spare parts professionals worldwide to meet any request with real time shipments.



36,000 SPARE PARTS

Our spare parts inventory, with a value of 12 million euros, covers every single machine.



SPARE PARTS GUARANTEED

We guarantee also hard to find parts, with 3,5 million euros invested in "critical" spare parts.



IMMEDIATE AVAILABILITY

Over 90% of orders received are carried out the same day thanks to the huge inventory available.



6 BRANCHES AROUND THE WORLD

The spare parts service can count on worldwide support (Rimini, Singapore, Shenzhen, Moscow, Atlanta, Sao Bento do Sul).



500 SHIPMENTS A DAY



**STRONG
REASONS
WHY**

WHATEVER YOUR NEED SCM HAS THE RIGHT ANSWER

WITH **15 SPECIALISED BRANDS**,
SCM GROUP PROVIDES THE WIDEST
RANGE OF MACHINERY FOR
SECONDARY WOOD PROCESSING.

	INDUSTRY		ARTISANS
	FURNITURE	HOUSING	JOINERIES AND BESPOKE PRODUCTION
MACHINING CENTRES	morbidelli	scm routech	scm
BEAM SAWS	gabbiani		scm
EDGE BANDERS, SIZING EDGE BANDERS	stefani		scm minimax
BORING MACHINES	morbidelli		scm minimax
PRESSES		sergiani	scm
WIDE BELT SANDERS		dmc	scm minimax
THROUGHFEED MOULDERS		scm	scm
SYSTEMS FOR DOORS AND WINDOWS		scm	
SYSTEMS FOR TIMBER CONSTRUCTIONS			routech
DOUBLE-END TENONERS		celaschi	
FINISHING SYSTEMS		superfici	
HANDLING AND AUTOMATION		mahros	
ASSEMBLY AND PACKAGING		cpc	scm
LINES		scmgroup engineering	
CLASSICAL MACHINES			scm

SCM GROUP, THE WOODWORKING TECHNOLOGIES ITALIAN LEADER

There are countless, concrete reasons why the wood industry continues to choose SCM. Our numbers speak clearly, but even clearer are the words of our customers around the world. Loyal customers, with whom we have developed a working partnership over the decades that has enabled us to hone in on products and services that respond to their needs. This is how our group has partnered them in the face of a challenging market, and has become a vital part of their success.

65 Years of know-how and specialist knowledge
Certified Quality of an integrated supply chain, 100% Made in Italy
15 Brands specialised in woodworking technologies
The widest range of solutions
Customer-oriented care in every part of the world
Extremely low cost of ownership
500 Engineers dedicated to R&D
500 active patents
Latest generation software developed by SCM

STRONG REASONS WHY



Many people believe that Italy is world-famous for style, design and good taste.

PROGETTO

SCM GROUP COMMUNICATIONS
Rimini

ART DIRECTION

KOMMA
Pesaro, Milano

FOTOLITO

LIFEINPIXEL
Pesaro

STAMPA

DIGITALPRINT
Rimini

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