insider

CAVAION SIDELOADERS
BAUMANN®

Latest News from Baumann Sideloaders

ISSUE TWO

The X Factor

Extra reach and extra cabin space on the all new ELX

Record results

Top performances leads to our best ever year!

Concrete mixer

Taking on long loads with Lynx Precast

+

Melinda Steel · Wolfgang & Rolf Baumann · VRS - The Next Generation
Davide Ambrosi · VAR d.o.o. · Yuri · Hydrogen Fuel Cell · Latest News

Galante Fratelli

Family Tree

CUSTOMER In 1964, Alessandro Galante, together with his sons Carmelo and Narciso, established a new business in Condino, northern Italy.

He wasn't exactly new to the work. The spectacular Southern Alps region had no doubt played a part in stirring the passions of Alessandro's father and grandfather, both woodworkers - a family heritage stretching back to the 19th century.

The family sawmill is now in the hands of cousins Catia, Elisabetta, Luca and Stella, nephews of the founder, and the team responsible for the business' future.

"The challenge is to continue investing in quality," says Catia, "as our fathers and grandfather have always taught us. The quality in the production processes and in the choice of raw material is the real added value."

Narrow minded

Raw material from company forests in Trentino Alto Adige is used for the production of glued laminated timber. It is stored in narrow runs, made possible by the use of Baumann sideloaders.

"The Baumann keeps the load level even when we are on an incline, which is great for our productivity and peace of mind."

Did you know?

Similar to the stop-start features on modern cars, Baumann electric sideloaders do not drain the battery when standing still. They detect when operators move the steering wheel, press a pedal or grip the joystick to seamlessly re-employ energy back into the machine.

News

The big Montreal machine

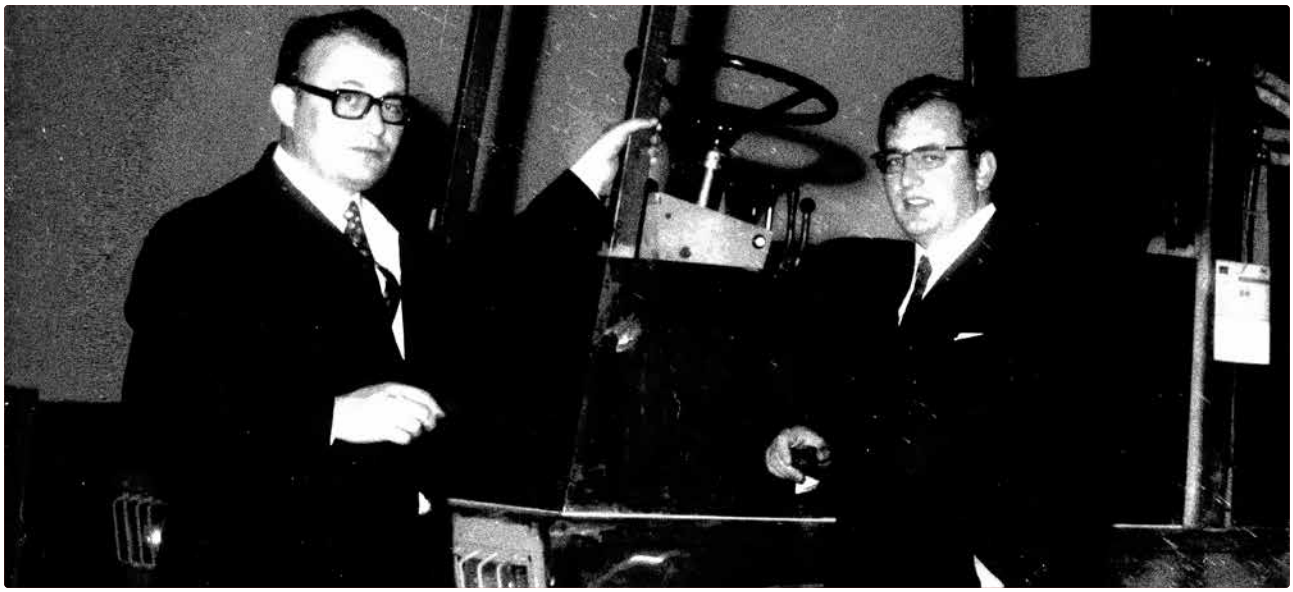
CUSTOMER A new GS180, the largest Baumann in Canada, is now lifting 18,000kg of steel pipe in Montreal. The GS180 was commissioned by our partner Toromont Material Handling with Baumann USA's Jay Meschino.

