

THE GREATEST

Show Behind the Show

A4

Rigger's magazine 2024



Highlights of brands
New & innovative products
Stunning projects
Interviews
Interesting articles
Technical topics
And other selected topics for riggers

Brought to you by  Area Four Industries

AM¹ LITEC¹ TOMCAT¹ JTE¹ PROLYTE¹ EXE¹

Xstage¹ Xtruss¹ Xlift¹ STAGEDEX¹ PROLYFT¹

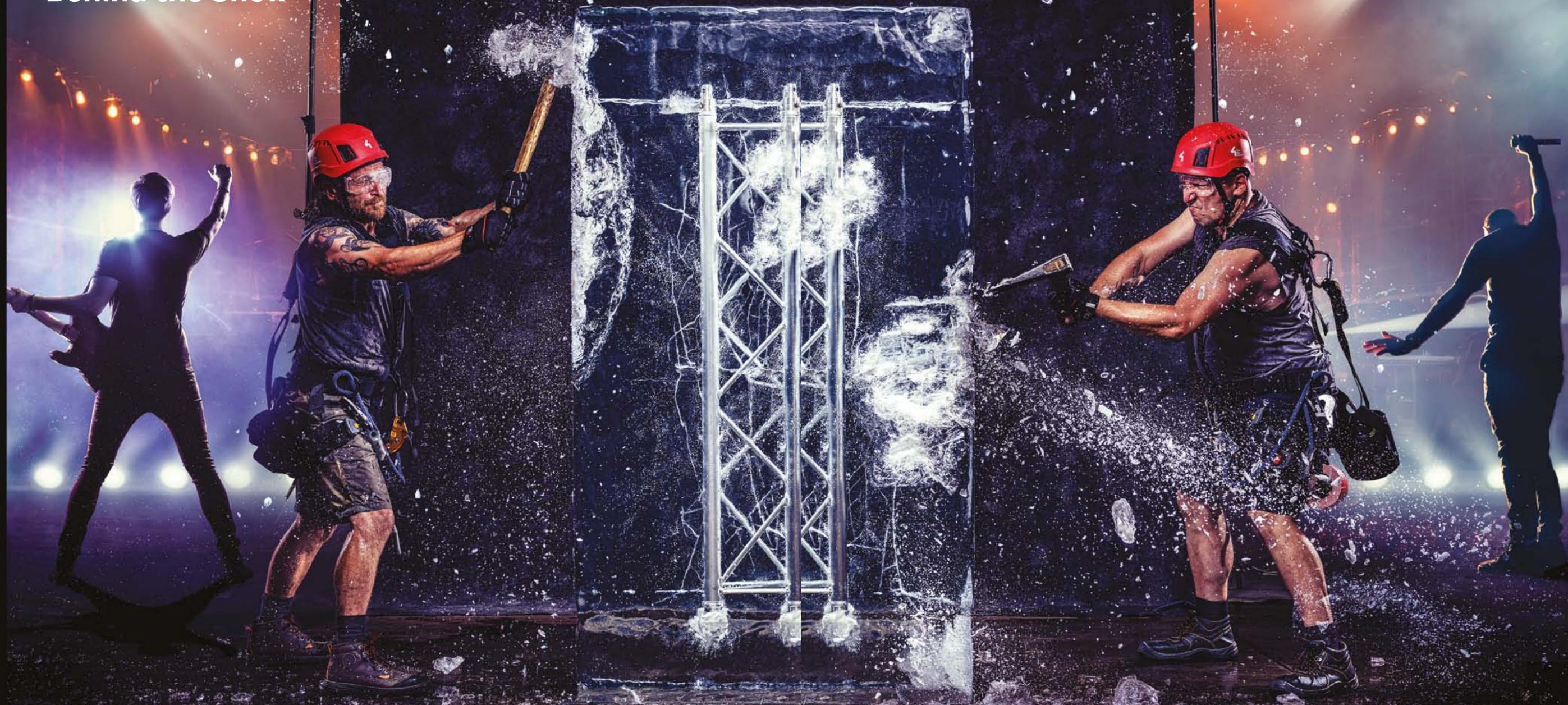


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The Gateway to the Greatest Show

Behind the Show



Area Four Industries, the world's leading provider of event support structures, is updating its main claim to better reflect all of the brand's activities. The new claim affirms that Area Four Industries' products play an essential role in all entertainment

projects. By providing safer, faster and more creative products for riggers, the company is helping to create bigger, more successful and more enjoyable events around the world. Area Four Industries is the gateway to the greatest show behind the show.



A Friendly Human Party on a Pale Blue Dot

František Zykan is the head of Area Four Industries, a company that manufactures stages and equipment for the entertainment industry. But in this interview, he doesn't describe new constructions or sophisticated designs; he reflects on why the human joy of having fun together still wins out over the fun brought by artificial intelligence.

The robot in the photo is serving you coffee and you're smiling. Why?

Because I'm doubly proud. It's the first welding robot in the company, and that's why I feel more warmly about it than about any other robot. Secondly, the word robot comes from Czech, my native language, but it's used all over the world, and I'm proud of that too. In fact, there are 193 countries in the world that are members of the United Nations, two countries without membership and eleven countries with undetermined status. There is much competition among them, and every detail of familiarity is decisive. I don't have any illusions that everyone knows where the Czech Republic is, so if I'm in a meeting somewhere, buying welding robots, for example, and I say that it's a Czech word, it relaxes the atmosphere.

So, the robot is a Czech invention?

It's not the robot itself, just the name. The word "robota" in Czech used to mean the work of the serfs on a nobleman's farm. When the Czech writer Karel Čapek wrote a drama about artificial beings in 1921, he asked his brother, the painter Josef, to help him name the intelligent machines. Josef was just painting, another brush in his mouth, and just between his teeth, he said, "Call them robots." Thus came the name of the play R.U.R — Rossum's Universal Robots and also the name for the machines that partially replace human labour.

The year 2023 marked the arrival of OpenAI's ChatGPT chatbot. Is artificial intelligence affecting your business, too?

That's an inaccurate term. It's not artificial intelligence; it's a computer program. It may be yet decades before what Stephen Hawking warned about happens: "If AI one day acquires the ability to rebuild itself at an ever-increasing rate, an uncontrollable 'intelligence explosion' could lead to human extinction." But if I had to bet my last ten dollars, I would invest five dollars in a company that makes designs for the entertainment industry, not in the development of AI, and the other five dollars in advertising our products.

That's a very conservative view. It goes against the tide of people who see their future in a world that is imbued with AI, where cryptocurrency will be used to pay and where entertainment will take place in virtual space.

My view is not conservative at all; rather, it is optimistic and with a well-thought-out

vision of what tomorrow will look like. Advances are definitely happening in the tech space, and we at Area Four Industries are using some AI tools as well. For example, in design, in computer simulations or in translations, but business-wise we still lay our bets on human nature. It doesn't change much over time, and human needs are identical to those of, for example, many thousands of years ago.

For example?

The human need for physical encounters and encounters. Our company is based near Prague, which has dozens of theatres operating, the most in Europe per 100,000 inhabitants, and yet new theatres are being built all the time, and their performances are sold out weeks in advance. Objectively, however, this is not just a Prague trend; it is a European and global trend. Thanks to AI, people are shortening their working week, reducing their working hours and thus creating more and more free time. And this unexpected amount of free time cannot be filled by Netflix, YouTube or social networks because human nature and the constant desire for physical encounters cannot be eradicated. Many totalitarian regimes have tried to do just that, and all of them have failed precisely by restricting movement, gathering and social entertainment. But above all, we have recently been taught a hard lesson in what happens when people are locked up and left to virtual entertainment.

What educational lesson do you think?

Covid! Closed pubs, bars, theatres, schools, cinemas. COVID-19 was the ban on concerts, exhibitions, sports, and demonstrations. And what was the people's reaction to their restrictions on physical exercise? The move into the virtual world? No.

After the initial bout of discipline and after the fear of the unknown had subsided, pubs were set up in garages, house parties were held, apartment theatres were organised, people went into the countryside to camp in secret, etc. The need to be together is deeply ingrained in us; it's in our genetic makeup, it can't be erased. It's the solitude that drives you crazy, not the company. And that's what our business is built on. I'm paraphrasing the biblical quote, "Where two or three are gathered in my name, there am I in the midst of them." And by I, I mean our podiums. So, after the initial concern when covid almost stopped production, I am now very optimistic. Our industry is not conservative, quite the opposite.

Are you increasing production?

Since the end of the last covid wave, production of all our brands' structures for the entertainment industry has been increasing as the hunger for physicality grows even more.

Just look at Bruce Springsteen and his tour of Europe and North America last year. All of his concerts were sold out, even in stadiums for tens of thousands of people. I bring up the Springsteen example because he's an old rock icon. We would assume everyone has seen him play live over the decades, and fans are therefore fully satisfied. But they aren't. They still want to see him live. When I was at his concert in Vienna in July, I was surrounded by 52,000 people of all generations, grandfathers, fathers, and daughters. And they all left happy. You can't get that kind of energy and joy with Oculus augmented reality glasses.

What's more, we're currently experiencing not only great interest from clients who specialize in large stadium events, but we're literally feeling the explosion of small rural festivals. This is an emerging phenomenon. Almost every Czech, German, Austrian, French or even Italian town is organising music, gastronomy, theatre or sports events. And everywhere they need stages and structures, and we are happy to supply them. You go back to where you started.

Where do they go back to?

To man's roots. We may not realize it, but anatomically modern man has been on planet Earth for tens, maybe even hundreds of thousands of years. People living in the time of the mammoth hunters, for example, looked just like us, thought just like us, and were just as intelligent as us. They just had different kinds of information; they didn't know the names of rock bands, for example, but they could identify hundreds of species of birds; they didn't know Hollywood movies, but they knew the subtle differences in clouds, etc. But even then they had the ability and desire to have fun together. This is not a mental construct, but pure fact. It is described, for example, by the French philosopher Claude Lévi-Strauss in his 1950s book *Tristes tropiques*. At that time, he travelled through the South American Amazon, studied the daily life of members of indigenous Indian tribes and noticed that hunters and gatherers spent only two to three hours a day gathering food, the equivalent of today's work. Much of the day was spent

resting, playing, talking, dancing, having sex, just having fun. And this is true for all natural peoples around the world. They work to live, unlike us, who live to work.

And even back then, did they make podiums for entertainment?

Of course, and not just figuratively, but specifically. Humanity has spent more than ninety per cent of its history in the hunter-gatherer phase, that is, on the move. Only the last nine thousand years have been spent in agriculture, standing still. But the need for movement and knowledge is still within us. And just as the various bands of hunters and gatherers used to meet regularly, so today we like to meet at summer festivals tens and hundreds of kilometres away from our homes. And where there is a gathering of people, there are also stages.

Some of the earliest evidence of artificial podiums being made comes from the French cave of Lascaux and the Spanish cave of Altamira, which are famous for their paintings of animals as well as people. Prehistoric artists decorated the cave walls for tens and perhaps hundreds of years, using primitive constructions to paint them. We have evidence of this from archaeological finds - there are notches and depressions left in the walls for wooden scaffolding. The idea that back then, 15,000 years ago, a prehistoric artist created alone and without an audience is naive. When you have a stage and an audience, you certainly don't keep quiet; you talk and sing. I believe that the acoustics and atmosphere of cave concerts back then were not much different from today's rappers' concerts.

Covid didn't only bring the negative atmosphere of bans and restrictions, but also helped to spread positive working practices, for example starting home office work ...

... that doesn't concern us, fortunately.

Why fortunately?

Because you don't weld a structure in the home office. I'm not a fan of working from home. It's good to separate work time and play time, and home time. Mixing it up doesn't do any good. But even here, getting people together physically at work is more effective and inspiring than people working from home. But I recognize exceptions, of course.

But there are very sophisticated programs for working from home.

Do you know what Zoom, the company that makes tools that enable telecommuting, has done? At the end of the summer, they eliminated remote working for their employees, and people went back to work. Because it wasn't working.

Of course, in certain situations, we can't do without Zoom, Times and other tools in our company either. I won't fly to Singapore every week, for example, but in general, I don't recommend a home office.

Will you be flying to Singapore?

Yes. We're opening an office there in January to serve markets in Southeast Asia and Australia. It has been a pleasant experience because Singapore is a very pragmatic country with minimal bureaucratic hurdles. It is the opposite of a laced Europe. In a completely pragmatic way, Area Four Industries is turning its attention to the other side of the world. We are a global company and we understand that people all over the world have the same needs. The desire to meet in front of the podium is the same everywhere.

What about building a stage somewhere off planet Earth? Will we see it?

I don't think so. I am humble and modest about this. In 1990, the Voyager 1 space probe was six billion miles from Earth. American astronomer Carl Sagan came up with the idea of using the spacecraft's camera to take photographs of the Earth as it left the solar system's boundary. NASA went along with his idea and gave the probe commands that shot the cameras back into the solar system. The resulting image, known as the Pale Blue Dot, is one of the most important photographs in all of human history. Carl Sagan wrote in his heartfelt confession at the time that "Earth is a small stage in the vast cosmic mannequin, a speck of dust suspended in a sunbeam, a lonely speck in the great and enveloping darkness of space. Earth is the only life-bearing world so far. There is no other place, at least in the foreseeable future, where we as a civilization can relocate. Visit, yes. Settle, not yet. Whether you like it or not - Earth is where we must stand." And I'll add to that that Earth is still the only place in the universe where Area Four Industries can set the stage.

This is the planet Earth photographed in 1990 from a distance of six billion kilometres. It's still the only place in the infinite universe where people can set up a stage and have fun together.

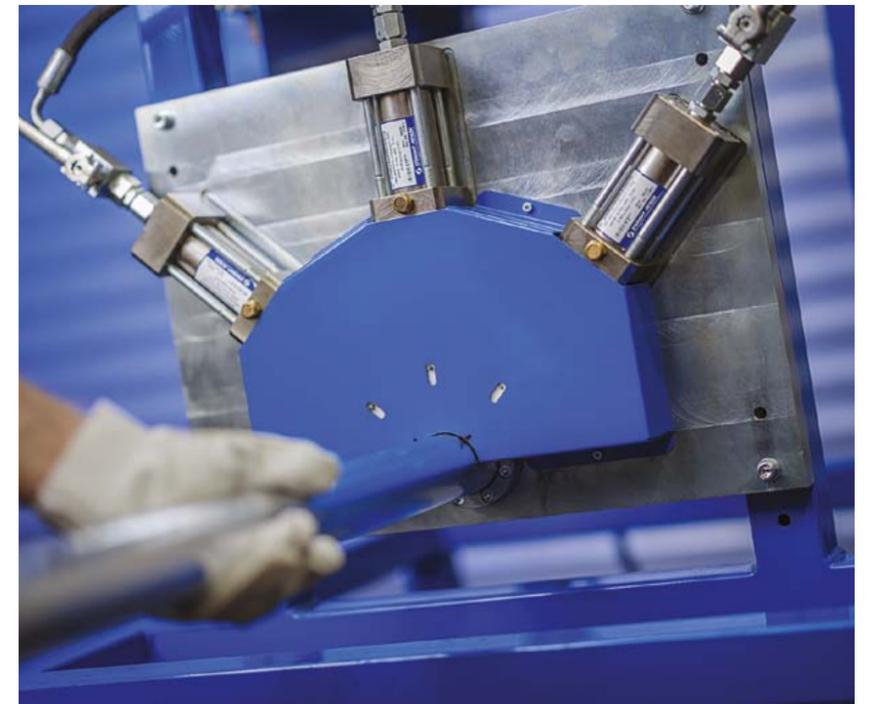
Steel Truss Production

The production of steel trusses is rather intensive in terms of labour and technology as it requires handling huge amounts of weight.



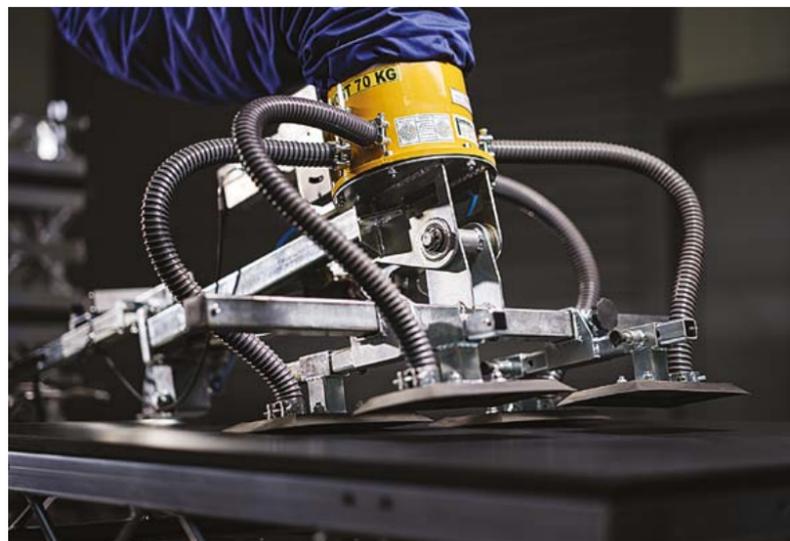
Get to know our machines:

A behind-the-scenes look at the manufacturing processes that help us shape the world-renowned Trusses.



Punch Press

This device creates holes in aluminium tubes so that gases do not accumulate inside the tube during subsequent welding. These pipes are then prepared for the welding robot, which assembles Trusses of our well-known brands.

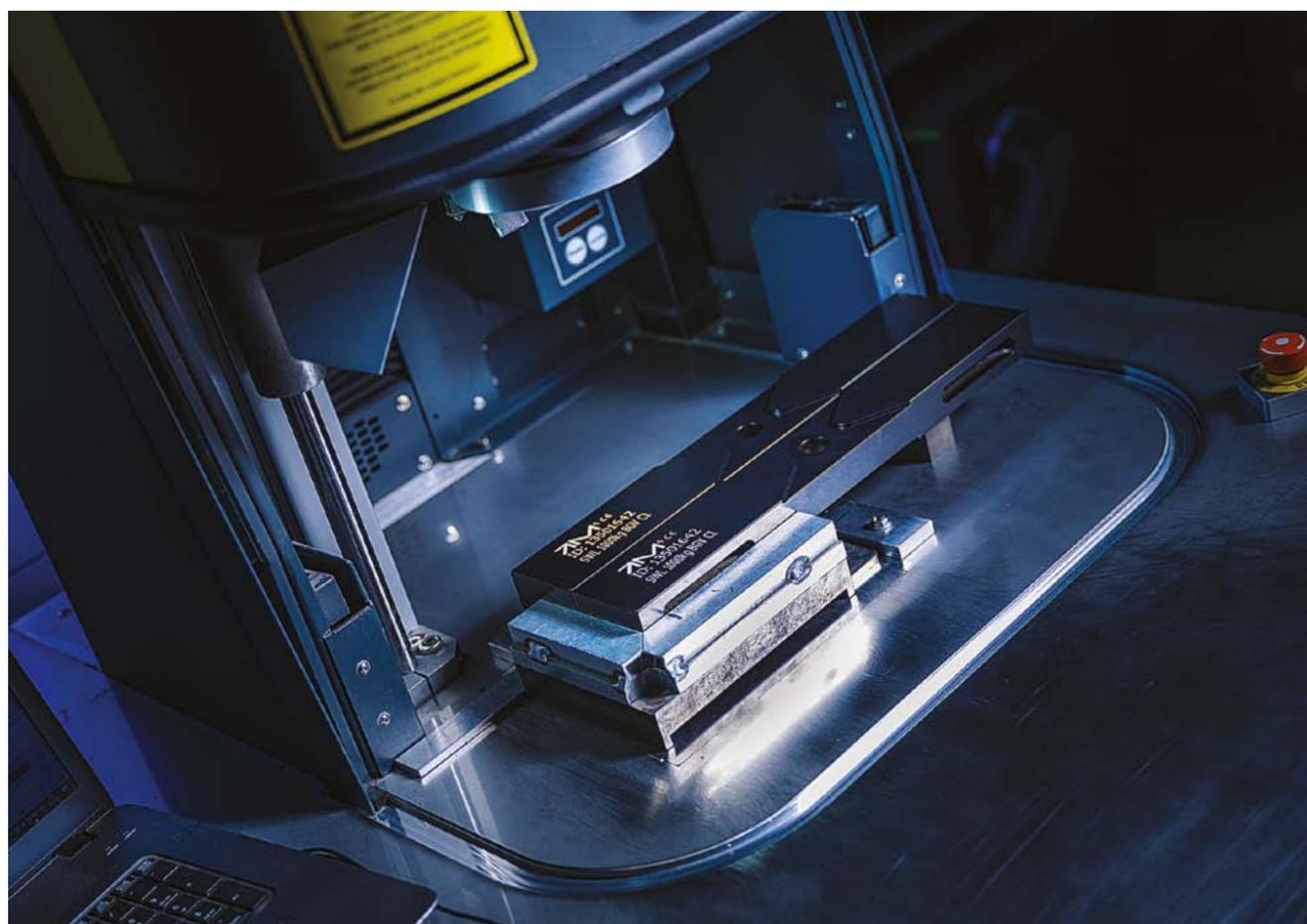


Vacuum Handler

The vacuum handler is an invaluable tool for our podium production, assembly and handling. It can carry loads of up to 70kg. This makes handling either the board itself or the entire stage quick, easy and safe. The vacuum manipulator also minimises the risk of damage to the objects being moved.

Verto system →

VERTO is an innovative and revolutionary system from PROLYTE that allows us to connect Trusses quickly and quietly without tools.



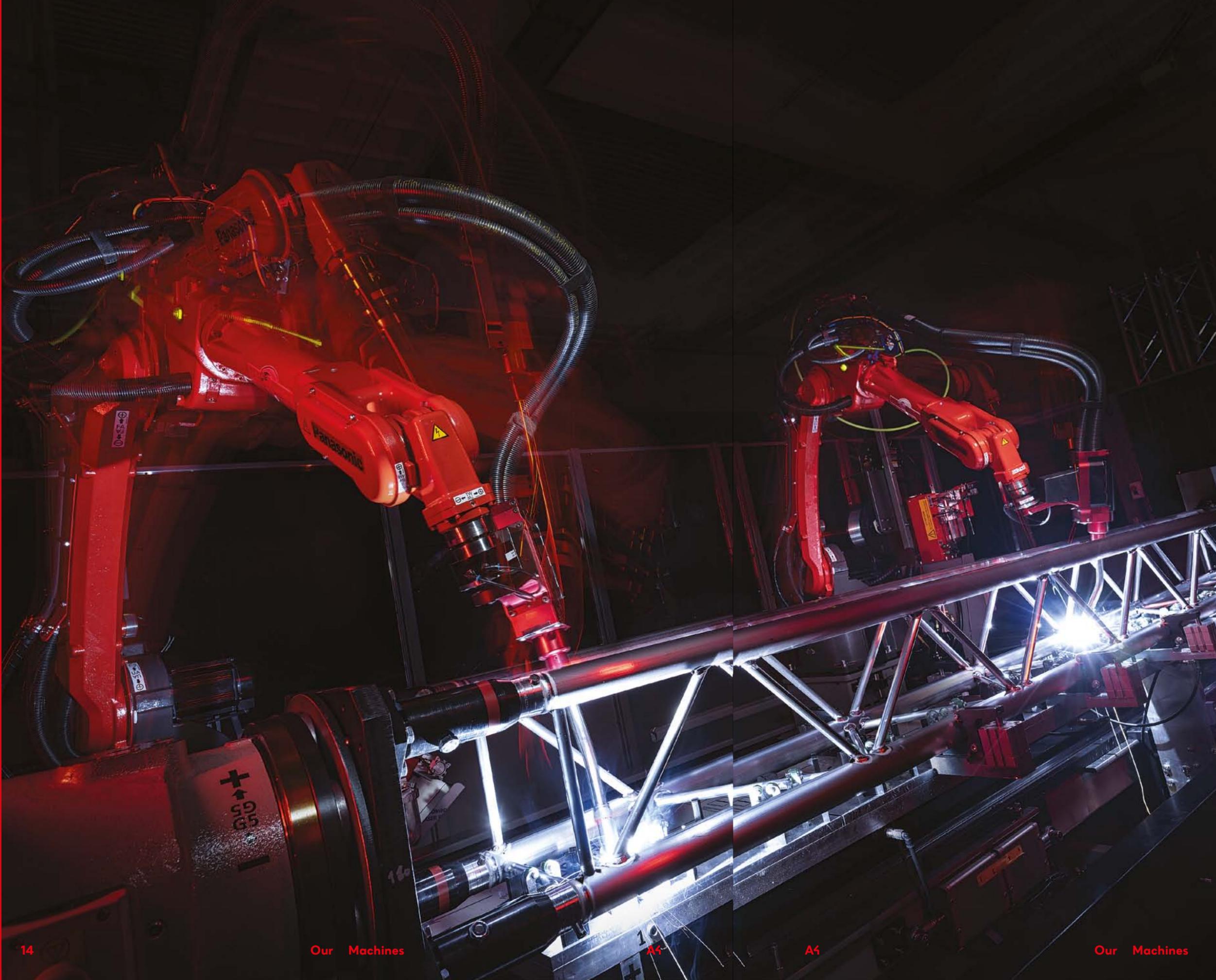
Laser Engraver

The Laser Workstation LW2 is a state-of-the-art device that allows us to mark our products with quality and efficiency. We label products of well-known brands such as MILOS, LITEC and PROLYTE.

