



# HITS

## 2024

SMART&HUMAN INNOVATION



*is more*

index



**PIETRO GHELLER**  
New Technology Centers,  
innovation and capillarity:  
SCM's strategies pagg. 14/17



**EDITORIAL** pagg. 4/5

**LUIGI DE VITO**  
A year full of investments pagg. 6/9

Corporate news

**A SUCCESSFUL YEAR** pagg. 10/13



Scm Group in the top ten  
of Italian companies for patents

Vice-President of the Council  
of Ministers' visit to Scm Group

Innovation Management White Paper presented  
at the Ministry of Enterprise and Made in Italy

Best Managed Companies:  
Scm Group is once again among the  
award-winning excellences

The Scm Group e-commerce project realised  
by NTT DATA at the SAP Quality Awards 2023

Scm Group among the best Italian companies  
for financial reliability

SCM news

**OPEN HOUSE, TRADE FAIRS,  
NEW BRANCHES...  
EVEN CLOSER TO THE CUSTOMER!** pagg. 18/21

- SCM España Opening
- SCM Deutschland Opening
- SCM Australia, modernised  
Headquarters in Sydney
- IndiaWood, the spotlight  
on the new SCM branch
- SCM Deutschland in Bengaluru
- Vietnamwood, announced the new  
SCM branch in Ho Chi Min City
- Woodtech 2023,  
grand début for SCM
- Dach+Holz2024:  
SCM builds the future  
of timber construction
- Interzum Guangzhou  
2024, what a success!
- New SCM Subsidiary in Slovenia
- Funds for professional training:  
an opportunity for wood/  
furnishings



Digital Transformation



**DIGITAL SERVICES: SCM, PIONEER  
WITH THE NEW MAESTRO  
CONNECT'S CONTROL ROOM** pagg. 22/25

Cover Story



**AT XYLEXPO 2024, A 100%  
'MADE IN RIMINI' DESIGN PROJECT** pagg. 26/31

Case studies

Furniture and Kitchens



- 3B IDO JÖRG SCHOLZ** Germany pagg. 34/35
- BÄUMLE** Germany pagg. 36/37
- CIAO BERTO** Kosovo pagg. 38/39
- ESTEL** Italy pagg. 40/41
- GAUTIER** France pagg. 42/43
- GRUPPO GEROMIN** Italy pagg. 44/45
- MOTIF JOINERY** Australia pagg. 46/47
- PRO PANEEL NEDERLAND** Netherlands pagg. 48/49
- RIMOBEL** Spain pagg. 50/51

### Timber construction



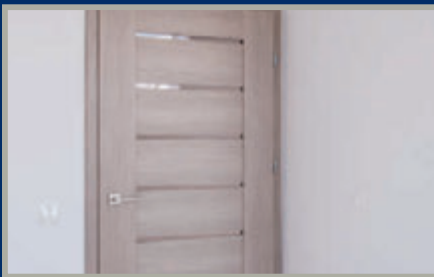
- FRERES ENGINEERED WOOD USA** pagg. 54/55
- HANS HUNZIKER HOLZBAU**  
Switzerland pagg. 56/57
- HOLZBAU SUD Italy** pagg. 58/59
- JAGRAM-PRO Poland** pagg. 60/61

### Windows



- KÖNITZER + HOFER AG** Switzerland pagg. 64/65
- MÉO France** pagg. 66/67

### Doors



- GRUPO VALCO Portugal** pagg. 70/71
- PRINCIPAL DOORSETS UK** pagg. 72/73

### Flooring



- CADORIN Italy** pagg. 76/77
- PUCHEGGER U. JILG Austria** pagg. 78/79

### Surface treatment



- DECORE-ATIVE SPECIALTIES USA** pagg. 82/83
- ESCALIERS PLASSE France** pagg. 84/85
- PM SERRAMENTI Italy** pagg. 86/87
- ROTTALER FENSTERLADENBAU**  
Germany pagg. 88/89
- TOM HOWLEY KITCHENS UK** pagg. 90/91

### Joinery and design



- D3WOOD Italy** pagg. 94/95
- HALDANE UK UK** pagg. 96/97
- 3D-CNC TISCHLEREI CLUSE**  
Germany pagg. 98/99

### Nautical and caravans



- DIESE ARREDAMENTI Italy** pagg. 102/103
- HANSEYACHTS Germany** pagg. 104/105
- KLAUS HÜNERKOPF**  
**PREMIUM-MANUFAKTUR**  
Germany pagg. 106/107
- NORD PRODUKT Croatia** pagg. 108/109
- NUCAMP USA** pagg. 110/111

**Editorial** | by Gian Luca Fariselli, Scm Group Communications Director

## More than a machine: SCM's Smart&Human innovation continues

Behind every machine or plant for wood machining lies the know-how of a team of experts with a permanent eye on the industry's future to provide products and services with added value. SCM's R&D work has always been driven by this philosophy and the same concept lies at the heart of HITS, the magazine showcasing our clients' success stories. A few years on since it was first published in 2017, we continue to believe in this format because the needs and objectives achieved by artisan and industrial excellence which we work alongside all over the world with our technological and digital solutions, represent the path on SCM's journey into the future of innovation. We continue to grow and develop alongside our clients while always keeping two concepts at the forefront of our mind - **Smart** and **Human** - which remain key to our vision.

As is clear from the news, interviews and stories carried in this latest edition of HITS, SCM is continuing its investments to offer **integrated, automated and complete solutions** for every field of application in secondary wood processing: furniture and kitchens, timber construction, windows and doors, flooring, surface treatment, joinery and design, right up to boats and caravans. Machines and systems developed for an increasingly efficient, sustainable and flexible production, in an Industry 4.0 context and which are now preparing to face the new, important challenge of **Industry 5.0**, with the same tenacity, steadiness and far-reaching vision.



As we said, more than a machine. Because, if technology remains the heart of SCM's experience, software and services are increasingly the guarantor element of a continuous and shared relationship with the client. Smart&Human innovation increasingly becomes a part of **digital transformation**, supporting the client with new assistance and advisory services and with an increasingly proactive approach. The **Digital Control Room**, created within SCM's new Technology Center in Rimini, is an example of this. Thanks to the analysis of data from thousands of machines connected all over the world and SCM service's experience, it can predict hazardous situations and potential stoppages or breakages and provide timely advice on what action to take.

Advantages which our clients also describe in this issue, starting with Fontemaggi - this issue's cover story - which, thanks to the systems and services provided by SCM, managed to increase its production of trade fair and showroom outfitting work and make it more efficient. This included SCM's design stand which was with us at the most recent edition of the Xylexpo trade fair.

Innovation and digital transformation are the *fil rouge* running through the numerous case studies presented in this issue, which once again prove that a company's size is not a hindrance to its brilliance and initiative. Stories of artisan excellence which have found the key to success in updating their processes. Joiners who create genuine works of art for world-famous designers and architects. Vast industrial organisations which acquire flexible machinery for an ever-more bespoke production... Behind all this is a partner like SCM which not only has had a passion for wood ingrained in its DNA for over seventy years, but can also rely on the integration of equally advanced technologies and solutions for machining marble, glass, metal, plastic and composite materials: those of an equally solid and reliable partner like Cms, another of the group's companies.

Automation, digitalisation, service and multi-materiality: Smart&Human innovation operating alongside our clients.

We hope you enjoy the read.

Gian Luca Fariselli,  
**Scm Group Communications Director**



# SMART & HUMAN



# INNOVATION



Integrated and digital solutions 5.0  
for the industry of the future



**Interview** | Luigi De Vito, General Manager of Scm Group



# A year full of investments

**Luigi De Vito, Scm Group's General Manager, describes the priorities and strategies of the extensive investment plan of this global leading Group in technologies for machining a wide range of materials and industrial components.**

It is well known that last year was not a particularly positive one for the manufacturing industry and the Italian economy. The shortage of raw materials and technological components and the uncertainties and instability within the international macroeconomic context proved extremely challenging for Made in Italy goods and is still taking its toll in 2024. That said, it is in these challenging situations that a team's strength, capacity for resilience, investments and a company's solidity must - and can - make a difference.

**Scm Group has gone on the attack** closely observing the market trends that concern them and implementing a **strategic plan of action** which, in 2023, saw them achieve a record level of **900 million in turnover**.

*"We have presided over the situation by keeping a good marginality and managing to positively handle relations with our clients, sharing difficulties, as well as strategies - says **Luigi De Vito, Scm Group's general manager** -. Most of our turnover, around 70 per cent, was generated by the Wood Division alone, a sector in which we continue to focus our activity, confident that it will continue to prove highly satisfying".*

As De Vito points out, Scm Group is a solid organisation with a **mid to long-term vision** and **continues to grow and innovate**.

Different investments and projects have been put in place over the last year and there are a large number of objectives: to increase production efficiency at the industrial sites in Italy; strengthen after-sales services and digitalisation of products and internal processes; increase the direct presence on international markets with the opening of new branches and consolidation of existing ones; strengthen R&D activities which represent 7% of the annual turnover, in the various business sectors; and last but not least, continue to encourage our team's growth and their skills thanks to Campus, the Group's training centre which celebrates five years this year. De Vito starts from the recent investments made at the Headquarters in Rimini to describe the main assets of Scm Group's strategy.

*"Since September 2023, we have a **completely new Technology Center** where, not only have we expanded the spaces, bringing*

*them to 4,000 square metres, but we have modernised the areas making them more elegant and welcoming to further enhance our relationship with the client and our vast, unique technological and digital range of proposals which are even more innovative and accessible to every woodworking application field. As well as this, we have added **11 thousand square metres** to the industrial site to increase our production efficiency, and we have modernised it by*

**Scm Group is a solid organisation with a mid to long-term vision and continues to grow and innovate.**

*We have presided over the situation by keeping a good marginality and managing to positively handle relations with our clients, sharing difficulties, as well as strategies.*





## Intervista | Luigi de Vito, General Manager of Scm Group

extending the digitalisation to all the production lines in Rimini and the other plants in Italy thanks to the adoption of a **'Factory Control System'** which allows us to monitor every step more precisely and steadily. This work is part of a precise industrial plan which does not just involve this plant but all the other ones in Italy as well, for an overall expansion of **20 thousand square metres**: in Sinalunga (Siena) for timber construction systems, in Villasanta (Monza-Brianza) for Superfici technologies and in Zogno (Bergamo), for the Cms plant, our company specialising in solutions for machining advanced materials, plastic, glass, stone and metal. June 2024 will see the official opening of the new Hiteco headquarters, the company in our group specialising in hi-tech electromechanical components for tool machine manufacturers: another investment which allows us to increase production and workforce efficiency".

Still in Rimini, as part of the redevelopment of the new Technology Center, we have another new entry which is clear proof of how much Scm Group aims to present itself not just as a supplier of technology but of high added value services.

"The opening of our **Digital Control Room** is a huge step forward because it transforms the approach of the service from reactive to **proactive** assistance, as well as allowing us to be at the clients' side 24/7 no matter where they are in the world. This is a summary of what we aim to be: partners who don't restrict themselves to selling a machine, but become close associates, operating to ensure our solution is always at its best, providing all the information needed in real time and constantly for the continuous improvement of the end product.

That's not all: all the information passing through our Control Room, whose privacy is fully protected, becomes valuable messages and feedback for our entire after-sales service, a single connected fabric which involves the machinery installed all over the world, generating a continuous update and

improvement process... a genuine technological community.

All this means being able to guarantee top-level **service** and **customer care**.

Digital services, but also **software**. "This is another aspect we have worked a great deal on, both from a logic point of view, the language which allows the components in our machines to move and operate harmoniously and to their maximum potential, and from a Human Machine Interface point of view, with a completely updated HMI for all the SCM machines, to allow operators to work simply and easily. Our proximity, continuous contact with schools and training centres, allows us to accurately monitor the needs of tomorrow's operators and we have started precisely from here by providing increasingly "easier" tools, especially for cad-cam".

All these investments imply a **strong focus on people and training**. "There is another aspect which is key to us and that is skills: always being top of the game at what we are doing, offering continuity to the partnership with our clients and contributing to the continuous implementation of their know-how.

This is why we have invested on our **Campus**, working at 360° on everyone who represents the important added value to our technologies wherever they work in the world.

We are extremely proud of what we have done and continue to do: this company has a winning DNA, irrespective of the historical periods we are all going through. It is the DNA of an industrial group looking to play a listening game towards the client but on the attack, with a keen sensitivity towards their needs, those of the people working within our organisation and towards the company's future. Our duty is to take these three ingredients and have them interact and soar to the maximum of their potential".

### Investments in production efficiency and digitalisation

We have invested in the Italian industrial sites for an overall expansion of over 20,000 square metres.



**There is another aspect which is key to us and that is skills: always being top of the game at what we are doing, offering continuity to the partnership with our clients and contributing to the continuous implementation of their know-how.**



“

*The DNA of this company is that of an industrial group looking to play a listening game towards the customer, with a keen sensitivity towards their needs, and to the people who work within our organisation.*

”

Corporate news



Some pictures of the visit of Vice-Premier Antonio Tajani welcomed by the Board of Directors of Scm Group

A successful year



**Scm Group in the top ten of Italian companies for patents**

Scm Group is among the Italian companies that submitted the most patent applications in 2023. The data from the Epo Patent Index drawn up by the European Patent Office, place the Rimini group in the top ten of the ranking. *“This news is further confirmation of the Group’s constant commitment to innovating its products and services, to offer customers increasingly advanced solutions in efficiency, quality of workmanship and sustainability, in highly competitive and constantly evolving sectors”* states **Marco Mancini**, CEO of Scm Group. *“Scm Group invests an average of 7% of its annual turnover in R&D activities - adds General Manager **Luigi De Vito** -. Innovation is at the core of a process that involves the entire company. It doesn’t only consider market expectations but is aimed at anticipating customer needs and improving the added value of their business projects”.*

The Innovation team is responsible for coordinating the Group’s R&D path with top management and working alongside specific process technologies to develop new solutions and skills. According to Group Innovation Director **Andrea Anesi**, about 2023 patents, *“the Group has*

*dedicated its innovative energies to various areas that include the world of digital applications and software, sustainability with the reduction of space, waste and consumption of machines and plants, as well as robotics applications and technological solutions aimed at facilitating the work of operators, improving performance, quality and human-machine interaction”.*

**Vice-President of the Council of Ministers’ visit to Scm Group**

2024 opened with **Antonio Tajani’s** visit to Scm Group Headquarters. The Vice-President of the Council of Ministers and Minister of Foreign Affairs was accompanied by the Minister of University and Research **Anna Maria Bernini** and they were welcomed by the Board of Directors and General Management of Scm Group.

The ministers chose to visit the company in recognition of the excellence for the Italian economic system of a Group that continues to invest in its industrial sites in Italy and to grow globally, enhancing the Made in Italy value all over the world. The ministers, together with various local authorities and institutions from the territory, also visited our renovated Technology Center dedicated to the entire woodworking industry,



*Scm Group is among the Italian companies that submitted the most patent applications in 2023*

*The presentation of the Innovation Management White Paper at the Ministry of Enterprise and Made in Italy*



with industrial automation systems and cutting-edge digital services. Antonio Tajani pointed out that the visit to the Scm Group is “*recognition to an extraordinary entrepreneurial reality that has always been committed to internationalisation*”. Mr. Tajani added that exports, which are growing in Italy despite the known criticalities in some foreign scenarios, represents a priority for the government and emphasised the importance of “*exploring new markets in addition to those already consolidated for Made in Italy exports*”. Minister Anna Maria Bernini added that “*the strength of Scm Group to remain constantly innovative over the decades*” is one of the main objectives that the national entrepreneurial system must set itself together with the “*ability to internationalise, to invest in sustainability and in new generative artificial intelligence technologies*”.

### **Innovation Management White Paper presented at the Ministry of Enterprise and Made in Italy**

The first White Paper on Innovation Management was presented to the Minister of Enterprise and Made in Italy Adolfo Urso on 17 November 2023. The initiative, promoted by the Think Tank of Italian innovation leaders, collects case studies and concrete proposals with the aim

of stimulating the growth of the Country System. Scm Group is among the entrepreneurial excellences protagonists of this project. The White Paper tells how the Group, which invests 7% of its annual turnover in R&D, is structured to stimulate innovation processes aimed not only at meeting market expectations, but above all at anticipating customers’ needs in terms of efficiency, processing quality and sustainability. Scm Group is also among the 11 companies that brought to the Ministry’s table concrete indications to encourage a greater culture of innovation in Italy. The proposal illustrated by Andrea Anesi, Scm Group’s Innovation Director, who attended the event with Giorgia Zanelli, Innovation Program Manager, is focused on the new ISO 56001 certification: its introduction,’ commented Anesi, ‘on paper guarantees more effective innovation management, but to translate it into a real opportunity it is necessary to favour companies by simplifying the management of research tenders and defiscalising the related costs. “One of the pillars of these innovation governance systems is the willingness of the company to improve, year by year, the results achieved. We therefore believe that, in addition to incentivising the adoption of this culture of innovation governance, we can reward its maintenance with bonuses on tax credits for research, development and innovation, and introdu-

Corporate news



From left, Davide De Sossi, CFO, and Gian Luca Fariselli, Communications Director of Scm Group, at the Best Managed Companies Award Ceremony



The Industria Felix Award Ceremony

ce simplification mechanisms for participation in funding calls through ISO 56001 certification’.

**Best Managed Companies: Scm Group is once again among the award-winning excellences**

For the third consecutive year, Scm Group has won the **Best Managed Companies Award**, aimed at the entrepreneurial excellence of Made in Italy and promoted by **Deloitte Private**, with the participation of ALTIS - Graduate School of Sustainable Management of the Università Cattolica del Sacro Cuore, ELITE-Gruppo Euronext and Piccola Industria di Confindustria. In this sixth edition, 79 Italian companies were awarded based on the parameters of ‘Strategy’, ‘Skills and Innovation’, ‘Commitment and Corporate Culture’, ‘Governance and Performance Measurement’, ‘Corporate Social Responsibility’, and ‘Internationalisation and Supply Chain’. The award ceremony, on 30 October at Palazzo Mezzanotte, headquarters of the Italian Stock Exchange ELITE-Euronext Group, was attended for Scm Group by

**Davide De Sossi**, CFO, and **Gian Luca Fariselli**, Communications Director. The award is a further source of pride for the Group which, as the organisers emphasised regarding the award-winning companies, has demonstrated its ability to successfully tackle a complex international scenario thanks to the excellent skills shown by all company employees.

**The Scm Group e-commerce project realised by NTT DATA at the SAP Quality Awards 2023**

The e-commerce project realised by NTT DATA Italia for Scm Group has been awarded by SAP Italia at SAP Quality Awards 2023, in the Business Transformation category. NTT DATA has supported Scm Group in the digital transformation of relations with end customers and business partners at international level, extending the B2B market to the D2C market with a solution based on SAP Commerce Cloud. The award as Gold Winner in the Business



Transformation category was celebrated during the SAP Now event in Milan on 26 October 2023. The SAP Quality Awards for Customer Success celebrate and recognise customers who have excelled in the successful implementation of solutions using SAP quality principles to simplify business processes and deliver significant business benefits to their organisation. The e-commerce project proved particularly strategic for SCM, the Group's Wood Division. In fact, SCM has become the first manufacturer worldwide in the Wood sector to offer online sales of machines, spare parts, traditional and digital services, and software, integrated and purchasable in a single shopping cart.

### Scm Group among the best Italian companies for financial reliability

Best management performance and financial reliability among large companies with registered offices in the province of Rimini. For these results Scm Group is among the companies that have been awarded by Cerved and Industria Felix Magazine, economic and financial sup-

plement of Il Sole 24 Ore daily newspaper, on Friday 14 April in Fossalta di Portogruaro (Venice) at the Headquarters of Zignago Holding. As emerges from the survey of balance sheets carried out by the organisers, in the post-Covid years about 7 out of 10 companies produced profits in the North East regions.

The regions that most drove growth were Veneto, which recorded 75% of companies with profits, Emilia-Romagna, with 73.2%, then Trentino Alto Adige with 73%, and Friuli Venezia Giulia with 72.1%.

Receiving the Highest honour for Scm Group were the Group's CFO, **Davide De Sossi**, and the Consolidated Balance, Reporting and Suppliers Accounting Manager **Andrea Diolaiti**. *"This award - commented De Sossi - is further confirmation of how in recent years the Scm Group has been able not only to grow in revenues, reaching 850 million, but also to improve its solidity and financial reliability".*

**Interview** | Pietro Gheller, Director of SCM Wood Division

# New Technology Centers, innovation and capillarity: SCM's strategies

**Pietro Gheller, new Director of the SCM Wood Division, talks about the priorities, investments and new achievements in Italy and abroad to be ever closer to the customer.**



## **Pietro Gheller is the new Director of Scm Group's Wood Division.**

Born in Vicenza 48 years ago, in 1997 Gheller took part in the International Business Program at Stockholm's School of Economics and in 1999 graduated from the Bocconi University in Milan in Business Economics. Since 2000, over the course of his long professional career, he has held strategic consulting positions and ones of managerial responsibility in sales, commercial marketing and the supply chain, working for important commercial organisations and multinationals in Italy and abroad in the Fast-Moving Consumer Goods, Durable Goods and Industrial Machinery sectors.

In 2019, he joined Scm Group as Sales&Markets Director in the Wood Division, taking charge of and handling the strategic management of more than twenty of the group's branches and the entire operating sales network in Italy and abroad. In 2022, he was appointed SCM's Product&Markets Director, taking charge of the Business Units and, as a result, of the different technologies which make up the group's vast range of products for use in the entire secondary wood processing industry.

Since 11 April 2024, he has been Director of the Wood Division, taking charge of SCM's Industrial and Customer Care departments together with the technology and commercial development departments.

*"I'd like to thank Scm Group's Board of Directors and Directorate-General for the trust show in me - he says - For me, this is the peak of my professional career which has allowed me to acquire important skills in the direct management of global teams and to adopt an increasingly more strategic and focused approach to results. Experiences and skills which I am proud to make use of in managing the Wood Division in every area of expertise. The international macroeconomic context is not yet fully on the industry's side, but we can continue to focus on our team strength, the value of ongoing investments and the Group's financial solidity, to gain further market shares".*

**In the company of Gheller, we shall retrace the main steps and strategies of a year which has seen SCM achieve significant goals in Italy and abroad.**

*"The Grand Opening of the Technology Center in Rimini - he explains - was undoubtedly an exceptional project; the largest event not only in 2023, but throughout the entire history of the Wood Division if we consider the investment made to bring these new spaces to life, the expectations and aims of correlated businesses. These spaces show that ours is a highly innovative offering with a strong technological skill set and that everything is in place for conquering new market shares".*





## Interview | Pietro Gheller, Director of SCM Wood Division



From 28 to 30 September 2023, the Headquarters in Rimini welcomed **more than 2,500 visitors from all over Europe, Asia and North and South America** and since then, there has been a succession of tech tours by groups of clients, dealers and schools from Italy and abroad. *“The new Technology Center is, for all intents and purposes, like a new digital home of innovation for woodworking: every detail has been planned to offer the client the widest range of technologies and services possible and provide integrated, connected, flexible, more sustainable and optimised processes at each stage of secondary wood processing. The event was an opportunity to discover the latest solutions developed by the Group which combine the strong technological skill for the production of solutions for furniture, doors and windows, timber construction and artisan joinery with the development of software and services, to accompany the client at each stage of their production process”.*

**It is not just the headquarters in Rimini that is being expanded and modernised.** SCM is investing in other Technology Centres at its plants in Italy and abroad. *“The opening of the **new SCM-Superfici Technology Center** in Villasanta (MB), in the heart of Brianza is planned during the Xylexpo trade fair, from 21 to 24 May: 2,000 square metres of high technology await you together with around thirty solutions focusing on efficiency and versatility for flexible, sustainable and top-quality production and an even wider, more advanced range of technologies and services for the whole secondary wood processing industry with software and digital services ready to work alongside the client at every step of the production process. In these new spaces, clients can explore not only Superfici’s innovative finishing solutions and Scm’s complementary offers for sanding, but a vast range of other technologies developed by the group to meet any machining requirement, in every area of secondary wood processing where it is applied”.* From Italy to **Germany**, where SCM’s plant in Nurtigen was moderni-

sed and, from 17 to 19 April 2024, officially opened its new Technology Center. *“In this case, the spaces have been extended by 60% to display even more of SCM’s machinery and plants and to represent the technological and commercial benchmark for the entire DACH area, a market which has always been key to SCM”.*

Equally consistent has been the investment in another one of SCM’s historical headquarters in Europe, this time in Spain, in Sant Cugat, where the Technology Center was opened last November.

*“This investment takes a close look at the trends and requests made by the Spanish companies in the wood furnishing sector. A market which stands out as one of the most evolved in the world for its innovation, with a high-end business quota and of above-average technological equipment in the woodworking sector at international level”.* There is no shortage of investment at the other end of the world either; from 8 - 10 May 2024, **SCM Australia** managed to present itself with new, state-of-the-art spaces. *“SCM has five facilities in this market in Adelaide, Melbourne, Brisbane, Perth and Sydney. It is precisely the one in **Sydney** which benefits from an exceptional Technology Center, where it can welcome clients and show them the technological solutions and services most congenial to their production needs”.*

All these investments have one common goal: **providing a direct welcome to the client, designed around the specific identities and needs of the individual markets.**

*“This is the direction in which we are moving to promote more regular occasions for exchange and relations with the client directly in ‘our home’ in our plants in Italy and abroad”.* 2023-2024 were two special years for the opening of new **SCM branches** around the world, in strategic markets.



*“Together with the more than twenty commercial branches which SCM can rely on around the world, are the new plants in Ljubljana in **Slovenia** - SCM’s first plant in the Balkans -, in Bengaluru in **India** and Ho Chi Min City in **Vietnam**. The common goal is to guarantee an ever more direct presence at international level to accompany the clients with highly specialised sales&services teams and offer a direct, punctual service wherever secondary wood processing is used”.*

A final consideration with the new Director of the Wood Division must concern **Xylexpo** (Fieramilano Rho, 21-24 May 2024) where SCM will present a full programme of technological and digital innovations, thanks both to the quality of new entries which the Italian group has in store for the entire secondary wood processing sector, and for the completely new presentation procedures.

