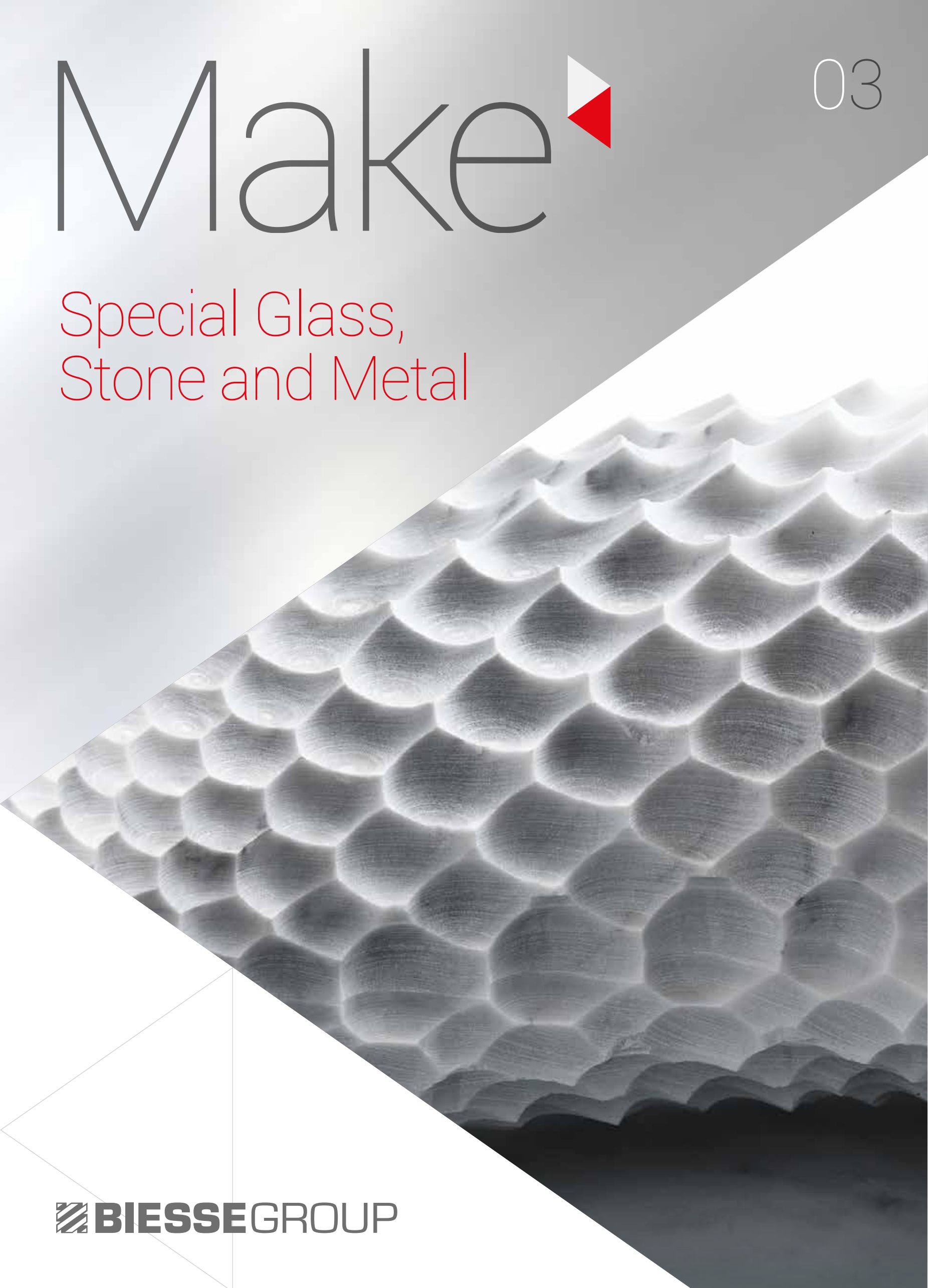
Make

03

Special Glass, Stone and Metal



BIESSEGROUP

03

Innovation in its purest form

It is an honour to open the first edition of Make, a periodical dedicated to technologies for the processing of glass, stone and metal, with an interview with the President of Biesse Group, **Roberto Selci**, who outlines the company's new strategy designed to further enhance the value of Intermac solutions. The objective is clear, as is evident from his words: to grow internationally by focusing on both products and processes. This ambitious strategy is supported by a team of experts and by a big company with a brand new image. Intermac has highlighted its commitment to its customers as well as reiterating its drive to grow and expand, through the redesign of the reception area at the company's headquarters, as well as the creation of a new showroom, which was inaugurated last March.
Make 03 tells the story of this new vision, through the experience of those who work for the company, the way of thinking of its leaders, the technological innovation for which it is celebrated, the testimonies of the people who have chosen it as an environment in which to grow, the events that have marked it and the tales of those who drive the company forward every day with their skills and their passion.

The focus of this first edition, dedicated to glass, stone and metal, is the 4th Industrial Revolution, which has been characterised by extremely high-performance solutions that can provide our customers with all the advantages of digital manufacturing, from a "think**4**ward" perspective, to quote our motto. A concrete example of "Made in Intermac" technological innovation can be seen during the two flagship events, **Marmomacc** and **Vitrum**. In Intermac's special **Live Demo Area**, you can see Diamut tools in action on various examples of machinery, and witness how these contribute to a unique marriage of technologies.
The avant-garde spirit of Intermac is also borne out in our software - the new generation **bSolid** programme has rewritten quality standards, as well as smashing the boundaries of technology to ensure that end users can enjoy both power and ease of use, a combination that is more achievable than ever before.

A magic and virtuous combination of creativity, craftsmanship and technology. A combination that - thanks to training, too - can assist users in creating unique design pieces, as well as providing new growth opportunities for young people in the digital manufacturing era. A tangible example of this is seen in **Bicefalo**, a work of art sculpted from Carrara marble by the designer Raffaello Galiotto, leveraging the power of the Intermac Master 850 machining centre and the precision of Diamut tools. This piece is a real-life demonstration of how technology, guided by creativity and applied to marble, can generate new possibilities of expression and construction.