Timber business goes electric

CUSTOMER In 2014, the family run merchant, Jacksons Timber, acquired four new Baumann GX55 sideloaders for its UK branches. After almost 8 years of use, this year they began the road to electrification, with their first ELX 50.

A peculiar parking space

INNOVATION You can't park there sir... this amazing electric 7 tonnes machine has been adapted for a customer of Germany dealer, Hald & Grunewald, with a deck that remotely extends to fit the width of a sports car.



Brothers, Wolfgang and Rolf Baumann at the opening of the Cavaion factory in 1969.

Wolfgang & Rolf Baumann

OUR THANKS We were deeply saddened at the passing of our inspirational co-founders, Wolfgang and Rolf Baumann during the past 18 months. We also wish to share our gratitude for the many messages of condolences that we have have received, bringing a lot of comfort to the family and friends. We endeavour to continue the great spirit for co-operation, investment, innovation and research, that both men brought to our business in abundance.

Future improvements

We are constantly looking at ways to improve our electric range. Battery and charger technologies are also improving, making the future very bright for the ELX and EGX series.

The New ELX XL

How to improve one of our best-selling electrics? Increased legroom and greater comfort, without sacrificing the existing advantages of the superb 120v ELX.

Maximum space & comfort

Now in two flavours, the classic ELX and ELX XL

EXtra reach

X DIMENSION The new ELX range with XL cabin features X-Plus, providing added reach beyond the footprint of the chassis. The result is easier accessibility to loads when further away from the lorry bed.

Improved comfort

COMFORT A wider cabin allows for a wider dash-board; the hydraulically mounted cabin is more comfortable and by being raised a further 10cm, the visibility for operators is also improved.

Easier access

EXTRA STEPS The change has been achieved via a small modification to the front of the chassis. This modification has also allowed us to provide three additional steps for improved operator access

A better view

ADAPTABLE Just 18cm longer, the new cabin, the truck remains exactly the same in speed and performance but is more adaptable for customer requirements.

"Lynx have a new machine that improves their operation, comfort and productivity - they get fuel and maintenance savings immediately.

Set in concrete

Despite the incredible strength of the products from Lynx Precast, at over six metres in length, these loads require precision handling.

Concrete flooring specialists, Lynx Precast, has added five new 120v baumann EGX six tonnes capacity sideloaders to its fleet, complete with specialist wide carriage fork positioner for loads wider than six metres.

The zero emission machines, with single piece battery above the deck, can operate around the clock thanks to intelligent chargers and a simple battery change process by crane or forklift pockets.

On The Road

Established in January 2014, Lynx Precast design, manufacture and install precast concrete flooring and other precast concrete products including stairs, liftshafts and terracing. The business has made rapid progress from its Ashington base, in Northumberland where continuous investment in new plant and equipment has increased turnover and its range of products.

"The only 120 volt sideloader with a single piece battery above deck on the market.

Based on the site of a former Alcan aluminium smelting plant, the ongoing requirements of the production and dispatch areas meant the exceptional battery run time was a significant factor.

Delivering the newest Baumann to Project Assistant, Tomislav Štos at modular buildings business, Jedinstvo Krapina

For the glory

Croatia is a great location for a vacation, but if it's peace and quiet you are looking for, perhaps a trip to the capital, Zagreb, is not the best idea...