*“We chose to present SCM’s latest products in terms of technologies, software and digital services in a completely new way, **with state-of-***

***the-art multi-media and immersive tools** for the purpose of showing off SCM’s entire range of products, without limitations and with a process logic. Indeed, our aim was to include every new product into **integrated and complete automated processes**, designed by SCM to meet the new production challenges and aimed at every application field: furniture and kitchens, windows and doors, flooring, construction, surface treatment, the nautical sector, caravans and joinery... Solutions aimed at making the processes more sustainable and efficient even in **batch-1 production** and at achieving bespoke products with an, as ever, outstanding quality and level of design.*

*Staying with the trade fair, we have decided to take a closer ad hoc look at the new Industry 5.0 incentives, a match which, once again, SCM wants to play in the role of key figure”.*

SCM’s Smart&Human innovation continues...

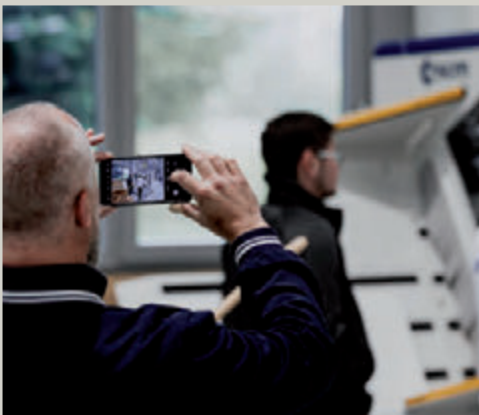
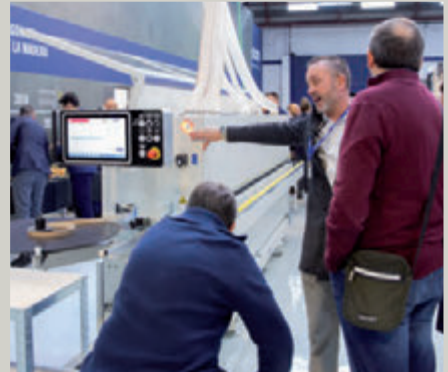
SCM news

# Open House, trade fairs, new branches... even closer to the customer!

## SCM España Opening

*From 29 November to 1 December 2023, the plant at Sant Cugat des Vallès opened its doors and welcomed a large number of clients and visitors, showing them around a wide variety of SCM technological and digital solutions in its fully modernised space.*

*Design solutions to fully satisfy the production needs of the furniture industry and the entire wood-working sector. The opening was just the beginning of a new stage in the life of the Spanish branch, which is keen to provide its Iberian clients with as much support as possible, relying on an increasingly growing and highly skilled sales and technical team.*



## SCM Deutschland Opening

*SCM continues to invest in the DACH markets and the new Technology Center which opened from 17 to 19 April 2024, is just one of the investments made to offer clients in Germany, Austria and Switzerland a selected number of technologies and services which best suit their market trends. Plenty of space is also given over here to software and digital services with a specific Digital Corner in link up with the new Control Room in Rimini. Innovation and services which keep a keen eye on every application need in the woodworking sector.*



## SCM Australia, modernised Headquarters in Sydney

From 8 to 10 May 2024, SCM Australia held the Grand Opening of its subsidiary in Sydney. New spaces for live technological demos to experiment SCM's widest range of solutions for the development of wood machining in digital transformation.

The event in May was only the most recent of a number of open houses organised by SCM at the various plants in Australia, from Adelaide to Melbourne and from Brisbane to Perth.



## Vietnamwood, announced the new SCM branch in Ho Chi Min City



SCM has recorded exceptional success with its latest edition of **Vietnamwood 2023**. For the first time, SCM has taken part directly in this trade fair event with its own stand where it physically and digitally presented its state-of-the-art innovations and technologies. Clients and visitors from more than 28 countries and regions crowded around the SCM stand and an excellent return was recorded in terms of orders, deals and contacts across a wide range of product types and important opportunities have opened up in Southeast Asia. Vietnamwood was also an opportunity to announce the up-and-coming opening of a branch in **Ho Chi Minh**, an important step forward in reinforcing SCM's presence on this market.

## IndiaWood, the spotlight on the new SCM branch in Bengaluru

SCM also recorded exceptional success at the latest **Indiawood 2024** trade fair. The event gave the Italian Group a chance to showcase a selection of its best machines and services for the market. Numerous clients and trade visitors crowded around the SCM stand to discover the extensive offering of technologies for every machining requirement for both panel and solid wood machining.

IndiaWood was also an opportunity for SCM to announce the opening of a new branch, this time in **Bengaluru** in the summer of 2024.



## SCM news

### Woodtech 2023, grand début for SCM

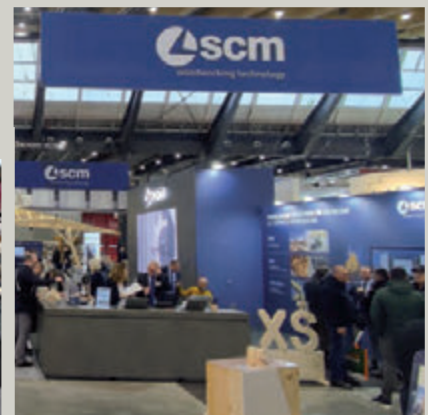


The Italian group took part with its own exhibiting space, in line with the strong interest shown in the Turkish market and with the strategic investments made with the opening of a branch last year, SCM Turkey (SCM Türkiye), near **Istanbul**. Visitors to WoodTech discovered the various advantages of a diversified proposal of state-of-the-art technologies for every production requirement. At the forefront, the concept of SCM's **Smart&Human Factory**: the solutions on display have been designed for a highly bespoke, interconnected and sustainable production, with one common goal: to make the processes more efficient, simplify control and keep down costs, consumption and waste.



### Dach+Holz2024: SCM builds the future of timber construction

At the most recent edition of Dach+Holz 2024 in Stuttgart, SCM presented the latest new entries for the timber construction sector. A large number of visitors were interested in the activity programme drawn up by SCM's team which, thanks to a live demo on the **"oikos xs"** cnc machining centre and the new HMI **Maestro active beam&wall**, managed to involve and fully explain all the potentials of SCM's solutions. The **"dmc system xl"** was also showcased, the automatic sanding-calibrating machine enhanced with three new groups to machine both the upper and lower side of CLT panels.



### Interzum Guangzhou 2024, what a success!

More than 1,200 exhibitors from 31 countries and regions, an area of 180,000 square metres and almost 150,000 professional visitors. **Interzum Guangzhou** proved to be the leading event in Asia in the woodworking machinery, furniture production and interior design industry. Flexibility, maximum machining quality and excellent reliability are the main advantages of SCM's technologies which continue to be a benchmark partner for Chinese companies looking for innovative and efficient machinery solutions to achieve excellent design products.



## New SCM Subsidiary in Slovenia

As of January 2024, the opening of a new branch in **Trzin** near **Ljubljana** in Slovenia, aims to directly follow clients from the Slovenian and Serbian markets, maintaining their characteristics and local identities, as well working alongside and providing even more efficient support to the dealers already active in Croatia and Bosnia.

The plant in Trzin has an exclusive 1,500-square-metre Technology Centre offering an extensive and varied range of SCM's latest entries with machinery and services closely linked to this market's production needs.

The new SCM branch can also rely on a team of technicians and sales engineers highly specialised in every field of application in the secondary wood processing sector: from a joinery workshop to large furniture industries, right up to windows and doors and timber construction which is showing a steep rise throughout the region.



## Funds for professional training: an opportunity for wood/furnishings

The shortage of specialised technicians is becoming an increasingly more urgent phenomenon in Italy and according to the latest Excelsior Report from Unioncamere, the sectors complaining the most about the mix-match with the requested profiles is precisely the wood and furniture industry. According to the foreseeability analysis 2022-2026, carried out by Unioncamere for Altagamma, over the next four years, there will be a need for more than 46 thousand workers in this sector alone.

The contribution from professional training schools and the growth of future wood professionals, therefore, becomes fundamental. This is why **SCM continues to work alongside these organisations, their teachers and students, supporting them with state-of-the-art technologies and services.** There is no lack of opportunities for schools. Just think of the training programmes financed with the NRRP or For.Te funds, to name but a few. The key point is how to build a quality training programme around young people looking to take up this trade.

Aslam and Patronato San Vincenzo are training organisations in the wood-furniture sector. Both are founding members of the ITS

Rosario Messina Foundation, better known as the **Artwood Academy**, SCM supports the Artwood Academy by providing both technological solutions to meet the most current demands from the sector and with specialised trainers from Campus, SCM's training centre.

For years, Artwood Academy, a training centre par excellence in the heart of Brianza, has put its trust in SCM to provide 80 hours of teaching for the "O&M Woodworking Machinery" training module, part of the teaching programme in the two-year post-diploma course in Ecodesign.

That's not all: SCM also arranges software training courses for other organisations which have already been provided with innovative technological solutions such as cnc machining centres and joinery workshop machines. They are the **Politecnico delle Marche**, the **Cluster Legno Arredo** in Udine and the Professional Schools **Crotto Caurga** in Chiavenna and **Bernardi** in Padua.

Placing your trust in SCM for the growth of future woodworking generations also means being able to rely on top-quality, all-round training which is constantly updated in line with market trends.

## Digital Transformation



# Digital services: SCM, pioneer with the new Maestro connect's Control Room

**Maestro connect and the new Control Room service mark out a new proactive relationship model, to guarantee the customer's operational and business continuity.**

Do you also think that having someone to support you in your daily activities would be a great help?

It is precisely to this need that **Maestro Connect's new Digital Control Room** responds. This service is the concrete result of a two-year project in which the advanced analysis of the data collected from the machines was combined with the expertise of SCM technicians to identify situations of risk or improvement, and the respective prescriptions.

The Digital Control Room service was launched in September 2023 at the Grand Opening of the SCM Technology Center in Rimini. Let's find out what it is all about.

### Everything starts from connected machines...

Maestro connect is SCM's IoT platform which - starting with the collection of data from connected machines - provides a series of services to customers. These include the possibility to: **remotely monitor** the work and production of their own machine, observing any machine stops even at a distance from where it occurred; analysing the trends in the machine's operating; organising and planning ordinary and scheduled **maintenance work**; opening a ticket requesting support from SCM's Service and then being able to monitor its progress and enriching its content with videos and photographs to facilitate the

troubleshooting process; ordering and receiving **spare parts, services, training and software** as quickly as possible by directly accessing **SCM's Spare Parts e-shop**.

But what other advantages can a manufacturer of furniture, doors or windows, irrespective of the company size, draw from the purchase of connected machines?

Thanks to the new Digital Control Room, nowadays, it is possible to receive a **proactive and customised service of technical and advisory support** with the important advantage for SCM's customer who is able to increase the **availability of the machine** by knowing the best strategy of use, have an all-round control of the production process and become more autonomous with troubleshooting.

### So what changes with the introduction of SCM's Digital Control Room?

Thanks to this new service, which is already included for customers who have a connected machine, the SCM service team contacts the customer to notify anticipatory situations regarding a potential problem or process drift, recorded through the analysis of machine data.

We are not talking about error messages, but complex processing resulting from the analysis of time series on a large sample of machines



in the field. This means that Service becomes a proactive function and changes the relationship between SCM and the customer: from reactive, on call, to proactive. SCM Service team is then able to call the customer **before a possible stoppage or accident occurs**, or to analyse together possible situations of sub-optimal machine utilisation, thus avoiding problems or additional costs related to excessive energy consumption or premature wear of components.

### The technologies enabling the Digital Control Room's Services

This new support procedure is enabled by the combination of a series of digital technologies: **IoT**, **Cloud** and **Edge Computing** technologies; **Data analytics** and **data platform** (Data Ingestion Services, data preparation and processing); **AI** and **Machine Learning Business Intelligence** in the data visualisation and reporting.

### Smart&Human

Buying an SCM machine means not just buying technology. It also means buying and sharing knowledge, the same knowledge of SCM experts who, thanks to this support model and these technologies, can provide clients with instructions, experience, advice on how to optimise

production and improve their experience of using the machine through a new paradigm both physical and digital.

### Facts&Figure

There are over 2000 machines installed all over the world which are connected to the IoT Maestro connect platform and generate data which can be monitored by the Digital Control Room every day.

### Other services

And that's not all. 2023 was the year when not only the digital services of the Control Room were launched but also other services of:

- **Virtual Training**, a new Service training method, or rather an immersion training enabled by Digital twin technology to explain to and make the client autonomous when carrying out maintenance work on the machine;
- **Solutions Library**, SCM's Wikipedia: a shared tool of knowledge which, starting from the NLP (Natural language processing) technology, provides the user with all the knowledge content regarding the search performed.



Digital Transformation

# Servitization, Control Room, Artificial intelligence: here is how our strategy changes

Interview with Alessandra Benedetti, Head of Service&Spare Parts and Digital Transformation&Business Remodeling of the Group



Alessandra Benedetti

Some images of the new Digital Control Room in Rimini

An investigation by the publication *Industriaitaliana.it* on strategies and new business models tied to servitization, highlights Scm Group as a prime example among Italy's leading companies. Here is the complete interview with Alessandra Benedetti, Head of Service&Spare Parts and Digital Transformation&Business Remodeling of the Group.

## How is Scm Group adapting its industrial strategy to embrace the shift towards servitization-based business models? What new initiatives are being pursued?

For Scm Group, embracing servitization means not just offering value-added services that enhance performance and user experience. This is a head fake: in that we are facing a thorough change management project.

This transformation involves integrating advanced technologies while prioritizing a seamless user experience. It seems like a paradox, but we need to use complexity to make our customers' lives easier. Specifically, Scm Group is focusing on extending the product lifecycle and enhancing customer relationships through innovative solutions:

- **Monitoring and Proactive Support:** Utilization of IoT and data analysis tools to monitor products and their usage in real-time, enabling proactive interventions to maintain or optimize asset performance, including energy consumption.

- **Investment in Emerging Technologies:** Adoption of advanced technologies including symbolic AI and Machine Learning to automate internal processes and create a shared technical knowledge management system, enabling easy access to solutions and “how to” tutorials, in a knowledge-as-a-service paradigm.

## Condition monitoring and predictive maintenance: where do we stand? How is the market responding?

Last September, during the inauguration of the Rimini Technology Center, Scm Group introduced Control Room, a new concept of proactive service enabled by IoT, edge and cloud computing, AI, and BI. This platform allows us to anticipate potential issues monitoring in real time the operation of the machinery in the field while running algos in the background to catch any possible anomalies by cross referencing variables and analyzing time series.

By investing in innovation, which is not only technological but increasingly service-oriented, we aim to convey to the market the message that differentiation and the ability to create partnerships with our customers depends on permeating technologies with meaning and value. Investing in technologies is not sufficient for innovation. Instead, we must conceive and co-create unique and divergent use cases, fostering a new capacity for active and empathetic listening to our customers.



Our customers are full of ideas waiting to be developed!.

### **What is the roadmap to successfully implement digitalization enabling servitization?**

It's not just about having a vision or the ability to cleverly imitate. Developing expertise and know-how, as well as investing in the best technologies or start-ups are not enough either. What appears necessary and paramount to us is to create an internal organizational context, with strong ties to the market and the territory. This context should be capable of nurturing and fostering new forms of collaboration and new ways of conceiving and developing product and service innovations. It's about the mindset, not just the skills. It's about the team, not just reinventing the process.

### **Are there opportunities for development in both generative and non-generative artificial intelligence?**

We're heavily investing in exploring and prototyping AI-driven use cases. Our applications range from classic statistical AI to areas like time-series, computer vision, text analysis, and human-machine interfaces. All the above techniques are not mutually exclusive but rather complementary. The specific level of success of each technology strongly depends on the process of designing the service behind it and not vice versa.

For example, consider the challenges of applying natural language understanding in an industrial context. We recently released a proprietary solution for self-service access to knowledge that is organized and distributed (or, to put it more accurately, "dispersed") across our systems, both legacy and cloud.

Before publishing the beta version, we developed and compared two alternative proofs of concepts, both aiming for the same goal. The first one was developed by using only symbolic NLP rules and a semantic engine for data classification and extraction, while the latter was implemented with GENAI (LLM) and trained on the same "technical publications" that defined the training set for the first. User feedback and KPIs led us to choose the non-generative artificial intelligence solution, while the GENAI solution was less accurate, less precise, less secure, less repeatable, much more expensive, and less sustainable.

However, we don't intend to dismiss "general-purpose" artificial intelligence outright just because they didn't meet one challenge ideally. We believe they may be perfect for other use cases that we already have on our roadmap, where they can be better "specialized" and "contained".

## Cover story



## At Xylexpo 2024, a 100% ‘Made in Rimini’ design project

A collaboration with its roots in Rimini but with a global vision. One of the fundamental stages along this path taken together is the 2024 edition of Xylexpo at the Fieramilano.

Fontemaggi and SCM are two companies which share not only the area where they originate from - Rimini, traditionally touristic by vocation and with a long-standing international twist - but also an innovative, forward-thinking corporate vision ready to take on change. With this vision **Fontemaggi, specialising in temporary design projects for trade fairs, conferences and events in Italy and abroad**, has managed to face head on the toughest periods encountered by this sector, when, in 2020 the Covid-19 pandemic struck and forced them to stop working for a year and a half.

*“That period for us linked to the stoppage of all events held in person was truly a watershed moment - explains Katia Celli, CEO and Shareholder of Fontemaggi - And yet, it was during that long and difficult break that we managed to find the strength to re-invent ourselves: from artisan workers, we started to evolve into an industrialised company ready to equip ourselves with the most advanced and digi-*

*talised production processes. We did so by keeping people at the centre of this change and asking ourselves how we could attract a new generation of ‘digital natives’ to the company. We put ourselves in their shoes, because people are always at the heart of our business vision, and we started to explore the world of digitalisation and new 4.0 machinery...”.*

A journey which took Fontemaggi just a few kilometres from their headquarters in Casalecchio: to SCM. *“We examined proposals from several potential partners, and we chose SCM because we found that this company and their team had a vision very similar to our own, placing maximum focus on service and the engineering and digitalisation of product cycles. For us, who with our temporary architectural projects accompany the clients and their brands around the world to trade fairs and events, it is not just a matter of product quality which needs to stand out for its finish, practicality and design. Engineering and digitally controlling the entire process is equally crucial in allowing us to be faster, offering an attractive price and reaching out to new markets”.*



**SCM and Fontemaggi are two very close companies and not just because they are located in the same area. They are linked by an industrial production model honed in on digitalisation and automation, while still keeping people at the centre of any change. A partnership which went on to become an exclusive outfitting: SCM's stand at the most recent edition of Xylexpo at the Fieramilano.**

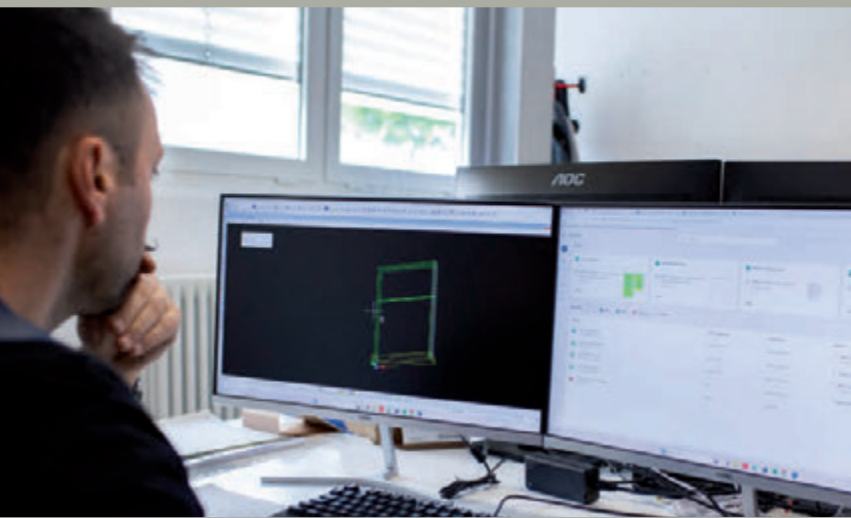
A partnership which, over the last few years, has intensified even more, to **the point of merging into another ambitious project: the creation of the SCM stand for the latest edition of Xylexpo at the Fieramilano.** For the first time ever, SCM has opted to present its technological solutions in a fully multimedia and completely new format, contextualising them in integrated, complete processes and, for its new “home” at the trade fair, from structural elements to furnishings, it chose to place its trust in Fontemaggi.

*“We are extremely proud to be able to accompany SCM with this challenge - says Katia Celli on the eve of Xylexpo -. We used SCM software, digital services and machinery to create the stand, so we were partners both at the design stage and its implementation. The project was developed hand-in-hand: we started with the look&feel which is what makes SCM stand out at international trade fairs, and we tried to enhance certain details to give it a finishing and design with a strong Made-in-Italy slant. **SCM's machines, software and digital services allowed us to industrialise the project and they helped us achieve an exclusive outfitting in a very short space of time”.***



Katia Celli

## Cover story



Alex Baldassarri working on the programming software. Further right, some pictures of the 'gabbiani gt 3' panel saw and the 'flexstore elr' automatic storage.



Stefano Perazzini using SCM's software to optimise the cutting phases and panel saw programming.

## Digital transformation and high technology

In recent years, SCM has accompanied Fontemaggi in this significant change of mentality and direction and continues to do so to this day on two fronts: high technology and digital transformation. Fontemaggi acquired **an engineering solution particularly suited to an industry like design outfitting which requires considerable flexibility, customisation and excellent quality**. This is a cell with a “gabbiani gt 3” automatic panel saw, a “flexstore elr” automatic 3-axes storage and a “morbidegli x400” 5-axis cnc machining centre in cell version. An “olimpic k 560” single-sided automatic edgebander was introduced alongside this system, it too a guarantee of excellent machining quality.

The cell machines mainly multi-layer pieces as well as mdf and chip-board ones. The panel saw is fast, accurate and guarantees a very high level of performance. In particular, it can move and cut panels of up to 4,250x2,200 mm in size, a significant advantage considering that in the outfitting sector there is a tendency to use very large, lightweight

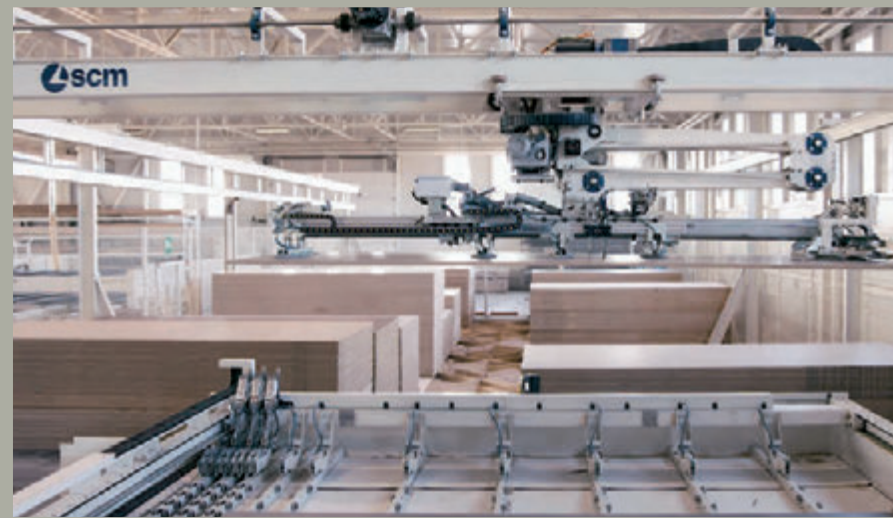
panels to make it easier to lay them on site.

The three-axis automatic storage offers excellent machining flexibility, allows the control of material to be optimised in a reduced space without sacrificing efficiency and saves material thanks to the automatic management of scraps.

The “flexstore elr” has an automatic labelling system and can control, pick up and handle considerable weights, again in line with the demands from the world of outfitting where the walls tend to have a very high density.

The “morbidegli x400” cnc machining centre is in cell version, with a unique worktable and has a wide range of tools for drilling, routing and nesting to meet every kind of machining requirement, even the most complex ones like the creation of joints to avoid using glue and making it easier to dismantle the furniture for future use.

This cell and the panel saw are normally loaded automatically by the magazine. The programs are prepared remotely by the programming



Marco Tamburini is one of the young Fontemaggi operators in charge of managing the information flow: here he is working with Maestro cnc software.

software and are sent to the automatic magazine where the creation of the strips can be dealt with according to the amount of material available. Alternatively, for both machines, the machining can be done locally, with manual loading, implementing the work programs directly from the operator interface. Especially in the case of the “morbidelli x400”, this may be essential for performing further machining work on nested material.

So, these are **highly versatile, performing solutions**, not just from a technical point of view, but also for the **added value given by the combined software and digital services**.