Evolution, Technology, Creativity: a mantra that characterizes the first edition of Make, dedicated to Intermac and Diamut. A statement of innovation in its purest form.

Raphaël Prati
Marketing and Communications Director
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Bicefalo
designer
Raffaele Galiotto

cover picture
Riccardo Rossi

picture below
Riccardo Rossi

Who

Roberto Selci

Biesse Group Chairman

«When I arrived at Intermac, I found a world of opportunity just waiting to be seized, along with a large team of people with in-depth knowledge of the trade, the manufacturing processes, and the product. A team who are a dream to work with». - These are the words of company president Roberto Selci, who took the helm at Intermac in April 2015 after years of experience in the woodworking industry -.
«We have ambitious goals and the foundations of our strategy lie in increasing our levels of specialization with regard to structure, through the creation of expert teams dedicated to the glass and stone markets. Each team will be engaged in the entire process, from product development, to commercial distribution and servicing. We are investing in the development of new products and innovative solutions (stand-alone machines and integrated lines). Alongside this, we are also considering increasing our portfolio with acquisitions and strategic alliances. All this will allow us to complete our glass and stone ranges.
By the time we reach the end of this process, Intermac will have shifted its focus from stand-alone solutions to integrated cells and dedicated lines.
After years of leadership in the field of processing centres, Intermac must now foster new skills and gain credibility, in order to be able to ultimately present itself as a supplier of turnkey solutions which can fully satisfy customer requirements.

With regard to Diamut, on the other hand, our goal is to make the company as independent as possible, investing in the development of the product and of the sales network, exploiting the competitive advantage we hold in the shape of the network of branches across the world».

> We have ambitious goals and the foundations of our strategy lie in increasing our levels of specialization with regard to structure, through the creation of expert teams dedicated to the glass and stone markets.

Roberto Selci joined the Group in 1988, initially working in the sales/marketing department, spending significant amounts of time in the US and Asia subsidiaries, and contributing to the internationalization process of the Group.

Intermac Milestones

1987 Intermac founded to design, manufacture and distribute glass processing machines.
Masterglass, the first automatic processing centre for glass shaped polished engraving, is launched in the same year.

1990 Launch of Master Edge, the first numerical control edge-banding machine for straight and shaped glass sheets.

1994 Intermac transfers its technology to the stone processing sector with the Master Stone numerical control processing centre.

1998 Start of international expansion: establishment of the first international subsidiary (Singapore).

2001 Acquisition of Diamut, based in Lugo (RA), a company specialising in diamond tools.

2007 Acquisition of AGM Inc. in the U.S.A. and creation of Intermac America.

2008 Entry into the metal sector with the Primus water jet cutting systems.

2014 Launch of bSolid and bSuite, software packages that set new benchmarks in the in the reference sectors.

Where

intermac.com/magazine

3 Giu

Intermac/ Biesse Asia Grand Opening

Kuala Lumpur, Malaysia
3-5 June 2015

A central office, a permanent showroom, and an efficient warehouse, all entirely dedicated to the Asian market: with a total area of 4500 m2, the new headquarters is strategically located at just 30 minutes from the Kuala Lumpur international airport, thus allowing the company's clients to personally verify the functionality of each machine on display in the show room the same day. With an area of 1800 m2, it's the largest showroom in the area.

Watch the video

20 Mag

Chinaglass

Beijing, China,
20-23 May 2015

The presence of the laminated glass cutting table at the stand was a great novelty for this market, and in this sense Intermac was seeking to stimulate the market by demonstrating a different process that's capable of offering significant advantages in terms of productivity.
The imposing presence of both the Local and Italian technical and sales Staff at the exhibition highlighted the international character of the event and contributed to the enormous success of this edition.

26 Mar

Inside Intermac

Pesaro, Italy,
26-28 March 2015

Intermac and Diamut opened the doors to their clients at the entirely renovated headquarters in Pesaro for the new edition of Inside Intermac, a three-day opportunity to explore the world of glass, stone, and metal processing technologies, as well as the company's vast range of tools.

28 Apr

The Natural Stone Show

London, UK,
28-30 April 2015

The industry's leading players and clients gathered at this unique event dedicated to the United Kingdom's vast stone and tile industry: the visitors' attendance at the Natural Stone Show was almost 20% greater than that of 2013.
As always, the exhibition of Intermac's latest machining centre technologies elicited much interest from every segment of the market.

Upcoming exhibitions

IranConMin
Teheran, Iran, 17-20 October

Blech Expo
Stuttgart, Germany, 3-6 November

Kamien
Poznan, Poland, 18-21 November

Big 5
Dubai, UAE, 23-26 November

Upcoming Biesse Group Events

Inside Biesse
Pesaro, Italy, 15-17 October

Apertura Technology Campus in Nordamerica
Charlotte, USA, November 2015

Marmomacc

30 September - 3 October 2015
Verona, Italy
Intermac Hall 3 - Booth No. B1/B21 C2/C22
Diamut Hall 7 - Booth D2

Make

Live Demo Area Intermac and Diamut tools in action

Machines on display and relative demos

Waterjet cutting systems

01 / Primus 322
Cutting and shaping operations on different materials and thicknesses.