This gives us a faster, more durable and legible product description, which is important for product identification and safety.



Verto system



“Incorporating robots into the manufacturing process has helped us utilize human welders for the more demanding tasks and greater challenges associated with special projects that Area Four Industries offers and is capable of,” says

Marek Žúbor
Brand manager

Robotic Welding

Robotic welding workstations, assisted by the operator, create a structure from the first to the last weld with the highest precision possible. Each weld is executed with the same precision as the previous one.

Be part of something fantastic

Currently opened positions

Product Designer

Responsible for managing multiple design briefs, developing and designing of product that will become a prototype for production; Managing projects from concept to production.



Business Development Manager

Together we can create & deliver unique, attractive and stunning equipment and services thus work of our customers, riggers, is easier, better and more successful In Area Four Industries we are extraordinary people from 15 nationalities working around the globe.



Product Manager

This newly created role will be responsible for the product management of a new electro-mechanical product line and to manage its preparation for market including performing market research, vendor relationship management and the creation of training programs for internal and external shareholders.



Key Account Manager

Cultivate, develop and manage relationship with existing and new key customer. Promote and create demand for brands existing & new products and solutions Manage strengthening loyalty to brand via deepening relationship with our customers.

...and that's not all folks. We want you all. Come among us.



Build with us the unforgettable experiences the entertainment industry has to offer. Being part of Area Four Industries means being part of a family that shares a passion for quality, efficiency and safety in our industry.

Production Operator

As a Production Operator, you will prepare, test (inspect), finalize and assemble our world-renowned Trusses and other smaller products on state-of-the-art production equipment to achieve our performance standards.



Packing Operator

You will be responsible for cleaning, packing, timely and correct picking of goods for dispatch.



Welder

Weld fantastic stages, towers and their components.



Logistic Coordinator

You will be responsible for completely intime, damage free delivered material, products.



Purchase Manager

Well-functioning purchasing team; timely and flawless execution of short- and long-term tasks. Correctly purchased and intime stocked defect free materials and parts.



Sales Team Leader

Supporting sales teams with relevant commercial information to allow efficient business decisions. Improving internal sales processes and related marketing strategies.



Manufacturing Supervisor

You will monitor and organise the capacity of teams and technical resources to guarantee deadlines and costs; functionality; quality and safety.



Process Engineer

Responsible for identifying and implementing efficiencies within the manufacturing processes; Thru knowledge, workload and major activity spend at production floor.



Quality Engineer

Responsible for implementing, maintaining and defining A4I quality system throughout the plants; communicating quality initiatives as well as executing actions to ensure that A4I quality standarts are constantly met.



Warehouse operator

You will be responsible for the proper operation of storage and sorting of parts and materials in warehouses in an efficient and safe way.

MILOS. A 30+ years young brand, with fast, flexible, and affordable quality solutions.

MILOS was once a small 'garage' outfit, but now it is a brand with an international reputation.

Company with two very simple concepts: simplicity & affordability without compromising quality. These values were quickly appreciated by customers and were behind the rapidly growing success of MILOS.

The name MILOS was chosen by František in honor of his grandfather, with whom he spent a lot of time in his childhood.

The performance of MILOS is currently driven by incredibly enthusiastic professionals and operates two state-of-the-art factories in Europe and Asia. Its products can be found on every continent in 40 countries.

MILOS benefits from having an extensive industrial tradition and experience that has been successfully transferred from the automotive industry. Work is constantly carried out to improve and simplify this production process.

- **Simplicity**
- **Speed of production**
- **Affordability**
- **Ready-made solutions**
- **Flexible production process system (in-house)**

Welcome, fellow robotic welders!



Marek Zubor
MILOS Brand Manager

First, can you describe to the readers what your position entails?

I have been working at MILOS for over nineteen years, and in that time, I have worked my way up through several positions. I started as an engineer, and when the opportunity arose to be there when the branch in China opened, I didn't hesitate a moment. I went there as a technical supervisor of production and suppliers.

Today, I am in the position of Brand Manager, the person who should know everything about MILOS products, and Product Development Manager, responsible for introducing new products into production. To do this, it is necessary to know and challenge what we could offer to our existing and future customers.

We offer our customers as much as possible so they have a good overview of how our products work, how they are developed and what new products they can expect. One such event for our customers is Rigger's Voice. This event is a highly professional annual gathering for very experienced Riggers that offers advanced and detailed workshops and in-depth and technical discussions on Truss and Support Structures.

What are the biggest challenges you face in your work during the year?

Every day at work brings situations that need to be dealt with somehow. Without that, it wouldn't be fun. I wouldn't call it a challenge, though; it's a daily activity in a team of people who are your friends and all playing for one team. My colleagues and I are intensively involved in producing aluminium structures using robots. A significant milestone in our activities was the acquisition of certificates for robotic production, and it was certainly necessary to add robotic workplaces under certification. We successfully passed this at the beginning of 2023, and we extended the validity of the certification of our Chinese branch; quality is not just an empty concept for us at MILOS. Thanks to a long history of success, it is clear that we are uncompromising in quality issues.

What are your plans for MILOS brand this year?

We are continuing to improve production. As far as making work easier for employees is concerned, we are acquiring even more powerful robotic workstations. We are focusing on steel production, which we want to expand due to increasing demand. We want to make our products even safer, so we are thinking of better ways to use and position Ballast. It's no small feat, but we're working on it with

determination because we know that focusing on precision and detail is what sets us apart.

Modernization is certainly a highly discussed topic these days. Are there any innovations in your production hall as well?

As I mentioned in the previous answers, one of the tasks falling under the Product Development Manager's responsibility is the development of robotically manufactured structures. Not only can we cope with this task, but thanks to the experience we have gained, we are becoming more and more confident in this field. The improvement is visible not only in production but especially in shorter delivery times for our customers; a satisfied customer is always the most important parameter.

Robotic welding workstations will certainly speed up production for you. Was it necessary to change the work environment or add more space to fit everything in?

Due to the acquisition of several more robotic workstations, or thanks to them, we have reorganised the production flow so that the robots never get idle. The flow is adapted so that there are as few strenuous material movements as possible and simultaneously that the manufactured constructions pass internal inspection as soon as possible and can be packed and shipped to customers. Fortunately, when we acquired our first robotic workstations, we were already looking to the future with the vision that they would not be the last, and placing the first robots in a newly created part of the production halls was prudent. I think MILOS has yet to have the last word regarding robots.

How have employees adapted to new technologies and robotic colleagues? How do they respond to them?

Robots are not here to steal the work of our workers; we have them to make our work easier. We are not in a situation where the robot is involved in developing a new product. Just ask it how to design the product better to make it easier to produce. Well, you can certainly ask our qualified workers in production...and, in fact, you have to, it doesn't happen that an engineer designs something from his desk that is not discussed with people who understand manufacturing from a different point of view.

You have to ask them directly about the welders' experience with robots, but I don't sense any resentment or perhaps fear from them, quite the contrary, they have freed up their capabilities and capacities to work on more challenging and unique projects where human skill and mind are irreplaceable.



Conquer the demands of large events with S-MR10 Steel Truss Roof!

Another amazing project we had the privilege to work on with our long-time partner and customer Creative Technology Norway.

The project's star was a huge MILOS roof S-MR10 26x19m, delivered to Norway, serving the whole summer season. Peter Gabriel was the first to perform under the S-MR10 roof, followed by Iron Maiden and Robbie Williams.

The MILOS S-MR10 roof is the best steel roof on the market, thanks to its ability to face the challenges and demands posed by events of enormous dimensions.

The roof boasts an incredible span of 24m and can carry loads of up to 83 Tons. It is the ideal solution if you require your application to carry a very large load of your stage equipment whilst maintaining as much stability as possible.

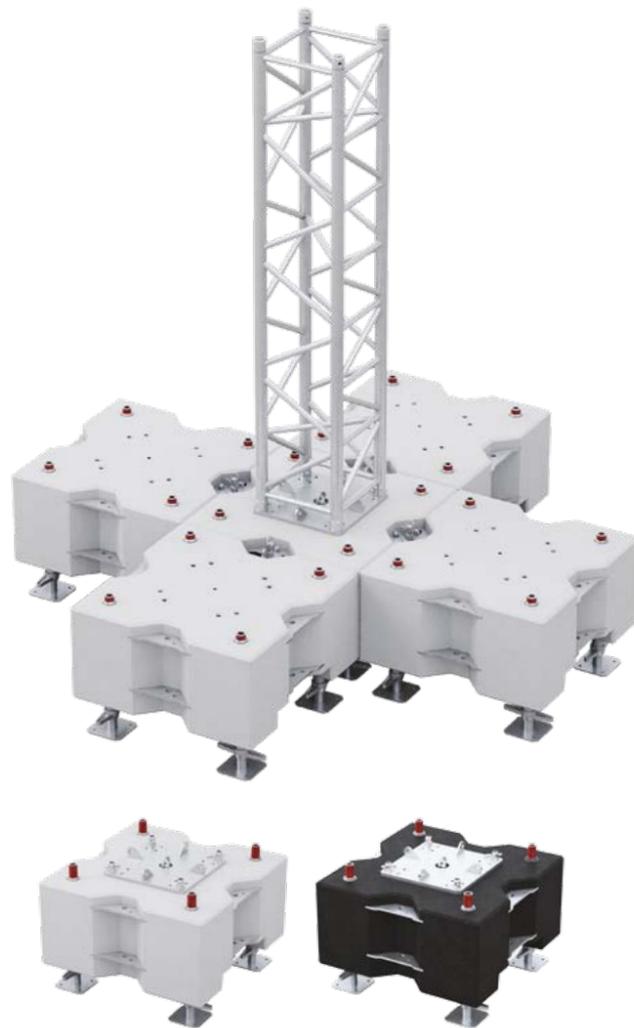
Creative Technology Norway always amaze us with their creativity and skill. They are event and concert support structure pros

with years of experience in our industry, so working with them is always a joy.

We are very happy to have been part of this project. We hope to see you soon at the next event - again under the roof of MILOS!

MILOS. A 30+ years young brand, with fast, flexible, and affordable quality solutions. "MILOS works better"





MILOS Multi-Purpose Aluminium Cart

The Multipurpose Cart can be used as a Meatrack for transporting lights suspended on tubes. And it is not the only possibility; also Ballet Floors, plastic boxes and other ranges of uses that are of key importance for our customers who specialise in organising fairs, exhibitions and concerts.

Our product is unique in that it arrives in a flat box (1,75x0,8x0,22m! weighing only 65kg) ready for assembly.

Our customers thus profit from speed and cost-effectiveness of delivery.



MILOS Concrete Ballast Base

The MILOS Concrete Ballast Base is a durable product made of steel-reinforced concrete.

It can serve as a solid Base for entire MR1 and MR2 series roofs, self-standing towers MT1 and MT2, or simply as a Ballast to help you achieve a high level of stability for your applications.

The universal orientation connectivity allows the individual blocks to be stacked together to form one large block of any weight. Our connectors allow for both horizontal and vertical connections.

Due to its compact dimensions (80x80x40 cm) and stackability, transportation is simple and efficient. For handling, you can use the hanging point in the middle of the block or the pocket ready for the forklift.

Adjustable "spindles" with a large contact area can be used on uneven surfaces.



MILOS MT-ICON-PA Tower

Introducing MILOS MT-ICON PA Tower: A practical and durable solution whenever you need to hang speakers or LED Wall at your event.

The main advantage is the compact size and the Ballast placed directly as part of the assembly, which takes up less space. It can be used both for indoor and outdoor events.

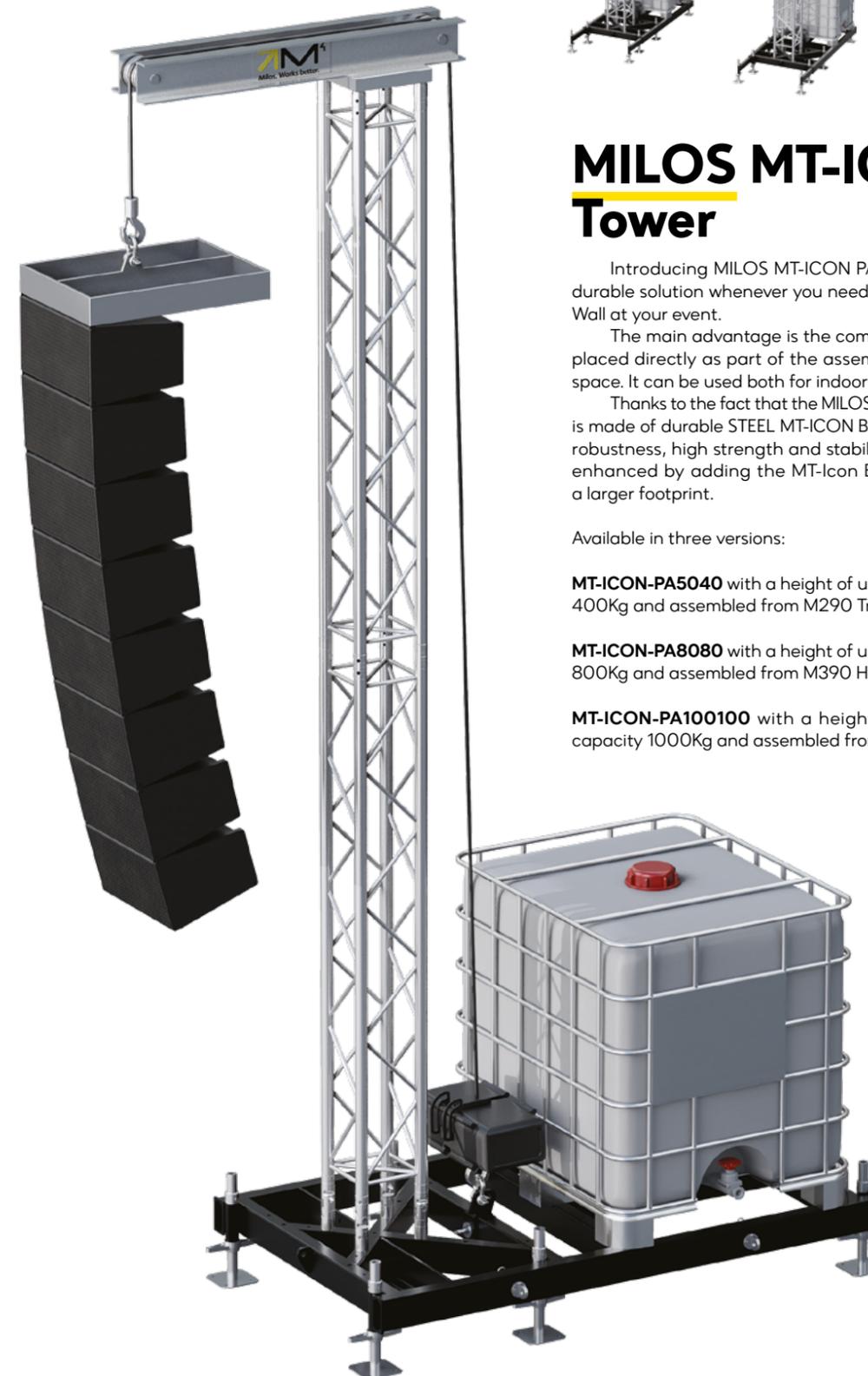
Thanks to the fact that the MILOS MT-ICON-PA Tower's Base is made of durable STEEL MT-ICON Base, it boasts unwavering robustness, high strength and stability, which can be further enhanced by adding the MT-Icon Base Steel Outrigger for a larger footprint.

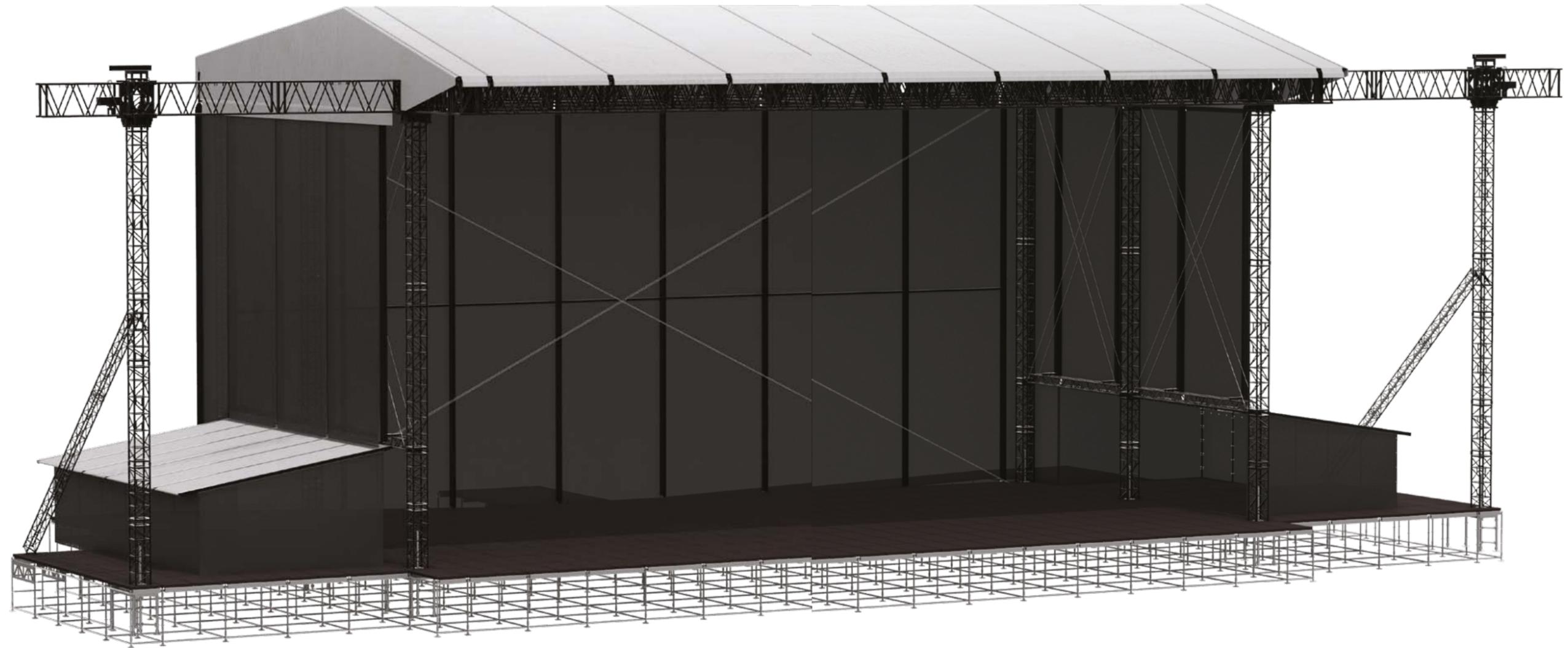
Available in three versions:

MT-ICON-PA5040 with a height of up to 5m, loading capacity 400Kg and assembled from M290 Truss.

MT-ICON-PA8080 with a height of up to 8m, loading capacity 800Kg and assembled from M390 Heavy duty Truss.

MT-ICON-PA100100 with a height of up to 10m, loading capacity 1000Kg and assembled from M520 Truss.





S-MR10 Steel roof 28x19 m ↑

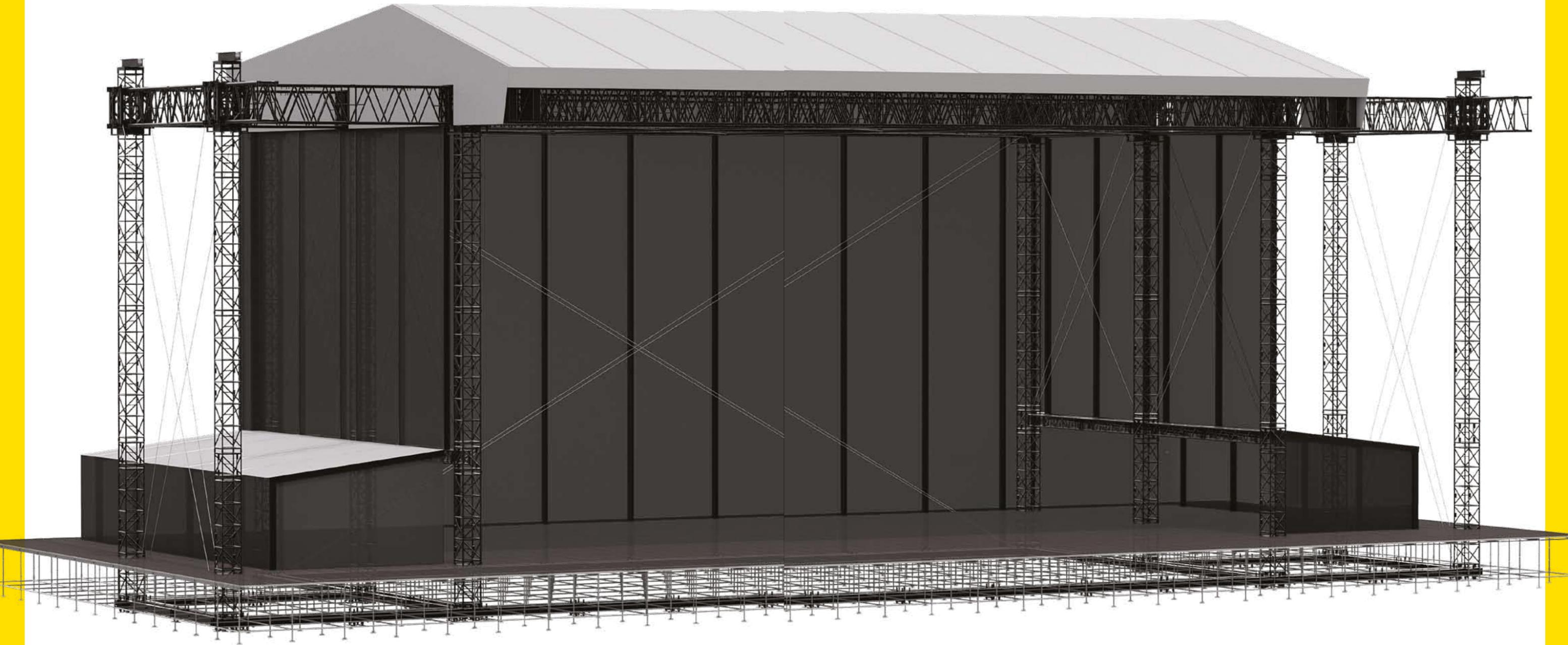
- UDL on the main roof 50 tons
- PA in total 12 tons (4 tons per main PA, 2 tons per sidefill PA)
- LED in side wing 500 kg/m

MR6 roof 26x16 m →

- Main grid made of 5 spans of M1200 RTR truss
- Clearance height nearly 14 m
- PA / video wing options available



Meet the Steel Beast!



S-MR20 Steel roof 32x25m

- UDL on the main roof 60 tons
- PA in total 12 tons (4 tons per main PA, 2 tons per sidefill PA)
- LED in side wing 500 kg/m

A Classic Lager Brewing Tradition Rooted in Pilsen's Legacy

Pilsner beer, with its alluring golden hue and crisp flavor, has a storied history deeply intertwined with the city of Plzeň (Pilsen) in the Czech Republic. Beyond being a refreshing beverage, Pilsner beer stands as a symbol of brewing excellence and innovation that has captivated beer enthusiasts for generations. In this article, we explore the origins, characteristics, brewing process, and cultural significance of Pilsner beer while delving into its profound connection with the city of Pilsen.

