

# A4

Rigger's magazine 2025

# PEOPLE

## Behind the Show



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

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# People Behind the Show



7M<sup>4</sup> LITEC<sup>4</sup> PROLYTE<sup>4</sup> TOMCAT<sup>4</sup> JTE<sup>4</sup> EXE<sup>4</sup> Xstage<sup>4</sup> Xlift<sup>4</sup> EXE<sup>4</sup> FLEXA STAGEDEX<sup>4</sup> PROLYFT<sup>4</sup>



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A short interview with Fabio Prada,  
Sales & Marketing Director  
at A4I GLOBAL.



His insights, his vision.

**Fabio, why is A4I considered a true global player in Truss & Rigging?**

Shaping the Future of Live Events and Beyond. At A4I, we stand out as a global leader in the Truss & Rigging industry. With an extensive network of production facilities in the United States, Italy, the Czech Republic, and China, and commercial branches in the UK, Germany, the Netherlands, the UAE, and Singapore, our global presence allows us to stay close to our clients and partners, wherever they are globally.

**Does being “global” mean distancing yourself from “local” needs or bespoke projects?**

No, absolutely not. Operating globally has taught us how to address local needs. It may sound paradoxical, but this is our strength: combining the advantages of a large organisation, with its production and R&D capabilities, with a focus on specific local projects.

Eight Iconic Brands, One Unified Vision.

Our portfolio features eight renowned brands - EXE Technology, James Thomas Engineering, Litec, Milos, Prolyte, Tomcat, XStage, and XLift - each integral to our reputation as pioneers in trussing and rigging solutions. With nearly 500 experts dedicated to designing and manufacturing solutions for the entertainment, exhibition, television, and film industries, we are setting new standards for quality, customisation, and reliability. These industries rely heavily on technological innovation, enabling event designers to create emotionally impactful scenarios. Our solutions are designed to support and enhance these dynamics.

**How do you address these evolving needs?**

Embracing Technological Evolution. The Truss & Rigging sector must keep pace with the evolving trends of the event industry. Technological innovation has introduced new products and applications in audio, lighting, and the broader field of communication facilitated by large LED walls. LED walls in particular have redefined live events, delivering immersive audiovisual experiences that captivate audiences and amplify the emotional impact of performances.

This evolution has expanded the boundaries of our craft, driving us to innovate with new applications of various aluminium alloys, advanced solutions in high-performance steel alloys, stainless steel, load-lifting and scenic motion systems, along with the full range of dynamic load-monitoring technology. These innovations ensure that our structures not only meet but exceed the demands of modern event production.

**In this evolution, which aspect do you consider the most important?**

**Safety First, always.** At A4I, safety is not just a priority - it is a core value. Every product we develop undergoes rigorous design and testing processes, leveraging both internal expertise and collaborations with external specialists. Our goal is to provide solutions that strike an optimal balance between performance, durability, and cost-efficiency while adhering to the highest safety standards.

We also prioritise safety during the use of our systems. I'd like to highlight that we offer the most extensive range of load cells in the industry, featuring an ecosystem of four lines of both wired and wireless load cells.

**So, technology for safety and technology for product innovation?**

Yes, but not only that. While products and technology drive our industry, we believe people make the real difference. Our approach goes beyond B2B or B2C - it's H2H (Human-to-Human) or P2P (People-to-People). We build trust and partnerships, putting human connections at the centre of our success.

**Expertise and the human factor: your key to success?**

Absolutely, combined with our commitment to listening and collaboration. Our industry is in constant motion, both literally and figuratively. Whether supporting a client with their first project, refining a custom solution, or staying ahead of emerging trends, the A4I team is always on the move. Every challenge reaffirms our commitment to excellence, innovation, and the people who make it all possible.

**Returning to your "global" dimension, how do you manage to communicate at a "local" level?**

Bridging the Gap. We stay connected with clients and partners through a wide range of activities, including participation in international trade shows such as ISE in Barcelona, Prolight + Sound in Frankfurt, LDI in

Las Vegas, and PALM Expo in Mumbai. Locally, we shine at events like PLASA in London and MIR in Rimini.