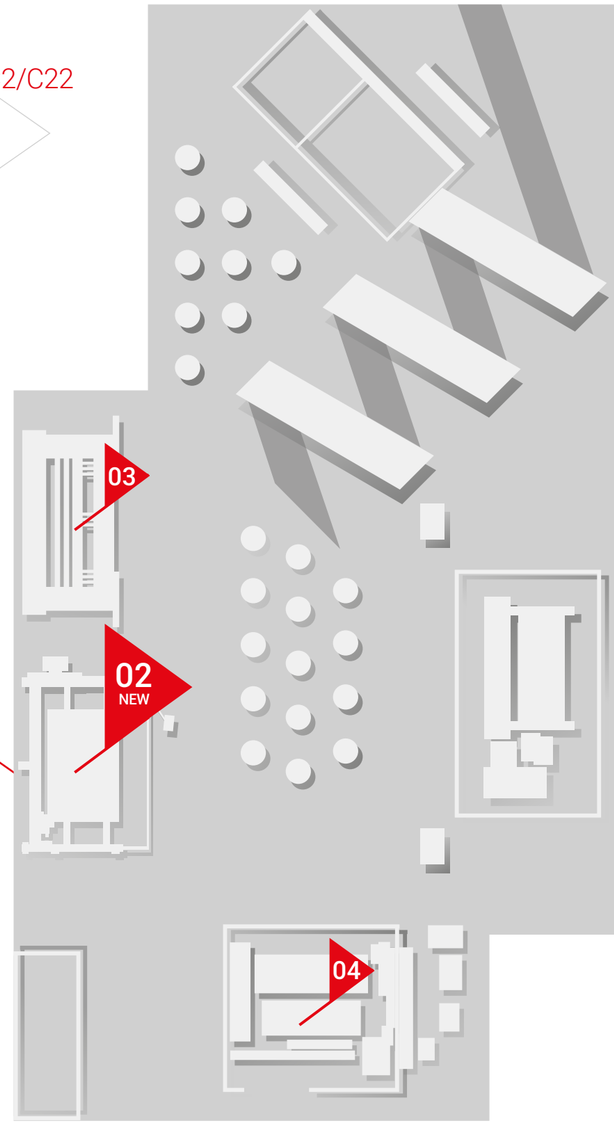
02 / NEW

CNC work centres

03 / Master 33 plus
Kitchen counter top with square hole, Kitchen counter top in synthetic material, funerary art from solid stone.

Universal work centres

04 / Master 850
Carving from block.



Intermac at Marmomacc 2015

600 square metres of exhibition area

4 technologies for slab, solid, and block processing

3 types of synthetic materials on demo

1 "Bicefalo" sculpture made entirely using the CNC technology on display at the Italian Stone Theatre exhibition in Hall 1

Diamut at Marmomacc 2015

155 tools on display

11 different technologies for natural and synthetic stone processing

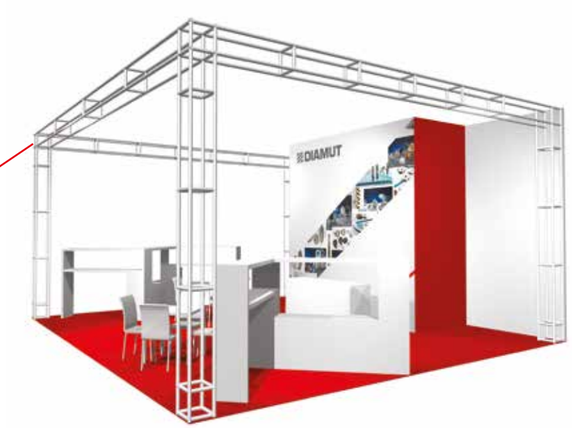
3 worldwide product previews

2 exhibition areas thanks to the Intermac Live Demo Area

Range of tools on display

Diamut Stand

/ Milling cutters
/ External grinding
/ Internal washbasin grinding
/ Kitchen counter top processing
/ Dry cutting discs
/ Wet cutting discs
/ Edge polishing tools
/ Drills and engraving



Think4ward

Vitrum

6 - 9 October 2015
Milan, Italy
Intermac Hall 24 - Stand No. R02/L01
Diamut Hall 24 - Stand L11

Make

Live Demo Area Intermac and Diamut tools in action

Machines on display and relative demos

Machines and systems for monolithic and laminated glass cutting

01 / Genius RSA
Straight or shaped cutting of monolithic glass sheets in various thicknesses, vinyl cutting.

02 / Genius 37 LM
Straight or shaped cutting of laminated glass sheets in various thicknesses.

03 / Genius Comby
Complete cycle on laminated 44.2 glass sheet.

Waterjet cutting systems

04 / Primus 322
Cutting and shaping operations on different materials and thicknesses.

CNC work centres

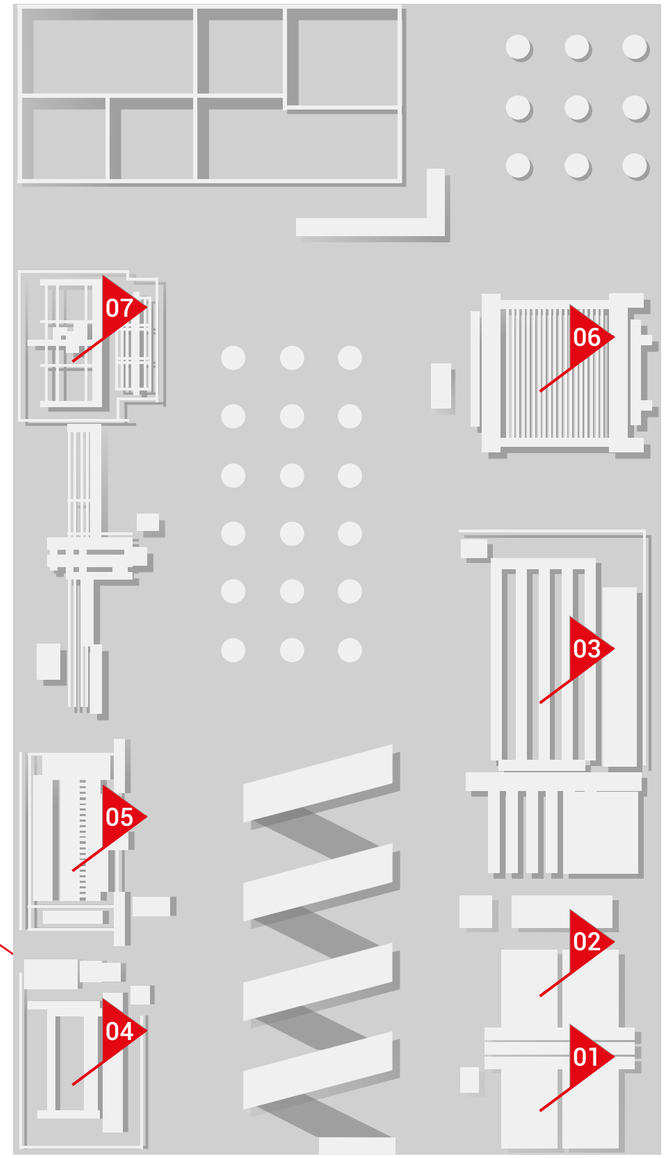
05 / Master 35
Glass doors, bathroom counter tops, bevelled mirrors, scoring, stratified glass steps with cup wheel grinding.