THE BIRTHPLACE OF PILSNER

The journey of Pilsner beer began in the mid-19th century in the picturesque city of Plzeň, where local brewers united with a shared vision: to create a beer that would redefine brewing standards. Discontent with the quality of existing brews, these pioneers embarked on a mission to craft a beer that would set new benchmarks for taste and quality. Their relentless pursuit led to the birth of the Pilsner style, characterized by its pale color, striking clarity, and harmonious balance of malt sweetness and hop bitterness.

CHARACTERISTICS OF PILSNER BEER

Pilsner beer's distinct characteristics continue to elevate its status as a beloved brew:

Radiant Appearance: Pilsners boast a radiant golden color that shines brilliantly, inviting admiration from beer connoisseurs and novices alike.

Aroma and Flavor Symphony: The delicate interplay between floral hop aromas and subtle malt notes creates a sensory symphony that defines the Pilsner experience.

Crisp and Refreshing: With a light to medium body and a crisp, refreshing profile, Pilsner beer remains an ideal choice for both leisurely sipping and quenching one's thirst.

Legacy of Saaz Hops: The use of Saaz hops imparts a distinctive earthy and slightly spicy character, contributing to Pilsner's unique and timeless flavor profile.

THE BREWING PROCESS:

A HERITAGE OF CRAFTSMANSHIP

Pilsner beer owes its exceptional quality to a meticulous brewing process that honors tradition and craftsmanship:

Pilsner Malt Magic: The foundation of Pilsner beer is laid with pale Pilsner malt, carefully selected to provide a delicate malt base.

Harmony in the Mash: The mashing process transforms malt starches into fermentable sugars, establishing the foundation for the beer's character.

The Dance of Hops: The addition of Saaz hops during the boil infuses Pilsner beer with a balanced bitterness and aromatic charm, shaping its distinctive taste.



Yeast and Fermentation: Pilsner yeast, fermented at cool temperatures, contributes to the beer's clean and crisp profile, while the extended lagering process ensures its smoothness and clarity.

THE HEARTBEAT OF PILSEN'S CULTURE

Pilsner beer's cultural significance extends far beyond its taste:

A Global Ambassador: Pilsner beer's popularity has made it a global ambassador of Czech brewing tradition, captivating palates across continents.

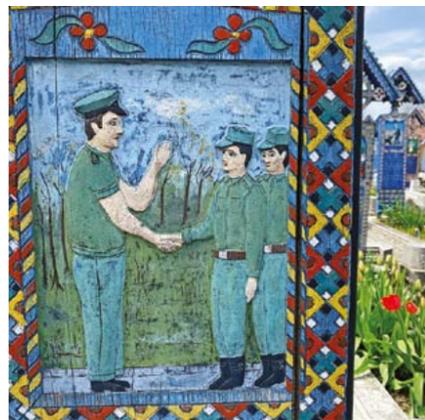
Cultural Emblem: The city of Pilsen proudly embraces its role as the birthplace of Pilsner beer, celebrating its brewing heritage through festivals, museums, and events.

A Catalyst for Connection: Pilsner beer's ability to bring people together has solidified its role as a social catalyst, fostering camaraderie and shared experiences.

CONCLUSION

Pilsner beer's legacy is an ode to the pioneering spirit of the brewers of Plzeň and their unwavering commitment to quality and innovation. As we raise our glasses to enjoy the timeless taste of Pilsner, let us also raise our hats to the city of Pilsen, whose influence on the world of beer continues to shine as brightly as the beer it birthed. In every sip, we honor the heritage of Pilsner brewing and the enduring bond between a beverage and the city that inspired it. *Na zdraví!*





Once it's all over, what scene from your life will you have carved?

The biggest challenge for any HR manager is writing a cover letter. This is a very young field because, until recently, most of the world's population could neither read nor write. People have been motivated primarily by verbal narratives, images and reliefs for centuries. What would such a motivational carving "letter" look like? Perhaps like the tombstones in a rural cemetery in northern Romania.

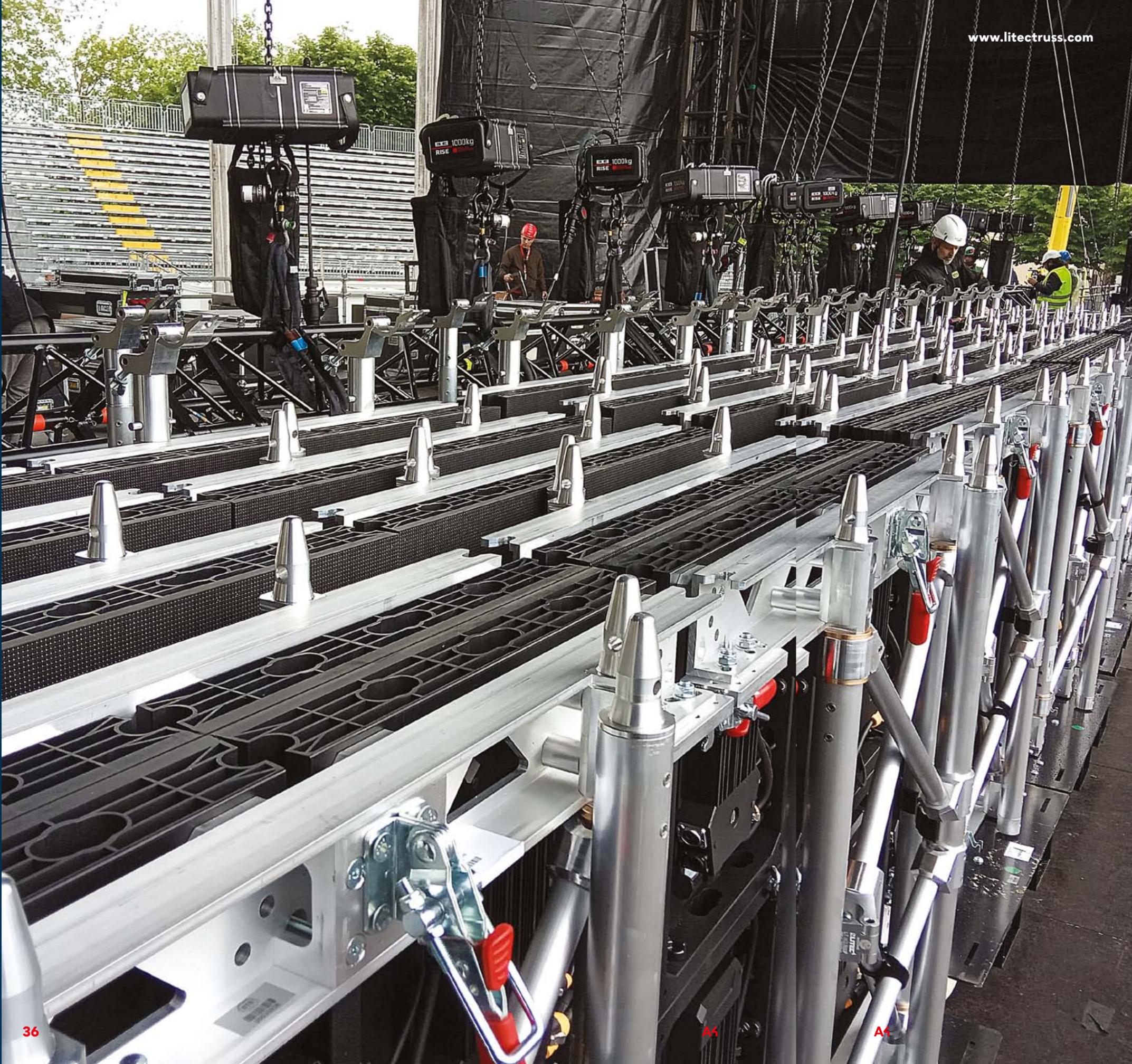
Billions of years have already dissolved behind us in time; billions of years ahead of us are still waiting their turn. The time carousel may have repeated itself endless times. Amid all this passage of time is our very short life, and it is up to us to choose what that life will look like, which will never be repeated. Why wouldn't you spend at least part of your precious life at Area Four Industries? It doesn't matter whether you're welding stunning structures, driving a forklift around the warehouse, motivating the sales team in the office, selling beautiful podiums worldwide or designing the look of individual parts on the computer. Because every time, you'll be sure that once your life is extinguished, you'll have a dramatic and rewarding scene carved on your tombstone for all to admire.

In the north of Romania, near the Ukrainian border, lies the village of Sapinta. In the middle of the village stands a colourful wooden church with a tall tower, and around it is a cemetery that everyone knows as The Merry Cemetery, or Cimitirul Vesel in the original. The tombstones in this merry cemetery are hand-carved by the skilled hands of local carvers, and each person who lies in the ground is introduced with a short text and a scene typical

of their life. Thus, you will see a sheep herder, a talented alcoholic, a sad housewife, a young man struck by lightning, a truck driver, a respected clerk, an expert in chemical spraying of orchards, a postman, a spinner, a turner, a horse tamer, a soldier, a taxi driver, a dog breeder, an old ironmonger ... Hundreds of lives are crammed into one scene of a life novel.

Now, ask yourself one more question: "What would I have in there?" The answer can be difficult because what kind of scene would an influencer, a YouTuber, an unemployed person, a social media manager, or a professional environmental activist have carved out? But the answer can also be easy, and that's if you work at Area Four Industries. You can have a futuristic welding helmet, fireworks of sparks, a beautiful stage with a guitarist in a faux fog, a structure illuminated by spotlights, a pack of forklifts, state-of-the-art computers, dancing welding robots, and just real-world human entertainment. All the companies under Area Four Industries make and sell real three-dimensional products, not empty illusions from which nothing tangible can be carved. So if you long for your life to have meaning, visit www.area-fourindustries.com. And discuss such irrelevancies as salary level, length of working hours or company bonuses in person. You'll be satisfied.

To carve or not to carve: that is the question. Those who spent their careers at A4I don't have to fear the famous question of Hamlet. Their lives will always provide much stuff to be carved out and admired by their descendants.



LITEC, Pioneering solutions

The spirit of innovation that has distinguished Litec since its inception continues year after year. Innovating in solutions designed to support tailor-made projects for our clients, innovating in the creation of entirely new product lines. Solutions that arise from the constant collaboration between our technical staff and the most discerning users to create new ambitious products.

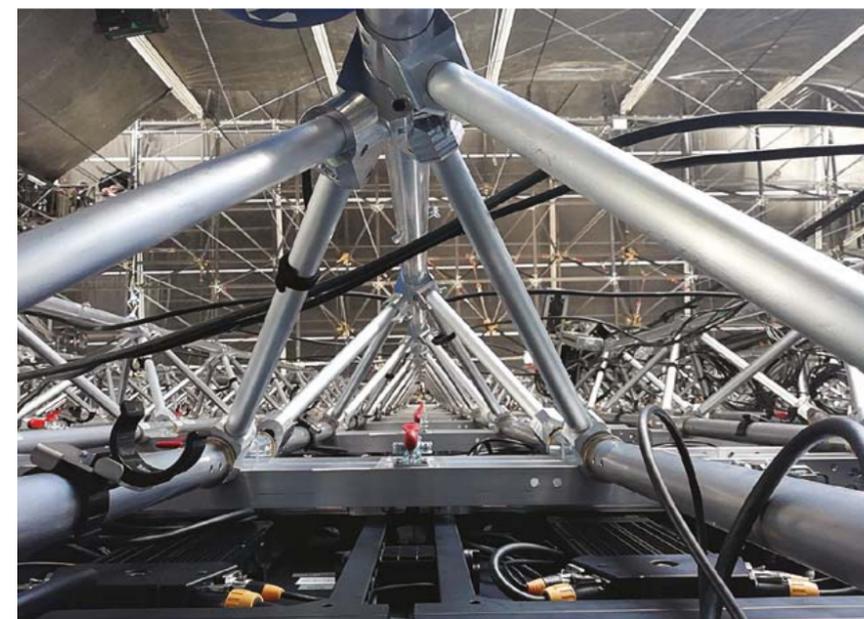
By definition, a product is a search for a solution to a problem, a response to a new requirement. The entertainment world relies on many technologies that are very different from each other. Each technology follows its own path, and often there is a need for a structural solution to "support" that technology.

In the course of 2023, Litec is proud to have introduced two important product lines. An aluminum line To support large LED Walls and a line of steel bases and special steel trusses to increase the load capacity of large Ground Support, with the same weights and dimensions, of the present aluminium solutions.

The following pages will briefly guide us through these milestones of brilliant innovations.



The Backbone LED wall support



The construction of a support system for high-definition LED panels for covering large vertical surfaces has been developed, produced, and utilized in major events. The close collaboration with STS Srl, one of the most established companies in rental and management of multimedia solutions, allowed us to achieve the required objective.

In just a few months, we transitioned from the preliminary study to the executive project, production, and real-world use on stages during the tours of prominent Italian artists. As we like to say, "good first".



Carlo Ughelini
LITEC Product Strategist

Carlo, it's been an intense year for Litec, with many projects supporting clients and the design of new standard products. Is there a different approach between designing a custom solution for a client and creating a new product intended for assembly production?

Very often, the need to solve a client's problem can be an inspiration for the subsequent development of a project, eventually turning it into a standard product.

Now, let's talk about the Backbone system for LED walls

Currently, the outdoor Backbone line is defined and has already been used for some tours of top Italian artists. It's a system that came out of the need of a robust and modular structure allowing to build large vertical surfaces. These surfaces, due to their heights and dimensions, would otherwise require scaffolding in the backstage area, resulting in significant costs and time. Light designers are now freer to pursue their dreams.

And what about the steel trusses?

The HiPe series is the first model of what is likely to become a standard in structures for

heavy loads in the future. We can say that as a precursor to aluminum solutions, Litec is now proud to accompany a line of steel.

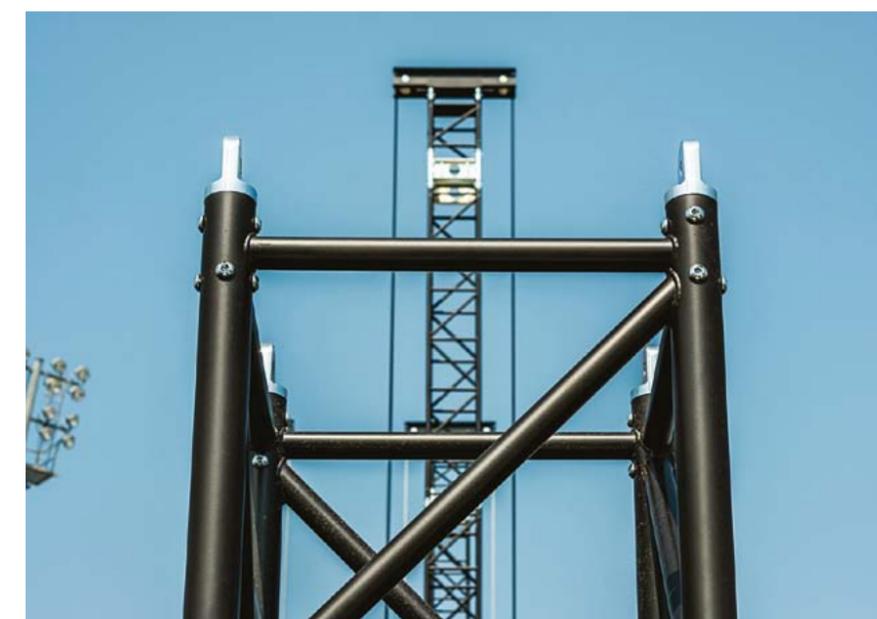
Any new projects?

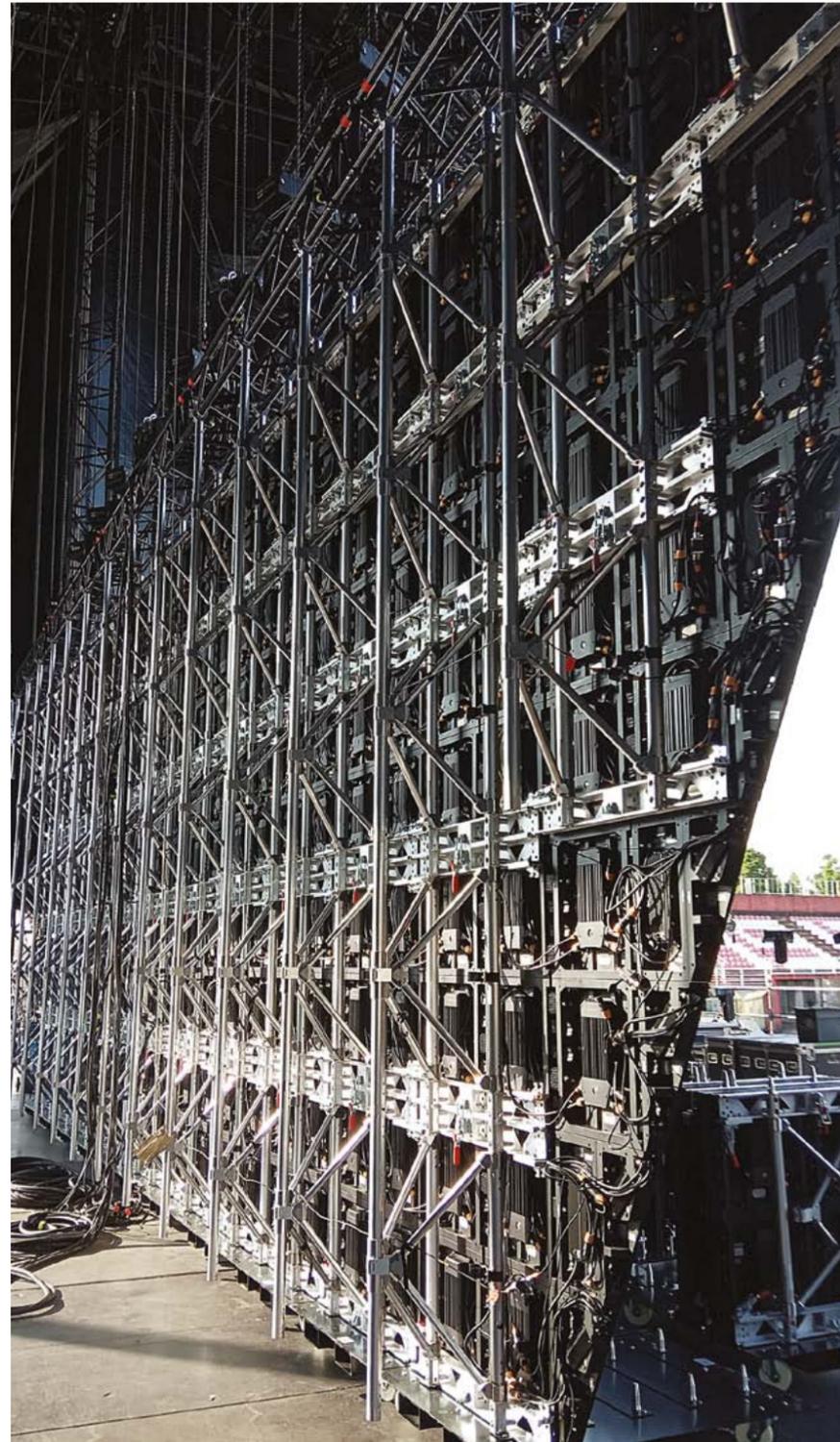
Plenty of ideas in the works! I like to mention that we're collaborating with some PhD students from the University of Padua on a new launchpad for space rockets... But that's a separate and fascinating chapter. We'll talk about it again.

The HiPe TRUSS made in special S700 steel

HiPe Truss is the acronym for High-Performance truss crafted from specialized steel, a recent innovation in steel industry. It delivers exceptional performance and significant load-bearing capabilities.

The design of the new truss, the dimensions and thicknesses of the tubes, and the unique fork connection constructed in 1515446 chrome-plated steel make this truss a natural companion for constructing large stages or significant spot and delay towers.





LITEC Backbone

LED walls, at the center of the scene

From rock bands to pop stars, from television studios to corporate conventions, LED walls have become an indispensable presence for event creators. The high performance achieved by this technology makes it possible to construct large surfaces composed of multiple LED panels.

Backbone, beyond the scenes...

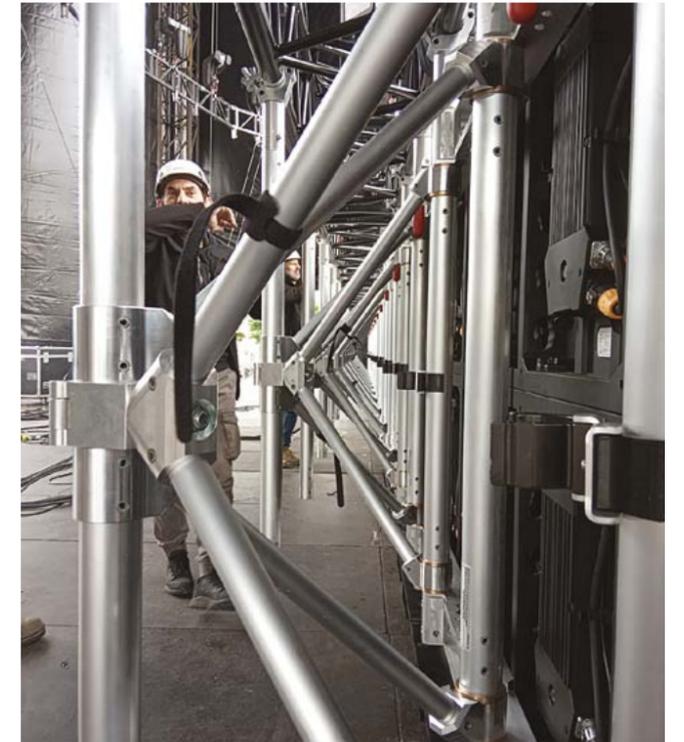
Litec Backbone, the solution for building large LED walls quickly and securely.

STS srl, one of the largest video rental companies in Italy, designed the specifications about this project for the Vasco Live Tour 2023, where a triangular LED panel wall served as the focal point for the entire show.

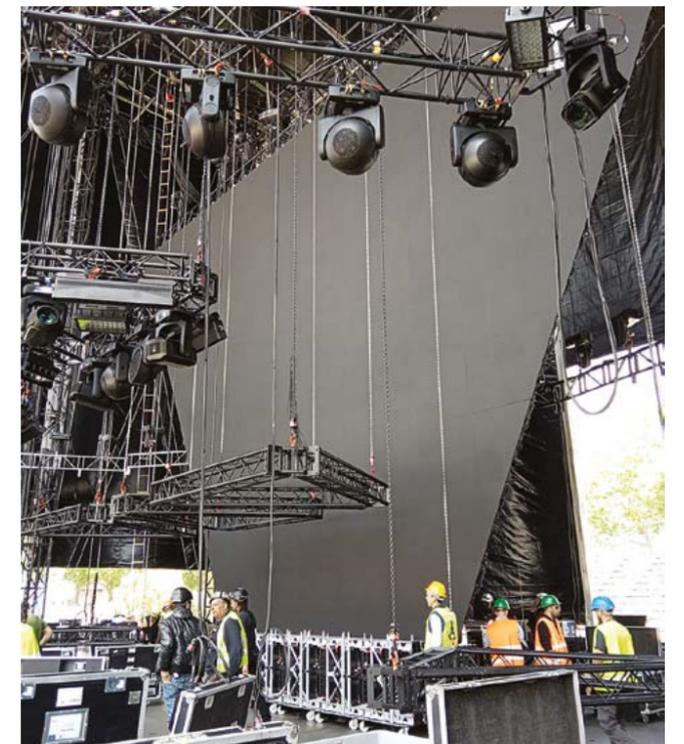
The aluminum reinforcement frame allowed the creation of a modular, robust structure that is easy to assemble, disassemble, and move.

Step by step, from storage to installation

Each module pairs with the LED panels with precision ($\pm 0.15\text{mm}$), allowing for the uniform construction of the wall.



The pre-wiring of 4 LED panels for each Backbone module ensures efficiency and time-saving during installation.