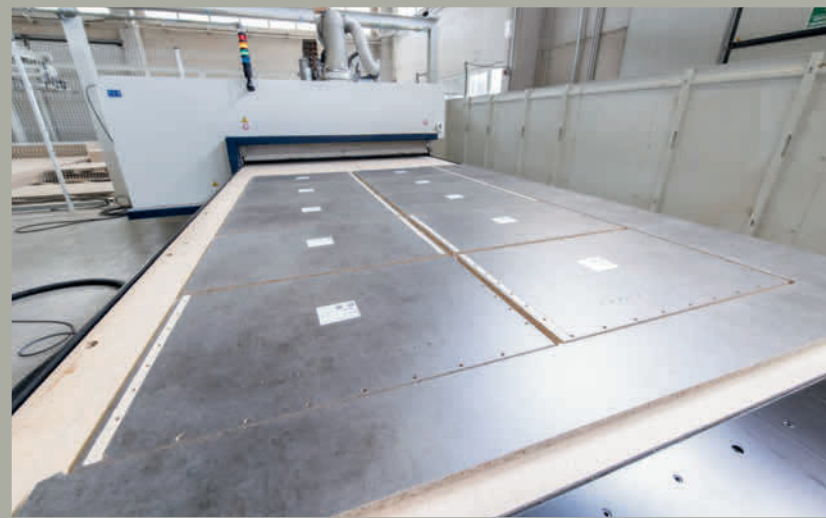
**Alex Baldassarri** is one of the operators at Fontemaggi who first experienced and believed in this change: *“Thanks to SCM’s new 4.0 machinery, we have dramatically increased productivity, not just because we have eliminated ‘downtimes’ thanks to the automatic loading and unloading mode, but most of all because, due to the flow of information between the design office and factory with regard to orders for pro-*

*duction and the automatic labelling systems in both the panel saw and cnc machining centre, we can control each part, from the project to packaging”.*

*“Digital transformation has given us a chance to make an important change compared to the past - adds **Marco Tamburini**, one of the young, under-30 operators entrusted with handling this flow -. The digitalisation of information allows us to eliminate paper, avoid errors when passing information, have more control over the process even remotely and lastly, increase production capacity”.*

*“Even for the joiners in charge of customising the pieces on the machine, it was a significant change - adds **Stefano Perazzini**, production planner -. In the past, projects were delegated in their entirety to them. Now, with the use of software for the design of CAD 3D projects, we deal with the process at source, and this allows us to speed up times and prevent production errors”.*

Cover story



Two images of the "morbidelli x400" cnc machining centre.



From the right, operators at work on the 'olimpic k560' edgebander and a piece of furniture machined with SCM solutions.



The process starts in the office, at the preparation and design stage of each piece. Marco uses software for CAD 3D designing and two types of SCM software, **Maestro cnc** and **Maestro nesting** which from CAD-CAM, thanks to the **Maestro 3D advanced Module**, import the strips of all the individual furniture parts which will be produced on the cnc machining centre. Stefano, on the other hand, uses **Maestro ottimo cut** to optimise the cutting phases and panel saw programming. Both monitor the production in the machine via **Maestro connect**, SCM's IoT platform which allows them to pick up any machine stoppages and check the overall condition of the machines and their productivity performance in relation to daily production objectives to be met. All the machines at Fontemaggi are interconnected which means they can benefit from all the advantages offered by Maestro connect. These include the possibility of opening technical support tickets and receiving fast answers from SCM's service, consulting data on the machines' production in real time, downloading all the production reports from the application for a later and more in-depth management and internal analysis aimed at making the processes more efficient and saving on costs and materials used. But, above all, Fontemaggi can further increase

the productivity of its machines via the **proactive technical support and advisory service** provided by SCM through the new **Digital Control Room** which, thanks to the analysis of data from the thousands of machines connected all over the world and SCM service's experience, can predict hazardous situations and potential stoppages or breakages, and provide timely advice on what action to take. For example, Stefano was called once by the SCM technicians to check on a potential fault on an edgebander and later received instructions to program the machine in a way that would increase its efficiency.

*"This collaboration with SCM - concludes Katia Celli - has been successful thanks to the internal cultural change aided by important investments which the company has made in training, and which has led to a remodelling of our technicians and artisans' skills".*

Once again, it has not just been the technological and digital innovations which have allowed us to achieve new aims: **none of this would have been possible without the people and their skills, as is clear from this partnership between Fontemaggi and SCM.**



## A HISTORICAL YET FUTURE-ORIENTED COMPANY

Fontemaggi is a long-standing organisation in Rimini. It was founded before the Second World War when **Angelo Fontemaggi** had an artisan workshop producing Sorghum brooms. His passion and dedication to work inspired his sons **Alberto** and **Eugenio** who expanded production, introducing the weaving of wooden chairs with natural rope. As the years passed, the company's solidity grew.

Alberto transmitted his forward-thinking vision of business to his sons Angelo and Roberto who, in 2000, with the arrival of **Katia Celli**, increased production with the work of designing and assembling bespoke stands for trade fair events. Another key turning point came in 2023 when the company decided to join the **BolognaFiere** group with a view to becoming an international leader in the industry.

Today, Fontemaggi has a turnover of 12 million Euro, with a rapidly growing EBITDA thanks in part to the investments made in the technological and digital innovation of its processes. 30% is earned abroad: not only in Europe, but also in the USA, South America, Dubai and Shanghai. At the plant in Rimini, there are 60 co-workers with an average age of 37 in the offices and 48 in the production department and almost half of the overall staff employed has a university degree.



## Case studies



# FURNITURE AND KITCHENS

---

Furnishings for the home, office and commercial units. Living rooms, kitchens, bedrooms and bathrooms which become an integral part of an interior design project, increasingly modelled around the client's choices and tastes. We open this edition of SCM HITS with success stories from our clients who have managed to combine efficiency and production flexibility to constantly advance their range of products.

---



**3B IDO JÖRG SCHOLZ**

**BÄUMLE**

**CIAO BERTO**

**ESTEL**

**GAUTIER**

**GRUPPO GEROMIN**

**MOTIF JOINERY**

**PRO PANEEL NEDERLAND**

**RIMOBEL**

Case studies | **3B IDO Jörg Scholz** - Germany



From the left: Fabian Bucher, technical director at 3b IDO Jörg Scholz GmbH and CEO Jörg Scholz.



The 'stefani cell E' edgebanding cell in action at the plant based in Lauffen am Neckar.

**Strong focus  
on our  
requirements**

*and a competent customer service which assists us in the event of problems with our more recently purchased machines and with training our operators: this is exactly what our technological partner needs to be!*  
**Jörg Scholz**



# More efficient, and with the same production space!

Pleasing a client is the aim of any industrial machine manufacturer and in the case of office-furniture manufacturer 3B IDO Jörg Scholz, SCM hit the mark.

“Welcome to the office of the future. We are furniture designers, manufacturers and full suppliers of bespoke work environments”: this is the introductory business card used by 3B IDO Jörg Scholz GmbH, German office-furniture manufacturer when presenting itself to the outside world.

“Most of our clients ask us what 3B IDO stands for”, explains the CEO, **Jörg Scholz**. “3B are the initials of the German words Baustoffkomponenten which mean ‘parts of construction material’, Bausysteme (‘construction systems’) and Baulösungen (‘construction solutions’). A perfect summary to describe us considering we transform parts and systems into solutions for construction. IDO, on the other hand, is an acronym for **Innovation, Design and Organization**, the first two concepts at the heart of our daily work while the organisational aspect is essential for the company to operate correctly”.

Since Scholz took it over in 2001, the company has continued to grow non-stop. “Nowadays, we often work as a general contract for large-scale projects coordinating up to 14 different professional figures.

The company’s core business, however, was and still is creating furniture and this is why we place a great deal of focus on our internal production processes”.

The 3B IDO Jörg Scholz’s clients are industrial or artisan companies and service companies, mainly working in the commercial and health sector where furniture becomes a key part of the interior design. The German company offers a complete design project of all the furnishings which not only includes the production of furniture, wardrobes and shelving but also benches, any kind of desk, extending as far as a complete design project with lighting, sound acoustic and ventilation solutions. Looking only at furniture, 3B IDO offers a catalogue of about **8,000 different products** and 150 of these are regularly manufactured in different versions, colours and sizes. In order to produ-

ce these volumes, Scholz wanted to update the internal production processes. This is where the bond with SCM comes into play. “Right from the start, Martin Krapf (Sales Engineer of SCM Deutschland), knew how to advise us well, irrespective of the investment needed to purchase the machines. Nowadays, we have a **flexible edgebanding cell, a 5-axis cnc machining centre and another cnc for drilling**, solutions that are not only perfectly in line with our production requirements but have been designed for the spaces available to us. We have gone to Rimini more than once and we took the time to see these machines and discuss their details: machining times, stations with buffer function, reduced distances between one machine and another in order to work flexibly and improve internal logistics... Each one of these elements was key for us and thanks to all the improvements made over the last 20 years, we can now achieve volumes of up to a million Euro in turnover in the same workspace.”

The relationship is about 70% standard furniture to 30% design, but even our standard production reaches very high levels of customisation with 26 colours for each product, for a total of about 270 possible colour combinations. Furthermore, 3B IDO works veneered products in the same way as all the other common materials used on the market. This too was a pre-requisite that had to be met for all the purchased machines.

The parts are preliminarily split into groups and different thicknesses to optimise the flow of incoming material to the “**stefani cell E**” edgebanding solution.

This system was Scholz’s latest investment and triggered a huge leap in terms of efficiency and, most of all, energy saving. It also guaranteed better quality on the machined pieces. “Even the previous edgebander had a single panel return but with no conveyor so with a lower production speed”, sums up Bucher. “Now we have a ‘**Pickback**’ gantry panel system, which is pneumatically controlled and

has suction cups to pick up the pieces. The gantry system stacks and brings the piece back to the machine entrance. Even though this machine is bigger and faster than the previous one, we make a considerable saving on electricity with it.

From a strictly energetic point of view, this replacement investment was definitely a sensible one. For us, however, **the improvement in quality can be found in the visibly enhanced finish with a fine line of glue, an optimised dose and greater resistance to heat and dampness**. The machine also works with greater precision thanks to the exact edge-panel centring, so we waste less material. It is also possible to work on panels of different sizes, for example, even with a thickness of up to 60 millimetres”.

After edgebanding, the panel arrives in a “**morbidelli m600**” 5-axis cnc machining centre and “**morbidelli ux**” cnc drilling centre. At this point, the pieces produced are again separated on pallets according to their order. The machining centre, for example, receives round pieces, while in the drilling centre the pieces are machined on both sides and don’t need to be repositioned. It is also possible to make a double loading of the pieces. All the machines have a CAD/CAM connection, machining centre and drilling centre controlled during normal operations by a single operator. The machine receives all the information about the piece from the bar code on the label.

The German businessman, however, is in no doubt that he will continue to invest in SCM machines. “Good process analysis, strong focus on our demands and requirements and a competent customer service which assists us in the event of problems with our more recently purchased machines and with training our operators: this is exactly what our technological partner needs to be!”

**Credits: Doris Bauer for Möbelfertigung**

Case studies | **Bäumle** - Germany

## A digital joinery workshop with an eye on the future

**Harald Bäumle and his team of just five people produce highly bespoke furniture and interior design projects. A small joinery workshop which has always kept a keen eye on the most advanced technologies, as is the case with the purchase of an automatic SCM “morbideilli x400” nesting cnc machining centre.**

Modernity and efficiency: these are the objectives which **Harald Bäumle** has always set out for his joinery workshop. An example of a contemporary design artisan company looking to the future; a story which has been ongoing since 2004 when Mr Harald founded his business in **Gallmannsweil**, not far from **Stockach** in the borough of Costance. The transfer to the new plant at the start of 2022, is further proof of how this Master joiner-entrepreneur wanted to improve and modernise his internal production processes.

Nowadays, **Digitalisation** and **automation** are the real strong points in this business with just six employees: a wood specialist, master joiner and technician, a young master joiner, two specialised workers (one of whom is a woman) and an apprentice. Small in size but with big ideas, so much so that **Bäumle** managed to increase its productivity and efficiency, while maintaining its uniqueness and the quality of its products.

The catalogue includes a wide selection: ranging from single pieces of decor and furniture (mostly wardrobes, tables, chairs, benches and kitchens) to the production and delivery of doors, windows, staircases and floors. And that's not all because Mr Harald and his team even deal in bespoke furniture for shops and trade fair stands, complete interior design projects, restoration of old buildings and bowling alleys. Being fast and meeting delivery deadlines is a real challenge, but this joinery workshop has managed to find the technological solutions to achieve this.

As well as the standard joinery machines, the first thing you spot in the new Bäumle plant are the hi-tech solutions. We are met with the machine which allowed Bäumle to make its first important step towards automation, precisely while it is operational: a **cell for nesting**

**machining** purchased from SCM. The plant has a **“morbideilli x400”** CNC machining centre particularly suited to “batch 1” machining. Indeed, it creates a variety of different shapes with high flexibility and, at the same time, productivity levels which are difficult to imagine with this kind of technology. Furthermore, SCM's exclusive **X-Vacuum system** allows for a dynamic vacuum activation, assisting with holding and machining the smallest pieces.

There are all the advantages linked to the **automatic movement of the panels**. The operators no longer need to perform low value work and the company can, therefore, further increase its own production efficiency.

The cnc machining centre is integrated into a 3-axis, **“flexstore elr”** storage which optimises the panels' movement, even when we're talking about different size and shape stacks, unfinished wooden panels or panels that are up to 3 mm thick. The pick-up table has been designed by SCM to maintain the surface quality of the panels.

And that's not all. The cell also includes an automatic **labelling system** which is done before the panel enters the machining centre; this ensures the individual pieces can be fully traced. Lastly, the **Maestro active software store** optimises the storage and subdivision of the material based on the order and available space.

Depending on the actual production needs at the joinery workshop, the “morbideilli x400” machining centre can also machine in stand-alone mode. A Smart&Human solution therefore: automatic and intelligent, but always flexible and user friendly, as is the style of the smart manufacturing developed by SCM.



“

***We are always on the lookout for material and equipment which can improve our processes.***

**Harald Bäumle**

”



All images in the article are by Martin Maier Photography BFF.

The 'morbidelli x400' cnc machining centre is integrated in a 3-axis automatic storage, 'flexstore el' (pictured above) that optimises the panels handling.



## “Made in Italy” enthusiasts

The engineering project developed for this company in Kosovo, leader in the production of luxury furnishings, is one of SCM's most important supply contracts in Kosovo. A vast range of highly technological solutions capable of covering a large part of the furniture production process.

**Ciao Berto**, the company in Kosovo specialising in the production of luxury furniture, has strong sentimental ties with Italy and this is clear even from the name selected by the **Krasniqi** family that founded it and has been running it for over twenty years, with one success story after another. It is a passion for *Made in Italy*, for the high standards of quality typical of the most renowned manufacturers of Italian and European design. It is the trust placed in **top-quality technology** for machining wood that comes from the shores across the Adriatic Sea. But it is also a bond that goes way back to when the founder **Ejup Krasniqi** worked in Italy, in Veneto in a bakery owned by a man called Berto who was to remain in his heart forever. A story of friendship that led over the decades to an **entrepreneurial success story**. All this began forty years ago, when **Ejup Krasniqi** began to import machinery to machine wood mainly from Germany, to sell them to furniture manufacturers in former Yugoslavia. Over time, he decided to take the “leap” and become a furniture manufacturer himself.

Nowadays, Ciao Berto is a company employing over **200 workers** and produces a wide range of furnishings for the kitchen, bedrooms and children's bedrooms, living areas, sofas and internal doors, with **considerable focus placed on design**, a particular inclination for the best known “retro” styles (Liberty) while targeting a **very high-end market**. A customised production of furnishings for luxury homes and hotels, that requires top-quality raw materials, **highly flexible processes** (often “batch 1”) and technologies that can guarantee excellent finishings, without forgetting just how fast the company can deliver, in a matter of two weeks.

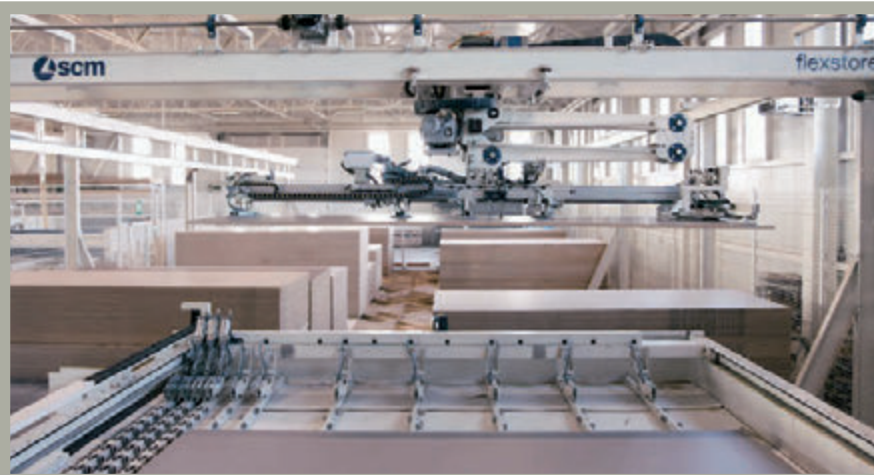
70% of production is sold abroad with the most predominant markets being the United States and nearby Germany and Switzerland where the company has several showrooms. As the owner **Bekim Krasniqi** points out, the aim is to continue to grow and reach an 85% export level by concentrating on other countries like Hungary, following the recent opening



of another showroom in Budapest. Ciao Berto recently inaugurated a new **12,000 m<sup>2</sup>** warehouse which joins the 9,000 m<sup>2</sup> one exclusively dedicated to sofa production. For the new plant Krasniqi, who had worked for many years with leading German suppliers, chose to change partner and put his trust in SCM technologies thanks to the invaluable consultation support received from the Italian Group's team and its dealer in Kosovo, **Si.mac**. After visiting the SCM industrial centres in Italy, the owner of Ciao Berto was in no doubt and selected a wide range of solutions that would cover almost all his production processes. It is mostly furniture boxes that are produced in the sizing cell, consisting of a “**gabbiani p**” beam saw with a three-axis automatic storage, “**flexstore el**”.

The cell benefits from all the advantages of these two SCM solutions: flexible cutting and productivity increase by up to 30% in the case of the panel saw thanks to the exclusive FLEXCUT unit; optimised management of panel stacks of different sizes and colours and complete traceability thanks to the automatic

labelling, in the case of the automatic storage, with a considerable increase in productivity and a significant reduction in management costs. There is also a “**gabbiani gt2**” stand alone panel saw operating at the plant. It guarantees excellent standards of finishing quality, dedicated to the production of special batches, mainly on solid-wood panels or ones that are thinner and more delicate. The production of cabinet doors is done on a “**morbidelli n100**” nesting cell, this too powered by the storage, which results in greater productivity. The “**morbidelli m100**” “All-In-One Technology” CNC machining centre for drilling and routing has made a fundamental contribution and Krasniqi chose to place it alongside a specific solution for drilling: “**morbidelli ux100**”. Some of the most popular advantages include the opportunity to produce specific furnishing parts with the standard operations of a numeric control machining centre, but with even greater flexibility. It is also possible to perform personal machinings, of a single amount and with no set-up times, for the production of kitchens such as toe kick, left and right-side routing, fan



extractor passages, spotlight holes, etc. All this, thanks to the tooling available on the machine of an electro-spindle with tool change. This allows for a reduction in the time it takes pieces to pass through that before were machined in several stages. The painting line is the plant's jewel in the crown. Like the most valuable things that are kept under a crystal display cabinet, the entire **Superfici spray range** is jealously kept in an attractive glass box. The **finishing line** solution can deal with the entire finishing process, and stands out for its production versatility, guaranteeing sublime applications both in the case of small production batches and when producing in series, while keeping costs down. Queen of the range is the automatic **Superfici Compact 3R** sprayer: despite its small size, Compact 3R is a guarantee in terms of quality and application smoothness, thanks to the robust double reciprocator fitted on precision lines. Furthermore, Compact 3R keeps a keen eye on the environment thanks to the overspray recovery system that helps reduce waste and maximise productivity. The drying system was

designed so the customer can **select varying uses of different paints**, ranging from the most traditional to the UV water-based ones. The latter is controlled by a **UV Superfici Poliedra** dryer, perfectly designed for the three-dimensional polymerisation of the paint with minimum energy consumption. The system's versatility, the high production flexibility and the opportunity to change all the machining parameters quickly, were the reasons that convinced Ciao Berto to not only buy the Superfici range but to place it centre stage in the production plant. For the final assembly stage of the furniture, the company bought the **"action tf"** electro-mechanical presser that can achieve 300 assembled pieces of furniture per day, guaranteeing an excellent end quality. In the case of packaging, the solution selected was the **"cut c100"** automatic punching machine for cutting and just in time production of a cardboard box to the size and shape required. The most recent purchase is a **"stefani" industrial edgbanding cell** that is perfect for



flexible machining with standards of high productivity and high precision and quality on all types of type of panel and material. For the processing of marble and glass, the company also chose two **CMS** solutions, from Scm Group as well. **Krasniqui says he is extremely satisfied with the performance levels achieved with SCM technologies and the service received from the Group and Si.mac.**

The strong tie between Italy and Kosovo continues in the name of innovation and more sophisticated design.



# The pleasure of working in an elegant, smart office

**Introducing Estel, experts in the production of home and office furnishings since 1937, which entrusted its entire “batch 1” production process to SCM. Thanks to the support from this technological partner, the company has managed to satisfy its need to be flexible and fast, especially with nesting, edgbanding and drilling machining.**

There is a star that has been shining brightly for over eighty years in the made in Italy design sky. It is the bright path of a company that, under the guidance of its founder **Alfredo Stella**, followed by his son Alberto and grandsons Massimo and Matteo, has conquered the **home and office furnishings** market with elegant, modern and hi-tech solutions. The first solution to lay the trail to success? A sliding, folding door patented in the 1950s which managed to become a genuine best seller in no time at all: “Estensibile Stella”. It is no coincidence, therefore, that this company's name, **Estel**, stems from the combination of these two words. Two headquarters, one in Thiene and the other in Arsiero, both in the province of **Vicenza**. A 100% made in Italy and in-house production, mostly for contract and office furnishings. A turnover in **excess of 65 million Euro** in 2021 and **260 employees**, more than half of whom working in the production departments.

With these figures, Estel proves itself to be a solid and expanding company operating mainly on the Italian market but is increasingly looking with interest towards countries in central Europe, the Middle East and the United States, with a significant export growth in recent years. “We offer an extensive and in-depth range of products: management and operations offices, chairs, partitions, cordons, technical areas and new furniture sections dedicated to dynamic, deft and modern work” explains **Massimo Stella**, owner of Estel and representative of the third generation of the founding family. With the expanding market, the company has managed to focus on clearly defined cornerstones: excellent production flexibility, the logistics ability to reach and accompany all its clients with a tailor-made and punctual service, its speed in offering an integrated service ranging from design, sample taking and batch-one production to delivery. Strong points that have led key brands and important banking and insurance institutions to choose Estel furnishings for their numerous branches and headquarters in Italy and abroad. “In recent years, the market has changed



**Market demands lead you to make the effort.**

*Everything becomes simpler, however, if you find a partner who manages to stay at your side, providing advice on the right technology at the right time based on your actual needs.*

*Thanks to SCM, we have always managed to find the most suitable solution to the business model in vogue on the market.*

**Massimo Stella**



- continues Stella -, the volume of work remains the same, but the mix of furniture and components requested has changed considerably. It is essential to create different series of production batches, and ensure that the client has their tailor-made office that meets with the architect, designer and interior-designer's instructions... There is a need to be flexible and fast: despite the client's decisional process being lengthy, the final creation is achieved today for tomorrow”.

Over the decades, Estel has increased its investments in research and development, technical-organisational know-how, logistics and technology with the aim of offering increasingly personalised and sophisticated products in terms of design, innovation and multi-functioning, even within the short time frame imposed by the market.

## “Batch 1”, digital transformation, Industry 4.0

Nowadays, Estel's entire “batch 1” production process is managed by a system of state-of-the-art SCM cells with a potential of **800/1000 pieces per shift**. Varying elements and different orders end up in the same production loop, from nesting to edgbanding and drilling, and are manually re-organised at the end of the process. A

smart&human choice that provides the operators' work with a decisive quality control role and one that was shared with SCM which fully comprehended the DNA. There is no excluding the possibility that this cell system may evolve further in the future with solutions that are even more automated.

The latest made in SCM purchases are instantly visible at the Asiero plant. The entire “batch 1” process starts from the “**morbidelli x200**” nesting cell complete with built-in automatic loading with labelling system. The cell's cutting speed allows for a previously inconceivable productivity even with highly flexible machining work. But, above all, the nesting cell is part of an integrated production system that sees it operating in synergy with a flexible “**stefani cell H**” edgbanding and squaring cell. This is also a highly evolved solution, designed by SCM for a highly flexible “batch 1” industrial production. The cell has an automatic loading and **Pickfeed** recirculation bridge that simplifies the handling of mixed stacks with pieces that differ from one another and a **Pickback** panel return system complete with automatic unloading. There is no need to stop production to change the machining parameters of the format, finishing and gluing quality, so-



WATCH THE  
CASE STUDY VIDEO



A shot of the “stefani cell H” flexible  
edgebanding solution.

The “morbidelli x200” nesting cell.



something that can occur frequently during a shift. The drilling stage completes the process and for this Estel has chosen two very different solutions.

The first is a “**morbidelli ux200**” drilling cell with automatic loading and unloading system. “Its uniqueness lies in its ability to machine all six sides of the panel and can, if necessary, route with two high-powered electro-spindles”. Another advantage is its high productivity and, in the case of uniform batches, it is also possible to machine two pieces one on top of the other, cutting times by half.

At its side we find a compact “**morbidelli cx210**” drilling machine, another solution designed specifically for “batch 1”, ca-

pable of drilling and routing with a production rate of 350 pieces per shift. High-powered and highly efficient drilling heads, shaped clamping grippers for a significant reduction in the cycle times, a made-to-measure worktable even of the most delicate surfaces...Numerous advantages encapsulated in such a small size. The entire process is controlled by **supervision software** for the edgebanding and drilling cells and SCM’s **IoT Maestro connect system** for all the machines mentioned, with the chance to remotely collect and analyse all the production, performance and maintenance data in real time. The flow of data is linked to Estel’s MES corporate management system and all the machines are

equipped with the same **HMI Maestro active**. “The most significant advantage in having contacted SCM to be a single technological partner is the integration - comments the owner Massimo Stella -. Shifting from a traditional production to a “batch 1” process managed by computer systems and 4.0 technologies requires a cultural leap and adequate training”. And the latest new entry to the Arserio factory is also from SCM; a “**morbidelli p800**” cnc machining centre for drilling-routing and edgebanding. As well as for the more traditional machining work, it is particularly useful for the 45-degree edged pieces that have always been Estel’s distinctive trademark.