Double edgers machinery and systems

06 / F-12 series (single)
Double edging on monolithic and laminated glass sheets of various thicknesses.

Vertical machines

07 / Vertmax 2.2 with automatic loading unit
Glass doors, balustrades, high-speed processing of 4 mm glass sheets.



Intermac at Vitrum 2015

1000 — square metres of exhibition area

8 — technologies for float, laminated, stratified, and low-e glass processing

1 — software area dedicated to the innovative bSolid

Diamut at Vitrum 2015

115 — tools on display with a worldwide product première

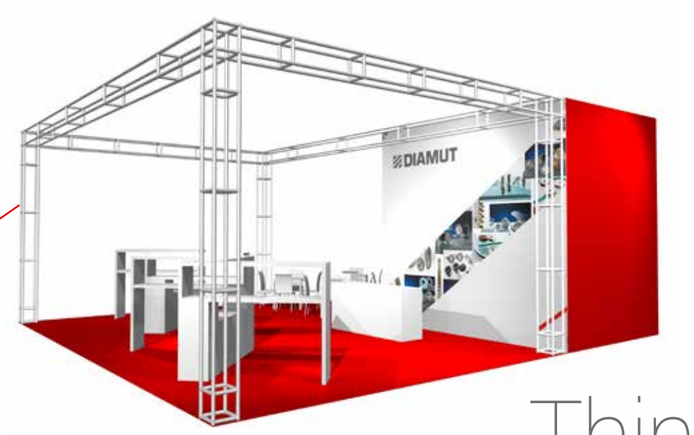
13 — different glass processing technologies

2 — exhibition areas thanks to the Intermac Live Demo Area

Range of tools on display

Diamut Stand

/ Chevron grinding wheels for laminated glass
/ Grinding wheels for double edgers pencil edge machines
/ CNC tools
/ Cutting discs
/ Grinding wheels for double edgers machines
/ Grinding wheels for straight line machines
/ Grinding wheels for Intermac Vertmax
/ Recess drain tools set
/ Grinding wheels for vertical machines
/ Helix
/ Finger touch tools
/ Tools for thin glass sheets
/ Diamut grinder



Think4ward

Inside Intermac

A new Tech Center for more than 700 attendees

From 26 to 29 March 2015, Intermac opened the doors of its newly renovated facility in Pesaro for the new edition of **Inside Intermac**, a three-day event fully dedicated to its customers, allowing them to witness the technological excellence in glass, stone and metal manufacturing first hand.

More than **700 visitors** from over **30 countries** around the world, 1,200 square metres of innovation thanks to a fully refurbished Tech Centre, over 10 technologies on display including work centres, machines and systems for cutting, double edgers and waterjet cutting, and the world première of a brand new product: the **Mastersaw 625**, the next generation of bridgesaw by Intermac!

Inside Intermac has proved to be a resounding success, a fantastic opportunity for customers to experience our latest products up close, and for Intermac to confirm, once again, its status as market leader, offering technological solutions that offer real, concrete benefits to the end user.

New Tech Center
Making of

Watch the video

Inside Intermac

Watch the video

Reception Area
Conjures up the three markets in which the company operates: glass, stone (reception, balustrades, handrails) and metal (chrome Intermac logo).

New Tech Center

1200 square metres, fully renovated and entirely dedicated to the customer

3 extensive range of technologies available

2 wall displays dedicated to Intermac samples and the Diamut tool range

1 room devoted to meetings and training

How

Intermac and technological innovation

Today, software is an essential part of any machine's use. The software defines the machine's operating logic and is used to tell the machine what we want to create.

The purpose of software development has always been to transform human thoughts into concrete objects. In order to do this, the machine uses abstractions, such as **CAD/CAM** systems: software applications that translate the individual's ideas into a "virtual" project, and subsequently into the movements of the machines, their components, and their tools.

The increasing complexity of the objects to be created have imposed the two main development objectives that engineers tackle on a daily basis: power and user-friendliness.

In this regard, Intermac has always been at the forefront of the technology: The company's most recent software application, **bSolid**, places these two concepts at the disposal of its Vertmax drilling machines and its 5-axis machining centres: user-friendliness and speed required for processing flat glass sheets, as well as power and flexibility required for processing stone, thus meeting the creative needs of even the most demanding clients and designers.

This combination is extremely difficult to achieve, and has posed and continues to pose significant challenges for our software development team. For this reason the company has been forced to hire a number of highly qualified figures with specific scientific knowledge.

The development team currently consists of over 60 people: in addition to software developers, the team also includes graphics designers, user experience experts, mathematicians, physicists, and operational research and artificial intelligence experts.

The average age of each team member is just over thirty years, and this is due to a specific choice. They all experienced the birth of the information age, smart phones, and tablet computers first hand: tools that revolutionised humanity's approach to technology.

The team's most experienced engineers guide this stream of innovation in the direction of our clients' needs: they can often be found carrying on lively conversations and discussing solutions from various points of view. They are the ones who represent the technological frontier that keeps our software applications constantly up-to-date.

Ten years have passed since Intermac first introduced **ICam**, the first CAD/CAM system produced entirely by Intermac without relying on external software applications. At the time, the innovativeness of the solution even caused some to worry, above all about our clients' ability to understand these technologies and similar process application concepts, and ultimately about the human-machine interaction.

Our doubts were soon relieved. As always, our clients showed us that a tool's true added value lies in the ability of its user. In my own experience, I have been surprised on numerous occasions by the ways that our software products have been used to create things that we never dreamed of in terms of user modes or functional possibilities. Things that were seemingly impossible, done by those who, like our clients, interpreted and continued down the path of innovation traced by our tools themselves.