Certainly, if it's a trip to VAR d.o.o. you decide upon, you will be made to feel very welcome by 'der Brüder' – owners Marko and Bruno Sagud are accomplished hosts with a complete understanding of the company's day-to-day issues. Their technical and engineering expertise extends to all facets of the business (with the possible exception of a particularly unco-operative coffee machine).

Instant impression

Young, energetic and seemingly always in a hurry, their down-to-earth approach to the service-led business makes an instant impression.

Bruno puts his mechanical -electrical education to use overseeing the workshop; Marko his economics degree to sales, finance and other uses: "I am a blue-collar worker," says Bruno. "Everyday I am in the workshop. Marko is on the road, meeting customers and overseeing the sales team. He's more... white collar."
"Not true," protests Marko, "I am black collar!"

From early in the morning until late in the evening, the official Baumann sideloader dealer in Croatia is a hive of activity. Predominantly the work is centred around refurbished forklifts, of which there are many, making their way through the various engineering bays, test benches, spray booths, workshops and technical areas before appearing, as new, in customer warehouses and yards across the country.

The effort that is made to make old machines fit for purpose again, cannot be understated. From the cleaning of PCB boards to re-welding of radiators; correcting warped brake drums to stripping and rebuilding hydraulic pumps – anything is possible, and done in-house by an army of technicians (VAR has grown from 30 to 75 staff in the last five years) who also exhibit bundles of energy despite, or perhaps because of, the cold, early morning starts.

Making A Start

Sales are good, forklifts and sideloaders. Baumann sales in the last 12 months have

The team send a recently refurbished big capacity truck head to France

Repairing electronics forklift components

exceeded the previous 12 years. There's no sign of things easing. "We will beat next year's target," says Marko.

VAR began in 2004, the name has echoes of the father's business which began over a decade earlier, a synonym for welding, even if today, it's more associated with questionable offsides in the football-mad country. [*We meet on the night Croatia qualify on a waterlogged pitch for the FIFA World Cup Finals. The pitch is a disgrace, and former national futsal champion, Bruno, complains loudly. Then... a slip, a Russian own goal, a 1-0 win. "I told you the pitch would help us!" he jokes.*]

"Our father taught us everything to run the business locally," says Marko, "he was our inspiration. He had faith in our decisions and started his own business in auto-repair at a time when it was hard to make anything a success. Just like his business, there were lots of challenges for us at the beginning. Now, we have systems and procedures in place for many eventualities."

Marko, with Schapour Dadsetan, discussing the new delivery at Jedinstvo Krapina

In the blood

Both parents were entrepreneurs. The brothers' mother, Durdica, founded a bakery that gave the boys valuable experience in their formative years.

"Our mother, she's still studying economics even today! Our father was reluctant to return to running a business, but he backed us on condition we completed our studies."

To say this was a wise decision is to state the obvious. There is now a desire for learning that goes beyond the classroom – each is fluent in both German and English – and an inquisitiveness in matters of 'the West'.

> "Our father was our inspiration... for international business, we owe a huge debt to Baumann and to Franz.

"We are at the end of the European Union. Membership has been rocket fuel for Croatia, but we still have much to learn and look to other countries for inspiration," adds Bruno.

Helping Franz

As much as the boys' father, who has sadly since passed away, instilled business know-how, it was an outside influence that has helped both look further afield.

"We owe a huge debt to Franz [Hollergschwandtner]. He has given us a great deal of advice and help through the years. He is always on hand to advise us and he's given us the confidence to represent Baumann in Croatia."

In a region dominated by German competitors, whatever sense of inferiority that could have existed, Franz helped disavow the brothers of it. "There is Baumann sales and technical help, but Franz has been our essential guide to international business," says Marko.

Bruno is quick to point out that it is also a team success. Technician, Sasha, studied with Bruno and has been alongside for 8 years. Mladen runs the welding department. He's been with them almost a decade. "Both see that fixing a customer's problem is the first priority. Gaining trust is of massive importance."