Beyond trade shows, we organise training sessions, provide on-site support, and host factory tours, allowing our partners to witness firsthand the craftsmanship and precision that define A4I. From project inception to post-installation, we are committed to guiding our clients every step of the way.

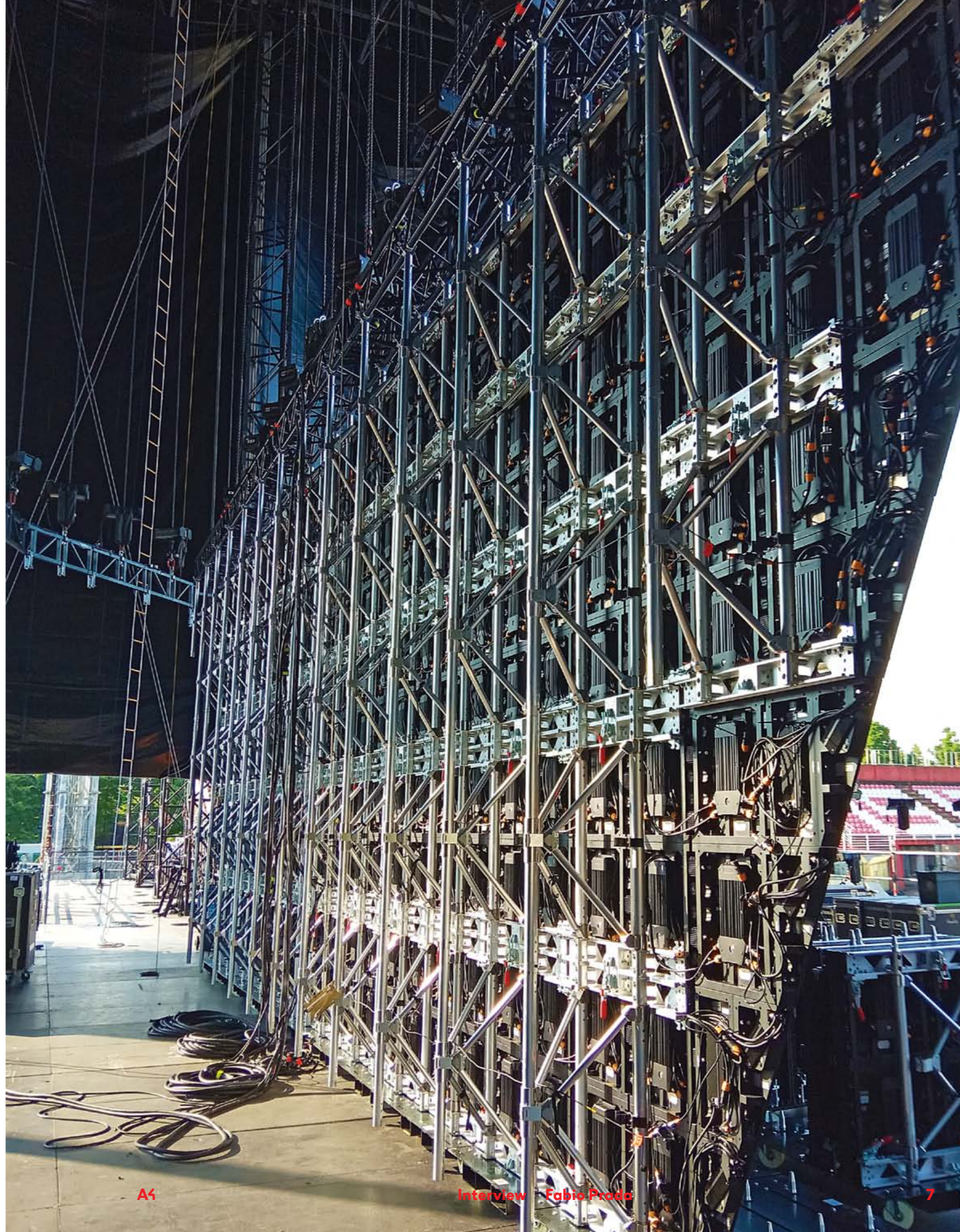
**Finally, could you summarise your role in the event industry?**

The Future is Now. Looking ahead, we are inspired by the evolution of live events, their communicative power, and the possibilities offered by the technologies shaping them. At A4I, we don't just build products; we create experiences, foster connections, and set new benchmarks for the industry.