During the development of our software applications, we have always placed a great deal of attention upon ease of use, but without compromising on power. That's why ICam continues to represent a comparative touchstone for the industry, even ten years after its initial release: it's an application that offers many functions that have yet to be outdone.

It's an application whose development is owed to numerous sources, thanks to the contribution of the automations themselves, as well as the service department, the show-room, and the recommendations of our clients. Its an application the gave rise to the concept that, at Intermac, innovation doesn't happen by chance... it's a pathway built by individuals who have continuous improvement and the pursuit of technological advancement in their DNA.

And it is precisely the strong foundations of ICam that gave rise to bSolid, the new generation of Intermac software. bSolid represents an enormous step towards an even greater convergence between the elements of power and simplicity.

The future...

The future has much in store. Technological innovation is highly dependent upon software, which ultimately represents exactly what the client can do with the machine.

For a few years now, Intermac has been investing heavily on the software front, with one specific goal: to bring the machine back to the human level. The possibility of digitising the machines and the workpieces in order to analyse the results with a dynamic simulation before the actual work begins, will soon become a reality.
Our fears of wasting time and materials, or worse, damaging the machine due to a trivial programming error, will soon be eliminated by these new technologies.

For our clients, producing work pieces that are often one-of-a-kind is the norm. For this reason, being 100% sure of that which we are about to do, about the correctness of the dimensions, and the absence of any potential collisions, before actually doing it on the machine, represents an enormous added value. The research and development department is therefore currently working on numerous innovations. Likewise, the company will be making numerous investments over the course of the months and years to come, all with a single objective: to put simplicity and power within the reach of all of our clients.
This is our mission, this is what we are proud of.

This is what Intermac stands for.

above:
Filippo Bostrenghi
Group Software Manager
Biesse S.p.A

beside:
Filippo Bindelli
Automation Manager
Intermac

Helix System

Revolutionary drilling

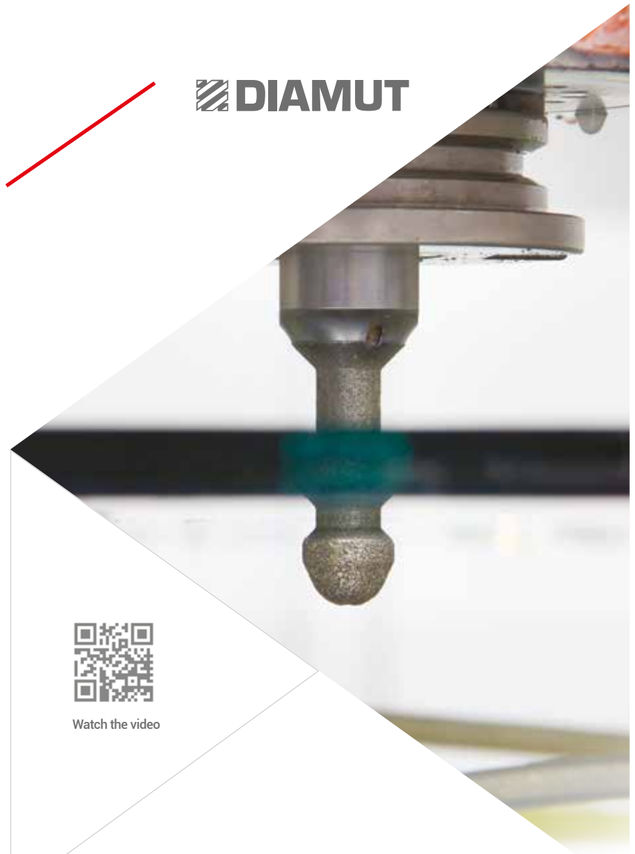
The Helix System was born of the desire of both Diamut and Intermac to develop a revolutionary drilling system which, to date, has not been present on market - a system able to perform drilling operations with integrated upper and lower countersinking on glass sheets of up to 19mm thick, using a single tool on CNC machines.

Today's technology forces operators to use two tools, as well as imposing some limits; it does not integrate countersinking of the lower part, thus re¬quiring the use of different drill bits for bores of different diameters.

Our collaboration with Intermac and the development of a specialist software means that the tool no longer descends vertically, but in a helical motion; it is the radiused part of the tool which enters the glass sheet, and instead of a drilling motion, the glass is ground to create the bore. Once the drilling operation is complete, lateral grinding takes place, which enlarges the bore to the nominal dimensions. Once this phase is complete, the lower and upper countersinking takes place, and all defects are eliminated.

Helix System is available across the whole Master range, manufactured from 2005 onwards and requires a specific software update. Please contact your Intermac Customer Service for further informations. Helix system is a patent pending solution of Biesse Group.

www.diamut.com/products



Watch the video

New set of polishing grinding wheels for edge polishing machines

At Marmomacc, Diamut introduced its new set of polishing grinding wheels for edge polishing machines, which combine the best technology available on the market with the company's exceptional knowledge of granite, marble and synthetic material processing.

Available in the 130 and 150 diameter versions, the new set of polishing wheels cover a wide range of grains (from 30 to 3500), and can be used on both straight and toroidal edges. A universal polishing wheel that's suitable for all types of processing needs is also available.

In order to maximize performance and ensure an excellent final result, a dedicated geometry has been designed for every size and processing operation. What's more, the "eccentric" version is even available for the 150 diameter models in order to minimise the marks generated by the processing operations. The structure of the grinding wheels include another important feature; an elastic bearing has been fitted inside the wheels thus enabling a floating movement for a better machining even on the most complex geometry with uncanny precision.

Diamut's new polishing wheels for edge polishing machines cover the entire range of machine makes and models, and are available with right or left spiral coupling. Their mix is universal and is suitable for processing agglomerates, granite, marble, and other synthetic materials. With its constant awareness of the market's developments and the industry's needs, Diamut designs and manufactures these tools according to specific processing requirements, focusing on the various materials available on the market.