As the Croatian market developed, established competitors began to compete on market share. It's led to some customers having to wait up to two weeks for trucks to be serviced.

"When they call us," says Bruno in a matter-of-fact way, "it's same day or next day. Usually within 24hrs. This weekend we received a call on a Saturday for a truck with major issues. By Monday morning we are already there."

And therein lies the heart of VAR. Success is investment in the business. It's new ventures and second and third locations. It's record sales and profit, sure, but it's also proving that the family, the city, maybe the nation, can compete with and even exceed the expectations and achievements of those outside the Balkans. "We do it for the glory!" says Marko with a grin. And joking or not, you have to believe him.

News

Special Snakes

Did you know that the Lake Garda area is home to many species of snake? Thankfully, most are non-venomous members of the Colubridae family and fairly harmless. Still, with our factory being close to Mount Mescal, we have to take special care not to disturb them, or provoke a little bite!

Andrea's record-breaking results

ITALY Our head of domestic sales, Andrea Zuliani, is not one to stand still, so catching him next to this 10 tonner is quite an achievement - although not as great as his record sales performance during 2021! Baumann sales are now at an all time high in Italy thanks, in no small part, to Andrea's hard work and dedication. Grazie mille AZ!

Yuri is a man in demand

ITALY We may have made a slight error in pointing out on social media that Yuri (below) is not only a top man, he also ensures all our completed machines are ready for their final shipment. He says everyone now knows who to ask for! So please ignore we said it, thanks!

Welcome Williams

CANADA Baumann's Canada team took a trip to Surrey, BC to have the pleasure of meeting with the sales, service, parts and operations team at recently appointed deler, Williams Machinery.

We recently delivered an ELX 50 for their demo fleet, which Jessica Sookero seems happy to be adding to their extensive portfolio of products.

Bravo in Brooklyn

USA Systems Specialist at Design Storage & Handling, Jay Meschino praised the ELX50 for its versatility as he got to see it in action when recently delivering it to Midwood Lumber in Brooklyn, NY. "The full free lift mast reaches upper storage levels with a low collapsed height for doorway clearance," added Jay.

VRS Evolves

INNOVATION Our patented Variable Reach System (VRS) is one of our proudest achievements of recent years. We are delighted to be continuing to evolve the outreach system with new dampers, added strengthening bars and even more accurate control... but the best is yet to come - watch this space!

Planning Pressures

With many businesses suffering from supply chain issues, we've had to take extra steps to ensure continuity of supply for our most important components. That means ordering many items up to two years in advance!

Quality Time

Naturally, everyone at Baumann takes quality matters very seriously, but our none perhaps more than Quality Manager, Davide Ambrosi!

Davide joined us at the beginning of 2021 to oversee the inspection of components and liaise with our many suppliers. He is already impressing his colleagues with his attention to detail and technical knowledge.

But don't be fooled by his gentle manner, when it comes to keeping suppliers on track, he wastes no time. "If the parts are not up to our standards, we let the providers know straightaway." And in this time of high procurement demand and pressures on the supply chain, what happens if the supplier can't correct the issue in time? "Simple." says Davide. "They have no choice!"

A measure of success, Quality Manager, Davide Ambrosi.

Melinda Steel

ROMANIA With over 25 years in the Romanian profile and cut-to-length coils market, Melinda Steel is an industry leader. It's branches in Bucharest, Oradea, Târgu-Mureș, Baia Mare, Bacău, Brașov and Craiova and two regional depots in the Constanța and Timișoara, provides fast and efficient intake from overseas suppliers and rapid supply for customers at home.

A key to its success is a fleet of Baumann sideloaders, including the first 120v electric ELX recently delivered to the Bucharest branch. Steel profile is an area that has been particularly successful for Baumann thanks to the durability of the machines as well as options such as steel decks and built-in sacrificial timber bearers.

Powering Up

ITM Power announced a £52m joint venture with Linde AG for the development and sale of electrolysers in the UK, the technology that makes self-generation possible.