Case studies | **Gautier** - Francia



*Some pictures of the Gautier plant with SCM engineering solutions.*



# Gautier, over 60 years of passion and audaciousness

**This European leader in contemporary furnishings has lived through the industry's history and evolved alongside it**

Founded in 1960 in Vandea by **Patrice and Annick Gautier**, the French company Gautier quickly expanded to become a leader in children's furnishings.

The **creativity** and **high quality** of their furnishings have always been Gautier's strong point, at the heart of their growth and evolution over time.

In the 1980s, the company created an innovative concept in the furniture sector: a bedroom as a personal living space for children. With the same inventiveness and audaciousness, Gautier later launched into the creation of adult bedroom furniture and the production of office furniture. The end of the 1990s saw the launch of the first collection of living-room furniture and in the early 2000s, furniture for dressing rooms with bespoke collections which clients loved even more.

In 2005, Gautier reinvented its distribution circuit and launched the first franchising shop. This was followed by about another hundred in France and abroad (Belgium, Saudi Arabia, India, Bulgaria, Morocco, Martinique, Guadalupe, Réunion Island and New Caledonia...).

The company has always **moved with the times** and keeps a close eye on market demands and environmental issues. In 2006, it launched into designing **ecological products** with wood from sustainably run local forests or with recycled forest wood. In 2007, Gautier became the first manufacturer of French furniture to be awarded the triple certification ISO 9001, ISO 14001 and OHSAS 18001, with regard to quality, the environment and safety in the workplace.

Led by **David Soulard**, CEO, nowadays, Gautier has around 700 employees with three production plants all in Vandea, and boasts over 70 shops in France. Exports represent 20% of their current turnover. Another equally important factor in this

Made in France success story has been the **innovation of its production processes**. In 2015, Gautier expanded its industrial site by investing heavily in the plant at Le Boupère, mainly for the new FLEX machining line. Most of this investment, spreading across 1,500 m<sup>2</sup> of production surface, was manufactured by SCM for the purchase of a line with two drilling machines and a **morbidelli** cnc machining centre, a **mahros** moving system and a customised **software**

***“This investment will allow us to manufacture fully bespoke products in the home furnishings and contract sectors, to meet the expectations of clients looking to choose their optional extras and finishings.”***

**David Soulard,  
AD Gautier**

**supervision system** to handle and produce the production lists, as well as monitor the flow of different products on the line in real time.

The main requirements were production flexibility, a chance to create complex projects, improve the level of quality, reduce the duration of the manufacturing cycles, achieve higher production capacity, keep working conditions in mind, make energy savings and lastly, reduce the size of the batches and manufacturing time of the pieces. More recently, Gautier opted for

another ambitious project for its third plant in Saint-Prouan: a fully integrated, high-automation line for “batch-one” machining.

**This is one of SCM's most advanced engineering projects**, a line extending 100 metres and entirely produced by the Italian group to meet Gautier's growing demands - and those of the furniture industry in general - for solutions capable of producing furniture with plenty of flexibility and a **low impact on the workforce**. These advantages are accompanied by high machining **quality** and **precision**, **an optimisation of materials** and **the reduction of intermediate magazines**.

This line includes a storage and nesting area with two **flexstore hp** automatic magazines, an **ergon nt** cnc nesting machining centre and a robot that picks up machined pieces and places them on a moving roller unit as far as a **mahros** station to then connect with the next edgebanding cell. This second plant sees a **stefani one** single-sided edgebander in action aided by two **mahros** automatic loading and unloading stations.

Another connection station conveys the edgebanded pieces to the next drilling area, with two **morbidelli ux200** cnc drilling centres with automatic unloading.

Further downstream, we find a sorting and outfeed area with a **storage cell with vertical magazine**, where the panels are sorted in fully automatic mode by another two industrial robots. What is also key on this line is the supply of software with supervisors and software for the optimisation and tracking in real time of the entire process. That's not all, because at the same factory, Gautier chose to equip it with two independent machining areas: a **morbidelli p200** cnc machining centre for drilling, routing and edgebanding; the other with a **class si 400** circular saw.

# The bathroom is increasingly becoming a key player in the home

**Gruppo Geromin has been producing furniture for bathrooms and wellness areas since 1945. Top-quality finishes, textures and materials produced using state-of-the-art technology, are designed to offer authentic moments of relaxation and wellness.**

Who said the bathroom can't be the most important room in the house? Market trends convey the exact opposite: this space linked to personal well-being is increasingly becoming a popular place to show off to guests. It can be customised and integrates perfectly with the design in the rest of the home. The choice of furnishings, therefore, plays a key role.

As a company with more than 100 employees and a turnover of 18 million Euro, **Gruppo Geromin** is well aware of this. Its **Hafro**, **Sauna Vita** and **Geromin** brands have become a benchmark for the Made-in-Italy production of bathroom and wellness furnishings. A business based in the province of Venice since 1945, it operates all over the world with a widespread, consolidated network which works alongside the client from the design to delivery stage, satisfying needs in every sector, from private to public, right up to contract work.

Complete shower systems, jacuzzi tubs, small design pools and shower units with steam functions enhance bathrooms in private homes and resorts, together with Turkish baths, saunas and spas: without forgetting about furnishings for laundry rooms, which the Gruppo Geromin's showroom displays as a truly fashionable room.

*"Right from the outset, we made our mark with the quality of our materials and manufacturing where finishing, textures and materials coexist in harmony",* explains the owner, **Carlo Geromin**. *"In specific terms, with regard to the production of bathroom and laundry room furnishings, we offer a careful selection of veneered, melamine and lacquered finishes, as well as solid wood components to customise the room and coordinate every stylish detail".*

There are so many aspirations and demand from the market is becoming increasingly more sophisticated. How can we satisfy this? Carlo Geromin points out the need to equip themselves with innovative technolo-

gical solutions. *"Guaranteeing a top-quality product to the end client is essential for us and this is why we continue to invest in research and innovation"* The Gruppo Geromin recently renovated its Hafro plant at San Stino di Livenza, in the province of Venice, and with help from SCM, fitted state-of-the-art "Industry 4.0" machinery.

A **cutting cell** consisting of a **gabbiani g2 panel saw** complete with **flexstore elr** automatic storage and **mahros runner** automatic unloading system meets these requirements. A solution which allows to achieve high production flexibility, in line with the extensi-

“  
**A guarantee of quality, flexibility, high technology and customer care: this is why we chose SCM technology.**  
”  
**Carlo Geromin**

ve customisation of the company's products, as well as high productivity and machining quality. Gabbiani g2 was designed to guarantee top performance in an advanced context of just-in-time productions. The machine's performance is reinforced by the optional internal rotation to handle any cutting outline without the need for operator intervention and the automatic labelling machine which attaches the labels directly onto the panel in masked time. The cut panels then move on to **squaring-edgebanding**, a process which is handled by an innovative system with the "stefani evo c"

squaring-edgebanding machine capable of guaranteeing more efficient machining and higher quality compared to what the company managed to achieve in the past. The panels are loaded automatically with a mahros runner single-station feeder, after which the panel is squared and edged in two stages, one longitudinal and the other transversal.

It is possible to machine standard chipboard panels as well as MDF ones veneered with different kinds of coating (melamine, CPL, HPL, opaque edges) and even ones that are not very thick. The squared, edged panels are drilled, dowelled and offloaded onto other machines, then unloaded at the end of the process, again automatically, with another SCM "mahros runner" system.

At this squaring edgebanding and drilling stage, all the machines and automation systems are controlled by a single supervisor software from the **Maestro active watch** range so that the work programs, flow of materials as well as the relative reports on production and diagnostic performance can be fully traced.

Gruppo Geromin also uses a "stefani kd" single-sided edgebander to edge smaller batches with **automatic panel return system** which means the entire edgebanding cycle can be handled by a single operator. This solution is also highly flexible, thanks to machining units with electronic axes which allow two different kinds of radii to be set automatically, fine edges and solid wood up to 12 mm.

WATCH THE CASE STUDY VIDEO





Carlo Geromin.



The "gabbiani g 2" cutting cell complete with "flexstore elr" automatic storage and "mahros" automatic unloading system. Above the "Stefani" squaring-edgebanding cell.



Case studies | Motif Joinery - Australia

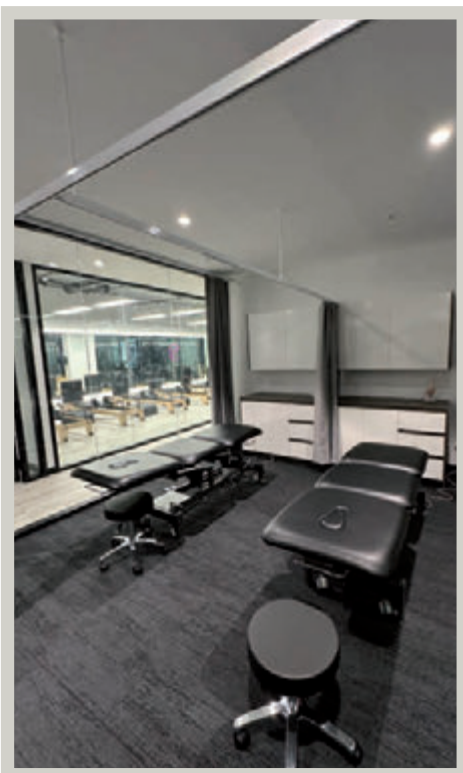


The owners of Motif Joinery Michael Saad on the left and Mena Saad on the right, show proud of the machines purchased from SCM to create their design projects.



# Passion and “made in Italy” Technology for high-quality fittings

**Commitment to quality, investment in efficient machinery and dedication to their work are the ingredients behind Motif Joinery’s success and continued growth.**



## Investing in Quality Machinery

One of the key factors in Motif’s success is their investment in quality machinery. When it came time to equip their workshop, Mena and Michael turned to SCM Woodworking Technology. SCM is a leading manufacturer of woodworking machinery, and were gladly able to provide Motif with the perfect combination of machines to suit their production requirements.

This included a “nova si 400” circular saw, which is a versatile and powerful saw that is ideal for a diverse range of woodworking applications, and an “olimpic k 230 evo” edgebander, efficient and compact in footprint yet highly capable of creating a finished product that is both functional and aesthetically pleasing.

## High-Quality Fit-Out for client

Their commitment to quality is evident in every project they take on. One recent example is the fit-out they completed for **Function PCP**, a fitness and wellness clinic in Strathfield, NSW. Motif transformed the vacant commercial space into a state-of-the-art facility with a gymnasium, Pilates studio, reformers, aerial room, treatment facilities, ice baths, and saunas.

Motif effectively utilised their workshop and SCM woodworking machines to create the high-quality finishes that client, Function PCP required.

The “nova si 400” and “olimpic k 230 evo” were essential for cutting and edging the wood panels precisely and accurately. The Function PCP team is delighted with the new fit-out, commenting on the high quality of the workmanship and the attention to detail that is evident throughout. The project is a testament to Motif Joinery’s expertise and professionalism, as well as

the power and versatility of SCM woodworking machines.

## A young company with a bright future ahead of them

Their commitment to quality, their investment in SCM woodworking technology, and their passion for their work are all ingredients for success.

Motif Joinery is not only a success story in the commercial fit-out industry, but they are also making a name for themselves in the residential sector.

In recent months, they have completed a number of high-end residential projects, including custom kitchens, bathrooms, and wardrobes.

It’s always good to tell a success story, and Motif Joinery is one that’s definitely worth telling. Founded in October 2022 by Mena and Michael, Motif Joinery is a commercial fit-out provider that has quickly gained a reputation for its high-quality workmanship and attention to detail.

Mena and Michael Saad are not your stereotypical entrepreneurs. They’re humble and down-to-earth, but they’re also incredibly passionate about their work. So, when establishing their business and workshop, their vision was clear: to create a company that would provide its clients with the best possible fit-out experience.





# Simply perfect panels

Since 2017, Pro Panel Nederland has been updating its entire range of machinery. One step at a time, each technological solution is replaced with a more modern, better one, and each one of these is supplied by SCM, as is the case with the new “stefani x” edgebander.

Pro Paneel Nederland has been around for over 45 years and specialises in the production of unfinished goods for the furniture industry, in particular, panel sizing, drilling and panel glueing. As well as this, the company based in **Weert (NL)**, also supplies bespoke internal furnishings.

*“We can supply panels of any size and with any kind of machining, and we also have an assembly department”,* explains the owner, **Marcel Veraa**. An increasing number of clients know how to find Pro Paneel.

The company has a wide range of machines at its 1,600 m<sup>2</sup> workshop. *“All the machines are supplied by SCM. We have established good relations with them and especially with **Niels Altena**, the product consultant for the south of the country: he understands us and knows exactly what we do best. As a result, he can advise us on the technological solutions that suit us best”.*

Over the last five years, Pro Paneel has purchased several machines: a new **“gabbiani g 2”** panel saw in 2020, a first **“morbidelli”** CNC machining centre for nesting and a second one in 2022.

*“All these machines allow for a simple, rapid cut. Thanks to the **‘morbidelli X200’** cnc machining centre for nesting, for example, the panel is only pre-treated in a single stage”.*

In 2020, Pro Panel also purchased an edgebander, so there were no plans to replace that. Despite that, after just two years, they decided to also purchase a **“stefani x”**. *“In 2022 - continues Marcel - we went with the team to Italy to visit SCM at its production plant. We saw that this new model offered*

*numerous advantages and we decided to purchase it anyway. We had plenty of work and still do, thankfully, so the decision was made fairly quickly”.*

## The latest purchase: a “stefani x” industrial edgebander

*“The glueing operations are more effective when using PU glue, rendering the product waterproof. Furthermore, the finish is faster and better, requiring less manual work”.*

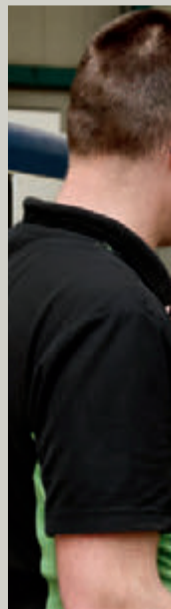
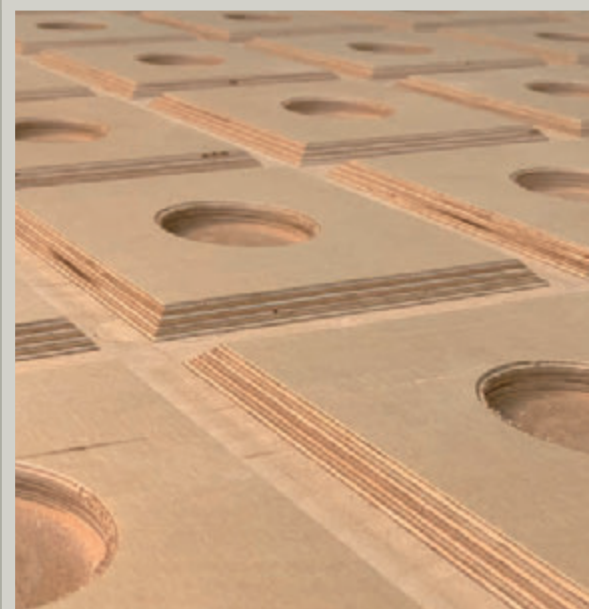
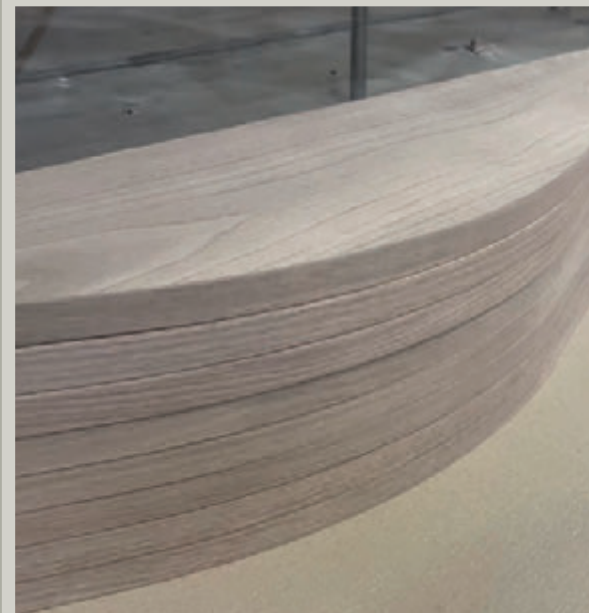
The machine has a high-tech **Multileaf glue scraper unit**. *“This innovation reduces finishing work to a minimum. This way, we achieve the maximum of what is currently possible. In addition, the machine is completely controlled via computer, and we can make umpteen adjustments very easily”.*

Marcel is extremely happy with the new edgebander and collaboration with SCM.

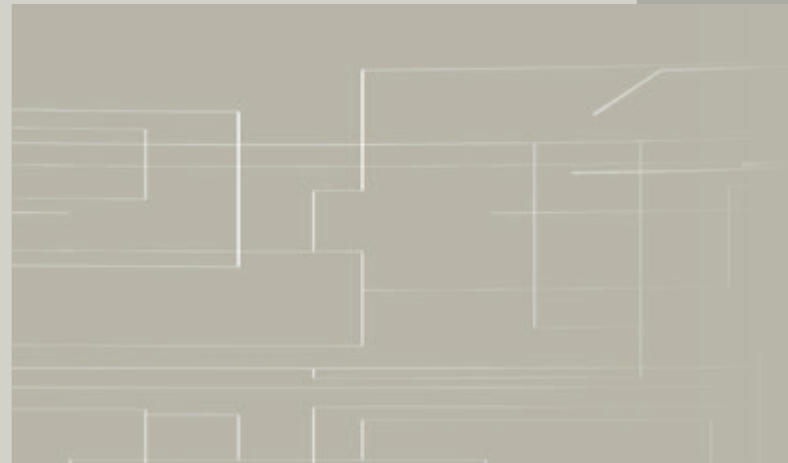
*““The machines are of a very high quality, and the service and customer care are excellent. By accessing our processes remotely and continually monitoring them together with our experience, we often manage to make a lot of progress without the need for a technician.”*

*An aspect which has proven to be very important for us because everything needs to function for 40 hours a week or more. Of course, we want there to be as few downtimes as possible and we are working hard to continue to make a name for ourselves”.*

**Credits: Tamara Brouwers for Binnenwerk**



Above right an operator at work at the “gabbiani g 2” panel saw. Above,, some panels machined at the the “morbidelli x200” cnc machining centre.



*The most recent purchase: the new "stefani x" industrial edgebander.*



Case studies | Rimobel - Spagna



**The new  
SCM's squaring-  
edgebanding  
line**

*allows us to be more flexible and provide multiple combinations of finishings which, if they were to go through other machines and processes, would slow us down and make us less competitive.*

**Francesc Reolid**



*General and detail images of the "stefani rocket" line.*

# Rimobel chooses SCM for state-of-the-art automation

**The Spanish company specialising in the furniture sector has 150 SCM machines at its production plants in Vinarós (Castellón). Its latest purchase is an automation system specifically for “batch 1”: the “stefani rocket” edgebanding line which, thanks to two single-sided edgebanders and a fully automatic interconnection/control system guarantees custom designed production of large volumes and one that is extremely easy to manage.**

On visiting the **Rimobel** company at its plant in Vinarós (Castellón) we instantly realised we were facing a highly dynamic, fast growing business organisation. Rimobel specialises in two particular business sectors: on the one hand, the **traditional furniture market**, with single-brand shops; on the other, that of **furniture kits**, where this Spanish company records extremely high levels of production and combines a vast network of distributors.

The main product is for **children’s bedrooms and lounges**, together with the equally important furniture for **bedrooms**. It focuses mainly on the **quality** of its product and service provided. “Our delivery times are much faster than those of the competition” points out **Francesc Reolid Sanz**, production manager of the prestigious company in Vinarós. For furniture kits in particular, Rimobel works with several important clients who deal with direct on-line sales. This is where the decision to establish an **“express delivery”** service for this important market segments, so that the furniture reaches the end buyer quickly and directly.

**Angel Puig Plana**, head of production is here to explain to us the variety of products in their catalogue: they range from children’s bedrooms to “low cost” ones, right up to a catalogue entirely dedicated to lounges which is proving extremely successful with the market. Rimobel currently handles around **160,000 items**. “We aim to expand the catalogues, provide associate shops with continuity and guarantee a quality service” explains the company owner and CEO, Mr **Manuel Ripollés**.

SCM has sold to Rimobel a **“stefani rocket” square edging line** particularly suited to **“batch 1”**. This kind of processing is done piece by piece, each one different from the previous one with stacks of panels of different materials, colour and size. Everything becomes a lot simpler with “stefani rocket”. The bar code found on each individual piece is automatically read on entry to the line, thus allowing for **instant changes of edgings** to be achieved with **up to as many as 24 different colourings**, always available and in stock in the vast roll holder warehouse.

This new SCM solution of industrial edgebanding offers Rimobel maximum flexibility to be able to deal with even special productions, with the right guarantees. In order to achieve the same result, the company would have had to purchase more machinery and, in any case, would not have been able to manage the “batch 1” edgebanding process simply due to the times and costs incurred to regulate the machinery in succession. All this with the addition of a high risk of errors, subsequent complaints and returned goods.

We are talking about a square-edging line that boasts maximum reliability. SCM analysed in detail the product that Rimobel was looking to produce and, once the configuration of the machines had been defined, a customised IT solution was drawn up for a practical, correct management.

Rimobel chose to invest in this SCM square edging line to uphold and even improve the level of speed and efficiency of its service, bringing delivery times down to a minimum. The company has gained in productivity. “Our catalogue includes numerous products,

with a wide variety of colours, shapes and thicknesses”, explains Francesc Reolid.

“The new SCM square edging line allows us to be more flexible and provide multiple combinations of finishings which, if they were to go through other machines and processes, would slow us down and make us less competitive”.

After almost a year since it was installed, the new “stefani rocket” line has allowed the Vinarós company to become **“three times faster with half the resources”**.

“We have made a leap in quality. We work with PUR glue, squaring and profiling all the pieces that pass through the line, correctly and in real time. Furthermore, we avoid a number of errors”, concludes the head of production at Rimobel. “Each piece is coded and contains all the information needed for processing: trimming, colour and thickness of the edge... In the past, all these parameters were changed by hand. Now, thanks to SCM technology, the machine acquires and manages all the information and each day we record a high level of production reliability”.

WATCH THE  
CASE STUDY VIDEO



## Case studies

# TIMBER CONSTRUCTION

---

The showcased companies in this section demonstrate how timber construction has recorded a steady and significant growth, right across the various kinds of construction thanks to considerable advantages of timber constructions.

A development which from Europe to the United States is drawn by high technology and the in-depth experience accrued by SCM in this sector.

---



**FRERES ENGINEERED WOOD**

**HANS HUNZIKER HOLZBAU**

**HOLZBAU SUD**

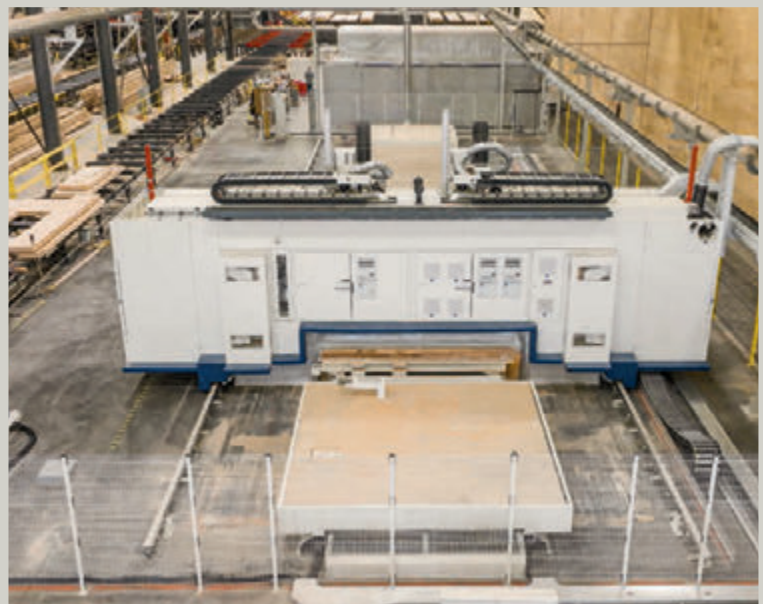
**JAGRAM-PRO**



Case studies | Freres Engineered Wood - USA



Kyle and Tyler Freres



Some pictures of Freres Engineered Wood's achievements and the new "area xi" installed a few months ago.

# Innovation and high technology in mass ply panels production

**Building the future with wood. This is much more than a concept for Freres Engineered Wood, a US family owned business operated for over 100 years, that find in innovation and high technology the most important drivers not only in their continuous growth, but also in the increasing spread of mass timber buildings.**

**Being innovative is in Freres Engineered Wood's DNA.** This company began producing veneer in the 50s, and added plywood in the 90s to keep their momentum. In 2007 they built a cogeneration facility supplying renewable power to the local power grid.

In 2017, they developed and now manufacture what could possibly be the most significant new mass timber product in the world, as they state: **Mass Ply Panels**, or MPP.

Everything starts from **Freres's core values**: first of all, a deep respect for wood, the forests their fiber comes from, and the benefits to society that wood products provide. "We love innovation, which motivates us to do more with less of one of the world's most valuable resources" states the company. Innovation is lead by a concrete mission: **promoting the use of wood and mass timber also for multi-storey buildings**, as the same Freres's projects and constructions demonstrate. "Mass Ply products are patented, veneer-based, engineered wood products that provide superior performance characteristics over mass timber products such as CLT, Glulam beams, and solid sawn lumber" states the company in describing their core business. "The building block of each Mass Ply Product is Freres Structural Composite Lumber (SCL), which consists of multiple layers of density-graded Douglas Fir veneers. These veneers are glued and pressed in a variety of combinations and orientations, and finally joined together to create 1" layers (called lamellas)".