The spot and delay HiPe special steel tower

High Performance Special Steel Truss

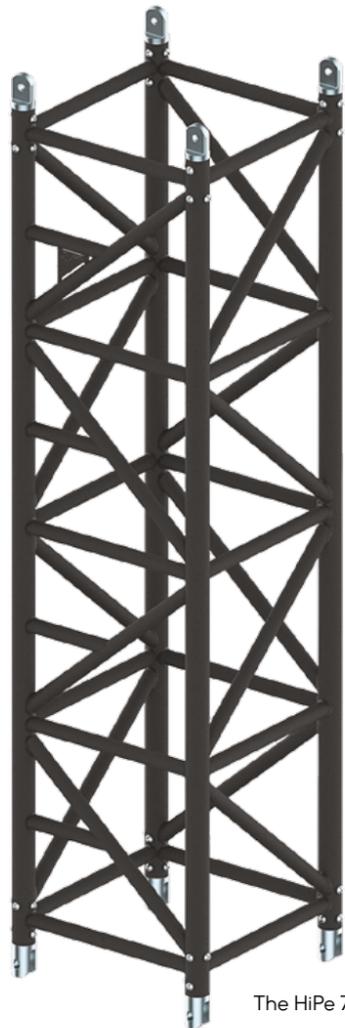
When the required performance is extreme, only a steel construction can live up to it.

We have developed the HiPe truss system, with chords in S700 special steel alloy, the same alloy used for large construction cranes.

With only 4mm thickness, this family of steels allows you to create trusses with a lower weight than the corresponding aluminum models, with 3 times higher performance.

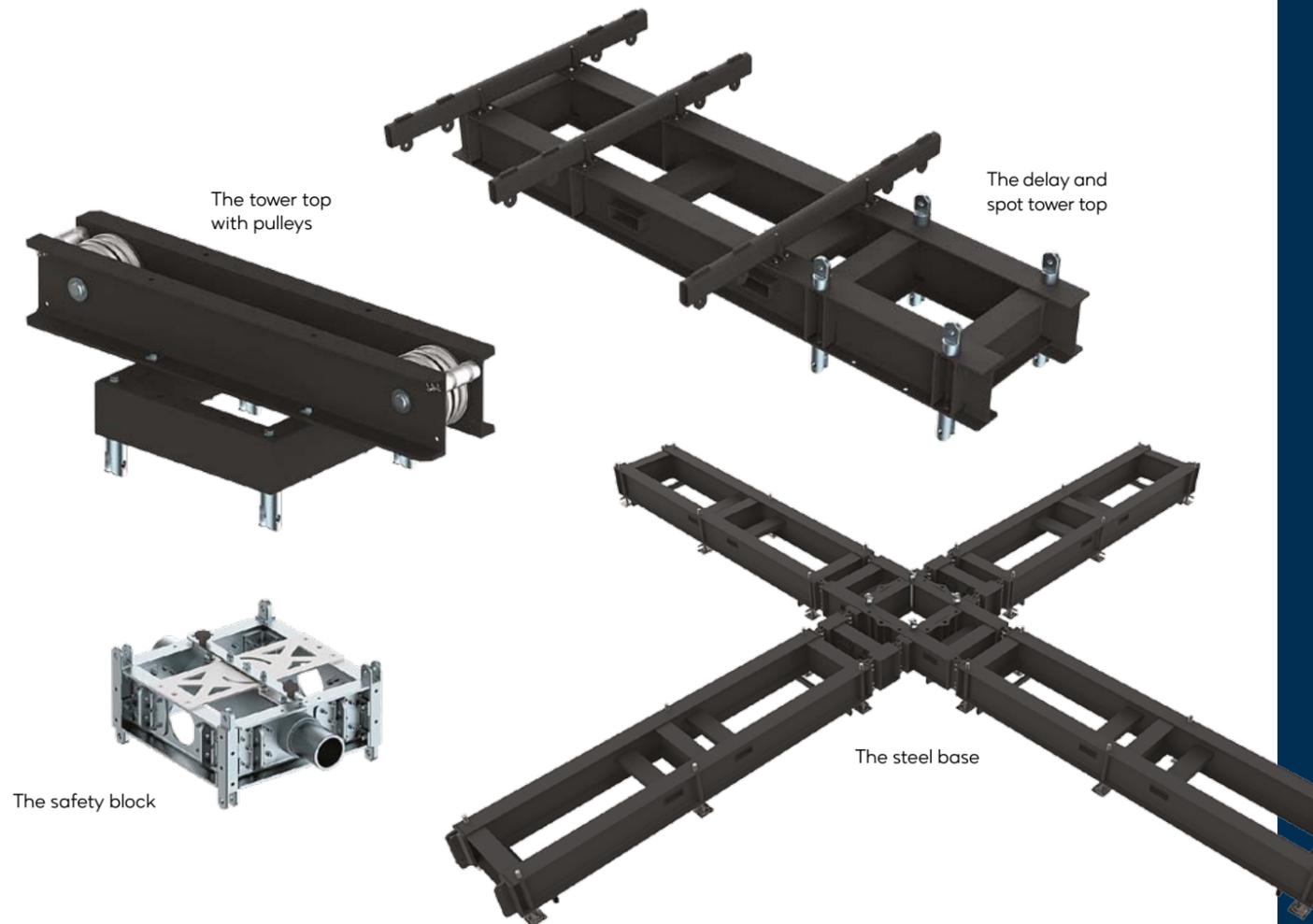
In our HiPe series we have combined different steels for the chords, the diagonals and the connections.

High performance is now possible. To safely overcome the limits of all aluminum trusses on the market.



The HiPe 76x76cm special steel tower

An excellent combination of Litec steel bases and towers, EXE Technology hoists and Prolyte Space Roof.



The tower top with pulleys

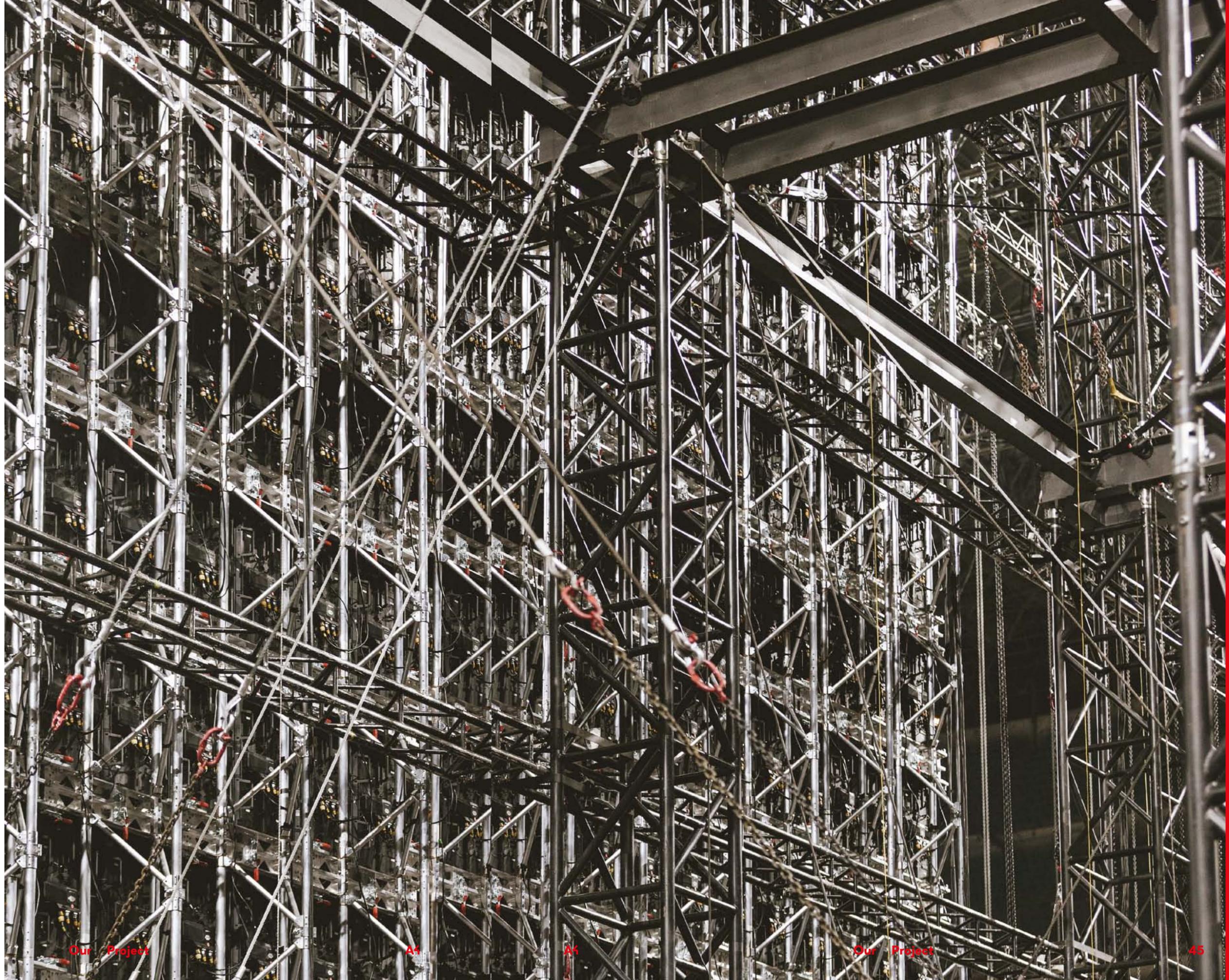
The delay and spot tower top

The safety block

The steel base



LITEC project, Milano, Italy (2023)



Cat, Barrel and Danube – A Verbal Archaeology of the Electricity Network

Towers, the distinctive verticals of the landscape, are the most visible part of the electrical transmission system. But they are not anonymous structures; they have names which humanise them. Their builders took inspiration in naming them from animals, people and the world around them.

DANUBE AND OTHERS

There are less than ten basic shapes of the most common tower structures, and they are found in similar variations worldwide, the names of which suggest much. Barrel, Cat, Delta, or Danube are so-called single-shaft towers because they have just one supporting "leg". The designs of the Portal form have two legs, connected at the top by a spar or cross-arm. Their names therefore usually describe the shape of the tower in some way. In Barrel, for example, the middle bracket is slightly wider than the one below and above it, so it looks like a rounded barrel. Cat has two brackets on its tops for grounding ropes resembling cat ears. And the top of Delta is shaped like an inverted triangle, the Greek letter "delta" standing upside down.

However, in the case of other designs, the origin of their names is different. The single-shaft Danube got its name because it was first used in 1927 for the construction of a line from the Kachlet hydroelectric power station near Passau on the Danube to Regensburg (although the exact shape appeared as early as 1910 in Ontario, Canada). The double-shaft Portal was designed for the construction of an electricity system in Scotland in 1928 — its designer, Sir Reginald Blomfield, was fascinated by archaeological excavations in Egypt at the time and likened his design to the gateway — the Portal — of the Temple of Edfu. But it was only after WWII, with the advent of very high voltage routes, that the world's electrical grid gained the proper dynamism and connectivity.

DIFFERENT HEIGHTS OF HIGH VOLTAGE

The fundamental criterion for the shape and height of high-voltage towers is the voltage level to be supported by the tower. The most numerous type for each shape is the so-called supporting tower. It is characterised by the vertical direction of the insulator hangers, which are made up of individual insulators and fittings on which the rope conductors are suspended. In contrast, on an anchor tower, the insulators are "diagonally" in the direction of the rope deflections and are connected through the tower structure by a "bulkhead". The individual rope conductors are up to several kilometres long — their beginning and end are fixed on two

anchor towers defining the so-called anchor section, in which several supporting towers are usually placed at intervals of several hundred metres. The number of these and thus the length of the anchor section is influenced by many factors — for example, the passability of the area, the presence of infrastructure and amenities, the ruggedness of the terrain, the altitude and the associated effects of wind or frost in the winter months, or large differences in height where the anchor towers may predominate. The latter are generally more massive than supporting towers because of the tension from the wire ropes, whereas supporting towers are lighter and simpler in construction. Anchor towers are also placed where the direction of the line route changes.

For double 400 kV lines, the Danube shape is preferred, while for single lines it is the Portal shape. Where due to their width, it is not possible to place them in such a way that they can safely avoid infrastructure or buildings, possibly for environmental reasons, Barrel (for double 400 kV lines) or Delta (single 400 kV lines) shaped towers are used. These are narrower but taller at the same time.

FIFTY SHADES OF TOWER COLOURS

One of the other interesting things that are considered when building new towers and replacing the old ones is their colour. The aim is to make the towers as "invisible" as possible and to disturb the natural landscape of the area as little as possible. Although the standard paint is green, other shades through grey-green to grey are used, particularly in treeless flat areas. It depends on the predominant background colour.

However, some towers violate this visual rule. They are painted red and white to draw as much attention to themselves as possible. You will see them where lines cross major roads, watercourses or near airfields.

The key link between the steel structure of the tower and the conductor itself is, of course, the insulators. These can be ceramic, glass or composite and vary in length depending on the material used. In general, the tendency is to design towers to allow all insulation materials to be used, but for certain types of towers such as

the Portal, the primary insulator hangers used are 'shorter' ones made up of glass.

INSTALLATION BY TRESTLE AND HELICOPTER

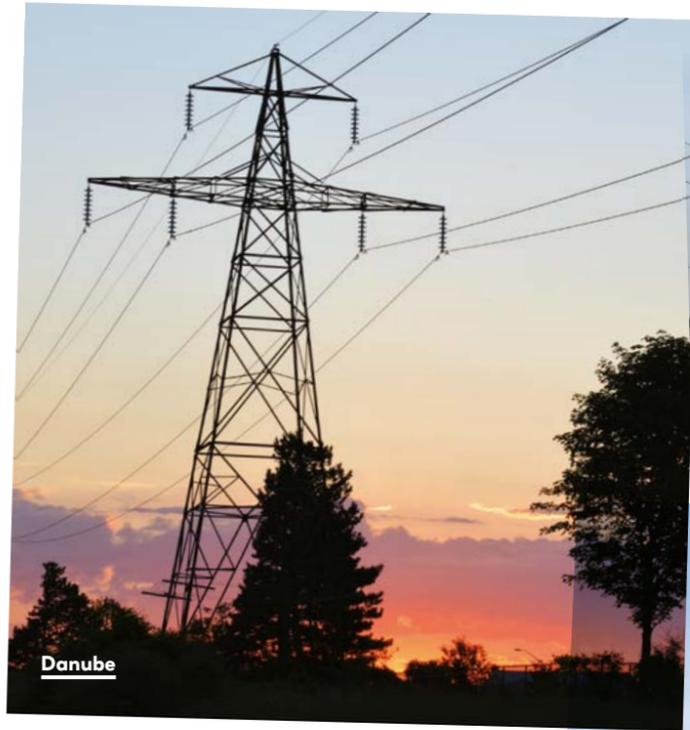
In terms of materials, steel sharp-edged rolled profiles are used for the production of individual parts, especially angle irons. Exceptionally, tubes are used for some parts of the structure (material savings are negatively affected by the more complex production and maintenance). With a view to long service life, the rods are protected by galvanising and surface coating.

Part joints are either welded or bolted, depending on the size of the parts and the surface protection. On assembly, the contacts are exclusively bolted. In practice, everything is simplified so that after surveying and staking the line route and carrying out the landscaping, the foundations are dug, and the concrete base slab is poured. The steel towers are assembled horizontally on the ground directly at their destination, next to the foundation pit. Subsequently, the towers are tilted using a trestle and sunk into the concrete slab in the pit. When erecting taller steel towers, erections are often carried out by knocking around fixed joints or using mobile cranes with high booms. In rugged terrain, heavy cargo helicopters are also used for erection.

Workers first attach the completed tower to the helicopter at a suitable location, which carries it to its destination. There, the power engineers are ready to bolt the tower to the concrete footing.

Once the towers are standing, it's time to install the wires. Their tensioning technology, which is based on the reinforcing towers, is greatly influenced by their positioning along the route (distance of 3 to 5 km). Also important are the maintenance and repair aspects of the lines, the possibility of climbing a tower under power etc. As a rule, access to the tower is solved by means of a ladder located on one or two corners.

As can be seen, the problems of tower structures are more varied than a tramp accustomed to wiping the dew off the tracks could imagine.



Danube



Portal



Delta



Tree



Barrel



Cat

Range of Telescopic and Front Load Lifts

In most setups, there are almost always loads to be lifted. Xlift towers have been designed for lifting loads ranging from 125kg to 500kg. Each tower has a Safety Stop, which is a mechanical device that locks each section in the event of a winch malfunction or towing cable breakage, preventing accidental descent.



The Xlift 270, weighing just 123kg, is among the lightest in its category. It is made up of 5 sections of aluminum profile, each with the Safety Stop system for maximum safety. The steel base is mounted on 4 swivel wheels for easy positioning and transport.

The Xlift 500 is also composed of 5 sections of aluminum profile, each with the Safety Stop system for maximum safety. Each section is equipped with eyebolts so the lifter can be fixed at any height. The steel base is mounted on 4 swivel wheels for easy positioning and transport. On this model, two additional rear wheels and one central wheel are provided for horizontal transport,

XLT-125

Maximum height: 3.8 m (12.5')
Folded height: 1.26 m (4.1')
WLL: 125 kg (275 lb)

XLT-150

Maximum height: 5.35 m (17.5')
Folded height: 1.72 m (5.6')
WLL: 150 kg (331 lb)

XLT-300

Maximum height: 6.5 m (21.3')
Folded height: 1.87 m (6.1')
WLL: 300 kg (661 lb)

XLF-270

Maximum height: 6.65 m (21.81')
Folded height: 1.78 m (5.84')
WLL: 144 kg (317.47 lb)

XLF-500

Maximum height: 7 m (23')
Folded height: 1.90 m (6.23')
WLL: 223 kg (492 lb)



A Common Sea Sponge that Changed the History of Mankind

Put on a modern helmet, such as our Area4Industries brand, and experience warm, hygienic comfort thanks to the hi-tech materials used. But what was used to line the helmets of soldiers in ancient Greece and Rome, what padding did the crusader knights use, or what lightened the armour of soldiers in the Ottoman Empire? Nature's ingenious invention — a common sea sponge!

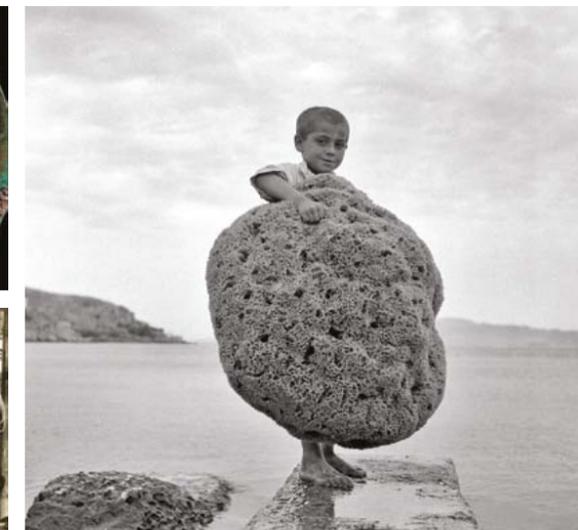
Technologists have spent millions of hours over the last two millennia inventing a material that would approximate the properties of a sea sponge. The sponge's therapeutic effect on the health of the human skin was described by the philosopher Aristotle and mentioned by Homer in his epic poems Iliad and Odyssey. People of the ancient empires used the sea sponge for washing, as a protection against abrasion, for the treatment and healing of various wounds and scars, as a precursor to toilet paper, a menstrual tampon, etc. Sea sponges have

antiseptic, antibacterial and disinfectant properties thanks to their high iodine content: a single gram of sponge contains the same amount of iodine as 120 litres of seawater. Above all, however, it was an ideal military material. The sponge was used as a lining for armour, helmets and other equipment. The layers of compressed sponge protected the soldier's body from punctures and burns as the bronze and iron plates heated to unbearable levels in the sun.

Sea sponges grow on underwater reefs at depths of five metres or more. Natural sponges

have a light honey colour but are sometimes chemically bleached to give them a light yellow. This is more spectacular, but the sponge loses its quality and durability.

The epicentre of marine sponge collecting was the Greek island of Kalymnos in the southeastern Aegean. There is little fertile land on the volcanic island, so people have been forced to seek their livelihoods here as fishermen but also as divers in search of sea sponges. Their skills passed down through the centuries from generation to generation, were



so specific that the Turkish sultans granted them many privileges and tax exemptions. This is quite understandable, as the comfort and, therefore, the performance of the Ottoman soldiers depended on a regular supply of sea sponges.

Until modern times, sponges were collected by a simple method, and divers did not use any special equipment. The crew went to sea in small boats and used an ordinary glass-bottomed barrel to find sponges on the seabed. When a diver spotted a sponge, he usually lowered himself to it naked using a rope and a weight called "scandalopetra," a 30-pound flat rock. After cutting the sponge from the seabed, the diver placed it in a special net. The depth and time the divers reached depended on the capacity of their lungs. Often they would dive down to 30 metres below the surface and stay there for three to five minutes.

In 1865, a revolutionary diving suit including a special helmet called "skafandro" in Greek was introduced to local divers. The benefits seemed enormous. Divers could stay underwater as long as they wanted and dive to greater depths, as the best quality sponges grow about 70 metres below the surface.

Sponge harvesting profits were high, and divers' working conditions were better than those of "naked" diving. But then came the terrible toll of this prosperity. After surfacing, divers staying underwater for long periods suffered from decompression (caisson) sickness. Its symptoms - severe pain, paralysis, and, in some cases, death — were terrifying to divers and other crew members because they had no idea what was causing them.

The combination of several deep dives a day and surfacing without decompression stops had fatal consequences. Between 1886 and 1910, several thousand divers died on Kalymnos, and several thousand more were permanently disabled. Knowledge of decompression did not reach the remote Greek islands until just before the First World War.

The growth of the sea sponge trade peaked around 1900, but later, various trade restrictions caused divers to emigrate from Kalymnos and the surrounding islands. They made famous, for example, the small town on the west coast of Florida, Tarpon Springs, where, in 1905, a group of about 500 divers arrived from the Greek archipelago of Dodecanese, which includes Kalymnos.

Trade complications, the emigration of professionals and the introduction of synthetic sponges on the market caused the near extinction of the tradition of collecting sea sponges in Kalymnos. But the biggest problem occurred in 1986. That was when most of the sponges in the Eastern Aegean died. The cause was never found. It may have been a sudden rise in sea temperature. However, similar infections occurred in the Gulf of Mexico in the 1940s, 1970s and 1990s. Thus, a few years ago, only ten ships specialising in sponge harvesting were operating on Kalymnos — by comparison, in 1868, four hundred ships with a crew of ten went to sea regularly.

Today, the risks associated with sponge hunting are minimal, mainly due to modern equipment and technology. Still, sponge harvesting has largely shifted from traditional Mediterranean locations to the Gulf of Mexico and the Caribbean. So, when you buy a sea sponge at a seaside resort in the European Mediterranean, it will most likely be imported from Florida and the surrounding islands. You can also buy a replica of an ancient Greek helmet and stuff it with sponges. Better yet, get the best in helmets — a helmet from Area4Industries.

Behind the Show: How every Helmet is Made

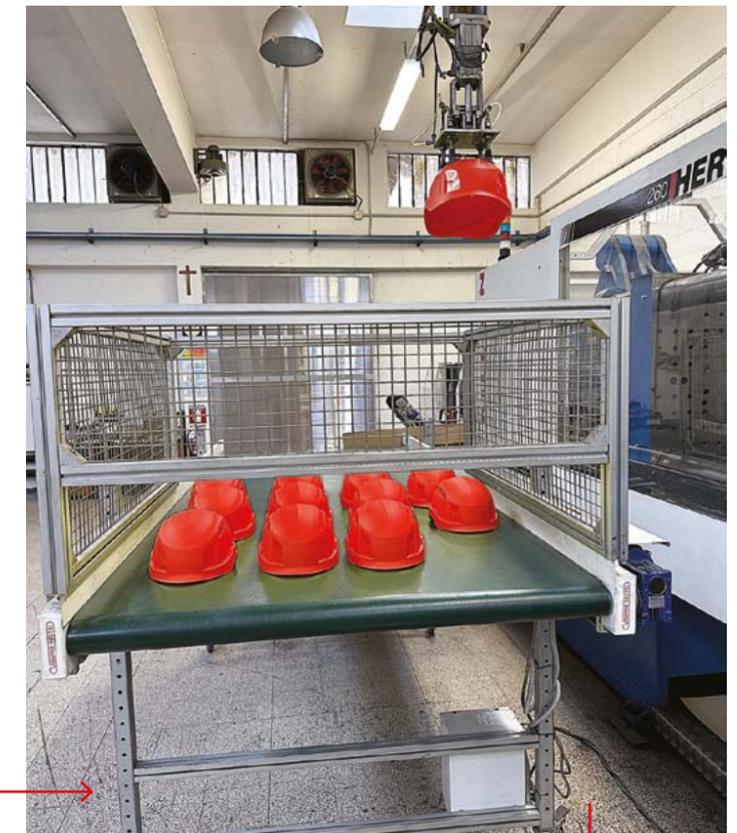
Get ready for an exciting excursion into the world of our helmet!