Out of reach?

Judging by the number of times the question 'is hydrogen the vehicle power of the future?' has been asked over the years, you could perhaps be forgiven for thinking this technology would forever remain tantalisingly out of reach...

Within a €130 billion recovery package announced in Germany to tackle the after-effects of the coronavirus is a €9 billion fund to specifically boost investment in hydrogen technology.

Measures include expanding the country's electrolyzer capacity, the means by which green energy is converted to hydrogen and stored for later use. The government's plan puts hydrogen at the centre of efforts to tackle carbon emissions, bringing costs down, converting power stations and steelworks, and creating a network of roadside refuelling stations.

World first

It was in Germany, in 2011, a new four tonnes capacity sideloader was unveiled by Baumann at the CeMAT logistics show in Hannover.

Based on the HX Series, one of the most popular ranges in the company's history, it had little to tell it apart from its parent model, but this was very different. This was the first ever hydrogen fuel cell sideloader.

Three years in the making, the H2X was the first Italian-made fuel cell machine to receive European funding and it worked exactly as expected, a quiet and reliable sideloader in a compact footprint. Ideal for timber merchants or production operations where exhaust fumes are undesirable and space is at a premium, the H2X offered the perfect blend of the familiar and the new.

Upsides / Downsides

The benefits seem obvious, cleaner emissions, simple, fast refuelling, excellent range capabilities and the abundantly available fuel source. The downsides have included cost, safety fears and lack of refuelling infrastructure - the type perhaps already familiar to electric cars enthusiasts.

Baumann MD, Klaus Pirpamer, described the H2X as having "all the benefits of diesel and electric power combined. "The development was not simple, and the development cost prohibitive, but work began immediately on a second prototype, this time based on the larger EGX range. This model has broader usage and a customer in east Germany had a definite need. Another three years of development ensued and the potential customer began looking at his own hydrogen production on-site.

The first ever fuel cell sideloader - unveiled by Baumann in 2011

Electric success

The success of electric vehicles has ironically led to a renewed interest in hydrogen power and fuel cell technology, by highlighting the areas where they don't work well. Lithium-ion batteries have proven to work well in cars, where they can be slowly recharged overnight and topped up in fast-charging stations.

They may also work for smaller forklift batteries, but the jury is still out as to whether this will prove to be the case for larger vehicles where the increased battery size creates issues for electricity supply and brings with it an increase in weight. Carrying the added battery weight around may have deterred early electric sideloader adoption.

By 2015, the H2GX was on test at the Gelo Holzwerke sawmill in the Fichtel Mountains, in north eastern Bavaria, Germany. This was a six tonnes capacity truck driven by a 16.5kW fuel cell and supercapacitor, feeding a 120v AC battery.

MHE batteries are typically around 80v. Higher voltage batteries require fewer amperes to power the same motor, so a higher voltage battery would run for longer, but it would also be bigger, heavier, take more power to charge and be costlier. Said Klaus: "There was a considerable amount of work to do, particularly in terms of managing the flow of electrical energy delivered by the fuel cell, controlling the speed of the traction motor and the torque it produces."

Hydrogen Fuel Cell

Using a 120v battery in the H2GX meant a smaller fuel cell was required, it also meant a bespoke solution to convert the fuel cell output to match.

The result was a MOSFET drive inverter configuration designed in-house, as well as load-sensing hydraulics to deliver the right amount of power for lifting and lowering.

"When the H2GX was first being developed a 120v battery was not readily available. We worked with our suppliers to find a solution and that experience helped us to later develop our first standalone 120v electric model. At the time, we were the only materials handling company to implement the technology."

Complete nonsense

The fuel cell offers a potential solution for those applications where pure electric power is problematic – buses, cruise ships, even data centres have in recent years been drawn towards it. Fuel cell vehicles emit nothing but water vapour, have a long range and can be filled almost as quickly as a diesel machine, but the majority of hydrogen stems from fossil fuels.