Diamut Corporate

Watch the video

In

Mastersaw 625 Double table

Innovation arises from experience and knowledge of the process

The true challenge of industrial processes lies in the perfect synergy of the production phases.
Intermac has always been by its clients' side, offering custom solutions that are capable of optimising their stone working processes.

This gave rise to the idea of a work cell capable of combining the cutting and finishing process, that guarantees:

- ☑ **a significant reduction in machine programming times**
- ☑ **a single station that's completely automated**
- ☑ **an optimised machine layout and process flow**

The Mastersaw 625 Double table (patented by Intermac) is a working unit with the characteristics of a five-axis work centre that combines versatility, automation, and technological innovation within an extraordinary and highly robust unit.

The machine is capable of photographing the slab, optimising the position of the pieces to be cut based on the particularities or the grain of the material,determining the material cutting process, and subsequently automatically transferring the pieces that need to be finished onto the aluminium platform dedicated to this operation.

The Mastersaw 625 Double table (patented by Intermac) is the only system that truly allows for production to be carried out in a flexible and optimised manner, with no need for supervision or intervention on behalf of the machine's operator.

Mastersaw 625 doubletable

Watch the video

In

Automatic diagonal cutting on laminated glass

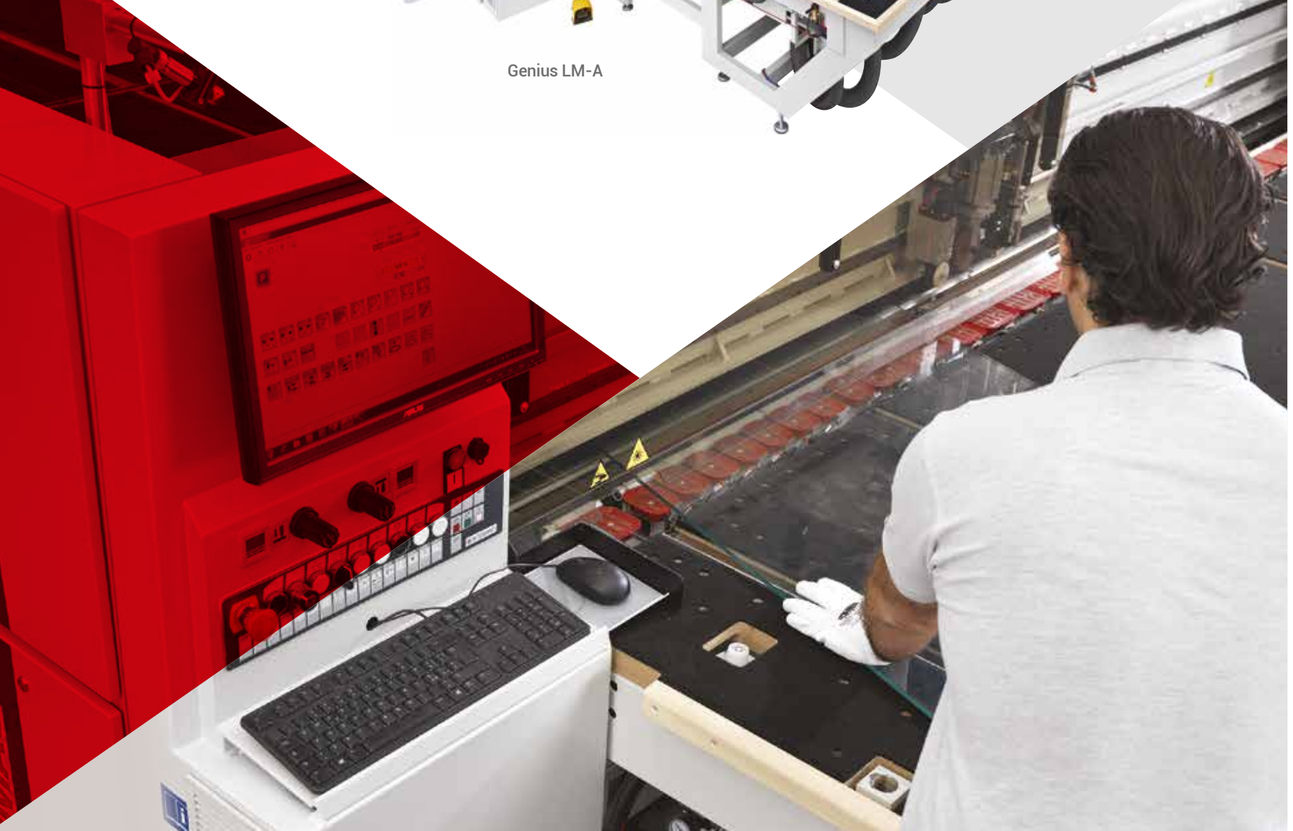
Higher quality and time optimization

Solution that change the way to make a diagonal cutting: there is no need to mark the starting and ending point on glass and then to position it by hand over the laser reference.
Zero human error on measuring, tracing and position.

Now the diagonal cutting are managed as a simple straight cutting.
This solution brings considerable advantages to the customer that result in higher quality and time saving:

- ☑ **possibility to produce immediately, inside and in the same sequence given from the optimizer, the finished volumes and to avoid extra handling at the end of the cutting cycle to make the diagonal cutting**
- ☑ **no limitations of shapes and sizes**
- ☑ **accuracy comparable to straight cutting**

Genius LM-A



With

The Bicefalo: five axes for two heads

Carried out by **Marmi Fontanelli** in collaboration with Intermac, the project fully represents the levels that Italian entrepreneurs are capable of reaching when the potentials of industry and artisanal craftsmanship are combined.