The helmet is produced through injection molding, with the base material being a PP copolymer.

Injection molding is an industrial production process in which a plastic material is melted (plasticized) and injected at high pressure into a closed mold. The mold is opened after the material solidifies.

High precision on the molds and a fully automated process deliver the final product ready for internal padding.



Thanks to our experience gained over the years, we have combined safety and protection with lightness and comfort.

The combination of these four needs is the ideal condition for helmet wearers, allowing them to focus on their activities in the working environment.

The result is a stunning and highly comfortable helmet designed for rigging professionals.

It provides a maximum level of safety and security, remaining lightweight and resistant even at low and high temperatures.



First Rigger Helmet

Meet our new helmet, to be appreciated by riggers and all who work at heights. Area Four Industries presents its new proprietary helmet. It has been designed to meet the stringent requirements of riggers and other related professions.



Discover more
with the QR code



Browse through our Collection of A4I Merchandise

Whether you're a professional Stage-Hand, Rigging Expert or just a fan of our products, we have clothing that will both please and impress you. Take advantage of the SPECIAL edition A4I T-shirt, made from high-quality cotton and features an original-themed Trussing & Rigging print. This T-shirt is perfect for any occasion and popular with our customers.

A4I Merchandise is a great way to show the world your passion for the Trussing & Rigging industry.



Discover more
with the QR code



Precisely aimed on Customer Satisfaction

Prolyte brings something new every year. Founded in 1991 in Leek, The Netherlands, Prolyte has quickly become famous around the world due to its in-house expertise, one step ahead mentality, and energy.

The brand's focus is on customer satisfaction which inspires riggers and industry professionals to discover new horizons within the world of events.

Prolyte is renowned worldwide for its iconic products including the H30V, VERTO and MPT Tower. The H30V is used by most professional rental houses worldwide as they are recognised for their strength and durability.

The latest feature of Prolyte is the VERTO coupling system, which is known for its fast and silent connecting system.

Prolyte is part of Area Four Industries since 2019; world's largest manufacturer and supplier of aluminium and steel trusses, stage platforms and rigging material, making the implementation of larger projects a lot quicker and easier.

Prolyte is continuously striving to make a Rigger's work a whole lot easier.

- **Any kind of satisfaction; primarily customer**
- **Manufacturer not reseller**
- **One step ahead mentality**
- **Combining high craft & cutting-edge technology**
- **Always iconic, new products & solutions**





Jeroen Slotema

Prolyte Operational Manager

Witnessing the Live Events

For those who may not be familiar with Prolyte, tell us a little about the Prolyte brand and your responsibilities.

Prolyte is a renowned company specialized in truss, staging and lifting solutions. We provide high-quality products and services for events, concerts, theatres, and other live entertainment industries. As for my role within the company, I'm responsible for the operational activities in the entire organization to ensure that we are aligning our operation with the needs of our partners and the industry.

How did Prolyte get to the top of the Truss and Staging market?

First of all Prolyte is committed to providing cutting-edge, safe and reliable products that meet the demands of our industry. Combining these products with the innovative mindset is what set us apart in the market. We have a skilled and dedicated team of professionals who are passionate about creating solutions that create the best experience for the audience. We also actively engage with our partners, gathering feedback and continuously improving our products to meet the ever-evolving needs of the market.

What are the biggest challenges and joys of working in this industry?

The live entertainment industry is dynamic and exciting, but it comes with its unique set of challenges. The biggest challenges include maintaining the safety standards and keeping up with rapidly changing technology and demands. The greatest joys come from witnessing the magic of live events, being part of a creative community, and knowing that the products we provide play an important role in making those events possible.

What are the most interesting projects you have worked on?

It's hard to mention a specific project that was the most interesting. Throughout the years I had the luck to be part of many projects within Prolyte where we were able to show our experience and utilizing the solution mindset of our team. This ensures that every project we are working on is a great and new experience.

What is your favourite event that you have participated in as an employee or spectator?

As a spectator I visited many different events from the smallest scale to the bigger outdoor festivals. The ones that truly stand out were the festivals that are running multiple days, where every day brings a new experience. Tomorrowland in Belgium is a great example where you are not only a visitor at a festival, but you are witnessing a live story telling. This shows for me the reason why we are part of this awesome industry.

How do you maintain a good mood and humour at work?

As we fully understand the importance of work-life balance, humour is a very important part in our day to day working life. This is what makes the team as strong as it is. At Prolyte we have a very diverse team, a good mix of younger talents and more experienced people. The thing that unites us is the huge passion for our industry. Combining these characteristics creates a team that is very enthusiastic and supportive.

How do you rate the quality and safety of the products and services offered by PROLYTE, and how does it strive to continuously improve them?

At Prolyte, quality and safety are paramount. We have rigorous quality control processes in place, and our products adhere to international safety standards. We continuously invest in research and development to innovate, improve, and extend our range of products. We participate in Norm groups, invest in sharing knowledge, train our users all over the world making sure our products are used how intended and in the safest possible way.

Prolyte is a company that certainly has a lot of satisfied customers. What is the overall customer relationship? Is there any way you show gratitude to customers for their long loyalty?

The greatest asset of Prolyte is of course our network. We try to maintain a very close relationship with our partners and by working together we are able to provide an excellent service to the users. One way of showing our gratitude are the Blue Heart-ers. A program to show that we value our partners, users and ambassadors of the brand by giving them this award.



Musical Dome in Cologne

The Musical Dome in Cologne has been hosting the spectacular Broadway musical "Moulin Rouge" for over a year now. Mehr-BB Entertainment extensively rebuilt the theater right next to Cologne Cathedral using a large amount of PROLYTE trusses. In addition to a visual makeover in entrance and foyer, this also included an extensive redesign of the stage technology and the auditorium.

It is the largest and most spectacular transformation the Musical Dome has ever experienced. The entire theater is unrecognizable and the large hall is completely resplendent in the splendor of Paris' most famous nightclub, the Moulin Rouge.

Countless chandeliers float above the spectators, everything is wrapped in red velvet curtains and the typical Parisian windmill and the world-famous blue elephant sit

enthroned between the magnificent, gold-decorated walls.

Technically, the Musical Dome presented a lot of challenges. The theatre was first put into operation as a temporary venue in 1996 and no one expected it to remain in operation for such a long time. Due to a lack of hanging points in the theater, a prerig made of Prolyte M145RV and lots of H40R, H30V and H30D trusses was used for the elaborate decoration including new sound and lighting technology. The entire rig hangs on a total of four side supports and spans the entire, almost 30m wide auditorium.

But a lot has happened not only in the auditorium. The stage house also received a major upgrade and was brought up to the latest technical standards. In order to meet production requirements, the entire upper machinery was replaced, among other things. In

addition to new cable winches and controlling systems, Prolyte trusses were also used as a supporting structure.

A truss with a height of 125 cm was developed specifically for the project in Cologne. "The length of the span was not the problem in this case," remembers Jens Kannacher from Prolyte. "The type of load in combination with the requirement for very low deflection and a certain rigidity of the entire system made a custom-made product necessary. Larger systems from our range would have been too heavy or the height would not have been appropriate. Therefore, we used a modified truss based on our B100 truss for the project. The result speaks for itself. The stage design is gigantic and you completely immerse yourself in another world. A visit to the Musical Dome is worth it for that alone."

© Mehr-BB Entertainment GmbH

Questions often Asked When People See Verto for the First Time



Wilfred Hovinga

Prolyte Account Manager & Project Manager



Is the loading capacity the same as a standard H30V and H40V?

Yes Verto is based on the H30V or H40V, it has a similar design but is equipped with Verto rotating coupling system. The structural properties are identical.

How much faster is building the Verto system?

Since the Verto does not require the use of any tools and needs no additional pins or clips it is much easier to build. This saves significantly in time. Compared with building with the traditional conical coupler system it can save up to five times the build time of a structure.

Can we build a ground support tower system of Verto items?

The Prolyte R&D team keeps improving and extending the Verto range. A complete selfclimbing tower system will be introduced on short notice. A ground support will be certainly be possible to build, I would suggest to follow the development of the Verto range!

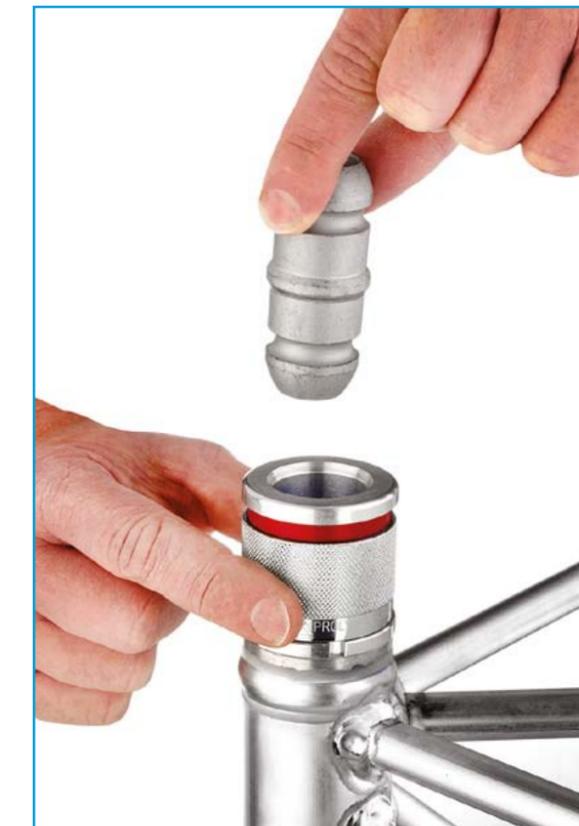
Why should I buy Verto if it is more expensive than traditional truss?

Verto is indeed more expensive due to the more complex receiver. Due to the fast and easy assembly and disassembly a lot of costs can be saved by decreasing expensive labor time and crew-size. Besides that, the fact that building a Verto system is absolutely silent, it gives also the possibility to build a structure at any time. Ideal for schools, theatres, hotels and venues. Your crew can even start building when there is another event ongoing at the same time.

What is the biggest advantage of Verto?

There is not just one advantage, Verto builds smooth, without any tools and noise.

Verto does everything a truss should do and more and fits within our philosophy by having foolproof light weight systems.





How does the system work?

This system is a full modular system. It works like a matrix frame. You have the main upper suspension bars and underneath in a 90 degrees angle you can attach the lower bars which will take the led panel adapters. Due to the slotted profile the lower bars can be slid in any position which matches the size of the panel. The led panel adapters are adjustable in height, so in case of any deflection you can adjust them in the right position. The led panels can be bolted to the panel adapter.

What makes this design so unique?

This system is a full modular system. You can create a led ceiling in almost every measurement. The slotted profiles are available in different length and you are able to create a free span in both directions of max. 3 meter, which means that for an led screen of 3x3 meter you only need 4 suspension points. You can prep the system in your warehouse, so the installation on site is very easy and quick. The great part is that it can be assembled without the use of any tools.

Is it suitable for all brands of LED panels?

As long as the panels have wire thread holes in the corner of the panel, you will be able to attach it to the adapter. The panel adapter has a modular mounting plate which can take a M8, M10 or M12 bolt.

Do you need a sub structure for the LSU HS system?

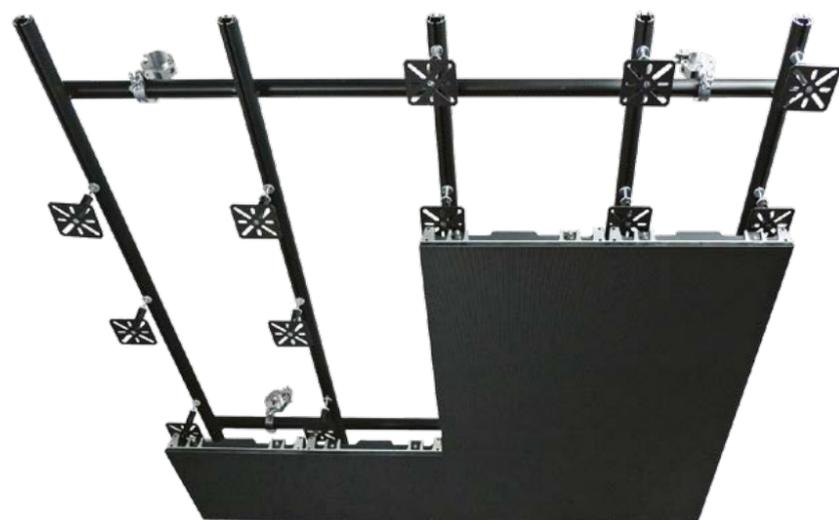
It is not necessary, but depending on the size of the screen a sub-structure can make you life more easy. If you have to create a led ceiling in a temporary demountable structure, than normally you attach the the matrix frame to the truss structure. This can be done by the use of standard cell clamps, in this case a double clamp with a width of 30 or 50mm, so standard equipment. For fixed installation you also can choose to suspend the matrix frame from steelwire rope in combination with a cell clamp which has a lifting eye. So there are more options available

Where can I get this product?

Prolyte has a world wide distributor/dealer network. We are active all around the globe.

All the information about our network can be found on www.prolyte.com/dealer.

More information about the LSU HS system is available at: www.prolyte.com/products/led-wall-support-solutions/indoor-led-wall-support/lsu-horizontal-suspension.

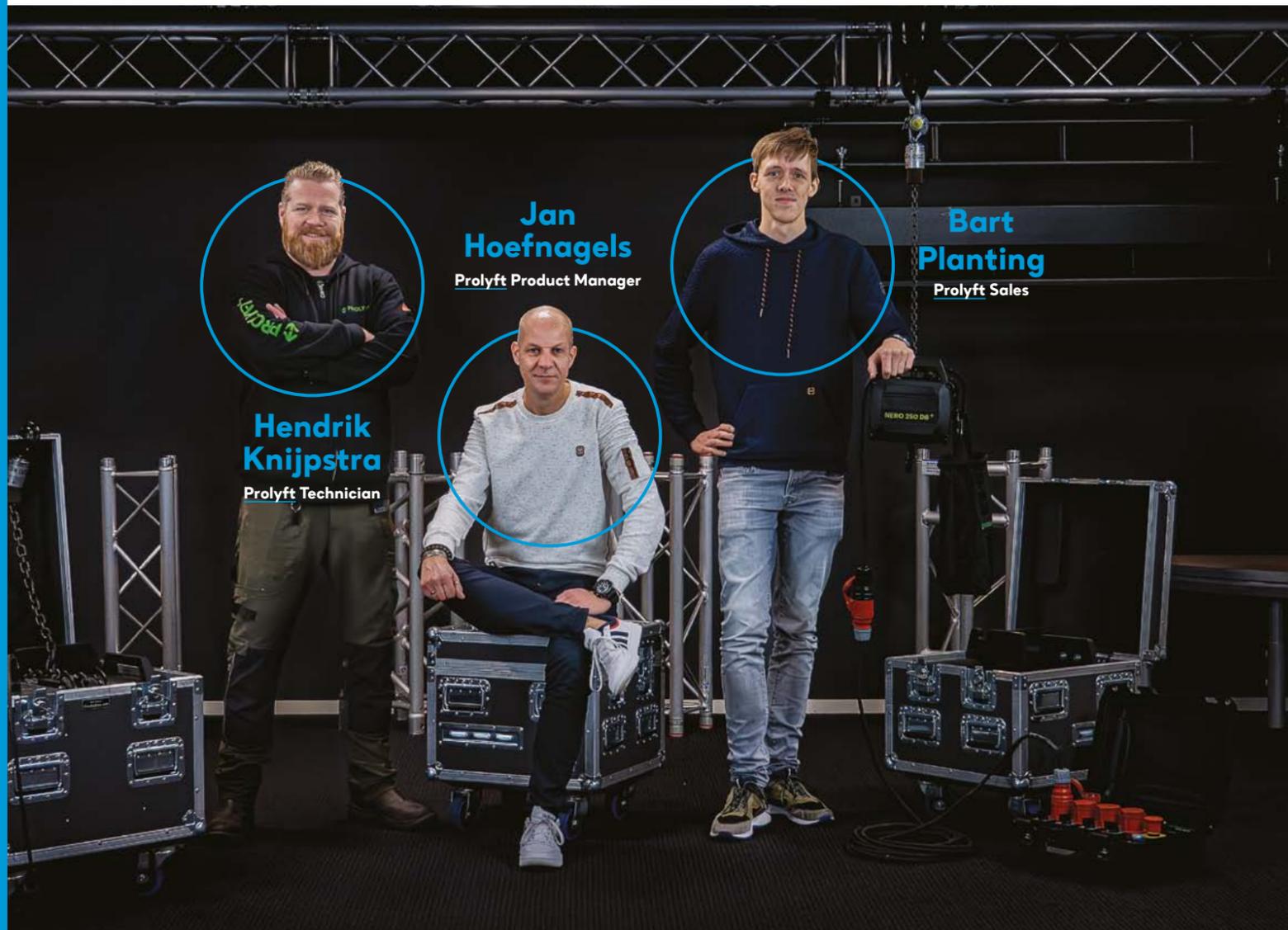


Eric Laanstra
Prolyte Product Manager

LED Screens in a horizontal position

How did you come up with the idea of a horizontal suspension system for LED panels?

We follow the trends of the market. Nowadays video is an important part of a show and we develop products that fulfill the needs of our customers. There are hardly any solid solutions available in suspending led screens in a horizontal position. If you look around you will notice that people invent their own systems and have to put a lot of effort and material into creating a ceiling from led panels. We have stepped in that gap and designed an easy to install system, just based on one special profile in combination with led panel adapters



At Prolyft, we have an eye for detail and safety.

Who are the Prolyft team?

The Prolyft team consists of Jan Hoefnagels, Bart Planting and Hendrik Knijpstra. Jan Hoefnagels is the product manager and with his years of experience as a rigger in the event industry, knows exactly what requirements a hoist must meet today. He is mainly involved in the further development of the hoist and all accessories. He also provides the information to the sales and marketing department and provides product training to distributors and service points.

Bart Planting has been a familiar face in the sales department for years. Bart takes care of the sale of the hoists, purchasing the parts and managing the stock. In the workshop we find Hendrik Knijpstra as the Prolyft technician. Hendrik knows all Prolyft hoists inside and out.

He assembles the hoists and does the initial certification of the hoist before it is shipped to the customer. Hendrik also provides the service point training to keep our service point employees up to date.

What is Prolyft's product range?

Prolyft mainly produces electronic chain hoists, specially made for the event industry. The hoists are assembled in the Netherlands and equipped with the right electronics to make a direct controlled or low voltage hoist. At the moment there are two series. We make Nero and Nero E. Nero is the standard hoist with a standard limit switch on both the direct controlled hoist and the low voltage hoist. Nero E is only available as a direct controlled hoist and without a limit switch.

All hoists are D8+ and comply with all European directives.

You can choose from a 250, 500, 1000 and 2000kg capacity hoist. In addition to the hoists, there are also various controllers available and all the cabling needed to connect a complete system. We can also provide the necessary accessories such as flight cases, rain covers and chain bags. Prolyft is the one stop shop for all rigging rental companies that consider safety to be of paramount importance.

What makes Prolyft so unique?

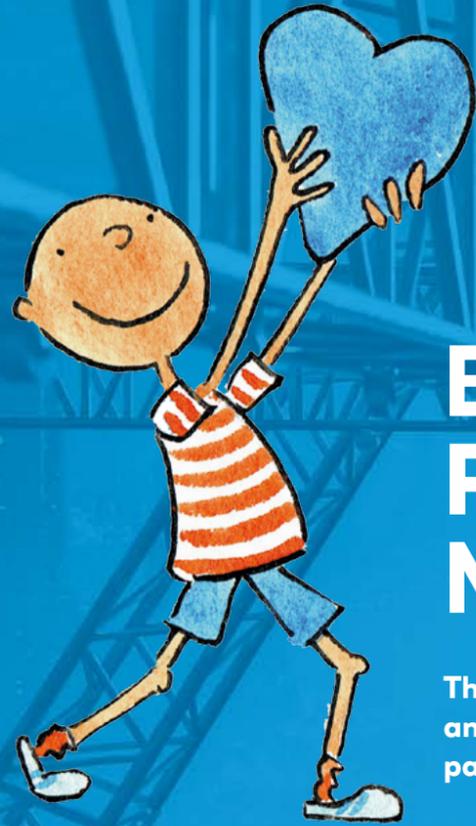
At Prolyft, we have an eye for detail and safety is a main priority. We therefore believe that all hoists should be equipped with limit switches. This is not only for safety but also for the lifespan of the hoist. We have made it easier to have the hoist serviced and certified annually by our completely renewed database. Every hoist that is sold is registered in this database and can be accessed by any owner. He can see his own hoists in the database with all the checklists and certificates.

Furthermore, he has the option to add additional documents to his hoist.

The database also contains general documents, such as the instructions for use. The annual maintenance and inspection not only ensures that your hoists work trouble-free and safely, but also entitles you to a lifetime warranty.

What are the plans for the future?

The continued development of our products has the highest priority. For example, we are busy upgrading the control boards. This makes it possible to exchange or modify control boards in a simple and fast way. Furthermore, the demand for built-in load cells and encoders is increasing, so we are also looking at the possibilities of integrating them into a new series. We are also currently working on a new controller range as Prolyft thinks it should be idiot-proof and easy to operate. Made to survive a world tour.



Blu Hearter. Partnership That Matters.

The Blu Hearter awards represent the love, gratitude and appreciation Prolyte gives and receives from loyal partners, valued customers, friends and family.

Cenk Yildiz

owner and founder of Focus Turkey

Competitive, hard-working and visionary, Cenk is known for daring to imagine and set new industry standards. When nominating Cenk as our Blu Heart-er, he expressed "feeling thankful for being part of this big family Prolyte is".

Jochen Habermann

from VERANTEC

You might remember our "Circular Roof" project, which we launched last year. Well, Jochem was significantly involved in the development of the "PROLYTE Circular Roof" and has been using it regularly and with great success since its delivery in the summer of 2022.

Louis Teo

Managing Director of Lighting & Sound Distribution Asia

Louis Teo and Lighting & Sound Distribution Asia have offices in Singapore and Malaysia, being a Prolyte customer for more than 15 years. During all these years, Louis mentioned that the Stagedex is his favorite Prolyte product, due to its versatility and flexibility. When asked how did he feel being nominated as a Blu Heart-er, Louis commented "it's great being a part of this family, the 'blue' family".

Erwin Sasburg

from Rolight Theatertechnik

Erwin has been part of Prolyte's journey with Rolight for almost 16 years now. For him, StageDex and its unique option of placing the railings are his favorite of Prolyte products; however, it is not as favorite as the people that are working for the company in Leek, he said. "I am honoured and see it as a reward for all the energy I put in the relation with Prolyte over all those years", mentioned Erwin about his very well-deserved award.

Sijmen Hoekstra

owner of Showdesign

"We believe that every moment, no matter how big or small, can become a special and therefore unforgettable moment." With this beautiful saying from Sijmen, we thank him and his team again for their loyalty, gratitude and appreciation!

Tom Chennells & Adam Nicholls

from Yes Events

When asking them how they felt about being nominated for the Blu Heart-er award, they replied: "We are very grateful for being nominated and the relationship we have recently been able to build with Mike and the team at Stage Electrics! Hopefully, this forms the next chapter of our long history of working with Prolyte. The products form a literal framework for everything we do as a company, so I think the analogy of them being at the heart of our business is a really nice way to think about Prolyte."