**Why Mass Ply products?** Freres is aware of this: "We love wood, and building with wood have significant benefits over concrete and steel. Our Mass ply products have raised the bar for mass timber construction and can out-perform lumber-based mass timber in many ways".

A slower char rate and more consistent fire

performance, a better dimensional stability with lower moisture content, a reduced volume and cost with their flexibility in panel dimensions and thickness: these are some of the many advantages coming from Mass Ply production that according to Freres can be applied to all structural elements of a building.

**High technology is a key element in the production of Mass Ply building components.** As stated by **Kyle Freres**, Vice President of Operations at Freres: "One of the keys to success in mass timber is the ability to cut and route panels, beams and columns, so that when they arrive on the jobsite they are ready to install without additional labor. Whether manufacturing on the product is required for mechanical, electrical, or plumbing (MEP) penetrations, to allow for connections, or simply to cut pieces to correct dimensions, the capabilities of **modern CNC machines are essential to the success of mass timber projects**".

Freres Mass Ply Panel facility has utilized a CNC machining centre provided by a German industrial machinery manufacturer since they began operation in 2017. "After a significant amount of downtime last year due to the inability to source parts, we learned that we would have limited support for the machine in the future. This forced us to consider a replacement machine. The universe of large scale, mass timber CNC manufacturers is not large, but we were able to research a variety of options and decided on the **SCM "area xl"**. As luck would have it, a fortuitous chain of events allowed for delivery of the equipment in December of 2023".

Kyle Freres describes the advantages of "area xl" as following. "One of the first glaring differences is that the Area XL has the option for two large cutting heads at 63 kw, where the previous CNC had one 30kw spindle for cutting with a 920mm saw and a

24kw main spindle. The additional horsepower on the spindles is beneficial for the machine feeds and speeds, but also allows for a wider variety of larger tooling that we were not able to use on our existing machine due to clamping pressures and horsepower of the spindles".

An example would be **disc cutting tools** like the one shown below. "These disc cutting tools can speed up routing operations, such as those for spline connections, by cutting a width of three inches in one pass instead of a typical router bit, which is one and a half inches and would take twice as many passes. We hope that this, coupled with the ability for each spindle to be operating at the same time, will dramatically speed up basic panel connection operations".

Another difference is that "each of the spindles on the "area xl" has a **Rapid10 position and a Rapid18-position tool holder**, whereas our previous machine was limited to a total of 18 tools. The large saw on the SCM cnc machining centre is 1150mm compared to the 920mm on our existing machine, which will increase the thickness of the panel we can process – up to a maximum of 14 inches.

The secondary saw has also increased in diameter size to 800mm. Another great feature added will be the use of a chainsaw aggregate for corner cut outs of doors and window openings.

One of the changes our operators are most looking forward to is the addition of a chip removal system, which conveys chips from the CNC bed to one of the dust collection systems to allow for quicker, easier cleanup and dramatically reducing the manual labor involved".



# An “oikos x” to overcome any challenge

The Swiss company, Hans Hunziker Holzbau AG, based in Moosleerau, recently installed SCM's modern 6-axis machining centre.



From the left: Daniel Ott, SCM Schweiz Country Manager, Igor Tartagni, technician in charge of SCM Schweiz's customer care, Simon Fuchs, deputy managing director and manager of Hans Hunziker Holzbau AG's timber construction and Matthias Bärtschi from Hans Hunziker Holzbau AG.

Maximum care in the design and manufacturing of timber construction projects. This is Hans Hunziker Holzbau's strong point. “Our products are built at the factory, assembled and delivered directly to the worksite. Whether we're dealing with construction parts or windows and doors from our joinery workshop, accurate design is key to determining the success of each individual project,” explains **Simon Fuchs**, deputy general director and head of timber construction at this Swiss company.

Hans Hunziker Holzbau offers a complete range of products and services for timber construction: from work planning and management to the construction of new buildings, renovations and extensions; from windows and doors to finishes and cladding, right up to flooring. It is no surprise then that the company invested in updating its machinery and chose SCM's “oikos x” machining centre. “Right from our first meeting, we realised we had found able partners in Daniel Ott, SCM Schweiz's Country Manager and Igor Tartagni from

SCM's team Service. The new SCM machining centre has been operational now for six months and is a real pleasure to use.

**Thanks to this solution, we have become even more flexible with our production, which is something greatly appreciated by the market**”. “Right from the outset, we found in Simon Fuchs and Hans Hunziker Holzbau AG partners who know exactly what they're looking for and understand their company's needs,” says Daniel Ott. - On the other hand, our ‘oikos x’ machining centre for timber construction is becoming increasingly technological, flexible and powerful, and this is why the market appreciates it even more”.

As Daniel Ott explains, the solution offers numerous advantages. For example, its laser probe offers **an unparalleled precision** which makes it ideal for creating dovetail joints and pockets. Another key advantage comes from the modern **Maestro beam&wall** software which satisfies more or less any request, offering great **programming flexibility and fast execution**. A guide

carriage combined with pressure rollers right next to the work area offers excellent machining quality.

Furthermore, **the innovative 6-axis operating unit allows for any kind of machining on every side of the piece** with a single positioning, with no need to turn it over, thus reducing bulk to a minimum and cutting back considerably on the number of tool change operations thanks to the innovative combined tools, designed by SCM and ideal for rapidly and accurately creating timber frame projects. Oikos x also has automatic loading and unloading systems with bespoke solutions for every need.

“There is also the option of dealing with glulam beams and modules for walls, ceilings and roofs as well as round beams, bevelled beams etc. with adequate accessories,” points out Daniel Ott.

Thanks to the **eye-M console**, the operator has a more rapid, efficient control over the machine. It is also possible to handle **complex projects like nesting**, to create modular structures.



*The "oikos x" in action at the plant of Hans Hunziker Holzbau.*



## THE COMPANY

Hans Hunziker Holzbau was founded in 1905 at a time of great technological progress, on the initiative of **Robert Hunziker** who, at that time, ran a joinery workshop and sawmill. He died of pneumonia at the age of 31 and the business was taken over by his brother, **Hans Hunziker**.

In 1955, the company became a joint-stock company with a construction and civil engineering department, a sawmill, joinery workshop and timber construction department. The building and civil engineering department gradually grew to become the core business. With more than a century of history behind it, it continues to be a solid company focusing on the future. The range of services offered in the construction sector has grown constantly and the timber construction and joinery divisions have been absorbed into the newly founded **Hans Hunziker Holzbau AG**.

*Credits: HBS - HolzBaumarktSchweiz*



# Holzbau Sud, wood lies at the heart of every project

“

## *The choice of the SCM “area” machining centre has proved to be crucial*

*in reducing machining time by 50%, eliminating numerous manual operations and guaranteeing precision and speed, and making the assembly and installation of our structures easier.*

**Alina Greco**

”



Holzbau Sud was founded in 1990 and has grown by focusing on modern style and an international market with solutions for large public buildings and residential architecture which stem from the encounter between modern technologies and the antique Italian culture of wood.

The decision to choose an SCM “area” **5-axis machining centre** ensured the optimisation of production time, eliminating numerous manual operations and guaranteeing precision and speed, assisting with the assembly and installation of structures, among the largest in Europe.

Workers at the company show spontaneous enthusiasm for the new machine which has made a huge difference, because when the beam goes to the worksite its precision is impeccable. Considerable appreciation has been shown for the fact that each order now takes 40% less time and there is a chance to discover the machine functions with new tools, in order to continually try out new kinds of machining operations.

As explained by the Sole Administrator of Holzbau Sud srl, the engineer **Alina Greco**, for over thirty years this company has been working in the laminated timber sector in Italy and abroad. Nowadays, it is the most important company in this industry in central-southern Italy. In specific terms, Holzbau Sud is involved in the design, production and installation of **large structures in laminated timber and timber houses**.

The company is spread across 55,000 square metres and a covered surface area of 15,000 square metres split between

three factories. The internal organisation has an admin. office, sales office, and technical and production departments.

### **An international vision**

Holzbau Sud works right across the country and abroad with important works in Qatar, Syria, Congo, Malta and Israel.

“For the last eight years, we have been working on a large job in Qatar complete with luxury bungalows with direct access to the sea. For the World Cup, we created vast resorts in laminated timber and villas in CLT with the main client being Qatar Airways. In Congo, we built the villa for the former president of Congo and in Syria we rebuilt a church that had been bombed in Aleppo, and in Malta a large warehouse for tin can recycling. In Naples, we created a 5,000 square metre roof in laminated timber and curved CLT, the largest in the whole of Europe and the first structure to have a roof in curved CLT. This company is skilled in creating large structures and plenty of light: we have completed dozens of churches where the wood is ideal for its purpose. We have completed a number of shopping centres where the request is for ample light. The church in Rionero was completed last year and its morphology retraces Christ’s rib”.

### **An all-round production process**

Holzbau Sud’s core business is laminated wood as well as CLT which we buy and process to manufacture panels for walls and lofts. At the plant, we can produce large beams, pushing ourselves to produce

curvatures which fall into the category known as micro-laminate. The machines and plants installed together with the SCM “area” numerical control machining centre can guarantee a production capacity of more than 20,000 cubic metres per year.

With the installation of the SCM’s cnc machining centre, Holzbau Sud has completed its **4.0 digital transformation**. As stated by the Technical Director, **Dario Curlante**: “Nowadays, the technical department is fully interconnected with the production and the digital designs of the structures travel in LAN between the technical department and the plant. The files are read and transferred to the machine via an intuitive and simple operator interface. All the project choices are contained in the CAD files which, with precision and dependability, will be reproduced on the wooden elements. So, the transfer from the office to the machine is certainly simpler as well as its management, because the technical department together with its team of designers draws up the itemised list which is then automatically sent to the machine, and this allows everyone to see how the product will turn out: this is a genuine integration between machine and operator. It should, however, be pointed out that our technical department consists of professionals who have understood wood for many years and one of the most important features of Holzbau Sud is precisely the fact that the technical department manages to always find solutions for unusual problems



*With the installation of the SCM's cnc machining centre, Holzbau Sud has completed its 4.0 digital transformation.*



which other companies can't manage to solve".

**The head of production at Holzbau Sud, Luca Fratianni, adds:** "Holzbau Sud selected the SCM 'area' machining centre to automatize the operations and maximise precision. Using a video-surveillance system, we can control the process in real time and the software helps us planning and checking the result remotely prior to implementation. The technological sensors installed in the machine also allow us to monitor the situation in real time. SCM customer services is available for anything we may need. The SCM 'area' machining centre cuts, drills, routes and completes all operations on the curved and straight be-

ams up to 40 metres without the need for additional controls". "The future goes hand in hand with specialisation and skill - concludes the Sole Administrator of Holzbau Sud, Alina Greco -. Following a consolidated experience spanning more than thirty years, matured in the timber sector and in virtue of its own technical department, in the future I think Holzbau Sud will be able to strengthen its position on the market as a player capable of offering not only a product but above all complex and competitive design solutions for timber structures and houses. We are already there but we want to increase that presence, moving further towards new machining technologies and staying constantly abreast of the times; and I also imagine that all this experience and

ability of the technical department will allow us to combine growing market demand with what we offer".

**Case study extracted from an article by Sonia Maritan for Struttura Legno (06/2023)**

WATCH THE CASE STUDY VIDEO



Case studies | Jagram-Pro - Poland



*The "area" cnc machining centre in action at the Jagram-Pro plant. Above, a detail of the machine.*



# Modern wooden constructions meet SCM innovative technology

**Modern wooden construction is largely based on engineered wood-based materials. Thanks to this, the structures currently being created often do not resemble traditional solutions, but they amaze with their scale and form.**

One of the manufacturers of such constructions is the polish company **Jagram-Pro S.A.**, which specializes in the production of **large-size curvilinear constructions**. The technology used by Jagram-Pro consists in gluing bent elements made of thin wood lamellas (TCLwood618 ® - thin construction lamella for wooden constructions). Thanks to this, the company is able to produce wooden arches with a radius of R-15, which gives an opportunity to architectural projects that cannot be designed and implemented using standard technology.

During the production of wooden construction elements used in modern construction, high accuracy is required, which is particularly difficult to maintain in case of large-size curvilinear elements. Modern CNC machines from the world's leading manufacturers are used for such tasks. Jagram-Pro opted for SCM products.

*"We have two SCM CNC machining centres – 'oikos' and 'area'. Their selection was preceded by a thorough recognition of the available solutions and specific expectations, e.g. pneumatic locking of the work pieces was necessary for us, not so obvious in devices designed for large-size elements. Thanks to the investment in the SCM area, we have achieved a very high accuracy and repeatability of the manufactured products. After two years of use, we can confirm that it was a good choice - says Waldemar Mysliński, vice-president of Jagram-Pro SA. Only robots can be an alternative to this solution. Unfortunately, in our case, they would have to have arms with a length of at least 3.5 m, which do not allow to maintain the required machining accuracy - he adds.*

The SCM "area" installed at Jagram-Pro is a **5-axis CNC machining centre with a mobile gantry and a modular structure that allows**

**the machining of large elements of wooden structures**, such as complete walls made of CLT panels, structural beams or curvilinear elements. The scale of the capabilities of this device is reflected in the maximum dimensions of the work piece, which can be up to 16 m long, 3.2 m wide and 360 mm thick. SCM "area" is equipped with a 12-position tool magazine. The maximum diameter of the saw blade is 1020 mm.

**The machining head unit with 5 interpolating axes has a power of 30 kW** to meet all production requirements and works with the HSK85S chuck. The worktable has been specifically designed to be customizable with a range of accessories for easy and secure positioning of work pieces. Thanks to the use of guides with a low vertical profile and a reduced base surface, easy access to the work table was obtained, which is of great importance when processing large-size elements. In turn, the safety system used eliminates the risk of collision during machine operation.

The second Italian CNC machining centre used by Jagram-Pro is the 6-axis SCM "oikos". This machine is designed as an optimal technological solution for machining structural beams and wooden elements of modular walls, which can be managed by one operator. **6-axis CNC means that in addition to machining with a 5-axis electrospindle, we also have the ability to move the work piece.**

The compact structure, equipped with an innovative control system, allows unlimited processing of all sides of beams and wall modules with a width of 1250 mm, a height of 300 mm and a length of 13.5 meters. OIKOS allows you to perform all longitudinal and transverse cuts, including optimized operations on beams and the creation of modular elements from unfinished slabs and

to perform designed routing, drilling, straight and angled, in every size and variant imaginable. The machine is equipped with e.g. a laser probe to increase accuracy, e.g. in the case of dovetail joints, as well as a marker, mounted directly on the A axis, where a 13 kW electrospindle moves, thanks to which the transition from laser to marker and vice versa is very quick. The system offers automatic lubrication of the linear guides and highly accurate mechanics that require little operator maintenance.

**All CNC machining centres of AREA and OIKOS ranges are supplied with Maestro beam&wall software**, which allows for automatic generation of machine programs in the BTL standard and import of files from other formats, which facilitates integration with the most common CAD systems in the timber construction sector. Thanks to the 3D simulation, you can precisely calculate the time and costs needed to perform the required machining of each element and verify possible collisions on all elements planned for execution, to great advantage of the production workflow optimization.

WATCH THE  
CASE STUDY VIDEO



## Case studies

# WINDOWS

---

Styles, size, profiles and materials may change but one thing is sure: windows and doors are increasingly becoming an integral part of a fashionable interior-design project. An application field which is continually in search of solutions that are both fashionable and offer high aesthetic value, as well as being practical, as is clear from the stories in this section accompanied by SCM's high tech machines and systems.

---



**KONITZER + HOFER AG**

**MÉO**





Case studies | **Könitzer + Hofer AG** - Switzerland



*From the left, Lukas Krüsi, CEO of Könitzer + Hofer AG, and Daniel Ott, Country Manager of SCM Schweiz.*



*Tenoning operations with the "windor nt 1" machining centre.*

# Outstanding windows making history

Since 1854, the Swiss company K nitzer+Hofer has been an emblem of excellence. With its 30 employees, it produces windows, doors in wood or wood and metal, as well as other joinery works. “Thanks to our partnership with SCM and the purchase of a new ‘windor nt1’ angular machining centre, we are even more efficient”, explains Lukas Kr si, CEO and company owner.

**K nitzer + Hofer AG** a Swiss joinery company boasting a long tradition and its main activity for many years has been windows manufacturing. One of its specialities, as the company owner and CEO **Lukas Kr si** tells us, are the wooden windows for historical buildings and those subject to conservation orders, and it is precisely the extensive variety, that generally distinguishes this kind of construction, which requests a high level of production flexibility.

“We have tackled our specific needs together with SCM and, since January 2003, we have been using a ‘windor nt1’ angular machining centre to overcome even the most difficult challenges!”

Protected and catalogued buildings demand particular attention when windows and doors are being restored or replaced. It is often essential to integrate historical elements with more modern acoustic, heat and safety insulation requirements. There needs to be a variety of solutions, including profilings and historical divisions, the use of special glass as well as hinges and hardware typical of the era in question. **“With a production in excess of 1,200 windows per year, we found SCM to be an equally flexible and competent partner on the market”** says Kr si.

The company is firmly rooted in this region, as is clear from the references to date, including the National Library in Bern, Brunnstrasse, Junkernstrasse and Kramgasse.

**Daniel Ott**, SCM Schweiz’s Country Manager, enthusiastically describes the values shared by both companies: “Thanks to our angular machining centre, we have been able to provide K nitzer+Hofer with support, guaranteeing flexibility, structural efficiency and an excellent cost-benefit ratio. SCM is a leader in the production of machines and systems, offering services to the woodworking industry since 1952. The central head-

quarters of the Swiss branch is in Rothenburg, in the canton of Lucerne: a strategic position which means we can supply services across Switzerland rapidly and efficiently.” Ott continues: “We give full support which covers each stage of the process, from professional consultation to sales, right up to a reliable customer-care service.” “Windor nt1 enables performing all of the essential operations of end-cutting, tenoning, drilling-routing and profiling regardless of construction concept, joint and section type” continues Ott. Furthermore, he adds: “The machine structure is completely enclosed in order to reduce noise to a minimum and ensure maximum safety for the operator.” Kr si points out: “Using this angular machining centre, we have significantly optimised set-up costs for a wide range of different profiles compared to a CNC machine and the programming is faster.”

The angular machining centres are designed to produce windows and doors, with one side for tenoning and another for profiling, positioned at 90 degrees from one another. Cutting-off, end-cutting, tenoning, drilling-routing can be executed on the tenoning side, while on the profiling side it is possible to perform internal and external profiling, glazing bead cut-off and storm proofing.

The solid structure of the tenoning carriage guarantees excellent accuracy during the processing of all types of tenon, straight and angled. No limits to profile execution: to meet all the profiling requirements, the machine can be fitted with two 50x320 mm spindles. Moreover, SCM touch screen **eye-M** console allows a comfortable easy navigation of the machine managing software, Next, with a simple and intuitive interface. Interaction with external software is also not a problem.

In addition to “windor nt 1” machining centre, the Swiss company also chose an

SCM “**profiset 60**”. This is an automatic throughfeed moulder which can be equipped with up to 6 spindles. Daniel Ott points out the ease of use and safety of this technology solution: “The operator is facilitated to manage the machine’s functions thanks to easily accessible controls”. Feed rollers driven by gears box and cardan joints. The pneumatic working pressure on the feed rollers and the stepless speed adjustment from 5 to 25 m/min via inverter, ensure efficient feeding by maintaining superior finishing. The Easy Plus electronic control with the 7” LCD display, 16:9 format, simplifies the control of all the machine’s functions.

The collaboration between K nitzer+Hofer AG and SCM is based on well-defined values: **flexibility, versatility, service assistance and a solid tradition**. Kr si concludes: “Thanks to SCM, we can rely on a unique technological partner for all our machining requirements, including drilling operations. I can say, in no uncertain terms, that SCM greatly exceeded our expectations!”

**Credits: Lothar Mayer for HBS**



# MéO, state-of-the-art windows and doors

**MéO, the very first French manufacturer of wood-aluminium windows and doors, has always been an authority in this market, developing its offer and modernising its processes with high-productivity plants.**

There are windows....and windows. Their style, size, profile and material may change but one thing is sure: windows and doors are increasingly becoming a more integral part of the interior-design project and develop to make room for the most modern construction techniques surrounding safety and energy and acoustic efficiency.

**Customisation** is rapidly becoming the keyword for those producing windows and doors, though reconciling the demands of flexible machining with those of high productivity is also extremely difficult. State-of-the-art technological solutions are required to stay abreast of market trends, speed up even small batch machining as well as keeping down costs and the waste of consumables and materials including in the production of highly personalised windows.

**MéO**, the number one French manufacturer of bespoke wood-aluminium windows and front doors for the last 40 years has succeeded with this challenge by staying clearly focused on the future. MéO is a company within the family group **Vendée LIEBOT** with 12 companies and with more than 3,600 employees in France and Europe. MéO's mission has always been to offer the most complete range of wood-aluminium windows and doors on the market: windows and French windows with frame, sliding glass doors, front doors, shaped fixtures, glass roofs and porches.

Its plant in **Cugand** is one of the most modern production units in Europe. The company uses high performance industrial machines to meet the market's very high technical demands with a global approach, close attention to the sustainability of materials and internal processes and a specialist team to design and satisfy the most complex requests. A business where artisan know-how and top-quality industrial performance blend together perfectly.

Their investments with SCM are clear to see. In 2012, MéO purchased a **"system 8" integrated line** which led to excellent results in terms of production volumes. In 2021, it chose a second new high-auto-

mation line, the **"system 9"**, to increase production volumes by a further 60% as of 2025. This new SCM line stands out for the rapidity in its setup change and the extreme flexibility in the management of work-pieces with different dimensions, allowing the manufacturing of **up to 200 complete windows per working shift**, even with medium-small batches.

As with all the SCM "systems", the integration of multiple machines enables to perform all the operations for producing windows frame: planing with the **"superset nt"** throughfeed moulder, tenoning with the

“ *This investment will allow us to double our woodworking capacity and thus accompany the company's growth for the next few years, improving the quality of production and productivity* ”

*Franck Rostand,*  
*General Manager of MéO*

new **"celaschi action"**, drilling and routing with the **"fleximat"** machining centre and profiling on both right and left sides with two **"profitech"** machines.

The new **"celaschi action"** double-sided tenoning machine, the beating heart of the "system 9" line, allows simultaneous tenoning of two elements of different lengths, widths and thicknesses, exploiting the principle of machining with the motors moving when the pieces are stationary. Among the plus points is a high degree of flexibility in the production of tenons, thanks to the presence of 4 electrospindles, each of which is served by a 6-position tool changer. It is thus possible to produce **from 30 to 48 different tenons** without any intervention by the operator.

This integrated line stands out with a pro-

ductivity of **up to 6 pieces a minute** and it can manage pieces with length from 350 to 3100 mm, width from 35 to 130 mm and thickness from 35 to 100 mm.

It is also fully in line with the demands for a digital, connected and integrated production. The HMI **Maestro active watch** software manages the entire system and was designed to be easy to use and to import orders directly from the company management software. Thanks to Maestro active, the unified operator interface for all of SCM's technological solutions, the operator can control different machines very easily, with the great advantage of a unique, attractive and user-friendly look&feel.

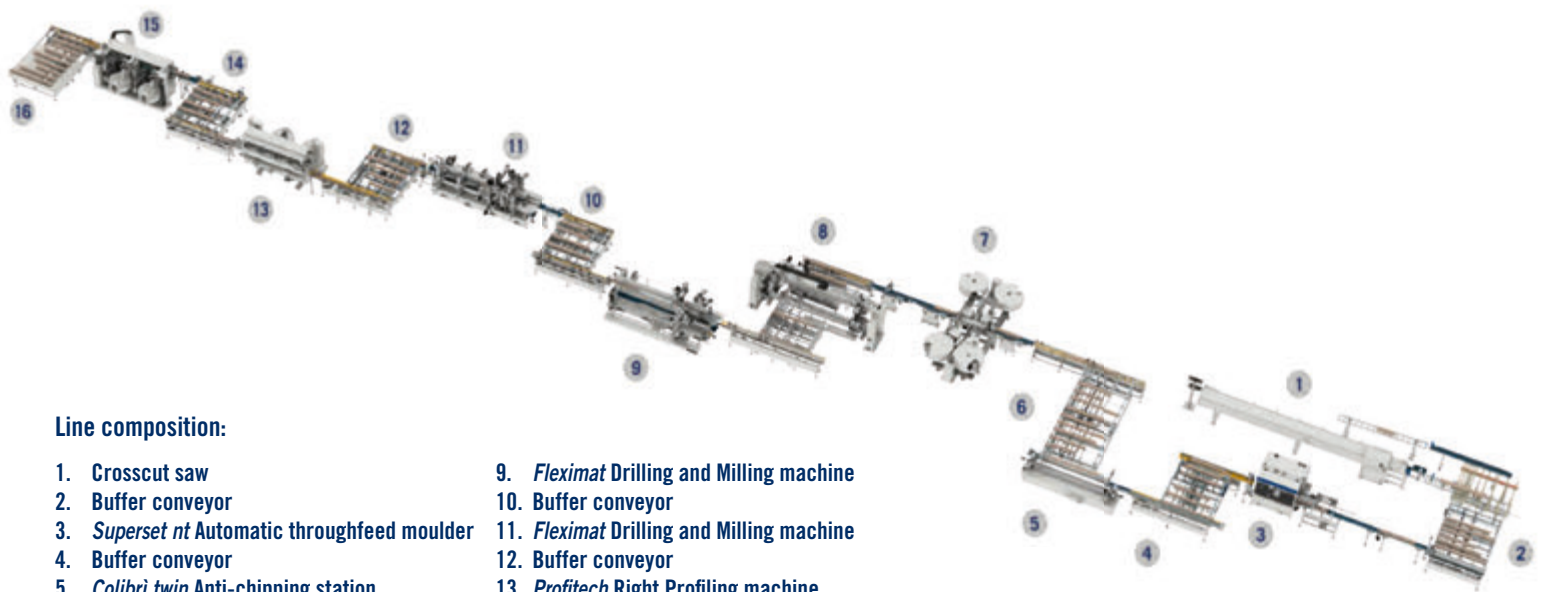
Another SCM solution used by MéO is **"windorflex"**, automatic machining cell for the complete production of windows and doors which optimises production rhythms by maintaining high flexibility and excellent finishing. In more specific terms, the version found at the MéO plant has a double automatic worktable, each one with dedicated clamps for the constant holding of the work-pieces. It is possible to process **from 1 to 4 work-pieces in sequence**.