Splitting water into hydrogen – the most common method of creating it – demands a lot of electricity. There's also 30g-60g of the costly precious metal platinum in fuel cells and these factors led former Jaguar Land Rover head of product development, Wolfgang Ziebart, in 2016 to state fuel cells were "complete nonsense."

Today, the technology exists to generate clean hydrogen from small wind turbines on site. Issues over fuel costs, availability and the reliance of tankered deliveries are immediately solved. In the mountains of Bavaria, that original sideloader customer is still developing their own hydrogen production facility, expecting it to be complete in 2022.

Testing Hours

And yet, after more than 600 hours of testing the H2GX in the field, in 2016 the project was mothballed. The customer purchased eight Baumann EGX 120v electric machines, the success of which was both inspired by, and possibly the end of the road for, the H2GX.

"Our hydrogen experience certainly helped us push forward our electric range," adds Klaus, "and as each year goes by, the number of electric models we produce is increasing."

The development of an EGX-based system for waste management in Zermatt led to another award-winning innovation, the VRS outreach system. Baumann went on to launch its ELX Series, again 120v, this time with redistributed weight and a bespoke single piece battery that makes battery change, and therefore multi-shift operation, a new reality.

The end of the road?

So, what now for hydrogen? Battery technology has changed significantly, even in the last few years, with lithium-ion now at the fore. The global investment into the lithium-ion supply chain is said to be around $600bn, whereas hydrogen is perhaps $30bn. Is it the end of the road?

"Absolutely not," concludes Klaus. "We believe in the hydrogen concept. Lithium-ion will undoubtedly come to sideloaders as well. Sooner, perhaps than we previously expected. Ten years ago we felt the time was right for hydrogen, but in hindsight the fuel costs for the customer were almost ten times the amount for him as they were in other parts of the world. That's not the case now."
"Fuel cells have reduced in price, the application benefits remain strong, and hydrogen would offer a perfect solution at the higher capacities. Add to that capability for self-production, and we may see a permanent change of the economics back in hydrogen's favour."

New Titan

A new Boman Titan Twin positioner is the latest major addition to the production line, allowing us to rotate truck chassis during welding.

New deliveries have arrived in Cavaion almost as quickly as they have departed!

Record Sales Record Investments

Why it's the right time for investing in infrastructure according to MD Klaus Pirpamer...

With our company performing at record levels, despite the many challenges of recent times, we are growing fast and see an excellent future ahead.

Orders from Italy, Germany, the UK, Croatia, France and elsewhere are at all record levels. It is a constant battle of course, but our award-winning products remain superior in design quality, reliability and productivity than those of our competitors.

Like many of our customers, we see this as a perfect time for investing for the long term. Recently we have installed our own solar array to help generate much of our electricity needs, a new lighting system, providing better quality lighting with less energy, and with sensors to switch off when not required. Less visible are changes to our IT and ERP systems that will help us for many years to come.

Putting the new CNC machine into operation.

Components old & new

One of our biggest acquisitions is that of a new CNC machine. As well as helping us for R&D and prototype purposes, this also helps us support customers with parts for older models that are no longer mass produced. We have also invested in new personnel in many production areas, and adapted our procurement strategies to help guarantee future supply. Increasing our parts stocking has also meant more storage, and a lack of space is quickly becoming an issue in what seems like just months after we opened our latest production hall!

We have now taken our mast production back in-house, and are investing in equipment to help us handle even our largest chassis safely and efficiently. Another new development is that of the battery crane attachment which is helping customers with battery change and other requirements. Put simply, we are proud to say there has never been a busier time for Baumann.

For more information on Baumann Sideloaders, visit www.baumann-sideloaders.com. © Copyright 2020 Cavaion Baumann Srl - All Rights Reserved. Baumann S.r.l. - I-37010 Cavaion (VR) - Via Palesega 1 - Tel. +39.045.6205311 - P.iva IT 0022475 023 2 - "*Ne ostavljaj me na kiši.*"

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