Lars Elmund

from Bellalite

Lars is known for his witty sense of humour, his honesty to speak his mind and his energy to walk a thousand miles. Most of all, he is known for being a strong believer in Prolyte. He has shown his support in us in many ways and we appreciate him for it. Lars was nominated by his close friends at Prolyte. Therefore, we at Prolyte wanted to show our appreciation to Lars by giving him a moment to shine in the spotlight.

Petter Norby

founder of Rubicon

Petter founded Rubicon in Norway, back in 1993, and has become a respected man in the business. Prolyte trusses entered Rubicon 20 years ago in a big rental company that later turned to become a distributor of quality products. He joined the Prolyte family in 2011 and has been a loyal member ever since.

Navigating the Intricacies of Staging and Rigging in the Netherlands Unveiling Fascinating Insights

The Netherlands, known for its rich cultural heritage and innovative spirit, extends its influence beyond art and architecture into the realm of staging and rigging. This article delves into the captivating world of staging and rigging in the Dutch context, uncovering unique facets of the business that play a pivotal role in shaping breathtaking events, performances, and exhibitions.

INNOVATIVE STAGING DESIGNS

The Dutch staging and rigging industry is celebrated for its penchant for pushing creative boundaries. Ingenious stage designs that seamlessly blend technology, artistry, and functionality are a hallmark of Dutch productions. From dynamic kinetic sculptures to interactive LED displays, Dutch staging designers are renowned for their ability to transform spaces into immersive experiences that captivate and engage audiences.

AMSTERDAM'S CUTTING-EDGE ARENAS

Amsterdam, the cultural heart of the Netherlands, boasts a collection of cutting-edge venues that showcase the country's prowess in staging and rigging. The Ziggo Dome, a marvel of modern architecture, offers a flexible canvas for innovative stage setups, while the Heineken Music Hall (now known as AFAS Live) is renowned for its adaptable rigging systems that facilitate seamless transformations between events of varying scales and genres.

SUSTAINABLE RIGGING PRACTICES

Reflecting the Netherlands' commitment to sustainability, the staging and rigging industry has embraced eco-friendly practices. Dutch companies are at the forefront of developing ingenious rigging solutions that minimize environmental impact through energy-efficient lighting, recyclable materials, and modular stage designs that reduce waste. This

dedication to sustainability showcases the industry's holistic approach to innovation.

ENGINEERING MARVELS IN ROTTERDAM

The port city of Rotterdam, with its striking modern architecture, is a hub of engineering marvels that extend to the staging and rigging domain. The Ahoy Rotterdam, a multifunctional event complex, exemplifies Dutch engineering ingenuity with its sophisticated rigging systems capable of accommodating elaborate productions and massive sets. These technological advancements enable seamless transitions between performances, enhancing the overall audience experience.

COLLABORATIVE MULTIDISCIPLINARY APPROACH

The Dutch staging and rigging industry thrives on collaboration, with professionals from various disciplines coming together to realize ambitious visions. Architects, engineers, lighting designers, and artists collaborate closely to ensure that every element aligns harmoniously, resulting in visually stunning and technically flawless productions. This multidisciplinary approach not only yields breathtaking results but also fosters innovation through diverse perspectives.

CONCLUSION

The Netherlands' staging and rigging business is a captivating blend of innovation,

sustainability, and artistic prowess. From transforming Amsterdam's arenas into immersive spectacles to engineering stunning rigging systems in Rotterdam's event venues, the Dutch demonstrate a remarkable dedication to pushing boundaries and creating unforgettable experiences. As the industry continues to evolve, it serves as a testament to the country's enduring commitment to blending technology, art, and creativity to mesmerize audiences around the world.

Dutch companies are at the forefront of developing ingenious rigging solutions that minimize environmental impact



Steel and Rocks Are Moved

Stage constructions have a straightforwardly planned life. After they are conceived and constructed, they move like nomads from event to event, where skilled hands assemble and dismantle them in an admirably short time. But what if all sorts of valuable buildings, prophesied to last forever, find themselves in the wrong place at the wrong time?

In 1975, a relocation operation ended in South Bohemia, the protagonist of which was the last surviving Empire-style chain bridge in Central Europe. Its steel bridge structure is the closest to the stage structures.

Built by the Czech constructor Vojtěch Lanna based on the project by Austrian engineers Gassner and Schnirch, it bridged the Vltava near the village of Podolsko in 1848 to 1960. After the filling of the Vltava dam Orlik, the bridge, at that time already a cultural monument, would be submerged and therefore it was decided to carefully dismantle it, document it and store it in a place outside the flooded bank. An offer to buy the bridge came from abroad in the 1960s, but it was rejected and it was decided to move and rebuild it later. The dismantled bridge had to rest for ten years in temporary storage before a picturesque location on the smaller Lužnice River was chosen from several possible sites. The 2000 numbered stone parts were stored there, while the metal parts were placed in a covered warehouse, cleaned and preserved.

There was even more trouble with the project itself. When a new bridge is designed, the optimal solution for the given obstacle and traffic parameters is always chosen. In the case of the relocation of the bridge from Podolsko, the architect was given not only the valley but also

the ready bridge, which had to be harmonised with a differently shaped valley in such a way that it looked as aesthetically true as possible, met all the strict requirements of the conservationists, and could be used for traffic. Since the Lužnice valley is much narrower and steeper, the bridge, with a total length of 147 metres, had to be placed diagonally so that the connection to the road was as easy as possible on both banks.

The main load-bearing structure of the bridge consists of four chains arranged in two pairs. The chains are supported by an upper — larger — and a lower — smaller — circular iron segment, which serves as a sliding bearing, on two stone pylons — gates 10 metres high above the road. The weight of all the iron parts of the bridge is 102.65 t.

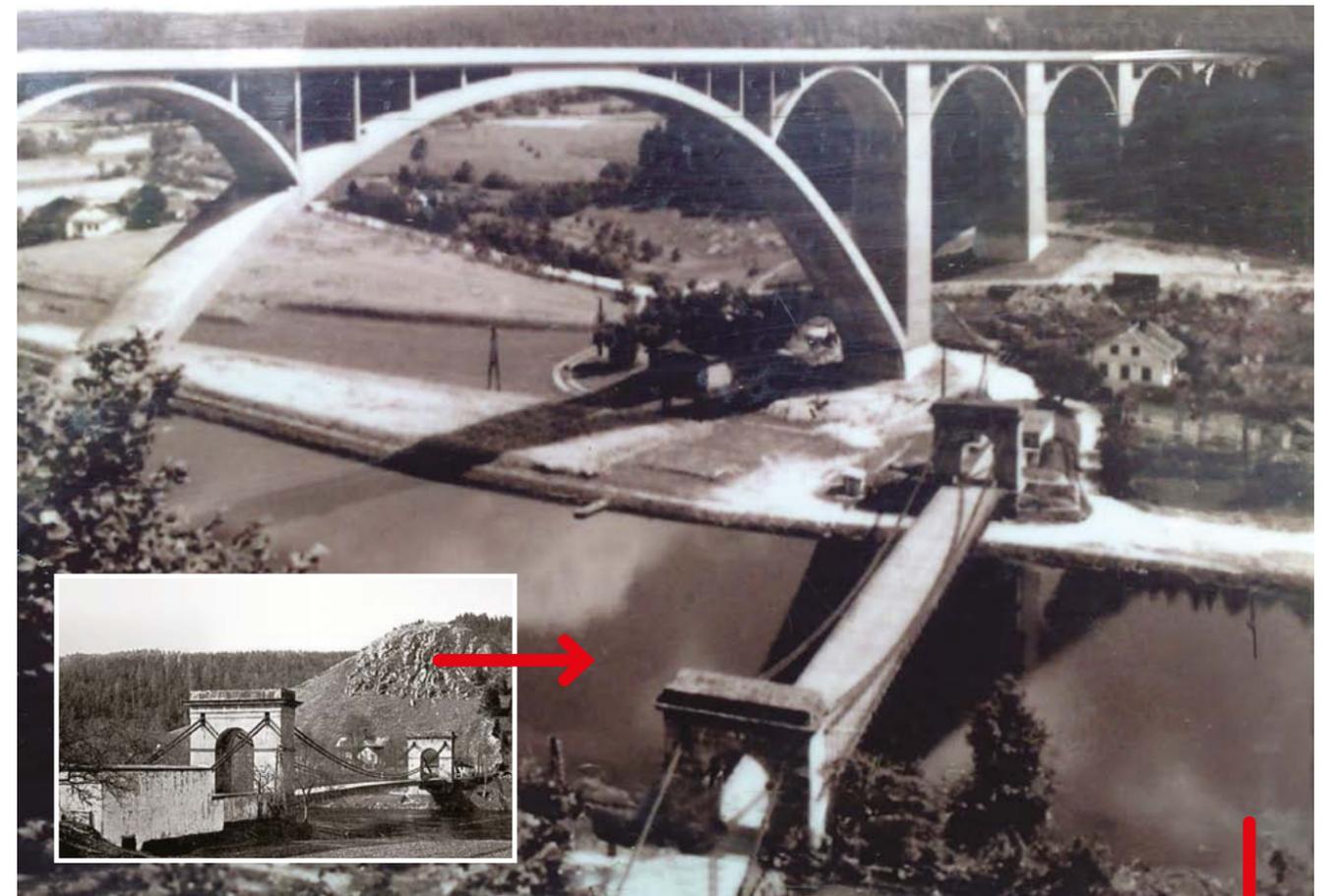
The question of the painting of the metal parts, especially the chains, was examined with the care appropriate to a historical work. Their surface showed much less corrosion than would have been expected of a hundred-and-twenty-year-old building. This could be explained by the properties of the iron in the way it was manufactured and processed at that time, but also by the relatively large thickness of the repeated coatings. Originally, all the iron material and wood on the bridge were painted with graphite mixed with coal tar.

The bridge from Podolsko was reassembled in Stádlec for practical use too. However,

very early it was clear that the level of use would have its limits with regard to material and dimensions. The bridge is made of welded iron. What its properties were was a question, because it was only forty years after the bridge was built (in 1887) that the standard of welded iron for bridges was first officially defined. Today, vehicles weighing up to 1.5 tonnes are allowed on it.

The new construction of the old bridge was completed after five years in 1975. It is still in service today and no one would have guessed that it once stood on a completely different site.

The 2000 numbered stone parts were stored there, while the metal parts were placed in a covered warehouse, cleaned and preserved.





MILOS project, S-MR10, Bergen, Norway (2023)

TOMCAT believes in making trusses that are built to last

The TOMCAT story began with one man's vision. Texan Mitch Clark foresaw the extraordinary potential of truss. In 1985, he started his own business and founded a brand that has since met with unequalled and unfailing success.

This success is not only the result of paying attention to each and every product, but also building renowned customer service.

This combination brought rapid success in the U.S, Canada and South America. In 2013, Will Todd was appointed Chief Operating Officer.

TOMCAT believes in making trusses that are built to last. Because TOMCAT understands what life is like "on the road", which combines structural power and industrial design beauty that could be found in TOMCAT Products.

By sourcing our own parts, and new materials from medium sized producers we know personally, and producing our products in our own factories, we have control over every step of production process. This ensures the utmost quality and consistency in every single piece of genuine TOMCAT product we produce.

Looking to the future, the TOMCAT brand plans to continue to dictate and define the direction that the truss and support structures take in the American market. Leading by example.

Strength Under Pressure. It's engineered into everything we do.

- **Robustness**
- **Build to last**
- **Long-term partnership**
- **American technology**
- **Huge structures**

Made in the USA

Hey Will! It seems like just yesterday we sat down to chat for our last magazine interview, what has been happening over in the U.S. market?

2023 has been a challenging year for us in the US/North American market. Most of our market segments have been very strong this year as we continue to recover from the COVID shutdown. That being said there have been economic situations that started to affect our markets. The fight against inflation has made it more difficult for our customers to borrow money for purchases, and the writers/actors strike has forced our film and television customers to put their projects on hold. Luckily, the writers' strike has now ended and with any luck, the actors will come to an agreement, and that strike will end soon as well. In 2024, we are finally going to launch the EXE brand of chain hoists into the US market. This brand has been extremely successfully for us in Europe and we are excited to finally offer the products in the US.

We often talk about how TOMCAT has had a very loyal customer base over its 36 years in business. Do you have any customers that have been around since the very beginning that still buy TOMCAT products?

I do believe that TOMCAT/JTE has a loyal customer base. Companies like Stage Rigging, Production Rigging Resources and Feld Entertainment are a couple of examples. That being said, we can never stop working with our customers to make sure we are providing the products and service that our customers need.

Why do you think this is?

We are a customer driven organization so maintaining our relationships with our customers is a priority for us. Having high quality products and being able to provide customers with on-time deliveries has helped us maintain and keep our customers.

In our last interview we talked about the new designer you hired that is focused on new product development. Can you give us any hints as to what new products may be coming our way?

There are several new products that are in the pipeline. We have a new touring PRT product, a new large format LED wall support truss, new corner block design for 12" plated

products, a fresh take on 12" and 20.5" products, and a refreshed Roof lineup. We will start releasing these in Q4 of 2023 and continue into 2024 and beyond. Product Development as a whole has traditionally been a struggle. We try to dedicate time to development, but it was often easy to move our resources back onto customer needs. Now with a dedicated product development designer on staff, we have finally been able to dedicate steady resources to product development and that effort is showing with the products we have in the pipeline for release.

Last time we spoke about the robotic inventory system you purchased. How's that working out, and do you have plans to add any more robots to TOMCAT?

We finished the installation of the Modula VLM at the end of July of this year. Since then we have loaded all TOMCAT & JTE warehouse components into the machine. We are now working on loading Milos and Prolyte items. So far, knock on wood, everything has been working very well. We have dedicated people that have access to the machine to pull items as needed for sales orders. Because of this success with the VLM, we are now working on an entire new factory layout project that will help us maximize our production flow.

TOMCAT has had many shirt slogans over the years, which has been your favorite?

Without a doubt my favorite shirt slogan that we have done is "All a Rigger wants is Power and Control." This is so simple and oh so true for anyone that has been on a show floor for a load-in or strike.

We can never stop working with our customers to make sure we are providing the products and service that our customers need.



Will Todd
TOMCAT President/CEO



The Salt Shed

This permanently installed outdoor roof structure was built in 2023 for The Salt Shed, a new entertainment venue created in and around the original Morton Salt factory in Chicago, Illinois.

TOMCAT was contracted by Upstaging to design and manufacture this 56'-6" x 45'-5" roof featuring steel towers to help reduce usage of guy cables.

Working closely with Upstaging on design elements and requirements, TOMCAT delivered this custom roof in time for the outdoor season to begin with Tyler Childers performing on June 8, 2023.

TOMCAT TURA

The latest touring truss solution from TOMCAT, TURA allows you to configure the truss the way YOU want to use it. With multiple options and hundreds of possible configurations, TURA can integrate into your workflow based on your specific needs and desires.

Based on a 14" tall by 24" wide format, TURA was developed with ease in mind. TURA has a completely open bottom, making fixture loading simple and easy. With the single exception of the connection hardware between trusses, there is no loose hardware anywhere on the truss. TURA is also lighter than other products currently available with the flown weight of an 8' section at only 116 lbs. (53Kg), and empty weight with legs at 160 lbs. (73Kg).

Borrowing the PATENTED Verto technology from sister company Prolyte, the leg connection is handled without tools and without pins. All leg types are available in 3 different heights.

The available slimline leg option makes the attachment and removal process easy to handle by a single technician. Additionally, when removed, a complete set of four (4) slimline legs nest together and fit in a space measuring only 8" x 10" x 36", and can be stored on the truss, on a dolly, or simply in an empty road case.

Standardly equipped with a single tube centered in the length of the truss for mounting, this tube can be moved to different locations or additional tubes can be added for more fixture mounting positions. Optional side carriage rails allow the use of adjustable and locking fixture carriages that make fixture loading even easier.

Options include:

- Stacking receiver
- Truss carriage rails
- Traveling mounting carriages
- Nylon protective bumpers
- Long nose, double head clevis (connection) pins
- Low profile dolly for compact storage/shipping
- Slimline legs
- Slimline leg dolly
- Slimline leg truss mounting system.
- Movable hard lifting points
- Cable raceway
- Rotating connection spigots
- Pre-cambered spigots





The historical significance and cultural impact of the music scene in Nashville, Tennessee, often referred to as the "Music City"

Nashville, Tennessee, isn't just a city; it's a symphony of American music history, echoing with the strums of guitars and the soulful croons of legends. Known affectionately as "Music City, USA," Nashville's story is a vibrant tapestry woven with the threads of numerous musical genres, primarily country music, but also encompassing the beats of rock, jazz, blues, and beyond.

THE DAWN OF NASHVILLE'S MUSICAL SAGA

Imagine the late 19th century, a time when music was more than entertainment—it was a lifeline. Here, the Fisk Jubilee Singers from Nashville's own Fisk University emerged, not just as singers, but as cultural ambassadors. These African American artists captivated audiences worldwide, popularizing spirituals and placing Nashville on the global music map as early as the 1870s.

THE GRAND OLE OPRY: A COUNTRY MUSIC BEACON

Fast forward to 1925, and the airwaves of Nashville buzzed to life with the sounds of the "WSM Barn Dance," later known as the Grand Ole Opry. This wasn't just a radio show; it was a revolution in country music. As the longest-running radio broadcast in US history, the Opry became a launchpad for country stars and etched Nashville's name in the annals of music history.

THE 1950S: THE NASHVILLE SOUND REVOLUTION

In the post-World War II era, Nashville shimmered with musical innovation. The city saw the rise of the "Nashville Sound," a smoother, more polished take on country music, pioneered in recording studios that sprang up like musical daisies. This sound, with its lush string

arrangements and backing vocals, catapulted artists like Patsy Cline and Johnny Cash into the stratosphere of fame.

BEYOND COUNTRY: NASHVILLE'S MUSICAL DIVERSIFICATION

But Nashville's tune didn't stop with country. The 1960s and 70s saw the city strumming the chords of rock, pop, and even R&B. When Bob Dylan recorded "Blonde on Blonde" in Nashville, it wasn't just an album—it was a statement that Nashville's musical prowess knew no boundaries.

TODAY'S MELODIC MOSAIC

Modern Nashville is a kaleidoscope of sound. From the iconic Ryman Auditorium to the intimate Bluebird Cafe, the city's venues are pulsating with diverse musical genres. The city is a magnet for musicians, producers, and songwriters, continuously brewing a potent mix of creativity and innovation.

NASHVILLE'S ENDURING CULTURAL SYMPHONY

The spirit of Nashville is immortalized not just in its past legends but in its ongoing influence. It's a city where music is the heartbeat, a place where every street corner, café, and bar resonates with the echoes of musical greats and the vibrant energy of emerging artists.

EPILOGUE: A CITY OF ETERNAL MELODY

In Nashville, every note tells a story, and every melody paints a picture of America's rich and diverse musical heritage. From the historic echoes of the Fisk Jubilee Singers to the legendary stage of the Grand Ole Opry, from the polished Nashville Sound to the eclectic beats of today, Nashville stands as a testament to the enduring power and evolution of music. It's not just a city; it's a living, breathing museum of melodies that continues to inspire and enchant musicians and music lovers across the globe.



Bowerbirds Are Genius Stage Builders

There is a little bird that, like man, builds stages for concerts, theatre and entertainment. From these, like music stars, the birds show off to their fans and expect applause. They are called the bowerbird and live in northern Australia and the surrounding islands.

Bowerbirds (family Ptilonorhynchidae) number twenty species and form a small group of songbirds. Unique among birds is their extraordinary artistic and constructional ability, necessary for successful reproduction. Indeed, during evolution, the bowerbird has lost the usual male sex characteristics, such as brightly coloured feathers and replaced them with the ability to accumulate wealth and make entertainment. They excel in constructing special love "retreats" called bowers because of their distinctive shape.

IN THE NAME OF PROCREATION

They build intricate courtship structures out of available materials for a single reason — to attract females. Bowerbirds build two types of bowers — one shaped like the hull of a ship or a tunnel, and the other resembles a party tent. In the first case, the inventive songbirds construct two parallel walls composed of twigs that look like an open tunnel when viewed from above. They are usually built on a base of varying thicknesses made of branches or grass. The size and sophistication of the walls vary from species to species. It ranges from a few pieces of material barely forming a continuous wall to an elaborate construction that would put the engineers at Area4Industries to shame. The males then deposit some brightly coloured leaves, stones, fruits, plastic rubbish and other unusual materials they find in the area.

The second type of bower, the tent type, is built by groups of bowerbirds living mainly in the rainforests of the island of New Guinea. The male piles twigs or other suitable plant material (e.g. orchid stems) up to a height of one metre. The bower may also be placed on a flat base of branches. Some species of bowerbirds have perfected this type of bower, forming elaborate structures resembling the fruiting bodies of a large mushroom or a teepee.

The work is far from over with the construction, for the males decorate their creations and their surroundings lavishly. For example, MacGregor's bowerbird decorates everything, including the bottom of the structure, with flowers, berries, lichens, beetle scabs, butterfly wings and other colourful objects. Its style of decorating twigs is also interesting. He carefully

hangs butterfly caterpillar faeces on the ends of the branches.

If the bowerbird's habitat is near people, artefacts such as lids, cans, labels, plastics, etc., are also present. In front of the hatch, we can then see different compositions corresponding to the different tastes of the owner.

Some species also partially cover their tunnel-like bowers with paint. The male obtains this by chewing up plants, which he mixes with saliva, and smears the resulting mixture on the inner walls of the bower. The general preferences of the species and the availability of the various ingredients play an essential role in the choice of ornaments and their arrangement, which is not random but also, to a large extent, the 'taste' of the individual. In general, ornaments that are rare or difficult to obtain in the surrounding environment are the most valued.

SOPHISTICATED COURTSHIP

If the male manages to attract the female by singing, the next phase of courtship begins. The female usually sits close to the bower, which is the signal for the male to start the "dance". This varies from species to species and can be described as ritualised, often strikingly jerky gestures with the wings and body, combined with jumping and running around the bower. The male often holds one of his most exciting and precious objects in his beak in an attempt to attract the female.

The female observes the male's dancing and singing from near the bower, i.e. from the same, and therefore predictable, point of view for the male. It has been found that the male arranges objects according to size so that a change of perspective can occur to create an optical illusion. Objects are, therefore, precisely stacked according to the gradient that flattens space the most. The male thus appears closer, i.e. larger, in the eyes of the female than he actually is!

The males must sensitively choose a threshold where the effect is pronounced but still looks natural. The transition from smaller to larger objects must also be as smooth as possible. Individuals that came closest to this ideal have been shown to have better "pick-up" and therefore reproductive success.

The bowerbirds of most species are now beginning to play a game of hide and seek rather than the expected display of their strengths. They usually move behind the bower so that they are not directly visible. With the decoration in their beaks, they then sing raspingly and mimic other species, only momentarily showing themselves to the female.

They do all this to get the female to stay in and near the bower as long as possible. It has been found that the longer the female stays, the greater the chance of successful copulation. If the male is successful, mating takes place either in the hatchery or in its immediate vicinity, or the pair flies off to "have it off" in the surrounding vegetation.

STAGE MASTERS

Not all species of bowerbirds build a bower, however; some are fine with an outdoor but equally imaginative "stage." This unique courtship style is particularly characteristic of the tooth-billed bowerbird, which inhabits the tropical rainforests of northeastern Australia. First, it thoroughly removes all leaves, twigs and other debris from several square metres of the surface so that the area appears perfectly swept at first glance. He then applies a few distinctive leaves. To make their light underside stand out in the forest's darkness, he turns them upwards. To enhance the effect, he purposefully removes the leaves of the plants, shading this 'stage' to improve its illumination.

The male then spends most of his time on one of several trunks growing near the landscaped area. He announces his presence not only to the females but also to nearby rivals with a distinctive song. The males tend to create their forest "podiums" near others, building a mating area in the sense that they are not in visual but vocal contact.

The whole process of courtship, especially the construction of both the bower and the natural stage, therefore, places extreme demands on the mental abilities of the males. Research also confirms that bowerbirds have, on average, larger brains than comparably sized bird species. And, as with humans, a well-lit and original stage is essential to the success of any show.