The worktable modularity allows managing three work-piece lengths: 3500, 4500, 6000 mm. The work-piece repositioning, from the internal side machining to the external one, is direct between the clamps, without needing additional devices, to ensure **excellent finish quality**. Another advantage is the **automatic work-pieces loading/unloading system** that enables the machine to work autonomously, without the continuous input of the operator: an anthropomorphic robot picks up the rough elements and unloads the finished work-pieces on special trolleys.

Thanks to windorflex and its **Maestro active window** control and programming software, nowadays, MéO can handle any request for windows and doors production. The French manufacturer's travels into the future continue by always guaranteeing their clients' comfort through high technology.



From the left, two details of machines composing "system 9" line, "fleximat" and "celaschi action", and the double worktable of "windorflex" automatic machining cell.



**Line composition:**

- |  |   |
|--|---|
| 1. Crosscut saw                              | 9. Fleximat Drilling and Milling machine  |
| 2. Buffer conveyor                           | 10. Buffer conveyor                       |
| 3. Superset nt Automatic throughfeed moulder | 11. Fleximat Drilling and Milling machine |
| 4. Buffer conveyor                           | 12. Buffer conveyor                       |
| 5. Colibri twin Anti-chipping station        | 13. Profitech Right Profiling machine     |
| 6. Buffer conveyor                           | 14. Buffer conveyor                       |
| 7. Celaschi action Tenoning machine          | 15. Profitech Left Profiling machine      |
| 8. Celaschi multidrill Drilling machine      | 16. Unloading station                     |

## Case studies

# DOORS

---

**Strong machining flexibility for a product which is increasingly bespoke and with ever more rigorous quality standards that further complicate the processes. Soundproof doors, fire doors, radiation-resistant doors or ones which stand out for their considerable size and weight...How is it possible to guarantee a diverse offering while keeping efficiency levels high? The following key figures have opened the doors to the future of technology.**

---



**GRUPO VALCO**

**PRINCIPAL DOORSETS**



# The Natural Innovation of Grupo Valco

**Grupo Valco manufactures 120,000 doors and 60,000 wardrobes each year, has over 80,000 square metres of factories and a vertical production from sawmills to the delivery of state-of-the-art solutions for residential and contract structures. Their connection with SCM and its Portuguese dealer Lignotec is long-standing and has been strategic in the choice of advanced technologies.**

More than 66 years of activity that, generation after generation, has continued to draw inspiration from a passion for wood, respect for environment and a strong and constant innovative vision. These are the pillars of **Grupo Valco**, an entrepreneurial story that has always seen the Oliveira family at the helm, specialising in the production of doors and other solutions for residential, hospitality and commercial structures.

As the CEO of Grupo Valco, **Rui Oliveira**, explains, an average of **120,000 doors and 60,000 wardrobes** are produced each year, and that's not all because the company is also involved in primary wood processing, with an annual production capacity of **26,000 tonnes** of maritime pine logs coming mainly from forests located in the heart of Portugal, where the company has its roots. It was Rui Oliveira's father, **Gabriel**, who founded Grupo Valco in 1958, starting with a small carpentry workshop. "Over the decades, we have evolved to become suppliers to large multinational construction companies such as Mota-Engil, Teixeira Duarte, Casais, A Santos..." says Rui Oliveira. "Doors represent about 40 per cent of our production, furniture another 40 per cent, while the rest is divided between the sale of panel coatings and Portuguese maritime pine wood. We sell mainly in Portugal and export to more than 34 countries, like Spain, Morocco, Cape Verde, Angola, Mozambique and Israel'.

Today, at Rui's side are his wife and sons, together with **160 employees**. The two plants boast a total production area of about **80,000 square metres** and the adoption of advanced technology has always been a constant for the group's growth.

"What has helped us progress over time is the **collaboration with SCM and its Portuguese dealer Lignotec**, who have been able to advise us on the technological solutions best suited to our needs. Machines that allow us to offer highly customised and higher quality production".

Grupo Valco relies on a **dozen SCM solu-**

**tions between machines and systems**, capable of covering every production requirement of doors and wardrobes: Celaschi profiling and squaring machines, Gabbiani panel sizing machines with Flexstore automatic storage, Morbidelli CNC machining centres, Stefani edgebanding machines, Dmc sanding and calibrating machines, Sergiani presses, etc.

The most recent purchases are highly automated solutions for door production. We see in action a "**stefani flex**" **squaring edgebanding line** equipped with an automatic workpiece return roller conveyor and

been machined, the robot can pick it up, return it to the centring device and then pick it up and place it back on the cnc machining centre, 180 degrees tilted. The robot takes care of unloading the doors or, in the case of slots execution, removes any off-cuts generated and then returns the doors to the cnc machining centre to continue the remaining machining operations.

Rui Oliveira says he appreciates **the high flexibility and processing quality** of both SCM automated systems. "Thanks to these solutions, we can machine doors and cabinets with 'batch 1' processes with great efficiency. Thanks to the Rfid systems for reading and identifying the parts and the integrated supervision software, these lines are connected with our company manufacturing execution system and we can automate and optimise the processes even more by having all the order and production data available. The 'stefani' line offers us significant advantages, allowing us to be faster and achieve high levels of customisation for doors that for the most part have very precise technical characteristics, such as soundproof doors, fireproof doors, and doors resistant to radiation, mainly applied in the hospital and residential sectors. The 'morbidelli p800' cell is also extremely flexible, and the possibility of servicing it with a robot allows us to achieve above-average performance".

The Portuguese company is a true example of an evolved and intelligent manufacturing company, where innovative processes and digital transformation are real distinctive pluses compared to competitors.

Grupo Valco is not stopping and already has the next steps in mind to grow further. "Today we have the in-house capacity to produce all the elements of a building: doors, wardrobes, skirting boards, bathroom furniture... - concludes Oliveira - Our next step will be to include the production of kitchens to increase turnover by 20 per cent".

“ **SCM has enormous potential for us thanks to the quality of its products, innovation and the diversity of the ranges that make up its offer** ”  
**Rui Oliveira**

served by two "**mahros brush**" stations for automatic loading and unloading, which can process doors weighing up to 120 kg. In the feeding stacking station, all the doors are identified by an **Rfid** (radio-frequency identification) **device**, which makes it possible to automatically detect all information relating to the production of each specific piece thanks to the insertion on it of a chip connected to the company manufacturing execution system.

The second solution is a **drilling, routing and edgebanding cell** with a "**morbidelli p800**" cnc machining centre served by a **7-axis robot** for loading, handling and unloading, and complete with a supervising system to control the entire cell. Here too, the loaded doors are identified by the **Rfid system** before passing to the "morbidelli p800" for all the necessary operations. Once the first upper side of the door has



*The Oliveira family at the helm of Grupo Valco.*



*Below, some pictures of the engineering solutions provided by SCM.*





Case studies | Principal Doorsets - UK



*The Principal Doorsets team. Below, some pictures of the sergiani gs-a' pressing line.*



# Pressing Ahead

**With huge diversity in its product offer and some very stringent standards to comply with, Principal Doorsets turned to SCM for a turnkey pressing solution: “sergiani gs-a”.**

**Principal Doorsets** is well known for the manufacture of fire doors, acoustic doors, x-ray and security doors, along with associated wall panelling.

The **Barnstaple**-based company provides for the needs of clients that include architects and specifiers working on anything from hospitals and schools to high end residential projects, leisure complexes and commercial premises.

Its products have to meet **the most stringent of standards** – up to FD120 for fire doors, Rw43Db for acoustic doors and PAS24 for residential security doors. Specifiers who need a seamless finish with no visible bead or joint to the face either side of the door rely on Principal Doorsets to provide solutions.

Until the installation of a new line, Principal Doorsets was processing panels with a manually-fed press.

“This operation took two people and required a lot of manual handling,” Director, Stan Bond, told Furniture Journal.

*“When we moved into our new factory in 2018, we carefully laid out the manufacturing to accommodate a new pressing line - We were looking to include as much product handling, cleaning and preparation within the line as possible and wanted to significantly increase our panel pressing capacity whilst managing labour increases and ensuring quality was not adversely affected.”*

Stan and his team took the opportunity to visit a number of factories and see various pressing lines in operation before settling on a custom-built **“sergiani gs-a”, a turnkey solution from SCM.**

*“After a thorough evaluation and visits to manufacturers, we discussed with SCM their offer. SCM were engaging and assisted us in understanding the press solutions fully. Their approach was professional and comprehensive and had us engaged from the outset. The price was competitive, as was the delivery availability. It was a no brainer”.*

Requiring **only one operator** to run the line with loading handled by a fork lift, the new automatic line at Principal Doorsets comprises a scissor lift at the feed end, a brushing unit, a glue spreader, a motorised disc conveyor and a double laminating holding carriage ahead of the composition station, press and roller outfeed.

The “sergiani gs-a” automatic hot press is the perfect solution for doors and veneered panel producers, and it is the heart of the line at Principal Doorsets.

From its control panel, the operator can manage and set all the line functionalities. The system is equipped with **dedicated software that makes the use of the press quick and easy.** The operator can save all the working programs and recalling them sets all the line parameters.

According to the product dimensions and the specific pressures required, the control panel sets the hydraulic pressure of the press and the cylinders that need to be activated. The temperature of the platens, the pressing time and the feeding unit can all be set from the control.

Once pressed, the finished door or panel passes to a roller outfeed conveyor that allows it to cool down prior to unloading.

Principal Doorsets’ **“sergiani gs-a”** press line, like most solutions supplied by SCM, was **designed and built to fit perfectly with the company’s needs**, some of which were quite specific.

With products ranging from 6mm up to 98mm in thickness, widths of up to 1200mm, panel lengths that could be anything up to 3100mm and weights of up to 120kg, **versatility was key**, and careful consideration had to be given to both the handling and processing stages.

Added to that, SCM’s design engineers had to take into account the **variety of different materials to be laminated** and the numerous single and two-component glue types

demanded by an immensely divergent product range. The solution SCM provided has enabled **productivity increases of up to 30%**. The line is capable of producing around **200-250 doors per shift**.

*“The SCM press fits very well into our panel process,”* said Stan, who is clearly as pleased with the outcome as he is with the service he gets from his long-term partner, SCM. *“With the new line installed we can run with one operator at the rate we ran with two. We also have the benefit of a glue application line that meters the glue onto both faces of the product simultaneously, providing consistency in replication of the product and consistent quality”.* *The set up and engineering during installation was helpful with training for our operative. We have not needed SCM’s support since,”* he said, concluding *“The training was successful.”*

**Case study extracted from an article by Melvyn Earle for Furniture Journal**

READ THE FULL  
CASE STUDY



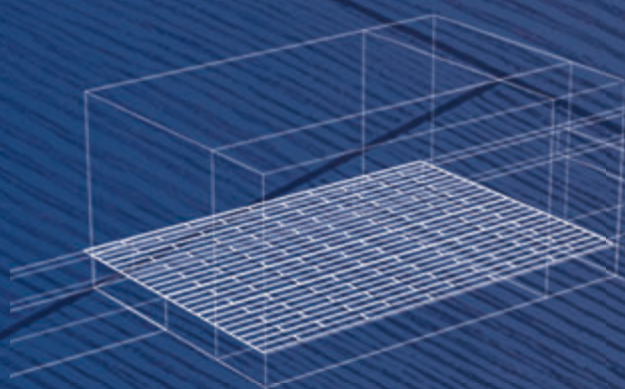
# FLOORING

---

Technological innovation and environmental sustainability lie at the heart of the exclusive parquet floors described in this section.

Stories with their roots in a deep commitment to artisan quality, but which have evolved alongside the machines, plants and the SCM team's experience to achieve maximum perfection and efficiency.

---



**CADORIN**

**PUCHEGGER U. JILG**

Case studies | Cadorin - Italy



The Quercia Europea Natur flooring provided for the new SCM Technology Center in Rimini. Below, the Cadorin family with (from the left) Delfino, Claudio and Rita Cadorin, and some images of the "celaschi tmc" line.



# Cadorin, 110% Made in Italy flooring

**With Celaschi technologies**

SCM has been with us for forty years now. With the new squaring and profiling line, we have achieved the utmost guarantee of perfection and efficiency thanks to the quality of the machine and its mechanical parts. The choice was really too easy!”

**Rita Cadorin**



**Cadorin is a company based in Veneto with a prestigious artisan feel, combining the quality of a longstanding family tradition for wood production with the values of technological innovation and environmental sustainability.**

For almost a century, the Cadorin family has been transforming wood with love, art, dedication and craftsmanship. A story dating back to 1938, handed down from father to son, while preserving the same passion for wood and artisan workmanship. It all began with the production of carts and casks at the joinery workshop run by **Giosuè Cadorin** who also managed a log sawmill. The business was later transformed and expanded by his son **Delfino**, extending the production to furnishings and a certified production of planks for parquet and cladding.

Currently run by the third generation, **Claudio and Rita Cadorin**, the company has further expanded in size and production capacity by specialising in parquet and cladding while holding on to its strong artisan imprinting.

Cadorin’s jewel in the crown is currently their machining of **three-layer solid wooden planks**, which they have been pioneers in, but also the wooden floor in different structures and sizes, together with top-quality structural and aesthetic artisan design modules.

““We mainly work with a production of one or two layers, elements which can be used for flooring and wall and ceiling cladding, until all the furniture and room design has been covered” explains Rita Cadorin. “In order to make our mark on the market, we made very clear-cut quality and product choices. We identified finishings, machining work and creativity which would have an added value compared to what is traditionally available on the market. And that has proven to be our strong point”.

Cadorin firmly believes in the value of a 100%, or rather a 110% **Made in Italy** product; “Our production is entirely Italian and we deliberately point out this 110% to provide our clients with the guarantee and assurance that this added bonus is concrete, real and not just a marketing ploy. You

can see the quality and uniqueness of a truly Made in Italy product and craftsmanship always pays off!”.

The company is based in **Possagno in the province of Treviso with 15,000 square metres for its production**. Where the perfect combination between advanced technologies and craftsmanship creates a balance which gives the product a high technical certification and a unique, innovative and stylish look.

Cadorin has been choosing SCM as its technological production partner for years; two companies united by the same passion for wood, sustainable innovation and Made in Italy goods.

A reciprocal exchange because if, on the one hand, SCM has accompanied the innovation of this traditional company from Veneto over the decades with its **Celaschi** tenoning and profiling solutions, on the other, Cadorin has contributed to enhancing SCM’s new Technology Center, opened in Rimini at the end of 2023, with its quality parquet flooring. It is a **Quercia europea Natur** flooring with specifically profiled planks using the Celaschi line installed two years ago.

A production that reflects those sustainability principles so dear to Cadorin and SCM: vinyl glues, water finishes and the choice of oak which, by its very nature, minimises wood waste by 30-40% of the material used. All these ideas have been shared to show off an innovate, green-oriented product.

The solution chosen by Cadorin is a “**celaschi tmc**” line which fully meets with **Industry 4.0** requirements. SCM specifically designed it around their needs for a highly flexible production, complete with **Maestro active square** supervisor software for total control and tracking of all the data needed to optimise production.

# Experts in “waterproof” parquet with an eye to future

**Puchegger u. Jilg is a leader in the production of parquet floor and has made a name for itself with its line of fully waterproof wooden floors. In order to improve the quality of their products, they chose a “celaschi tm40” profiling machine and a “dmc system” wide belt sander.**

A top-quality artisan product manufactured using natural and renewable raw materials, all fully Made in Austria. **Sonnberg Parkett** is the brand which, since 2000, has made a name for the wooden floors produced by the company, **Puchegger u. Jilg**.

A story which starts in the charming town of **Wiener Neustadt**, south of Vienna and has its roots in artisan craftsmanship thanks to the initiative and experience of the joiner, **Alfred Puchegger**. He founded the company in 1999 and he still heads it to this day together with his brother **Christoph**, like him, a qualified joiner and their partner **Helmut Jilg**.

The teamwork was done by Puchegger u. Jilg is a leading company in the Austrian market and highly specialised not only in the production of wooden floors for interiors, terraces and gardens, but also cladding for staircases, doors, underfloor heating systems as well as care products for parquet.

*“We manufacture and lay the parquet by following **all the rules for a 100% artisan product** - they tell us -. At our plant in Wiener Neustadt, we have more than 70 employees who, with their skills, expertise and commitment, provide top quality performance levels every day to ensure our clients are completely satisfied”.*

The range of services spans from consulting to design to the creation of top-quality products, right up to delivery and on-site assembly. Over the years, the company has expanded its working range, handling every aspect of wooden flooring and becoming a **unique and highly specialised industry**

**supplier** for their clients. *“Our floors are produced with a multi-layer” structure of soft wood, an easy-to-install Click system and a quality wood cladding”* explains the partners, adding that their production is also highly bespoke, with numerous surface design options.

Their **research and development work**, carried out by an internal team, **is also fundamental**. A continuous schedule of innovation which also lead to the creation of an exclusive brand like **marinaflexx®**. *“Our R&D team developed the only pre-finished waterproof parquet floor and with no joins for wet, damp areas like bathrooms and kitchens. This parquet is also entirely manufactured by our team. It is made of sustainable materials and is easy to install because it leaves the factory ready to be laid”.*

The secret of this special flooring, as with all the Sonnberg Parkett range, lies in the technological innovation at the heart of its production which uses two SCM machines. Three years ago, Puchegger u. Jilg purchased a **profiling machine, the “celaschi tm40”** designed to offer **maximum precision and manufacturing quality while profiling, squaring and tenoning**. Thanks to this highly flexible solution, it is possible to use a single machine for lengthwise and crosswise profiling of multilayer parquet with male and female profile. The boards are processed on each side by two scoring units and two profiling units. During crosswise processing, the pieces are semi-automatically loaded through a hopper feeder. During lengthwise processing, feeding is

executed manually. In both cases, the pieces are manually unloaded. The model also benefits from the advantages of **Maestro active square** software with Human-Machine-Interface for an efficient use, while still being simple and immediate.

For calibrating and sanding, the company chose a **“dmc system” wide belt sander** which proved perfect for the special configuration of marinaflexx® parquet floors. In order to make these floors 100% “waterproof”, and suitable for boats, jetties and swimming pools, Puchegger u. Jilg applies an internally produced resin onto the board grooves which creates a waterproof coating.

The main challenge faced by the company was to efficiently sand the parquet after applying this resin, which can reach a considerable thickness of 2-3 mm. The dmc system has been the ideal solution, capable of calibrating and sanding the material with the integration of a planer machining unit and traditional machining units with abrasive sanding belt. This combination guarantees a **maximum level of finish and plenty of material removal up to 3 mm, required to fully remove excess resin from the surface, ensuring an even, high-quality finish on wood products**.

The versatility of Maestro active sand interface made it easy to customise the dmc system’s machining parameters to adapt to the company’s specific needs, offering considerable improvement in the overall productivity.



Alfred Puchegger.  
Below, some images of the  
“dmc system” wide belt  
sander and the “celaschi  
tm40” profiling machine.





## SURFACE TREATMENT

---

Fully automatic or robotic spraying and painting lines and sanding machines which become flexible abrasive solutions for an extensive range of finishes. From furnishings to staircases, right up to windows and doors, the combination of SCM and Superfici state-of-the-art solutions for pre-treatment and finishing ensure aesthetically pleasing, fashionable finishes to satisfy the most recent demands in terms of design.

---



**DECORE-ATIVE SPECIALTIES**

**ESCALIERS PLASSE**

**PM SERRAMENTI**

**ROTTALER FENSTERLADENBAU**

**TOM HOWLEY KITCHENS**

Case studies | **Decore-ative Specialties** - USA



Some pictures of kitchens made with the finishing processes of Decore-Ative Specialties. On the left, one of the “dmc system” Sanding solutions selected by the company and, below, a detail of the Superfici line.

**We chose  
SCM and  
Superfici**

*because our relationship with their Sales and Management team is great. People buy from people they like and trust and SCM and Superfici both have great people!*

**Todd Shapiro**



# With Decore-Active Specialties, high quality extends coast to coast

**The US company has been manufacturing top quality and custom cabinet components for almost 60 years. Finishing is decisive in meeting the most challenging customers' needs, this is the reason why they purchased the latest technologies from Superfici and SCM.**

Founded in 1965, **Decore-Active Specialties** is a manufacturer providing custom cabinet components to the kitchen, bath, closet, garage, office, remodeling, refacing, healthcare, and multi-family housing industries. Product offering includes RTA (ready-to-assemble) cabinets, doors, drawer fronts, drawer boxes, moldings, accessories, finishing, and hardware that are manufactured in wood, plywood, 3D laminate, and melamine. Headquartered in Monrovia, California, they operate manufacturing facilities in Irwindale, California, and Monroe, North Carolina.

Decore-Active Specialties offer Solvent-Based finishing to meet every customer's needs. "Our goal – as explained by **Todd Shapiro**, Vice President - is to bring the highest level of quality, service, and innovation to each option we offer as we come alongside cabinetmakers nationwide to make beautiful spaces for living and working. Our Solvent-Based finishing allows customers to order their products finished with paint, primer for painting, clear topcoat, or spray-to-color stains.

After placing their Solvent-Based order, we can arrange to ship a **COLORFIRMATION®** sample block of the color we are producing. This provides the security customers expect when choosing a finish color".

According to Decore-Active Specialties, technology innovation is strategic to guarantee efficient processes and high-quality products. This is the reason why they chose a **Superfici finishing line** including a sanding conveyor downdraft table, a panel cleaner, a panel pre-heat, a paper belt spray cabin and a U-Shaped dry line. The line also has a Superfici integrated three component mixing station. "This system works great!", comments Todd. "This line is an improvement over hand spray for several reasons: coating is applied evenly on the face and edge of every part and is always dry as it exits the line, the quality of the enclosed system is better and guarantees less

'trash' in the finish, chemical mixing of the base and catalyst and thinners are consistent every time". Automation is also appreciated: "Hard jobs are made easier: our machine operators are relieved from hard labor of hand spraying and material handling and are able to spend time looking at quality and inspecting parts".

Decore-Active also has **two sanding lines** for doors and face frames production with several of **SCM's "dmc" sanders** in each line. Almost all of them are the latest "**dmc system**" models. Other "dmc" sanders are off the line, including an old planer machine that will also be replaced by a large "dmc system".

"We have purchased multiple 'dmc sanding lines for both East and West Coast operations and one of the main decisions to purchase them is because of the **new orbital sanders** - adds Todd -. Dmc sanders are unique to the industry. Cross grain sanding removal is critical to the US market, our customers expect the cross grain to be removed on both the face and back of the cabinet doors and for these reasons the 'dmc sanders are very effective. The newer 'dmc' models prove to be extremely reliable and easy to train new operators how to safely operate the equipment. Furthermore, the new lines all have the latest safety upgrades – both electronic and mechanical, including see-thru glass side doors and LED lighting. Both are a big improvement for sanding machines".

**According to Todd, Superfici and SCM are the best technology partners.** "We choose to continue to do business with SCM and Superfici because our relationship with their Sales and Management team is great. People buy from people they like and trust and SCM and Superfici both have great people!". That's not all. Todd also comments: "SCM always has leading-edge technology for our industry and Spare Parts and Service are outstanding! Part fulfillment is consistently good too, even on older machines".

The quality of after-sales technical support is a further highlight in the partnership with Superfici and SCM. "This is an area where we feel the entire SCM Group does a nice job. They always 'take care of business' and stay with us all the way to completion. They have a great team of experienced people that always help us to a solution!".

With such a reliable partner at its side, Decore-Active Specialties looks forward with a future-proof vision. Digital transformation and Industry 4.0 are topics that the company is focused on. "We do have a newer line that is fully integrated with our manufacturing data. This allows the operator to scan a work order and the entire line of machines will set up specifically for an individual work order. We are also keeping an eye on the development of Industry 4.0 technologies.

Although it's still in its infancy stage, I believe this will grow and will be an important consideration for high technology equipment purchases. We see many long-term advantages for making the investment of cloud-based data for our machine centers, such as the improvement of preventative and predictive maintenance and the use of productivity dashboards to help us increase the efficiency of our internal processes".

The "coast to coast" trip of Decore-Active Specialties continues in the name of innovation.

# Escaliers Plasse optimises its offer with SCM

**Specialising in bespoke staircases, Escaliers Plasse resolved to work in partnership with a clientèle mainly consisting of professionals. The company, therefore, decided to purchase a Superfici finishing line from SCM. A new piece of equipment that allows the company to offer even more complete, excellent-quality features, while caring for the environment.**

Escaliers Plasse has been designing and selling bespoke staircases since 1973, most of them in wood. Bespoke because, as **Jean-Charles Lechaux**, director of Escaliers Plasse points out: “We adapt to the diverse contexts in the home, and it is precisely this flexibility that stands us apart from the competition.” A trained engineer, Jean-Charles Lechaux joined the company in 2016, after having previously worked in the woodworking industry. Escaliers Plasse, which has 95 employees, currently produces an average of around **6,000 staircases per year**. In 1992, Escaliers Plasse became part of the **Huet Group**, an important joinery manufacturer based in Vandea.