Marmi Fontanelli is an artisanal stone working company located in Vezzano Sul Crostolo, in the province of Reggio Emilia. Having founded the company in 1965, **Franco Fontanelli** later ceded control to his son Claudio, who joined his father's business in 1985 and succeeded in transforming it by following a very specific vision: that of acquiring advanced equipment, because only a leap forward in terms of technology would allow the company to focus upon new applications, thus attracting potential clients from various markets.
Today, Marmi Fontanelli's core business lies in the top-class construction and furnishings industries. The funerary industry only represents a small part of the company's production, and together with other sectors contributes to the formation of a highly diverse and extremely loyal clientele.
This evolution was rendered possible (and evidently not by chance) thanks to the company's fleet of machinery, which are not inferior to those of much larger companies: "We had to expand to other markets, because the figure of the marble worker has changed over time, and today their presence can even be required in extremely diverse contexts: we needed to equip ourselves to intercept and meet these new demands", explains **Claudio Fontanelli**.
The company currently operates seven machines. These include three Intermac models, the most recent of which is described by the proprietor as the company's flagship: the **Master 850**, the latest generation five-axis work centre to be produced by the Pesaro-based company.
Fontanelli continued: "With our Intermac systems, we are now capable of performing any type of processing operation: we carry out projects for final users, as well as for companies operating in the furniture, architecture, construction, and distribution industries. Our clients even include stone working companies that are not equipped with our technologies. The systems in our possession provide us with good margins, because the pieces that we produce are essentially unique: washbasins, shower trays, portals, bas-reliefs, kitchen counter tops, floors, inlaid bathtubs, columns, profiled windowsills, statues, fountains... We are capable of performing any type of cut, even on ceramics, stoneware, earthenware, and agglomerates, the latter of which is often used for kitchen counter tops. With our latest acquisition, the Master 850, we have succeeded in further expanding our range of processing operations, and are now capable of handling greater thicknesses with more advanced technologies".

Together with Marmi Fontanelli, the Master 850 has taught us a lesson about the levels that Italian craftsmanship is capable of achieving: the creation of a sculpture, the **Bicefalo** (or **Two-headed snake**) in white Carrara marble, which was carried out entirely by the machining centre according to a specific programme. The work was commissioned by the studio of designer **Raffaello Galiotto** of Chiampo (Vicenza), who selected **Intermac** as his technological partner. In turn, the Marche-based company contacted Marmi Fontanelli, which formed a team made up of its technical expert, **Cristiano Ravagnan**, Claudio Fontanelli, and his sons Luca and Marco.
The production activities began on 23 March, as soon as a marble block of a suitable size had been obtained: after 223 hours of machining (and a total of 38 km travelled by the Master 850's tools), excluding the time employed for the manual finishing, the work was completed on 11 April.

The Bicefalo statue, which is approximately two and a half meters long, was displayed just a few days later at **Fuorisalone** in Milan during the course of the "**Digital Lithic Design**" exhibition organised by **Marmomacc Verona**, and was later transported to **Milan's Expo 2015** fairgrounds, where it is currently on display.

"In order to carry out this project, we pushed the Master 850 to unknown limits, with the work centre's five axes in positions that we thought were impossible. We worked in synergy with Intermac's technical expert, Cristiano Ravagnan, who played a decisive role in helping us set up the 54 scoring and finishing programs utilised: we had never carried out a project of this type before, and continuous consulting was therefore necessary in order to help us fully exploit this machine's enormous potential".

Claudio Fontanelli also likes to highlight another aspect of his relationship with Intermac's systems: "For me, focusing upon innovation means having the possibility to involve my children in the company as well: the new generations like to rely on technology, and if I had told them to pick up a grinder and a mask and to follow in their father's footsteps, the generational change might have been at risk. What's more, Intermac's technology can be exploited by everyone: from my experience, I can guarantee that the machinery's bSolid management software allows any operator, even those without any particular computer skills, to get the most out of these systems with minimal effort".

At Expo 2015 in Milan, the Bicefalo statue will be on display for millions of visitors: the pride of a mechatronics company from Pesaro, and a stone working company from Elimia Romagna.

Excerpt from an article by Barbara Marabelli, Marmomacchine

Client
Marmi Fontanelli

City
Vezzano sul Crostolo (RE)

Country
Italy

Website
www.marmifontanelli.it

Machine utilised
Master 850

Watch the video

> "In order to carry out this project, we pushed the Master 850 to unknown limits, with the work centre's five axes in positions that we thought were impossible."
>
> **Claudio Fontanelli**
> *Owner*