EXE Technology: Hoist and DST System

EXE HOIST and EXE DST System: Lifting, Moving, and Rotating.

The EXE Technology world is expanding and every year it enhances its product range with new load managing solutions.

We recently developed a line of compact and ultra-compact chain hoists.

EXE DST is expanding its range with new devices for moving and rotating loads, featuring increased control capabilities and an update on special aluminum rail and truss lines.





Matteo Di Palma

EXE DST Project Manager

Matteo, since when have you been exclusively involved with DST product line, and what is your role?

I have been working with DST product line for about three years now. I personally supervised and coordinated the development of the new Heavy Duty product line from its conceptual stage.

Can you describe the DST world and why it's becoming an increasingly important line within the EXE Technology family?

The DST system was created to handle scenic equipment. In the entertainment industry, it's evident that LED walls have become more prevalent, and this is precisely where the DST line is gaining prominence.

There is a growing demand to move increasingly larger, heavier, and faster LED wall panels; these requests are continuously on the rise.

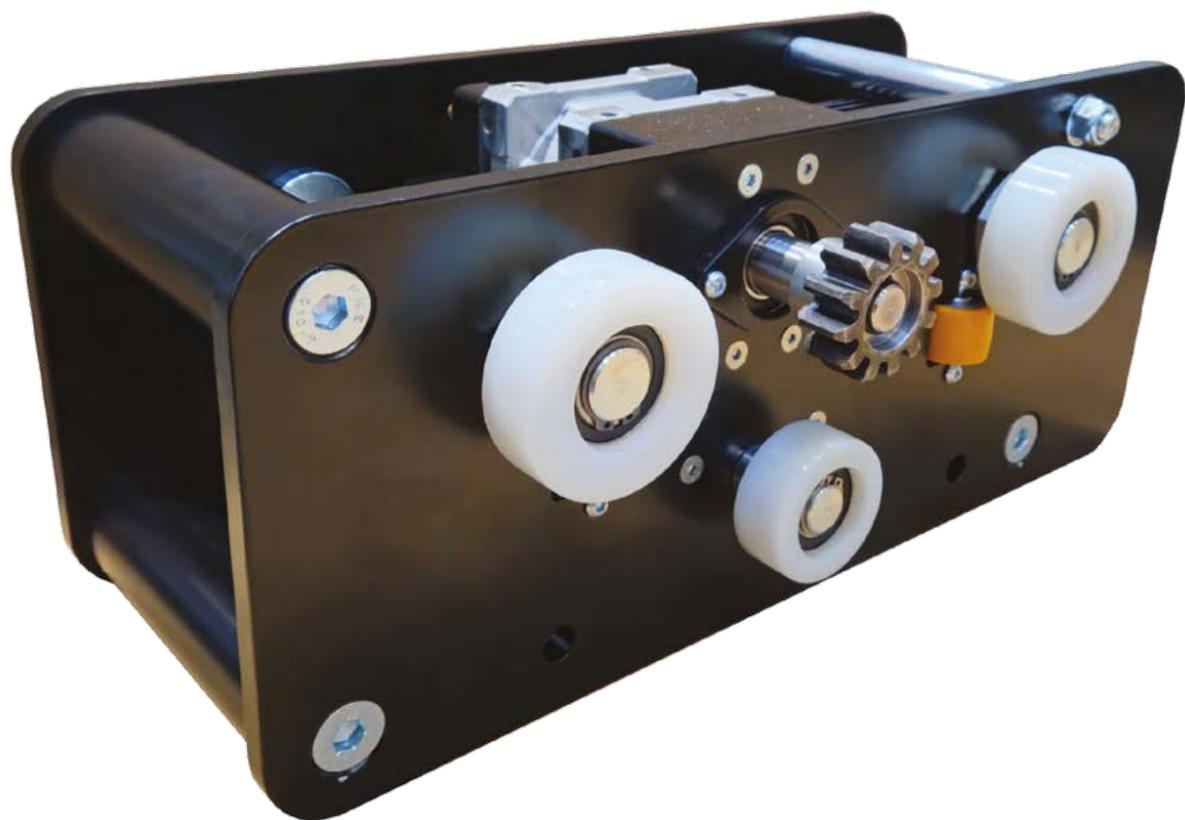
This is our daily challenge because each project has different specificities.

Based on feedback from our clients, it seems the goal has been achieved; We have provided customers with what they were asking for.

After hard work, the best result you can achieve is having a customer fully satisfied with what you've created for them.

Without going into specifics, how do you foresee the future evolution of managing moving devices in the entertainment industry?

Looking at the market trends, I believe we will be asked to continue increasing the performance of our products.



EXE DST Dynamic Stacking Truss System

Introducing the latest range of DST Systems for safe, secure & precise movement of video and scenic elements. Achieve linear speeds up to 120m/min with various Motorised Trolley drives and 6 RPM Rotator Modules. A vast range of motion can be controlled using a wide range of accessories and hoists from EXE Technology.

DST66
Stackable High Performance



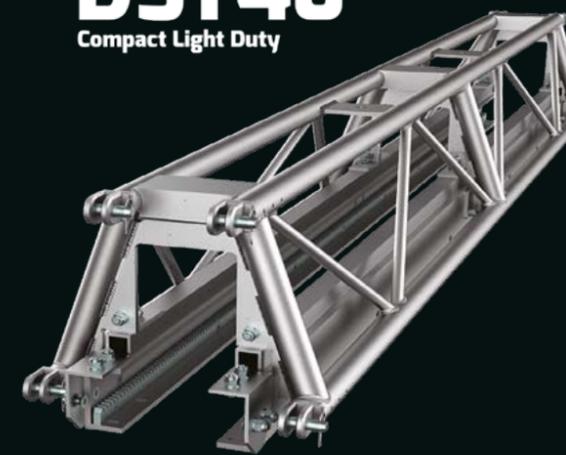
DST52
Stackable Heavy Duty



DST52
Square Heavy Duty

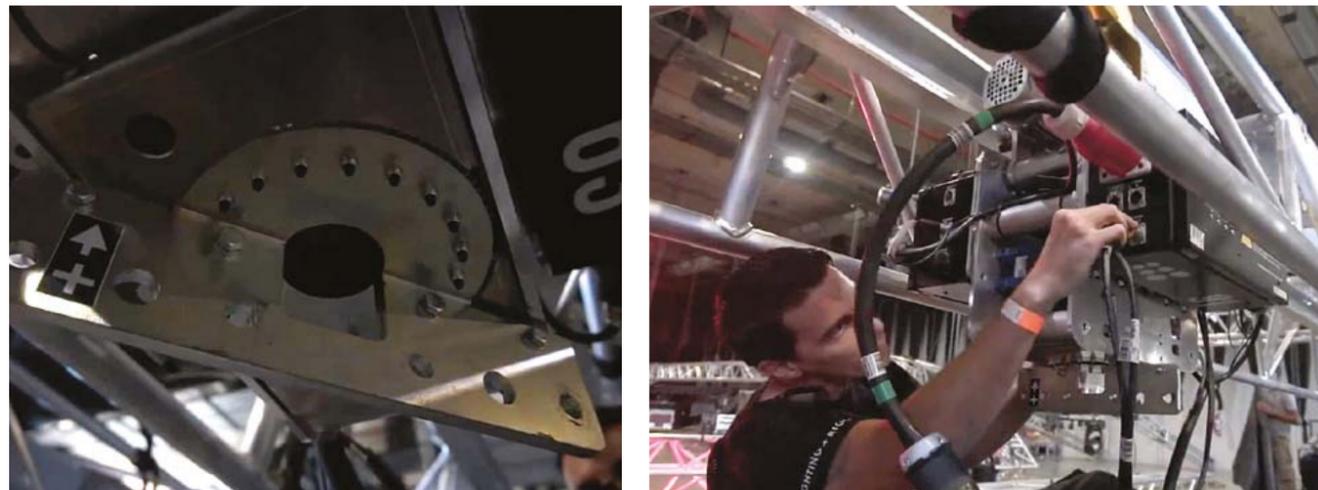
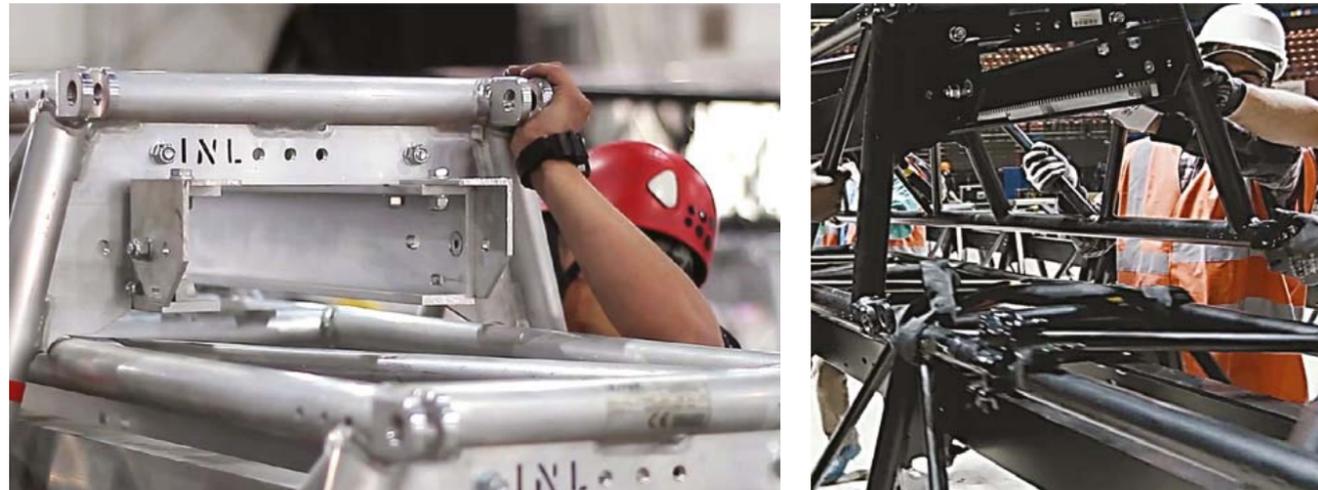
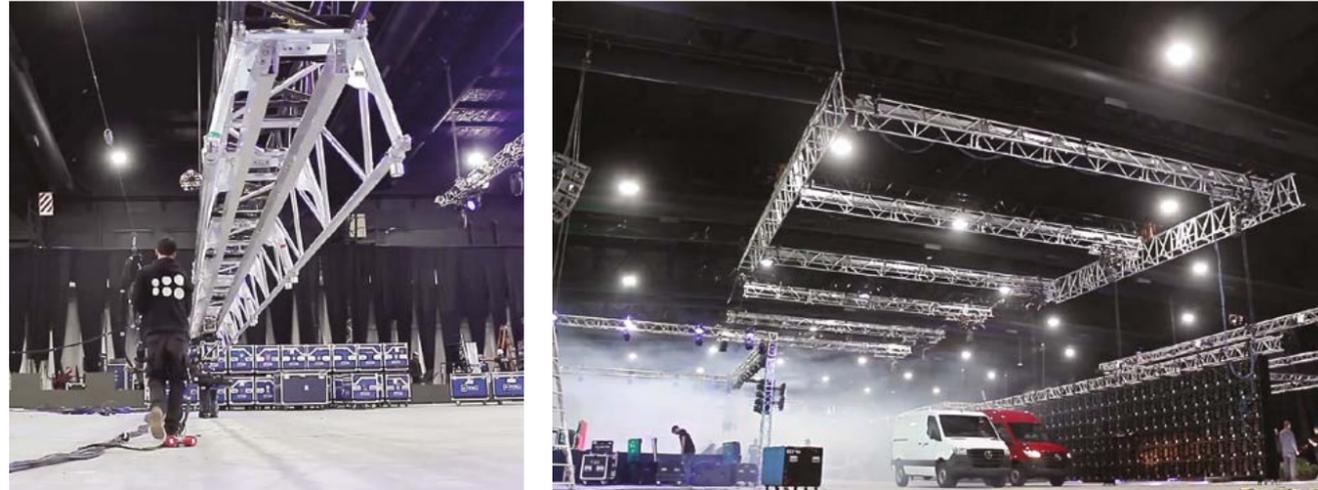


DST40
Compact Light Duty



EXE DST Dynamic Stacking Truss System

Worldwide appreciated



The modularity, the options to choose between systems of different sizes and capacities, and the ease of use make EXE DST System a preferred choice among motion professionals in the entertainment industry.





Gianluca Ferrari

EXE Automation Manager

Gianluca, tell us about the past year; it seems it has been a remarkable year for EXE Technology?

Yes, we can say that. I believe our customers have appreciated our quality standards, meticulous compliance with existing regulations, and our attention to new quality standards that will come into effect in the coming years.

Do you consider yourselves leaders in the entertainment lifting equipment industry?

We aim to improve; that is our goal. Lifting equipment represents the most critical aspect of an event.

That's why we have integrated both electric hoists and DST movements under the EXE Technology brand and, more recently, also the load sensors systems from Flexa Sensors is part of the family.

Flexa has now consolidated its product lines, both wireless and wired, standalone and integrated within hoists.

I'm not sure if we've become leaders, but we are certainly the manufacturer with The widest range of products and integration between analog and digital technologies.



EXE X Chain Hoist D8+ (2000kg)



EXE TECHNOLOGY IS PROUD TO PRESENT THE FIRST THREE SERIES OF ALL FOR ONE PRODUCT LINE.

Now, thoroughly updated and tested to provide advanced operators with high-performance tools for load management and control. Each product category is tailored to meet specific needs, ranging from dual-speed to variable speed, with load monitoring. Always with precise position control and a wide, intuitive display on the controllers.

	EXE B	EXE D	EXE X
LINKABLE			
TOUCH SCREEN			
GROUP CONTROL			
ENCODER			
LOAD CELL			
REMOTE CONTROL			
SPEED	DUAL FIXED SPEED	FIXED SPEED	MULTIPLE SELECTABLE SPEED
HARD LIMIT SWITCH	On request	On request	2 position
SOFT LIMIT SWITCH	No	UP & DOWN	UP & DOWN

ALL FOR ONE Solutions, Smart hoists and intelligent controllers



ALL FOR ONE is designed as a fully integrated system including 'smart' hoists and intelligent controllers, offering plug and play devices. It is the integration between equipments designed to operate as a "single' stage machine".



DUAL SPEED FOR FAST AND PRECISE CONTROL



LOAD MONITORING / PROTECTION AND POSITION CONTROL SYSTEM



VARIABLE SPEED SMART SYSTEM WITH LOAD MONITORING / PROTECTION AND POSITION CONTROL

ALL FOR ONE is a product line designed to exclusively operate between hoists and their respective controllers. It is a "single stage machine" in constant dialogue among its components to ensure maximum performance and intelligent control in load management.

EXE B DUAL SPEED CHAIN HOIST

D8+ 500kg dual speed
(2 or 8) m/min



EXE D CHAIN HOIST

D8+ 500kg



D8+ 1000kg



D8+ 2000kg



EXE X CHAIN HOIST

D8+ 500kg



D8+ 1000kg



D8+ 2000kg





RUD hoist chains move all kinds of loads in the entertainment industry.



The company RUD Ketten Rieger & Dietz GmbH u. Co. KG was founded by Carl Rieger and Friedrich Dietz in Aalen, Southern Germany, in 1875. Today, it has a workforce of more than 1,700 employees in 120 countries.



SAFE LIFTING, TELESCOPING, MOVING AND TURNING OF THE STAGE AND EVENT EQUIPMENT.

The magic of the moment in a show is priceless. Many opera houses, theatres and festivals rely on hoist chains and drive solutions from RUD. These products reliably raise and lower stage elements, lighting and audio equipment, and curtains.



The CHAIN is a DAT type, RTS quality chain made of galvanized alloy steel grade 80 that complies with the standard DIN EN 818-7.

Available in BLACK colour with T grade and DAT type, with phosphate surface.

SIMPLE SETUP FOR FAST RESULTS



The RUD limit gauge consists of a sturdy aluminium strip with guide holes for the measuring pins as well as locking holes for the locking studs attached to the measuring pin.



Case-hardened round link chains are the models used by EXE Technology.



Unraveling the Mystique of Horsepower: The Heartbeat of Power

In the thrilling world of engines, the term "**horsepower**" reverberates like a symphony of power and performance. But what lies beneath this enigmatic word? Let's embark on a journey to decode the essence of horsepower, the celestial measure that fuels our automotive passions.

A GALLOPING ORIGIN:

In the annals of engineering lore, James Watt, the maestro of steam engines, crafted the term "horsepower." Picture this: it's the late 1700s, and Watt needed a relatable benchmark to showcase the might of his invention. He chose the labor of horses, the mechanical workhorses of the era, as the measuring stick.

DEFINING THE GALLOP:

One horsepower, the unit of mechanical might, is defined as the capability to perform 550 foot-pounds of work per second, which translates to a lively 745.7 watts in the metric world. It's the cornerstone of power metrics, enabling us to navigate the realm of machinery with precision.

HORSEPOWER IN THE AUTO UNIVERSE:

In the realm of roaring engines and tire-screaming thrills, horsepower is the star of the show. It's the golden ticket to discerning a vehicle's muscle. A ride with more horsepower means quicker acceleration, higher top speeds, and an appetite for feats that leave others in the dust.

CRUNCHING THE NUMBERS:

To calculate this powerhouse metric, the formula is our guide: **Horsepower (hp) = (Torque (lb-ft) × RPM) / 5252**

This equation cleverly intertwines torque (the twisting force of an engine) with RPM (revolutions per minute), revealing the engine's true prowess.

THE THRILL OF VARIANCE:

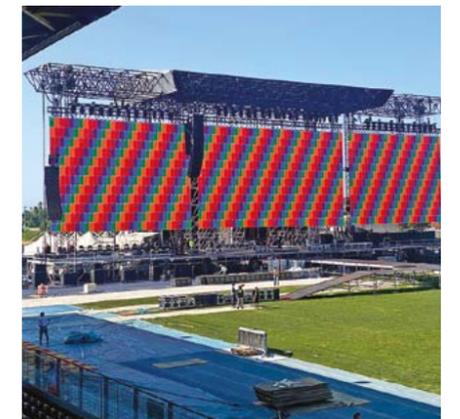
Horsepower isn't a static entity; it's a dynamic force shaped by tweaks, tuning, and even the fuel it consumes. Types like brake horsepower (BHP) and indicated horsepower (IHP) shine a light on mechanical losses within the engine, unraveling a tale of power transformation.

BEYOND THE RACETRACK:

Intriguingly, horsepower isn't confined to racetracks or garages alone. It marches into factories, plants, and construction sites, defining the prowess of machinery like generators, industrial motors, and pumps. Knowing the horsepower of these mechanical marvels is the key to unlocking their potential.

In the grand narrative of engines and machines, horsepower is the protagonist, the guiding star that illuminates our journey. It's the benchmark that sets our hearts racing and our ambitions soaring. So, the next time you hear the roar of an engine, remember, it's the spirit of horsepower that propels us forward, igniting the flames of innovation and power.

James Watt needed a relatable benchmark to showcase the might of his invention. He chose the labor of horses, the mechanical workhorses of the era, as the measuring stick.



LITEC and PROLYTE project, Lignano, Italy (2023)

FLEXA Sensors, a Consolidated Success

Flexa Sensors is the youngest among the products of Area Four Industries Italy. In 2023, we dedicated our efforts to consolidate our two platforms.

In the IoT space, the new cloud platform is now available, featuring enhanced gateways that have reduced online management costs by over 70% compared to the previous version.

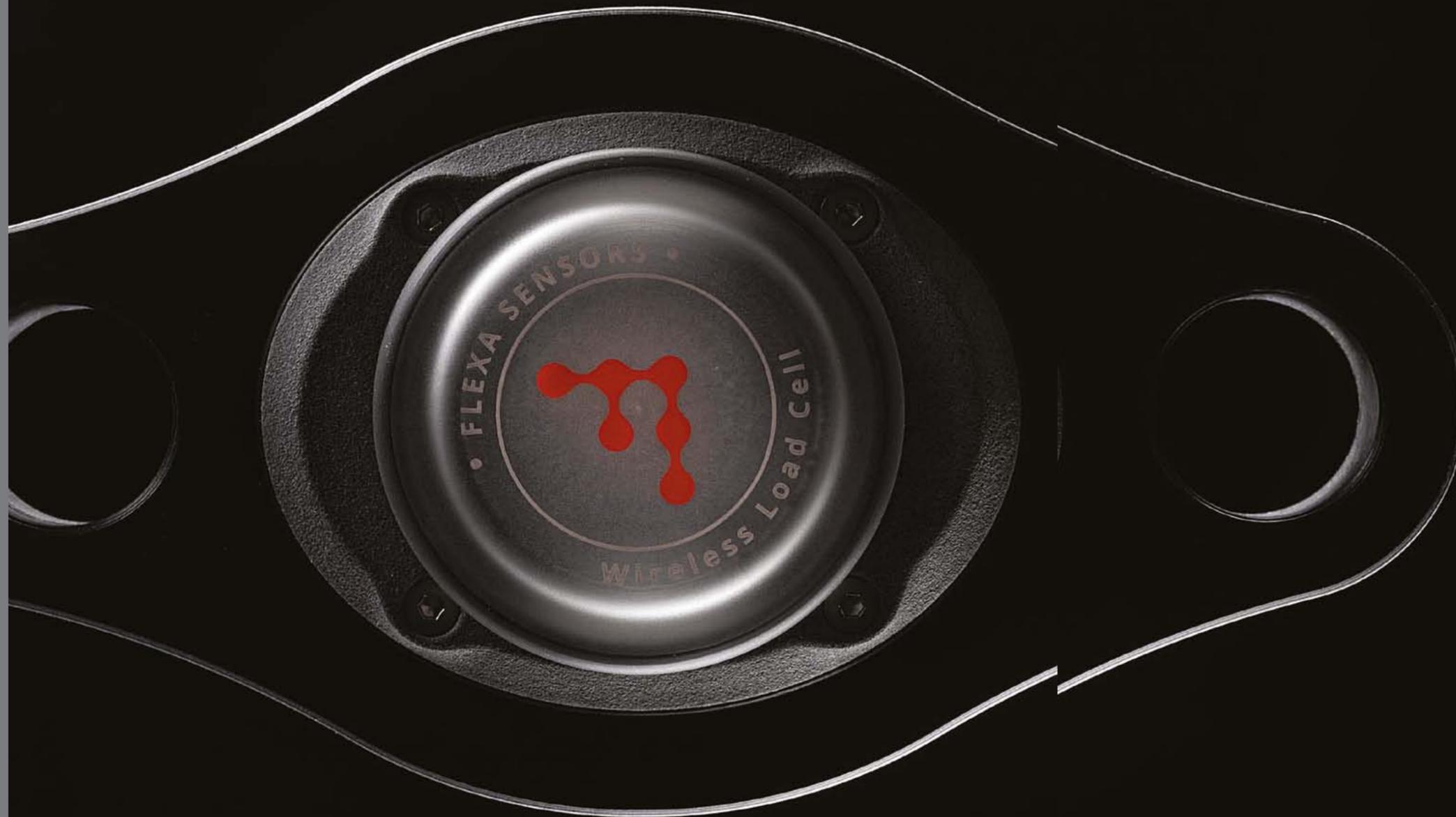
Within the Real-time series, our focus has been on optimizing firmware to ensure that our systems operate seamlessly and comply with local regulations also in some major Asian countries.

The Real-time line is proving to be a natural aid for load control, providing an easy and immediate user experience.

Flexa Sensors is now part of the EXE Technology world.

The synergies between Flexa devices for load control are increasingly evident in combination with EXE Hoist and EXE DST systems.

Nowadays Flexa Sensors brand is integrated into EXE Technology family. Flexa Sensors brand into EXE Technology family to amplify the significant growth potential of all our load management devices.





Giuliano Luvisotto
FLEXA Sensors
Brand Manager

THE INTERNET OF THING LINE

From load control to an extensive sensor management system.

The introduction of the new Flexa LoRaWAN Gateways and the new cloud platform, conditions are created to establish a sensor network that goes beyond simple load monitoring.

The ongoing fruitful collaboration between A4I Italia, Rimini Trade Fair and Flexa LoRaWAN network operators, has allowed us to deploy a sufficient number of Gateways to cover the entire trade fair area.