The company works with a clientele of professionals, including independent house builders, joiners, architects and real-estate developers. As well as its laboratories, the company has a surface area of 6,000 m<sup>2</sup> and a work area of 1,600 m<sup>2</sup>. In terms of essences, Escaliers Plasse mainly chooses rubber tree and beech wood, but also, to a lesser extent, Scots pine or more quality essences like oak. Escaliers Plasse, with its team of 11 salespeople, is operational across about two-thirds of France. “We distinguish ourselves with the service we provide to our clients,” explains Jean-Charles Lechaux, adding: “We assist clients at every stage of the project, from consultation, to measuring, production and after on-site delivery, we can also fit the staircase.” Even though Escaliers Plasse mainly produces wooden staircases, the company also offers a wide range of metal staircases. “We aim to industrialise our production tools,” sums up Jean-Charles Lechaux: We aim to control the entire production chain, from design to finishing.” In the laboratories, the production process involves a series of stages performed on various machines: cutting, profiling, machining, assembly, fitting and finish. The

company has several state-of-the-art SCM technologies.

## Expanding its offer with the finishing

“For the last five years, we have been offering staircases with a painted finish and about a year and a half ago, we decided to bring a part of this finishing work internally. We continue to work with our subcontracting partners, entrusting them with a part of our finishing workload, like the dual colour or varnished products” explains Jean-Charles Lechaux. “In order to offer our clients a complete service, we decided to purchase a finishing line from SCM”, he continues, “and we appreciated the fact that SCM allowed us to run tests in Italy on their Superfici finishing system.” “Painting, as a part of our production, has allowed us to increase orders in response to new contracts,” underlines Jean-Charles Lechaux, “bearing in mind that this increase in our offer fully reflects the underlying trend which is steadily on the rise.” The high-performance Superfici finishing line recently delivered by SCM includes a loading station, the surface levelling and automatic spray application of the finishing product. Operating at a speed of **2 metres per minute**, the line can machine **around 400 m<sup>2</sup> in 8 working hours**. “This is a finishing line for flat products like furniture, doors, staircases which are between 60 and 80 mm thick, for an actual spraying width of 1.3 metres,” points out **Saverio Ghiringhelli**, Superfici’s Product Manager. “The aim of this line is to achieve enhanced productivity with automation and improved quality by optimising the amount of finishing product used. This tool also considers the operators’ well-being: everything is incorporated into the inside of the cabin to reduce the risks of paint inhalation and skin contact.”

This machine is controlled by a PLC via a computer linked to Internet, which allows te-

chnical support to be given remotely. “The machine is connected to a network, and this allows information to be transferred such as the level of production or the surface treated, to optimise the process,” explains Saverio Ghiringhelli. “Thanks to **Optispray software** which considers all the production parameters, the quality and amount of paint used can be simultaneously optimised.” The Optispray software was developed by SCM for spraying machines, along the same lines as the Maestro software model for machining equipment. With a view to **protecting the environment**, Escaliers Plasse also opted for a water-based paint.

“The product is sprayed inside a cabin,” explains the product manager, “in order to protect the operator’s well-being as much as possible.” Staying with ecological matters, it’s worth pointing out that the discharge of air is reduced to a minimum, which means only a very limited amount of heating is required in the laboratories, resulting in a considerable energy saving. “There is also the option of recycling the paint.” The drying cabin installed at Escaliers Plasse, which measures 10 metres by 6 has a ventilation system and can contain a very high number of drying trolleys. As well as this Superfici finishing line, Escaliers Plasse is already planning on making other investments: “The constantly evolving context of new constructions forces us to continually question and adapt our offer while simultaneously improving production costs. The next stage will be the integration at source and, in particular, the internal integration of the profiling of joists. The purpose of this project is to control quality and improve the production costs of our wooden profiled components for staircases” explains Jean-Charles Lechaux.

**Credits: Stéphane Jardin for Le Bois International**



*From left, Jean-Charles Lechaux, Director of Escaliers Plassé, Hervé Boudaud, Head of Methods and Development, and Laetitia Kpanou, Marketing Manager of SCM France.*

WATCH THE  
CASE STUDY VIDEO



Case studies | **PM Serramenti** - Italy



*The Superfici line with Maestro robot has enabled PM Serramenti to achieve flawless painting, simplifying the operators' work.*



# Italian excellence in the heart of Lombardy

**PM Serramenti continues to invest and looks to the future with optimism. This is demonstrated by the purchase of a new Superfici line, which combines technological efficiency and environmental sustainability.**



Top-quality products and an all-round service covering all the clients' requirements. These are **PM Serramenti's** strong points, not just a brand but a genuine success story. Stemming from **Patrizio Pesenti's** passion and experience, this company in Bergamo rapidly made its mark in Italy as a leader in the production of **high-end windows and doors**.

His philosophy is to place **quality and customer care** at the centre, without ever forgetting the importance of **environmental sustainability**. This is highlighted by Patrizio Pesenti himself who explains yet another precise choice: *"PM Serramenti has tested itself against a top of the range client target and this is what we want to continue to focus on in order to meet any demand, including FSC/PEFC certificates and everything linked to the environment"*.

What's the key to success? Pesenti is in no doubt: *"A constant commitment to the research and development of innovative solu-*

*tions, which translates into products created with the best materials and the most advanced technologies".* But PM Serramenti is not just about quality. The company places the client at the heart of its operations, offering an impeccable service at each stage of the process, from budgeting to installation and after-sales. A team of highly qualified professionals is on hand to listen to the client's needs and find the most suitable solutions to each specific requirement.

In order to do all this, PM Serramenti continues to invest and look to the future with optimism. The company plans to expand its range of products and reinforce its presence on the international market. A future which presents an image of growth and success.

*"We got back on our feet after 2021 with the opening of the new headquarters and offices, managing to use solar panels to be more self-sufficient. In the future, we plan to launch a new production of windows and doors and a brand positioning which is increasingly more focused on environmental sustainability, something we care a great deal about as is clear from all the significant investments we've made in that direction"*.

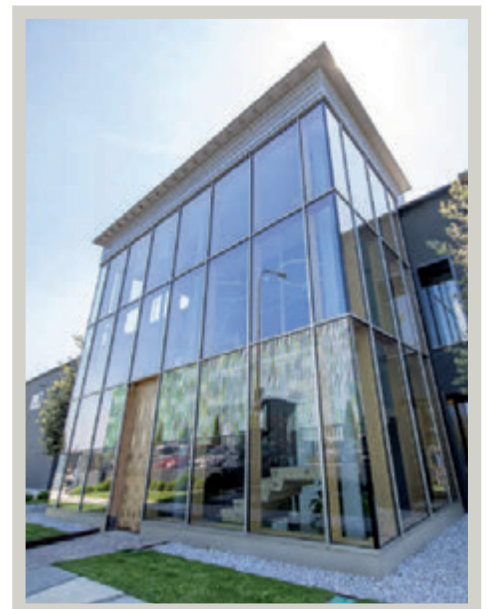
One emblematic example is the **new range of paints purchased from Superfici, part of the SCM Group**, designed to optimise emissions and convey them to a single substation to be purified and re-released into the atmosphere. *"We chose Superfici and SCM as our technological partner because we wanted the best solution for painting windows and doors. In particular, the implementation of the **"maestro" robot** allowed us to achieve an impeccable painting and a significant production consistency, by simplifying our operators' work"*.

Another advantage which has been greatly appreciated is how easy it is to use the robot. *"We were surprised how easy it was for*

*our operators to learn how to use the robot; we thought it would be more complex to use the HMI but the interface was instantly easy to understand. Specialist operators are enthusiastic, and this is very important for me because being the first ones to use the robot, it was essential for the robot be a valued ally, improving the efficiency and quality of the production process."* explains Patrizio Pesenti.

The owner's words express his satisfaction at the investment: *"I am satisfied with both points which were essential for me and upon which I reflected while making the investment: the quality of spray and ease of use."*

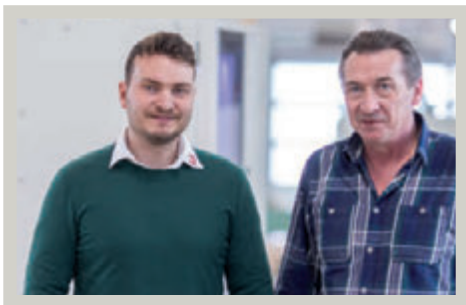
PM Serramenti is a virtuous example of how excellence in quality can thrive alongside a solid commitment to saving the environment.





# A “Maestro” finish for the Rottaler shutters

The German company, Rottaler Fensterladenbau, is one of the main manufacturers of shutters and cabinet doors for furniture in south-east Bavaria. A business run by real professionals in wood processing who in turn are flanked by another “Maestro”: a Superfici robot for painting which has dramatically improved productivity and efficiency in this company, while maintaining that sophisticated quality which has always distinguished its artisan products.



An entrepreneurial story which dates back to 1956 over two generations, and whose roots lie in the traditions of Southern Bavarian with its joinery workshops and that strong passion for wood which is one of the undisputed symbols of this region.

After all, **Rottaler Fensterladenbau** is a genuine expert in wood. We're talking about a company which uses this material to manufacture top-quality products for blacking out and shutting **windows and doors. Shutters, cupboard doors and fronts** are the result of a constant artisan perfection and stem from the work and dedication of an expert workforce and designers as well as innovative technological equipment.

About thirty employees, **a turnover of around three million Euro, a production which supplies only industry specialists:** joinery workshops, timber construction workshops, window and door manufacturers both in Germany and 30% in other European countries like Austria, France, the Netherlands, Belgium and Italy. Rottaler Fensterladenbau Mayer takes on the market's complexities and evolutions with these figures.

*“The attention to the customer begins with the choice of raw materials. This is why we only use high quality wood from the mountains”* explains **Philipp Mayer**, General Manager who took over control of the company from his father **Wolfgang Mayer** in 2018. *“The quality of our products needs to be high and constant and must guarantee significant resistance over time against external agents”* the young businessman clari-

fies. Quality is a recurring word used at the **Bad Griesbach im Rottal** factory and also concerns the modus operandi of this company which only uses dynamic equipment and professionals who, in this industry, are real...masters.

And this is the second secret which lies at the heart of the success of Rottaler shutters. How do you guarantee the highest standards to satisfy a market which is becoming ever more demanding? How do you speed up delivery times even with bespoke productions? Philipp Mayer and his team have often asked this question and nowadays, they also have to deal with a shortage of qualified manpower, that expertise which the company has always relied on.

## The additional “Maestro”!

Fortunately, technology is here to give a hand, as is the case with the recent arrival at the factory of another **Maestro**: no coincidence that this is its name, the articulated robot which Mayer wanted to buy. A solution created by Superfici, part of the SCM Group which is a leading company in terms of painting and finishing. Designed by following the movements of an artisan's arm, this robot offers an exceptional finishing quality with each individual spray and on each window and door. All this with the advantage of guaranteeing a management system and highly efficient control to paint all the parts of the object and expose the true heart of the window and door.

*“This robot allowed us to achieve the most accurate and efficient production and to make our processes more reliable”, Philipp Mayer points out. “The surfaces on our products keep their beauty over time and are more resistant. Furthermore, we manage to obtain all these advantages without too much effort: with Maestro, even the most bespoke machining work can be programmed easily”.*

**Digitalisation** is a key element for Rottaler Fensterladenbau. *“With the help of our company software, each order can already be simulated on the computer. These orders*

*can be consulted in the machine, and this allows us to resolve discrepancies more easily”.* From entering orders to invoicing, everything is done digitally following a precise and orderly flow. *“The transmission of data starts in the office and ends in the machine and the whole process is tracked to guarantee the client a unique product”.*

The German company had opted for hi-tech solutions from the SCM group even before buying the Maestro robot. They use the highly versatile **dmc sd 60** sanding and calibrating machine. So, together with the robot for painting, the surface treatment process can count on the support of a single technological benchmark partner which is part of one important group and has been leader in the field of wood processing for seventy years.

The company in Bavaria uses a 5-axis cnc machining centre, the **accord 40 fx**, for drilling and routing. It is particularly appreciated by Mayer for its MATIC bars worktable offering a fast, accurate set-up.

What would Philipp Mayer say if he were to sum up the purchases made? *“With SCM and Superfici, we have always been guaranteed rapid and reliable support both at the consultation stage and when choosing the solutions best suited to us, whether that be at technical-support level when assembling the machines or after sales. This has made it much easier for us. We are extremely satisfied, and we see ourselves continuing to work with SCM and Superfici even in the future”.*

WATCH THE  
CASE STUDY VIDEO





*Superfici's Maestro robot works in perfect synergy with the the "dmc system" sanding machine (lower left). Below, also a picture of the "accord 40 fx" cnc machining centre.*



# The final touch for exceptional surfaces

Tom Howley Kitchens invested in an automatic surface finishing line from SCM



Tom Howley Kitchens is a brand for clients who want something rather special. Almost every kitchen that leaves the **Glossop** factory is sold direct to the consumer via a network of **19 retail showrooms** strategically-positioned between London and Edinburgh and a new showroom is about to open in Nottingham soon.

Predominantly in-frame designs, 95% of Tom Howley kitchens are painted and everything is custom-designed and made in timber.

Part of the **BHID Group**, the company has enjoyed a remarkable growth trajectory since it was established 19 years ago by **Tom Howley** and his partner, **Mark Clayton**, now the company's Operations Director.

"We've grown from two people to 300, spread over two sites," Mark says. "When we started the business, we had one spray booth and one sprayer. The business grew quite quickly, so we kept adding spray booths until we had 10 booths and 20 sprayers.

We'd only reached the halfway point of our journey when we realised we could not fit any more spray booths into the building. We had to change the way we were working.

Moving to automation was the obvious way

forward and it held the key to the future growth we wanted".

Getting from manual spraying to automatic spraying has been a four or five-year project for us that culminated in a visit to Italy to see the systems being offered by two very different companies. "We went to them knowing what we wanted to achieve but not knowing exactly how or what was needed to achieve it. The difference in approach between the two was the real decider for us: one seemed to want to channel us down a route that suited them, even though we felt it wasn't right for us; the other - **Superfici** - wanted to know in detail what we wanted to achieve, how we wanted to work and then came up with ideas. The truth is, we really felt we could trust the people at Superfici much more than others, so we went with them".

At the start of the line, Superfici's proposal included a "**dmc system**" **automatic sanding**, denibbing and cross-grain finishing sander equipped with barrel brushes, planetary discs and superfinishing pads. "The sander has several stations on it," explains Mark. "The first station is oscillating, for edge breaking and denibbing. It's then got two big circular barrel brushes, which get into the panels of the doors and into nooks and crannies. Then there are two belts, like

traditional sanding belts, and a final planetary head, which takes the place of an orbital sander. That takes out the cross grain. Operators then manually transfer sanded frames, doors and other components to the feed conveyor of a fully automatic Superfici painting and drying line".

First, the frame, fascia, plinth or rail – or combination load – is thoroughly cleaned of any residual dust from the sanding process using a blower and overhead extraction as it passes along the infeed conveyor. Spraying paint onto cold timber often results in poor drying, so the next station Superfici included is an infrared heater that warms the timber and prepares it to take the paint. Before entering the spray cabin, the component passes under a scanner that reads the size, shape and profile and relays that to the sprayer. "If it's a door, the Superfici understands there's a panel coming and it will spray the whole door. If it's a frame with no centre panel, the spray guns pass across, spray the rail, stop, and then spray the next rail, so it only sprays where there is timber." Superfici recommended their "**compact 3**" **automatic spraying machine**, a flexible reciprocator machine with double arms, which Mark had equipped with 12 Kremlin guns. "The



Some pictures of the Superfici automatic line for finishing and the SCM's "dmc system" wide belt sander.

Superfici will handle raised and fielded panels easily because we have 12 spray guns in the cabinet. They are grouped together in sets of four, all pointed in different directions. As the arm is traversing the cabinet, it's spraying all sides of the doors, the edges and all the inside edges. It knows automatically from the scan which guns to use". According to Tom Howley the huge benefit of this machine over hand spraying is the **consistency** it provides. "When you've got 20 people spraying, each sprayer will spray in a different way and it's very difficult to achieve consistency. With the Superfici, you tell it how many grams per square foot you want and it applies that film weight. The drying is where it gets

complicated, because you have to work out how much paint to put on so it dries correctly. Too much paint and it won't dry. You'll get cracking and bubbling". One of the options on the Superfici "compact 3" is the choice of either a paper protection system, or a self-cleaning belt for lacquer recovery. "That was a very big part of our decision," recalls Mark. "With the other supplier we consulted, we felt we were being pushed down the paper roll route. We didn't feel it was right for us and we couldn't work out why we were being driven down that route when all the calculations we did suggested recycling would be better for us. The problem with paper is you've got to get rid of it. It's industrial wa-

ste. Buying the paper is also quite expensive. Even factoring in the replacement cost of a belt every two or three years, the paper route worked out much more expensive. When we went to Superfici, Klaus was totally in agreement that the paper roll option wasn't for us". **"With the cleaning system we've got, we can recycle some of the product – mostly the primer.** We don't recycle the top coat because we're changing the colours so often, but recycling the primer gives us the opportunity to make it go further."

**Text extracted from an article by Melvyn Earle for Furniture Journal (09/23)**

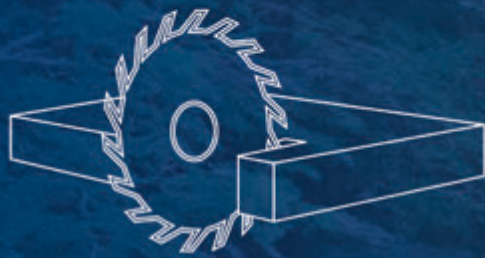
## JOINERY AND DESIGN

---

Decorative elements for bunk beds, wooden sculptures routed with 3D technique, installations for world-famous architects and designers...

The potential of SCM solutions for joinery and cnc machining centres to machine solid wood elements is limitless, as is clear from the works of the key figures in this section.

---



**D3WOOD**

**HALDANE UK**

**3D-CNC TISCHLEREI CLUSE**



Case studies | **D3Wood** - Italy



*A detail of the "hypsos" machining centre and of the joinery machines purchased from D3Wood.*

# Wood becomes art with D3Wood

**We met Marco Clozza of D3Wood, a company that cannot be defined with few words, but that we will try to present in this article in the most thorough and exhaustive way.**



*Marco Clozza and some of his installations including, below, "Flying Kodama".*



First of all, we introduce the founder, Marco, who after his studies at the Politecnico of Milan, the long-term collaboration with the professor and friend Marco Imperadori (Ordinary Construction Production and holder of the Chair of Design and Technological Innovation at the Politecnico of Milan) and several years of work as an engineer, decided to change substantially his career, devoting himself to wood as the material of choice and exploring it (and working it) under all the possible and practicable aspects.

The initial idea of Marco and his brother, Claudio, was to produce furniture complements with material from the local forests or wood from felling in urban areas. This aspect alone represents a beautiful story: to make a tree live on, in a different form from its native one.

Thanks to the fact that Marco and Claudio have the possibility to directly cut trees, they handle very big wooden boards, which allow demanding work from a size point of view, a feature that not everyone can provide.

The D3wood workshop opened its doors in 2017 and, after a brief experience with traditional joinery machines, was equipped with a "morbidelli" three-axis cnc machining centre. Following an initial collaboration in 2018 with Japanese architect **Kengo Kuma** for the development and realisation of the Kodama installation at Arte Sella, and beginning to work with other internationally renowned architects, the decision was made to make a further technological leap by equipping their workshop with a "hypsos" machining centre. Since the beginning of 2020, this large 5-axis routing machine has been used to create important installations, structures created on behalf of major architects and artists, for whom D3Wood often not only produces the prototype, but also carries

out all the structural calculations, the various load and strength tests, as well as installing the final work on site.

It is not only the big names in architecture and art that are linked with D3Wood, but also major brands and associations that commission D3Wood to study and create special solid wood objects ranging from lighting to furnishing accessories in general.

**Flying Kodama** is one of the latest installations realised. It was conceived by the Japanese architect **Kengo Kuma** and realised by D3Wood with SCM machines and the scientific assistance from Marco Imperadori.

Kodama, which means "tree spirit" in Japanese, results from structural and sculptural experimentation that Kuma has been carrying out for several years.

It is a sphere measuring 120 cm in diameter, designed to be hung as if floating, made up of interlocking blocks of pale ash that fit together to create a fascinating interplay of joints and contrasts.

In the specific case of Flying Kodama, a "hypsos" cnc machining centre was used, ideal for processing complex-shaped solid wood elements, and various joinery machines, in particular, a "class e" surface planer, an "st 5es" spindle moulder saw and a "dmc sd30" sanding machine.

The "hypsos" was also used for two other valuable installations at the solo exhibition of Kengo Kuma for the Biennale 2023 in Venice and at the last edition of the Fuorisalone 2024.

The "hypsos" is therefore the ideal machine for a company like D3Wood that develops and produces both small objects and architectural installations, offering the flexibility to work different scales with both the oldest materials such as wood and the most innovative ones.



# Scotland's best-kept secret

**We discover Haldane UK, a company whose five-axis woodwork adorns palaces and castles but whose name is known only by cognoscenti who seldom share it.**

You could be forgiven for thinking Scotland's best-kept secret might be a rare single malt whisky, the view across a beautiful glen bordered with fir forests and snow-capped peaks, or a little-known beach where the sun never dips below the horizon during the summer solstice.

I'm sure there are many such secrets in Scotland. It is a land without parallel. But the one I'm thinking of is a secret so rare that those who know of it will not reveal its name or its whereabouts.

This secret is behind some of the most prestigious restoration projects in Britain. It's been instrumental in creating exquisite ceilings for castles, decorative woodwork for palaces, complex furniture components for the world's finest hotels, copy antique hand rails and staircase components for listed buildings, panelling for prestigious shopping centres, intricate friezes adorned with complex inscriptions for university libraries, carvings and columns... The list is endless. If it's complicated, it's three-dimensional, it's curved and it will take skilled craftsmen days or weeks to make it from wood, this secret has the expertise and the equipment to produce it in hours, sometimes just minutes – and once you know who it is, it could be as beneficial to your business as it is invaluable to the countless cognoscenti on its client list who will never share its name. I'm about to break the secret. I will share it with you.

**Scotland's best-kept secret is a specialist in five-axis machining called Haldane; Haldane UK** of Glenrothes; the secret subcontractor whose identity top-flight architects, designers and furniture manufacturers will not reveal because what Haldane can't make with its fleet of five-axis machines has yet to be discovered. Haldane's story began shortly after the Se-

cond World War. A small wood-turning company, much of its work was cooperation for the whisky distilleries and bobbins for weavers. Spinning Jennys followed.

The advent of five-axis CNCs was a real turning point for Haldane: "We must have been the first in the UK to use a five-axis machine for wood," Managing Director, **Forrester Adam**, told Furniture Journal. "One of the most notable projects we did was for **Windsor Castle** when it burned down. The ceiling was made up of components about the size of a brick - eight designs, all twisted. It was taking one guy a day and a half to carve each one and there were 950 to make. They gave the job to us and we made each **one in 40 minutes.**"

## **Pezzi unici e grandi volumi grazie alla tecnologia**

The company is constantly evolving. "We were always seen as bespoke manufacturers, specialists in one-off complex pieces, but now, with our latest machine, we can offer large volume work. **That's really what prompted us to invest in a new and much larger five-axis machine: we knew it would help us open up new markets and it has. It's given us new opportunities, enabled us to produce volume and made us very competitive.**" Haldane's most recent investment, an SCM's **hypsos**, is much bigger than any of the company's other five-axis machines. Equipped with a 4.8 x 1.8m bed, it's ideal for taking on volume contracts involving products much larger than the complex components and handrails the other CNCs are producing. In fact, the bed is so large that production can even be zoned so up to four different projects can be machined without opening the cabin. The **hypsos** simply jumps from one to the next. "With the new SCM machine, we can be much more competitive. We're now producing components in seven minutes that would

**have taken us 27 and the largest piece we can machine is 4.8 metres in length.** On the furniture side, it's helped us transform from a bespoke specialist to a contract machining specialist. Whatever you want manufacturing, we can do it now. Forget six-week lead times and four weeks in shipping, plus the cost of a container. Since we took delivery of our SCM, our lead time for standard components can be as little as a few days." Haldane's CNC Manager, Derek Jorgensen, has more than 30 years working with five-axis machines and even he is impressed with the **hypsos**. "This is a big workhorse," he says.

"It copes with anything people want without compromising on accuracy. **The only limit to this machine is the limit of your imagination.**" The SCM **hypsos** is connected via a mobile console with integrated PC - a 21" LCD eye-M Pro touch screen colour display - that runs Windows 10 IoT but it also has two points for remote machine control from where the full protection enclosure can be operated. **Maestro active** is installed on the control unit, along with performance enhancing **Smart Pro** software.

"The software is top-of-the-range HMI," says Derek. "It's very intuitive. I've been working machines like these for a long time and it only took me two weeks to get my head around it. It took six months with the other machines before we reached full commercial operation. Compared with the other machines we have, the **hypsos** is more of a workhorse. It gives us something unique. Now we've got into it properly, it never stops and already we are thinking about having another."

*Text extracted from an article by Melvyn Earle for Furniture Journal*

***With the  
“hypsos” we can  
be much more  
competitive.***

*We're now producing components in seven minutes that would have taken us 27 and the largest piece we can machine is 4.8 metres in length.*

***Forrester Adam***



*The “hypsos” machining centre:  
A powerful giant.*

# The limitless creativity of “the sculptors” in 3D

**A carriage in the fields, a wooden puma at the front entrance... These are just some of the internationally renowned evocative items produced by the Cluse Joinery Workshop. Thomas Cluse and his team specialise in the technique of 3D routing that they apply at the highest level to produce genuine works of art.**

The **3D-CNC Tischlerei Cluse** company can be found in the countryside in the village of **Marbeck**, in western Münsterland. The grandfather of the current owner, **Thomas Cluse**, founded this joinery workshop in 1926 and Thomas has been running it since 1996. After the sudden death of his father, he found himself completely out of his depth and struggling to survive. At the age of 30, from one day to the next, he was forced to change his plans: *“I could no longer hide behind my father and I had to take control of the reins”, he says.*

Cluse also remembers how he worked a great deal on himself and that, from timid carpenter, he grew to become an out-going and extrovert businessman. Thanks to him, the joinery workshop that previously produced every kind of wooden product indiscriminately, from trusses to rocking chairs, started to specialise in **3D routing** even changing its name to 3D-CNC Tischlerei Cluse.