With

The application of Intermac's Waterjet technology at Tenaris

Tenaris, one of the world's leading manufacturers and suppliers of steel pipes for the energy industry and for other industrial applications, is listed on the stock markets of New York, Milan, Buenos Aires, and Mexico City, and has an integrated network of steel pipe production units, research and development laboratories, and service centres throughout North and South America, Europe, Asia, the Middle East, and Africa, as well as a direct presence in most of the world's largest oil & gas markets.
In fact, with an annual production capacity of 950,000 tonnes of finished product, over 2,300 employees, 5 production facilities, and an independently operated 120 Mw power station that renders the facility in Dalmine energetically autonomous, TenarisDalmine is Italy's leading domestic manufacturer of seamless steel pipes for the energy, automotive, and mechanical industries.
Within the scope of TenarisDalmine's rich production scenario, which consists of extremely high numbers, the company also operates an efficient testing laboratory: a structure run by the Quality Management department that manages and executes all the destructive and non-destructive pipe testing activities of a mechanical, chemical and corrosive nature.
"The laboratory", explains **Daniele Persiani**, Laboratory Coordinator for TenarisDalmine, "is divided into 5 sections: test preparation, mechanical testing, metallography, corrosion, and chemical analysis. We receive approximately 5,000 pipe sections from all of our Italian facilities on a monthly basis, from which we obtain an average of about 12,000 finished test samples per month (with peaks of up to 16,000). A new section called Special Testing was recently created, which handles special tests only required by clients who work in certain countries and for specific industries: examples include the burst test on pipes for airbags, or the collapse tests on pipes for oil wells. Prior to delivery, each pipe must have passed all the tests required by the client".
Due to the need to manufacture pipes of increasingly greater thickness, the test preparation section has been equipped with waterjet machines in order to expedite the preparation of the test samples with more efficient pipe section cutting operations.
"For us, **waterjet** technology is the solution that best satisfies our requirements", confirms **Marco Perletti**, Laboratory technician, "and in 2010 we purchased our first **Primus 202** system by Intermac. Based on our positive experience with this system, which has shown itself to be extremely functional for our types of processing activities, in 2011 we decided to make a second investment by purchasing a machine similar to the previous one, but entirely customised to meet our specific needs. These machines are equipped with two 5-axis working heads that work by projection and not by adhesion.
Today, thanks to our two waterjet systems by Intermac, we are not only capable of processing pipe sections up to 33 mm thick in a much more efficient manner with respect to traditional machine tools, but we can even boasts the exclusive capability of processing sections up to 66 mm thick. Featuring a useful cutting area of 2,000 x 2,200 mm2, our machines can handle sizes ranging from 80 to 512 mm in diameter, and are designed to process four families of steel (which we refer to as soft, medium, hard, and custom), all of which require specific cutting parameters. Furthermore, we are even capable of cutting tempered materials".
"In addition to having gained the ability to process thicknesses and tempered materials that were previously impossible, thus obtaining significant advantages in terms of flexibility", Persiani continued, "we have also succeeded in improving our productivity. In fact, when we used traditional CNC machine tools, we were only able to process one section at a time. Now, on the other hand, we can process up to 8 sections of pipe at a time, even of various sizes and with the possibility of obtaining multiple test samples from each section. What's more, there's even the possibility of dividing each system into two parts thus allowing the loading/unloading operations to be carried out in masked time.
Finally, we also obtained significant savings thanks to the lower cost associated with the use of the abrasive with respect to inserts and utensils for extracting the shavings, and the possibility of entrusting both systems to a single operator. During peak work times, the machines are even used for three shifts a day and for seven days a week. The reliability of these machines is also therefore extremely important, and they are kept in optimal working conditions thanks to the scheduled maintenance program, which involves periodic inspections and maintenance interventions (whenever necessary) by Intermac technicians.
Having incorporated the Primus 202 within our laboratory three years ago", Persiani concludes, "I must say that we are extremely satisfied with our investment, as it has provided significant advantages in terms of both production and economy. The role that Intermac played during the pre-sales phase was decisive in maximising the machines' results on both a mechanical and software level, as the resulting configurations were designed to meet our specific needs.

Excerpt from an article by Ernesto Imperio, Tecnologie Meccaniche

Client
Tenaris

City
Dalmine (BG)

Country
Italia

Website
www.tenaris.com

Machine utilised
Primus 202

> Having incorporated the Primus 202 within our laboratory three years ago, I must say that we are extremely satisfied with our investment, as it has provided significant advantages in terms of both production and economy.

Daniele Persiani
Laboratory Coordinator

We

#WeAreBiesse

Cristiano
Having earned his degree in Economics and Commerce, followed by a Masters degree in Business management in 2010, he began his work experience in Thailand in the industrial production sector. Today he works as a Business Analyst for the sales management team.
Why Intermac?
«I'm proud to have decided to work for Biesse group, because every day it gives me the opportunity to interact within an international context, as well as to gain a more in-depth knowledge of the B2B market, which is characterised by extremely high tech products».

Aurora
Born and raised in Albania, she earned her degree in mathematics and is passionate about art and nature. She previously worked for numerous years in the production division, and worked her way from managing raw materials to taking a position as product programmer. She has been working as a planner in the spare parts division for approximately 6 months.
Why Intermac?
«Intermac is a company that's continuously evolving, and the sector in which I'm engaged is extremely interesting and delicate, as it involves both technology and direct interaction with the clientele».

Giuseppe
At 28 years old, and with a degree in mechanical engineering, he always knows how to repair any item. After a brief stint in the automotive industry, today he's a mechanical designer for the cutting bench technologies.
Why Intermac?
«I chose Intermac because I love working in a dynamic environment where I can see the projects that I have designed being brought to life».

Biesse Group invests in people, through its new recruitment plan

The pursuit of excellence through machinery, the distilled essence of technology, and through people, both those with extensive experience and young people with great potential, to translate tomorrow's ideas into today's innovations - this is the new challenge to be tackled by Biesse Group. In the second half of 2014, the group launched a major recruitment programme to support development in Italy and across the world, with a view to strengthening the main business areas, from design to manufacturing, relying on the experience of senior professionals and the enthusiasm of those who aspire to one day take their place.

In 2015, this programme evolved into a plan targeting recruitment and inclusion in Italy and abroad, where Biesse Group today employs nearly 50% of its staff. «This operation is designed to build the company's future» explains **Fabio La Cava**, the Group's Human Resources Director. «In light of the cyclical nature of the industry, within 4-5 years, people we recruit today will become the reference points of tomorrow, pushing Biesse Group ever forwards towards the ambitious targets we have set ourselves».

The recovery in production volumes has allowed for new employment opportunities to be generated in the factory, which has always been a pillar of excellence in terms both of methodologies and working conditions. «The machines incorporate increasingly advanced technologies, and operators in the factory are a precious resource - they combine technical expertise and reliable engineering skills» continues Fabio La Cava. These operators are required to have a good technical education, as well as the ability to read mechanical drawings, or specific experience in mechanics. In addition, organisational flexibility is a must, as well as a passion for working in an environment which is focused on ensuring the absolute quality and reliability of high-tech products. «For us, reliability is a great strength, and we foster it as part of our corporate culture» concludes the Director of Human Resources.

The new positions represent a fantastic opportunity, above all for young people from the surrounding areas, who have probably already taken part in a tour of the company. However, working with Biesse is also a powerful draw for all those who are willing to invest seriously on their own professional development, and who are interested an international career.

Who is the ideal candidate for the world of Biesse? «Young people with talent and energy, who are precise and committed when it comes down to practical methods, and who are ready to seize every opportunity for professional growth that they are offered, with enthusiasm and the spirit of adventure» explains Fabio La Cava. Key targets are new engineering graduates (whether in the mechanical, electronic, computer science or management area).

People are the true capital of the company, and founder **Giancarlo Selci** is the most ardent believer of this: «We push people towards self-improvement, encouraging them to make suggestions, to make decisions, but also to be creative and innovative and to work in team. We help them to develop their leadership and skills, guiding them with passion and leading by example».

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