The comprehensive coverage of every square meter of the convention center allows for the relocation of cells to any necessary position. All data will be stored in the cloud and will be accessible on the portal from PCs or mobile devices.

For the Real-time and for those unfamiliar with wireless load cells, it's crucial to highlight that our radio transmission platform operates at frequencies below one Gigahertz (sub-1GHz). This approach entirely avoids the potential saturation of radio signals on the 2.4GHz frequencies commonly used worldwide for WiFi and Bluetooth signals.



The Fiera di Rimini Exhibition Center.



Dynacell 500kg



Dynacell 5t



IoT Line

Flexa Sensors LoRaWan IoT line, from load cells to the smart fair

NEW LORAWAN IOT PLATFORM, NEW GATEWAYS.

With the current infrastructure in place, adding more sensors will be straightforward.

Specifically, Time Of Flight (TOF) cameras for the People Counter service in crowded area and metering sensors for energy consumption control, can be easily integrated

The Flexa LoRaWAN IoT Gateway in the outdoor version serves as our reference gateway for various IoT applications.

Constructed with an aluminum body and waterproof connectors, it ensures an IP67 protection rating, safeguarding it against liquids and dust.

It is designed to operate in temperatures ranging from -40°C to +85°C, providing a durable and low-consumption wide-area connectivity solution.

Cloud connectivity is established via LAN Ethernet or the cellular network.

The data SIM is permanently embedded in the circuit (chip-SIM), and activation, deactivation, or pausing can be managed through our portal.

The data connection service is handled by a leading global service provider, relying on LTE networks, and is available in nearly all countries worldwide.

In the recent setup at the Rimini Trade Fair the system monitors over 500 Flexa Dynacell 0,5t wireless cells. Each point deemed critical or requiring load control is monitored through the new Flexa IoT Portal.

The comprehensive coverage of every square meter of the convention center allows the relocation of cells to any necessary position. All data will be stored in the cloud and will be accessible on the portal from PCs or mobile devices.



Real-Time Line

Year 2023 marked the consolidation of product lines, both hardware and software.

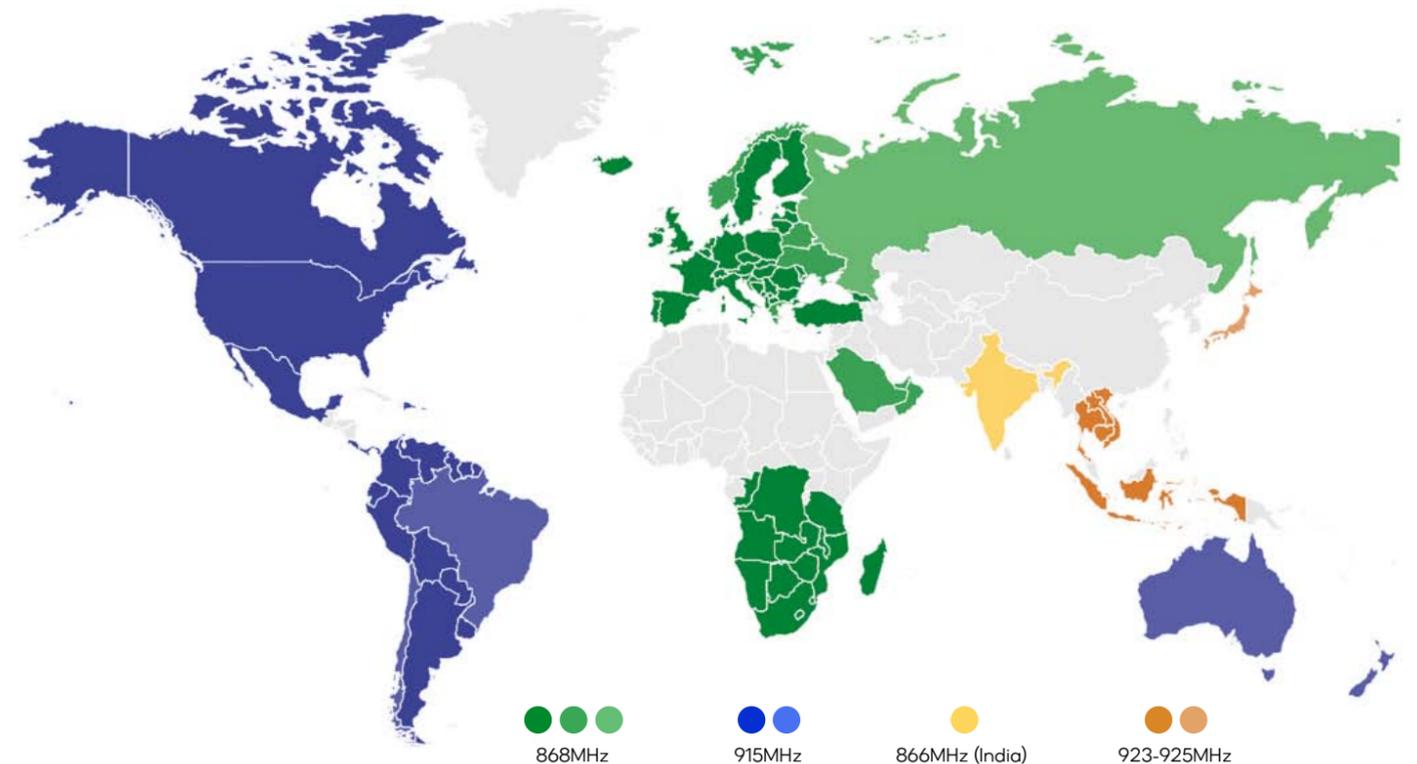
However, it is the continuous work on software for the user interface and the implementation of new firmware across all devices that has absorbed our energies and enhanced user experience.

In the software area, we focused on ongoing bug correction and the introduction of new features. A separate mention is deserved to the work on firmware, which serves as the operational intelligence installed in each device.

The Sub-1GHz frequencies at which we operate are regulated according to local laws in each major global region.

Our commitment over the past years has been to harmonize the radio modules and implement firmware to ensure compatibility, even in countries like India and other Asian nations that require adjustments to comply with local legislation.

Furthermore, coverage includes all EMEA countries, North America, and a significant portion of South America.



Clamps in Space: The Unsung Heroes of Precision and Safety

In the vast expanse of space exploration, where precision, safety, and functionality are paramount, an unassuming yet crucial tool emerges as a true hero: the clamp. These unpretentious devices play a pivotal role in the intricate dance of engineering that enables spacecraft, satellites, and rovers to operate flawlessly in the extreme conditions of outer space. In this article, we unravel the fascinating ways clamps are used in the space industry, shedding light on their indispensable contributions to our cosmic endeavors.

Payload Protection and Stability

One of the most critical applications of clamps in the space industry is ensuring the protection and stability of valuable payloads. Clamps securely fasten scientific instruments, communication equipment, and other payloads to the spacecraft or launch vehicle, preventing any jostling or movement that could compromise their functionality during the intense forces of launch and the rigors of space travel.

Solar Panel Deployment

Spacecraft and satellites rely on solar panels to generate power in the vacuum of space. Clamps come into play by holding these panels in a compact, stowed configuration during launch. Once the spacecraft reaches its designated orbit, the clamps release, allowing the solar panels to elegantly unfold and harness the power of the sun.

Precise Antenna Deployment

Communication satellites rely on antennas to maintain vital connections with Earth. Clamps play a pivotal role in keeping these antennas secure during launch and early mission phases. Upon reaching orbit, the clamps release, enabling the antennas to extend and establish reliable communication links.

Robotic Manipulation

In the realm of space exploration, robotic arms and manipulators are essential for tasks such as assembling structures, repairing equipment, and collecting samples. Clamps

are integral to the construction and operation of these mechanisms, ensuring that joints and end-effectors remain firmly attached while enabling intricate and precise movements.

Structural Integrity During Docking

During complex missions involving docking with other spacecraft or space stations, clamps maintain the structural integrity of the connection. They facilitate secure and stable connections, enabling astronauts and controllers on Earth to execute precise maneuvers without compromising the safety of the spacecraft.

Cable Management

In the intricate web of wires, cables, and hoses that run through a spacecraft, clamps are the unsung heroes of organization. They ensure that vital connections remain secure and prevent tangling or interference that could disrupt mission operations.

Heat Shield Protection

During atmospheric re-entry, spacecraft endure scorching temperatures. Clamps are essential in securing heat shields and thermal protection systems, ensuring that these critical components stay in place and shield the spacecraft from the intense heat generated during descent.

Sample Collection and Containment

For missions involving sample collection from celestial bodies like asteroids or planets, clamps play a role in securely holding

containers or collection mechanisms in place. They guarantee that gathered samples are safely stored until they can be returned to Earth for scientific analysis.

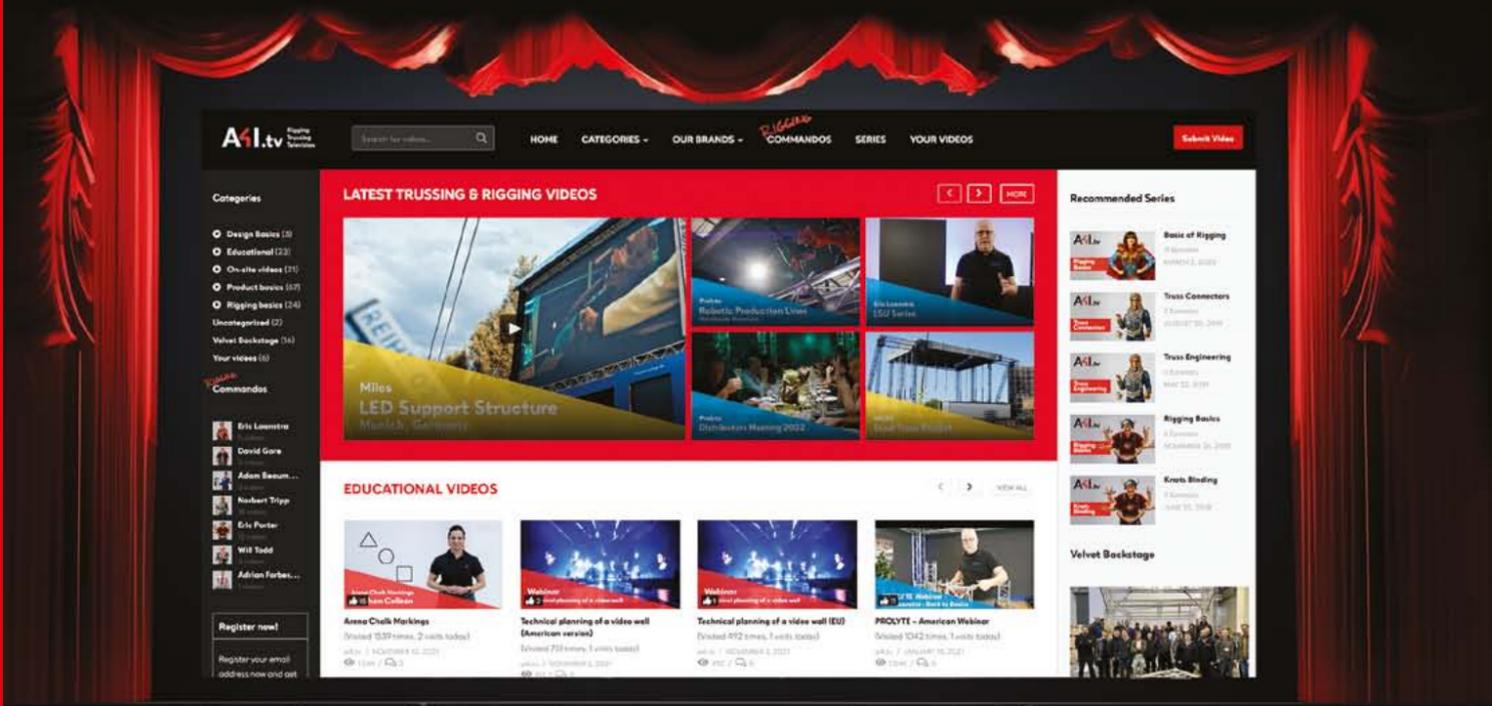
In the boundless universe of space exploration, where each component must perform flawlessly, clamps emerge as unsung heroes. These unassuming devices contribute to the precision, stability, and safety that enable spacecraft to navigate the challenges of space. From protecting payloads to enabling complex robotic maneuvers, clamps play a multifaceted and indispensable role in shaping the success of space missions. As we gaze toward the stars, let us remember the unassuming clamps that hold our cosmic aspirations together, ensuring that humanity's reach remains firmly within its grasp.

Clamps are essential in securing heat shields and thermal protection systems, ensuring that these critical components stay in place.



A4I.tv

Time to Change the Channel!



Education is one of the main pillars of the Area Four Industries group. We are well aware that quality education in rigging is the most important thing, both for protecting the riggers themselves and the visitors to events where our products are present.

www.a4i.tv





Rigging Commandos

Let's meet an elite rigging & trussing team, the Rigging Commandos!

One of A4I's priorities is to provide our customers and riggers with the best possible rigging training.

That's why A4I has assembled a group of Rigging Commandos that consists of elite professionals and trainers with years of experience in our industry.

The Rigging Commandos not only know all aspects of rigging but also know how to convey their knowledge in an interesting and understandable way.

Their lectures which are free to watch on our A4I.TV are not tiring and dull, but full of humour, examples and practical tips that help riggers around the world to make their work more efficient and, most importantly, safer.



Rigging Commandos is a group of respected experts who take an in-depth view of topics exciting interest within the industry. Let's meet the team!



Adrian Forbes Black

TOMCAT/JTE/Area Four Industries America Sales & Marketing Director, sneaks you behind the curtain of the rigging & trussing world to reveal the tips, valuable rigging practices and product knowledge gathered over his decades of experience on both American and British soil.



Eric Porter

British Rigging Consultant and Head Rigging Commando, with his practical knowledge and world-wide tour experience that goes back almost fifty years.



Eric Laanstra

Hailing from the Netherlands, Eric has worked at PROLYTE for 20 years, first in sales and then for the past 10 years as Product-Manager. With the arrival of Eric Laanstra the "You Know What. We Know How," philosophy of Area Four Industries is certain to continue influencing and improving industry standards.



Dipl.-Ing Norbert Tripp

German Structural Engineer and Area Four Industries' Technical Director, focuses on static calculations, physical truss characteristics and support structure physics that keep you working smarter and safer.



Siobhan Colleen

She is an spokesperson for Area Four Industries, instructional designer and content strategist with a background in rigging, fall protection, and rescue instruction for the wind Energy and entertainment sectors.



Will Todd

TOMCAT CEO and highly experienced tough guy in the rigging & trussing arena, serves as the hardhitting expert who attacks rigging & trussing practices and products needed for your daily entertainment production activities.



Keith Bohn

Keith has been a leading voice in the truss and rigging community for over 25 years, participating in the ESTA Technical Standards Program and conducting training classes worldwide. He is an ETCP Certified Arena Rigger and an ETCP Recognized Trainer and currently the Prolyte Business Development Director for Area Four Industries America.



The Rigger's Final Piece to the Puzzle

A screw, a nut, a part, a joint... often one part is missing. Nothing upsets a workman more than the last missing part in a design. Scientists have proven that an invisible, malevolent gnome lives near complex structures, deliberately hiding tools and parts in hard-to-reach places. In one version of the fairy tale of Snow White, the princess made of snow and ice lives only in winter and evaporates in spring when others celebrate spring by jumping over the fire. This inspired us to create a photo story in which two dudes conquer the ice block for one last truss (piece). We invited two guys, **Michal Maroši** (right) and **Tom Znamenáček** (left), who regularly tame the ice and snow, to liberate the last piece.

Michal Maroši: Construction is my livelihood, I build pumptrack tracks for bikers and longboarders

The multiple Red Bull Rampage participant talks about his experiences on the snow, his most serious injury, when he almost lost his life, and how he got lost in the snowdrifts of British Columbia.

When you say ice and snow, what comes to mind?

The Chinese Downhill. This is a mass downhill mountain bike ride on snow, which I organize every year in the Krkonoše, the highest mountain range in the Czech Republic. It's a tough, unpredictable race because the conditions are different every year. One year, it's snow, the other year, ice; yet another year, it's mud.

Is it dangerous?

Imagine hundreds of bikers starting at once and descending brutally down a frozen, two-kilometre-long slope. No adjustments, no concessions, just elbow-to-elbow battles at around 100 km/h. You mustn't hit the brakes because that's when you go down. Some years there's been more falling than riding, but it's still a hugely popular race, and we always sell out. It's a massacre.

Where else have you biked on ice and snow?

The races in the trough of the Olympic bobsleigh track in Cortina d'Ampezzo, Italy, were very demanding indeed. Pure ice, high elevation and no room for error. I also rode a mass downhill in Val d'Isère, France, where the Super G race was held before us. The 300-person mass downhill in the Swiss resort of Saas Fee was also tough. And I had a tough time at the Winter X-Games, at the American resort of Mount Snow in Vermont.

What happened?

I had the most brutal crash of my life there. My chain got stuck on the approach to the jump, which was quite long and deep, so I fell sideways from a ten-meter height. My spleen, my lungs and my head took it. I was transported by helicopter to the hospital, where my life was saved.

Besides biking, you're also good at snowboarding. Where's the best place to snowboard?



I've been both east in Georgia and west in Canada. But I still find that when it snows, I like the Austrian Alps best of all. Resorts like Sölden or Ischgl offer a gigantic portion of fun and entertainment. But it's true I've never been to Alaska.

Who is your winter sports hero?

Terje Haakonsen used to win all the World Cup races as a snowboarder, but when U-ramp snowboarding made it to the Olympics, he said he wouldn't go because it wasn't good for the independence of the sport. The other guru is Jeremy Jones, a tough guy and the best freeride rider. No one knows the mountains like he does.

Can you remember the best concert in the snow that took place on a big stage?

Ballantines Urban High in Prague. Besides the stage for Prodigy, a construction for a giant jump was being built, on which artificial snow was piled for the riders of the Snowboard World Cup.

What do you do for a living right now?

I build tarmac pumptracks for bikes, scooters, longboards or inline skates. It's a varied job that starts with site surveying and designing and ends with engaging heavy construction equipment and laying the asphalt surface. The result is great and brings joy to children and adults alike.

What makes you happy?

I've been leaning towards splitboarding for the last few years. The design is a board that splits into two skis, with risers glued to them so you can go uphill without slipping on the downhill. At the top, the skis snap back together and you ride down like a normal board. It's a tool that will really push your perception of big mountains and open terrain. It's actually a subset of ski mountaineering. With a splitboard, you can ski off the lifts and get into places with immaculate powder snow.

What's the most extreme thing you've experienced in the mountains?

I hit my rock bottom in Pemberton, Canada, where we summited, and then realized we couldn't cross the ridge in daylight, so we decided to turn back. I found a perfect descent, but unfortunately, it ended in a creek at the bottom. I spent an hour hopping from rock to rock only to find that beyond that, there were only trees, a river and difficult terrain. And my radios stopped working. I was completely lost somewhere in the wilds of British

Columbia. I dug paper slips out of my pack and wrote messages on them and stuck them on tree branches in case someone followed my tracks and found them.

And the ending?

Just when I thought I was going to spend the night in the snow cave, I heard voices. They belonged to the rest of the party. I was saved.

Michal Maroši (45): Professional biker riding for Red Bull. A versatile rider who has competed in World Cup downhill, fourcross and dual slalom. He won the World Cup race in Maribor (Slovenia) and also won gold at the 1998 European Championships in Spindleruv Mlyn (Czech Republic). He has participated in the Red Bull Rampage extreme race in Utah several times. He organizes races like Marosana and Chinese Downhill. He currently designs and builds pumptracks under the Schneestern brand.

Tomáš Znamenáček: The greatest ride of my life? Snowboarding in Lebanon and Mötley Crüe in Prague

For a quarter of a century, he has been making a programme about extreme sports for the viewers of the Czech television O2TV Sport, Element, but as soon as the snow falls, he packs his stuff and goes to the mountains. Can anything beat his powder-riding experiences in Japan and Kashmir? And if he goes to a gig in New York, what band to see?

As an experienced snowboarder, can you think of any design innovations from recent years?

Snowboards are going back in design to the second half of the 90's when they were making as many cutouts as possible. This means that the radius of the snowboard is as small as possible - around 7.5 metres - and this makes the snowboards easy to handle and spin beautifully. You'll appreciate this on the slopes when you want to have fun, but especially when riding in the woods when you need to react quickly between the trees. I appreciated this feature while freeriding in Japan, where there are a lot of tricky exits from the forest. So after years of pushing snowboard designs for comfortable, long turns on the piste, we're back to action radiuses again.

Judging by Instagram, it looks like you're spending the whole winter in the mountains. What resort would you recommend?

The best place to ride is in Zillertal, Austria. I know places there that few people know. I can walk to get good snow and have a fantastic time skiing without the people and the worry that the powder meadows they love will be rutted.

Why is it good to go to Tyrol?

It has grown on me not only because of the snow and the conditions for riding, but also because of its friendly atmosphere. Instead of hotels, I sleep on farms and in small guesthouses with local people who burn slivovitz, keep cows and give you home-baked bread and eggs for breakfast. Since then I've seen a lot of places in the world, but I consider the Austrian Zillertal to be my home.

Where are you going this year?

North Macedonia. The mountains there go up to 2700 meters and the precipitation is massive due to the proximity of the sea. We're heading to the area of Popova Šapka and Mavrovo. Both resorts are in the northern part of Macedonia. Hopefully we will discover some cool places with fresh powder snow.

Why these resorts?

They offer two ways to get to the snow. The first one is the classic cable car, and the second one is with the help of guides who take you to the peaks by snowmobile. These are places you'd be snowshoeing for a long time. From the top, you can reach beautiful gorges and boulder terrain.

What's the biggest extreme you've ever ridden on a snowboard?

It was in the Tyrolean resort of Serfaus-Fiss-Ladis. The ravine looked cool from the bottom, but when we got to the top and looked down, it was a tough dilemma. To turn around and give up would have meant several hours of backtracking and also being a wimp, so we decided to give up. That was probably my biggest fear at the time. It was probably the steepest slope I've ever ridden in my life.

Have you ever been in an avalanche?

I tore off an avalanche once. It was small and practically harmless. It happened while riding in the Swiss resort of St. Moritz, the terrain was avalanche-prone and not completely stable. I had no experience at the time and tore it off. It was nothing dangerous, but I realized what bad things could happen.

Since then I have been attending avalanche courses several times a season, attending lectures, following the news and trying to prevent the danger.

What was the biggest ice exotic for you?

I have visited Japan, I have been to America, I have been all over Europe and I have been to Kashmir in India, but the most exotic for me was Lebanon. We flew to Beirut from Bulgaria, where it was twenty degrees below zero at the time. In Lebanon it was plus twenty, palm trees and people in T-shirts. Fifteen minutes later we were in the mountains, where it was cold and eight meters of snow. Soldiers everywhere and a freshly bombed TV station on top from Syrian helicopters. That was huge indeed.

What winter event do you remember after all these years?

The Arctic Challenge was clearly the best race, hosted by Terje Haakonsen in Tromsø, Norway. The riding was great, but it was far from just that. I saw the Northern Lights, learned how to operate a dog sled, caught cod with the Lapps and roasted them over a fire. Since then I've seen countless races including the X-Games, Burton European Open and more, but this was an experience like no other.

Just like you go for snow, you go for music. What was the biggest gig of your life?

The concert of a lifetime was now in December in New York City, where KISS gave their last ever performance at Madison Square Garden. It was brilliant. Other than that, I've seen, organized and experienced a lot of concerts. Mötley Crüe in Prague this year was excellent. That was a blast, which my partner Cvachi and I enjoyed so much that we will remember it for the rest of our lives. Even though I've seen Metallica ten times, and recorded with them and Slayer, and seen metal and rap shows in Europe and America, Mötley Crüe live was the best.

Last question: you're a musician too, and if you had to pick one song to play at the end of your life, what would it be?

Rock and Roll All Night by KISS.

Tomáš Znamenáček (48) is the co-owner of the production agency 4Elements with his own show on the Czech TV channel O2TV Sport about extreme sports. He himself is an enthusiastic biker and snowboarder who never misses an opportunity to pedal a new trail or fly to another continent for fresh powder.

Michal Maroši



Tomáš Znamenáček





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