## Technology and tradition

The decision taken by the German master carpenter was clear cut, as well as visionary: they needed to specialise in order to compete on the market. The trusses had to go, and the CNC technology take centre stage. And so, twenty years ago, Cluse got himself his first second-hand 3-axes numerically controlled machine: a SCM Tech 99. He told us how he bought it at auction: *“At that time, a nearby colleague had a 3-axes machine. I watched impressed from a distance and thought: “You need one of those too!”. And to think I had no idea how it worked”,* chuckles Cluse. Initially, the owner used the machine for no more than five hours a month, but after uncovering its numerous potentials, he created the first relief, a multiplex propeller. Then he fitted it, including the ball bearing, onto the engine compartment of his T4 car and sped around the village with this original propeller. *“You need to be a bit crazy too!”* he laughed. It is individual actions like this that made him well-known in town and contributed to making a name for his company and its works. From that point onwards, the first requests for milled pieces began to



come in and, from then on, the master carpenter accepted numerous orders for wooden models and shapes.

## The digital turning point

Another breakthrough came 17 years later. *“We were making good money and I wanted to make an investment, but it had to be something worthwhile”,* explains the 56-year-old master carpenter. This is how the purchase of a new SCM 5-axes machining centre came about, a Record 110 model, and with this choice, Cluse began to use Alpha-Cam software. It was by no means easy: at that time, he was a young father, he focused on his work by day and his family in the evening, so, after just four hours of sleep, at 3:00 in the morning he was back at the PC facing new challenges. *“It was a difficult time, but it was definitely worth it!”.*

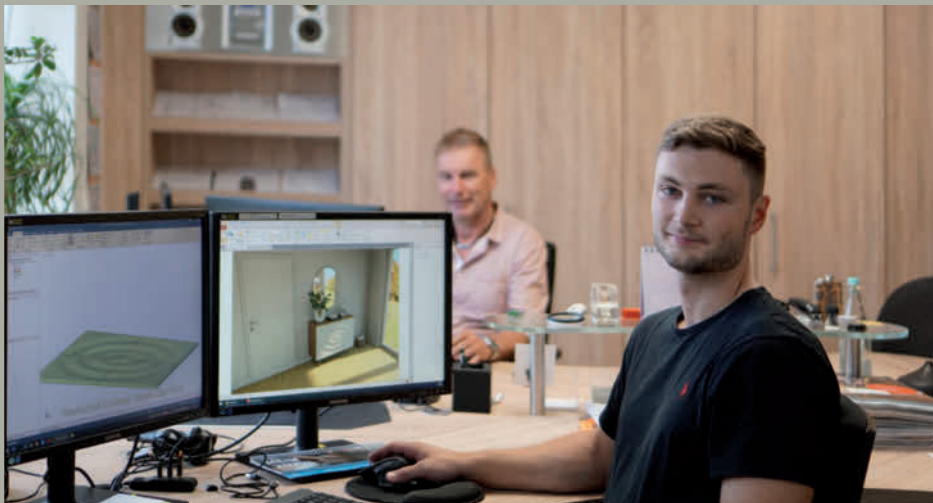
Now the post-processor, the converter between Alpha Cam and the CNC machining centre, also works perfectly. *“So, Alpha Cam developed the software to suit our needs and we were a kind of guinea pig!”*, explains Thomas Cluse. For the last four years, the joinery workshop has specialised almost exclusively in CNC routing. **Niklas Cluse**, his 24-year-old son has been part of the team for the same amount of time. He received his Master Artisan diploma in

September following his training: *“I always knew that one day I would become a carpenter and start working in the company”,* he tells us enthusiastically.

## Top technology with SCM

Like his father Thomas, Niklas is also a CNC-technology enthusiast. Nowadays, with four 5-axes machines, the company is highly advanced in terms of innovation. Thanks to the partnership with SCM, an **“accord 40 fx”** CNC machining centre was added in 2015 and an **“accord 50 fx”** in 2018. The latest purchase was made just a few months ago, an additional **“accord 50 fx”**, in the large 3680 x 2150 version. For the pre- and post-treatment of the components that come to the CNC machining centres, there is a 900 m2 operating surface, with another pair of classic machines for machining the wood.

Nowadays, with a Professional Bachelor's Certificate to his name, Cluse Junior can concentrate fully on the business that he will one day run by himself. But right now, his father Thomas has no intention of retiring because he loves what he does. With six employees in total, the joinery workshop manages to be highly competitive while maintaining its strong family atmosphere. Thomas Cluse as owner, his wife Thia as bookkeeper, his brother Andreas in the



Operators at work at the design office and at the “accord 50 fx” cnc machining centre.

workshop, his son Niklas representing the new generation, and another two employees who are also members of the family: Lukas Rottstegge, chief CNC operator and Florian Schwering, master carpenter.

### Limitless software

The SCM technologies work in full sync with other manufacturers’ software, in a perfectly integrated process. The work preparation is shared between father and son. When moulding large units, among other things, the Cluses use CAD Ansys Space Claim software. *“It is the ideal program. Easy to understand and simple to use”*, explains Thomas Cluse. The Space Claim files are loaded in Alpha Cam. *“What’s great about Alpha Cam is that it can import a huge number of different formats of files”*, explains Cluse enthusiastically. So, the routing strategy is created in Alpha Cam which, in the case of difficult items, can easily take several hours. Each program is personally produced by father or son. Niklas now uses CNC technology in a completely different way compared to how his father used it in the past, and it means a lot to Thomas that his knowledge is handed down to his son. The only thing that, to date, has remained a prerogative of the boss is work with the Geomagic CAD Freeform software. Thomas Cluse uses it for

unusual requests, drafts completely free of designers and shaped parts with no corners or sharp edges, together with the Geomatic Touch insertion device. Thanks to a mobile style, the master carpenter can freely form the shapes on screen as though using plasticine. *“The crazier the requests, the more interesting we find them”*, explains the joyous owner. And this is always the case: whether we are dealing with the portrait of one’s husky, a fish bone the length of a small car, an XXL cappuccino cup or a seven-metre hand with built-in conference table.

### From luxury to a whim

Nothing is impossible: with this approach, the family company thrills clients all over the world. *“We work for designers, interior designers of yachts, the car industry, numerous carpenter colleagues and even in the field of medical technology”*, explains the owner. The template for a forearm prosthesis was even produced by the Cluse Joinery Workshop. The Cluse’s technical expertise evokes a great deal of interest: *“We occasionally hold presentations with our machines and word gets around”*, Thomas tells us. *“Have you seen what they manage to make? You need to go, they can make it!”*: this is probably what so many of Cluse’s new clients have heard said. The



creative and technological potential of this joinery workshop is such that no one is surprised to learn that, nowadays, Tischlerei Cluse is in a league of its own in the field of 3D routing. And who knows for how long it will remain so.

**Credits: Anna-Katharina Ledwa for BM**

## Case studies

# NAUTICAL AND CARAVANS

---

A high level of customisation and sophisticated aesthetics without forgetting practicality and comfort. The production of wooden furniture and elements for nautical and caravans gravitate along the same wavelength whose common denominator is high technology, whether we're talking about mobile homes, luxury yachts or tear-drop camper trailers.

---



**DIESSE ARREDAMENTI**

**HANSEYACHTS**

**KLAUS HÜNERKOPF - PREMIUM-MANUFAKTUR**

**NORD PRODUKT**

**NUCAMP**



Case studies | **Diesse Arredamenti** - Italy



**Our customers  
look for  
perfection**

*precision, as well as fast  
manufacturing and delivery  
times, and this is why the  
use of the most advanced  
technologies is essential.*

**Paolo Ravaglioli**



*The owners, Paolo Ravaglioli  
and Manila Galletti Below,  
operators at the "ergon nt"  
and "morbidelli p800"  
cnc machining centres.*



# Luxury on the waves

**A continually developing company that specialises in exclusive interiors for luxury boats, and was brave enough to change production mentality, face up to the new digital challenges and renew its production lines with SCM.**

It is when you hit rough seas that a company like **Diesse Arredamenti**, experts in the production of **interiors for luxury yachts and mega yachts** since 1990, manages to get the best out of its fleet to keep on course towards success and innovation. Indeed, if we take a look at the history of this industrial organisation in Romagna, responsible for the production of customised furnishings for the **most prestigious brands in the nautical industry**, it doesn't take long to realise that some of the most difficult moments over the last few decades were followed by a dramatic change of direction for **Paolo Ravaglioli**, owner and sole director of Diesse Arredamenti, and his team.

With around one hundred employees, a **turnover of 20 million** and a new **11 thousand square metre** headquarters opened in 2020 at the height of the pandemic, Diesse Arredamenti stands out from the crowd for its advanced production processes, aimed at achieving maximum efficiency, flexibility and quality when creating **exclusive solutions, no matter what kind of yacht it is**.

Each project is followed right up to the final assembly stage on board with expert professionalism in each department: the technical department in close collaboration with the design, production and quality control department.

All done with the aid of advanced logistics and a MES system that guarantees full tracking of the parts and machining work and optimisation of times and performances. *"Our industry is continually developing from a design and technological evolution point of view - explains Ravaglioli -. Our customers look for perfection, precision, as well as fast manufacturing and delivery times, and this is why the use of the most advanced technologies is essential".*

Evolving becomes a priority because the market is continually and rapidly changing. It is essential to adopt organised industrial processes, as well as improve efficiency and

productivity. As a result, the choice of a technological partner is not random. *"Our relationship with SCM started with the expansion of our company. Over time, the need for precise, fast and advanced machinery grew. We felt the need for a reliable partner and we found this in SCM".*

The Diesse Arredamenti production plant boasts different technological solutions from the Rimini-based Group, including numeric control machining centres, sanding machines and joinery machines. Working at some of these state-of-the-art technologies, we find a number of female operators, demonstrating how the production work is evolving and modernising.

Daniela is one of them. We see her at work on an **"ergon nt"** cell, one of the SCM purchases that Ravaglioli says he is most satisfied with. It is a particularly advanced system for **nesting machining, with an automated loading and unloading system**.

*"Our biggest requirement was to deal with unloading all the cut panels in the nesting cell as best and efficiently as possible, as our components are completely different from one another and it is not possible to remove them from the worktable by pushing them out. We needed a solution designed around our requirements, that could take both the finished parts and production scraps and transport them along the conveyor belt, on which they would then be separated and labelled".* SCM's "ergon nt" solution gave Diesse Arredamenti the opportunity to achieve this, and that's not all. We are talking about a cell **capable of machining non-stop and without any drop in productivity**, over a number of years, while doing several shifts per day. Thanks to the double worktable and the presence of several operating units, it's like having two machines in one, as well as the relatively reduced bulk for cells in this category.

Furthermore, its integration with the **automated loading and unloading system** is the

best way possible to machine delicate parts, as the panels to be machined can be placed directly onto the machine's worktables, with the considerable added advantage of further protecting the operator. Alongside the "ergon nt" we find another of SCM's state-of-the-art machining centres, the **"morbidelli p800"**, for drilling routing and edge treatment.

A solution that allows for "just in time" work and for the highest standards of quality to be achieved on the panels ready to be assembled. "SCM provides positive consulting and after-sales relations because our company works on double shifts and technical support is an essential factor for us - concludes the owner of Diesse Arredamenti -. Thanks to the new digital services, we can interface with SCM technicians simply and rapidly to solve any problems and this helps us a great deal to keep the production flow running".



WATCH THE CASE STUDY VIDEO





## On a new course: top-level edgebanding

**Building yachts means taking into account individuality, quality, water resistance and humidity as well as versatility and efficiency. And to ensure that the finish on all its interior furnishings and fittings satisfies all these requirements, HanseYachts has hoisted sail towards a new horizon in edge-banding for its interior furnishings.**

Right from the start the policy of the **HanseYachts AG** yacht manufacturer, founded in 1990 and based in Greifswald (in the state of Mecklenburg-Vorpommern in Western Pomerania) has always been to offer privately-owned, easy-to-sail yachts with sophisticated technology and designs and an excellent quality-price ratio.

Naturally, the future owners of the yacht are also invited to add their own personal tastes and ideas. And to ensure that the end product is a success, the manufacturer has become a practical platform for a series of highly complex infrastructures as well as monitoring in minute detail, every step in the construction process, from the yacht's design to its production.

All this requires flexible, **highly efficient production processes with systems that guarantee continuous and coordinated machining cycles**. Recently, the production managers, guided by the company director, **Klaus Häcker**, hoisted sail towards a new horizon in edge-banding thanks to a **"stefani s"** edgebanding machine purchased by **SCM**.

HanseYachts were able to equip the standard **"stefani s"** machine frame to suit its own special requirements. So, **the machining programmes can now be selected according to the workpiece and the edge bands are fed in from a twelve-shelf automatic magazine**.

A nesting package ordered at the same time allows edge-banding to be performed on pieces that have already been CNC processed, for example, with holes for embossed hinges, and the machine also has all the finishing units the company requires. If rounded edge bands are applied with a single four-motor unit ("Round 4" automation package) the profiles, or better, the radiuses

are machined with a single diamond-tipped tool. Depending on the profile in question, the tool is positioned pneumatically for high, low, front and rear milling. This level of versatility is made possible by the **"Multiedge" automation package**. This is a set of versatile tools that are ideal for any number of ultra-slim bands and different radiuses. Another special feature is the **SGP Glue Pot gluing station**, which allows EVA and PU adhesives to be used without having to interrupt the gluing process, as the SGP changes the adhesive automatically.

The SGP also performs automatic emptying and dosing operations automatically (with a patented glue gun closure device). Glue dosage is analogically controlled by the program according to the specifications of the adhesive. Depending on the type of edging selected, the **"Maestro Pro-Edge"** machine software selects and automatically activates the required work stations.

If the customer has ordered surfaces in plastic or other non-wood materials, the machine starts up the spray device with a detaching unit and/or lubricant or detergent. Once the piece has been processed, a return system takes it back to the machine operator.

In this situation, the machine screen also shows which side of the piece is about to be edged and how to position the edge band.

Once again, HanseYachts' close working relationship with its suppliers, in this case the manufacturer of the **SCM** machines, has shown to be once again an important symbol of the value of the yachts it produces.

*Credits: DDS -  
das Magazin für möbel und ausbau*



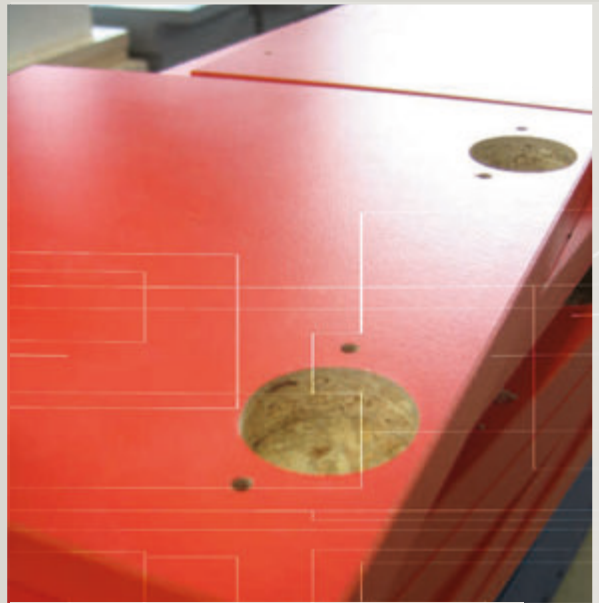
“

***I found it  
very important***

*advantages that the machine creates a production report every day indicating the work hours for each operator as well as the possible stop times and relative causes. The report also indicates the maintenance intervals for each unit and any servicing operations that are due. Consequently, I have practically everything under control, all the time.*

***Klaus Häcker***

”



*General picture of the 'stefani s' edgebanding machine chosen by HanseYachts. Above is a machining detail and some of the beautiful furniture made by the German manufacturer.*

Case studies | Klaus Hünerkopf - Premium-Manufaktur - Germany



The  
“dmc sd 90”  
wide belt sander

allows a finished surface  
to be sanded in tenths of a  
second. There is no better  
quality in the world.

**Klaus Hünerkopf**



## An exciting journey with Klaus Hünerkopf motorhomes

**The motorhomes created by the Klaus Hünerkopf - Die Premium-Manufaktur company are genuine works of art. Absolutely nothing is prefabricated. These luxurious masterpieces are decorated with a level of superior quality that reflects the individual, and sometimes unusual desires of a wide range of customers.**



The Premium-Manufaktur company in Neukirchen is a byword for innovative ideas, ultimate precision and high-quality materials and processes. Every motorhome is designed to meet the living requirements of a vast range of customers and all classes of vehicles. This is why, in addition to the company's core carpentry division and its state-of-the-art CAD/CAM machines, it also has departments specialised in water jet cutting, fine stonework, painting, upholstery, ironwork, electronics and electrical engineering, metal construction and a prototype production area. Plus, of course, creative design and architecture, which are the owner's special loves. *"We thrive on emotions,"* comments **Klaus Hünerkopf**, who, in 1989, took over Premium-Manufaktur, a company originally founded in 1955, and stamped his character on it, by turning it into a manufacturer in the MB Zetros Camper.

Just a glance is enough for any customer to see the importance that Klaus places on these prestige finishes, as they are everywhere, in the real wood veneer of the curved front cladding, the veneered doors with their fine glass inserts, the lighting elements, the real wood veneer and glass floors and the rounded partitions, with their fine veneered surfaces. Klaus Hünerkopf elaborates: *"The original style of these motorhomes is created by our special veneering process that uses only one tree trunk for each vehicle. So, thanks to our insistence on superior hand craftsmanship, every motorhome is unique. The curves in the dividing walls or on the fronts of the furnishings are all clad with a continuous veneer that has a very special style. The panning is also arranged so the veneer has a consistent progression from the bedroom to the lounge. You can literally see the grain of the trunk repeated in sequence. The woods*

*we particularly like are teak, oak, cherry, walnut, birds-eye maple, tinoe and maple, as well as any special customer requests."*

For the furnishings and fittings two work stations now play a leading role in the company's pool of modern and perfectly maintained machines: a **"morbidelli" 5-axis cnc machining centre** and a wide belt sanding machine with a fine-sanding and electronic sanding unit (**dmc sd 90**).

In the case of the cnc machining centre, both the 26-drillhole boring head and the controlled five axes guarantee maximum efficiency for solid wood and panel material processing.

The axes change position continually from the vertical to the horizontal position as well as rotating by 360°. To machine all the possible sides of a piece economically, all the sides, the various tools, such as cutters, drills, sawblades, and so on, are replaced automatically by the tool magazine as they are needed.

So, **any kind of CNC part can be machining, as well as individual moulded pieces or 3D parts with an infinite range of processing variants.** Without doubt, the wide-band sander has become the company's bread-and-butter machine. Its all-in-one design means it has a wide range of uses, from the precise calibration of the load-bearing plates to the preparation of surfaces for painting and intermediate sanding and onto fine veneer-sanding.

To ensure that this range of functions is easy to manage - as a sanded surface can often be very expensive for this kind of product - the machine's intuitive controls have an innovative graphic interface. All the machining parameters are entered and activated simply by pressing a button. Work programs that are regularly repeated can also be saved and recalled when required.

*Credits: Fumier-Magazin*

# The mobile lifestyle of Nord Produkt

Italian Technology and Design for homes that are on the move.

“

**We have worked with SCM and CMS technologies at our side**



*right from the beginning and today we continue to grow thanks to this value-based partnership, which can be summarised in two factors that are key to our success: superior technology and service that really makes a difference.*

”

**Stanko Birin**

Always one step ahead!” The words of Nord Produkt founder **Stanko Birin** leave no doubt as to what this company is about and where it is heading... Nord Produkt is one of Europe’s leading constructors of mobile homes - the modular holiday home structures that are becoming increasingly popular in trendy campsites and tourist villages thanks to their combination of exclusive hotel style, freedom of movement and the unique comfort of a real home. Based in Zagabria, Croatia, the company was founded over 30 years ago, as a sales and then production organisation, specialised in bathroom furnishings and fittings.

Later, in 2012, Nord Produkt shifted direction to take on the more ambitious challenge of becoming a manufacturer of mobile homes from A to Z. In fact, the company takes care of everything from the initial personalised design for the end customer to building the expertly insulated structure, producing the carefully designed interior furnishing and fittings and even the moul-

ding of the polyurethane bathtubs. Nord Produkt has become a byword for the mobile home and caravan and bathroom furnishing sector in Croatia. The company also exports to Austria, Germany and Holland, and is currently laying foundations for a number of interesting projects in Italy and France.

*“In our company we all work with a focus on the fact that the future is now, and that ideas are a rich and significant part of our daily commitment,”* explains Stanko Birin.

*At the same time, we are, without doubt, one of the companies that stands out most for the original design of our mobile homes.*

*One particular example is our yacht home that we unveiled at the last edition of the Italian SUN tradeshow and is perfectly in line with the advanced sense of style of a country like Italy.”*

**Nord Produkt has always chosen the pick of Italian technology with SCM and CMS.** SCM machines are at the heart of Nord Produkt’s furnishing and fitting production system.

Organised in two stations with separate production lines featuring the highly reliable and advanced cutting, edge-banding, drilling and nesting technologies. CMS sheet thermoforming machines are used in the production of all the bathroom fittings (including bath tubs, basins and shower cubicles). SCM and CMS are leaders in the development of integrated technological solutions for furniture production and plastic processing for the mobile home and caravan sectors. These innovative technological solutions are based on the exclusive know-how of the two companies that focus on achieving maximum levels of machining precision, quality, attention to detail, and advanced versatility in interpreting production requirements. Our **modern lifestyle is increasingly “mobile”** and environmentally friendly: Nord Produkt homes and furnishings are the intelligent response to today’s latest trends. The success of Nord Produkt mobile homes has led to increasing technological investments that ensure the company is ready to meet new production challenges.



SCM machines are at the heart of Nord Produkt's furnishing and fitting production system. Organised in two stations with separate production lines featuring the highly reliable and advanced cutting, edge-banding, drilling and nesting technologies. CMS sheet thermoforming machines are used in the production of all the bathroom fittings.

*In the picture below, the "morbidelli m200" cnc machining centre.*



Case studies | nuCamp - USA



*The "morbidelli p200" cnc machining centre with the exclusive HE-POD suction cup system.*



# Maximum comfort in a teardrop

**The nuCamp campers and travel trailers combine good looks, high quality raw materials and innovative design. This North American company selected SCM for its wood processing and more specifically, a “morbidelli p200” drilling, routing and edgebanding cnc machining centre capable of genuine “miracles”....**

High quality technology, comfort and innovation. Even on the busiest roads, nuCamp campers and travel trailers can be spotted in an instant thanks to their refined design and unmistakable teardrop shape. They are produced by the family run company of the same name in Sugarcreek, Ohio (also known by its historical name of Pleasant Valley Teardrop Trailers LLC), with 185 employees, and are aimed at the high end of the market mostly in the United States and Canada.

Manufactured in traditional hardwood, plywood and composite materials, these special vehicles need to meet precise requirements: high quality, lightness, intelligent use of space, practicality and eco-sustainability. The internal spaces of these “teardrops on the road” need to be optimised to make them striking and include all services and comforts on board that camper enthusiasts cannot live without while travelling. Reassurance, however, is also needed that it is agile in its movements while also being sturdy and stable. The raw materials, technologies adopted and investments into research and development, therefore, play a key role in creating the end product.

Almost the entire interior infrastructure is made of wood, including the stunning birch cabinetry and is produced “in house”, organising all the cutting, edging, assembly and finishing operations within the same production department. The only work that is outsourced are the dovetailed drawers and traditional doors with wooden frame that further characterise a range of vehicles.

*“The most important technologies for our wood processing department - they explain to us from the company - are the SCM machining centres ‘morbidelli m400’ for routing and drilling and the ‘morbidelli p200’ drilling, routing and edgebanding. We use Alphacam and SCM’s Maestro software line in combination with these solutions which*

*allow us to optimise and automate the flow and in particular, the edgebanding process. SCM’s advanced technologies help us simplify, automate and increase productivity, a key advantage in being able to compete successfully in a frenetic market like ours”.* The words of a company that has always been ahead of the rest of the industry. Unlike the car industry, campers have not made any significant progress in recent years in implementing high tech solutions. This can depend a great deal on the fact that the camper is a luxury item and not a basic necessity like a car, and is forced to live with a more unstable market. The road to success, therefore, lies with innovation and nuCamp RV is sure of this.

The most recent purchase made from SCM was the morbidelli p200 machining centre, with a unique HE-POD suction cup system patented by SCM to meet every routing, edgebanding and drilling requirement. Indeed, this system makes this machining centre unique on the market: the HE-POD suction cups add the third dimension to the work table, allowing the perimeter work to be carried out without the need to move, thanks to the alternating lifting of the pieces.

*“This cnc machining centre - continue those from the North American company - solved a number of our problems and eliminated the difficulties encountered with hand processes including shaped profiles, always produced manually, with a table saw. The main advantages achieved with the morbidelli cnc machining centre is the possibility of providing the client with high quality production. “We also use PUR glue on all the lateral band parts, which is very resistant (up to 360 degrees Fahrenheit) and has an almost invisible glue line, guaranteeing a sleek, clean look”.*

The nuCamp team decided to place its trust in SCM because their solutions “have a solid structure, are more reliable and require less maintenance. **It was the best long-**

**term investment we could ever make”.** We get the impression they are highly satisfied, not only with the type of technology purchased, but also the level of assistance received at the after-sales stage. *“Any manufacturing company knows that faults are problems are inevitable. Based on our experience, we can guarantee that SCM has the best support team. SCM helped us avoid downtimes and quickly deal with certain problems. The support we initially received from Rob Howell and Phil Bryant was outstanding, and Arvid Estep has always been able to identify our needs. SCM is a guarantee for us”.*

**“ This cnc machining centre solved a number of our problems and eliminated the difficulties encountered with hand processes. ”**









*is more*