**Fabio Prada**  
Sales & Marketing Director  
A4I GLOBAL

## The Gateway to the Greatest Show Behind the Show.



# A Message for the Heroes Behind the Show

It's time to take things up a notch. At Area Four Industries, we're all about celebrating the unsung heroes of the entertainment world: the riggers, the dreamers, and the builders who turn empty stages into spectacular shows. That's why we've refreshed our brand claims—to better represent the passion, strength, and innovation that define our brands. And yes, to give you the recognition you deserve.

## IT'S TIME TO BE EVEN BETTER

Riggers are perfectionists. Every bolt, every truss, every hoist has to be spot-on. We get it. That same drive for excellence is why we've updated our claims. Each one reflects not just what our brands do, but how they make your work easier, safer, and more efficient—because the best shows start with the best gear.

Our new claims aren't just words—they're promises. Promises that our brands understand your challenges and are here to help you overcome them, show after show.

## THE NEW CLAIMS: WHAT THEY MEAN FOR YOU

Let's break it down:

### MILOS – Flexibility Behind Your Show

Think of MILOS as the ultimate team player. Need a custom solution? No problem. Tight deadline? We've got you covered. With flexible production processes and a relentless focus on simplicity and affordability, MILOS is built to adapt to your needs.

### LITEC – Trussworthy Passion Behind Your Show

Italian engineering meets heart and soul. LITEC combines cutting-edge design with unshakable reliability. Whether it's hybrid steel-aluminum

solutions or heavy-duty towers, LITEC delivers passion you can trust, every time.

### TOMCAT – American Strength Behind Your Show

Built tough for life on the road. TOMCAT's trusses and systems embody American grit and durability. When you need gear that can handle the wildest tours and biggest challenges, TOMCAT is the name you count on.

### PROLYTE – One Step Ahead With Your Show

Innovation is in Prolyte's DNA. From the game-changing VERTO coupling system to iconic products like the H30V, Prolyte is always thinking ahead—helping you work faster, safer, and smarter.

### Area Four Industries – The Gateway to the Greatest Show Behind the Show

All of this comes together under the Area Four Industries umbrella. We're the gateway to the magic. The gear we make—and the people who use it—are the foundation of every unforgettable event.

### THE HEROES "BEHIND THE SHOW"

The main claim for Area Four Industries, "The Gateway to the Greatest Show Behind

the Show," isn't just about us. It's about you. You're the ones who make it all happen. You build the magic, set the stage, and make sure everything is safe, secure, and stunning. But at the end of the night, the spotlight isn't on you—it's on the performers and the production.

And that's why you're the real heroes. You're the architects of awe, the masters of the unseen. Without you, there's no show. Period.

## WHY THIS MATTERS

We know that rigging isn't just a job—it's a craft, a passion, and sometimes a bit of a grind. These new claims are here to remind you that we see you. We see the long hours, the hard work, and the commitment to getting it right. Our brands are designed to match that commitment, with products and innovations that make your life easier and your work better.

At the same time, these claims speak to company owners and decision-makers. They highlight the reliability, innovation, and quality that make our brands the smartest investment for any production.

So here's to you—the riggers, the planners, and the doers. Let's keep pushing boundaries, dreaming big, and creating unforgettable experiences. Because at the end of the day, every great show starts behind the show. And that's where we'll always have your back.



# The world is one big cosmic stage that is constantly changing, enlarging and connecting

Area Four Industries is a global company. Its offices can be found in the United States, the United Kingdom, the Netherlands, Germany, the Czech Republic, the United Arab Emirates, and Singapore. Our executives, who travel all over the planet, notice how the architectural face of cities and landscapes is constantly changing. Look at the architectural magnificence and the little things in or near our office locations. And visit them. You won't regret it.



## 1 THE EMPTY CENTER ← UAE/DUBAI

The Opus by Zaha Hadid Architects is a 93-meter-high glass structure with an amorphously shaped empty space in the middle. It can be found near Dubai's Burj Khalifa skyscraper. The 84,300-square-meter colossus is made of glass and steel and consists of two towers that join to form a cube that seems to float slightly above the ground. The organically flowing, empty center forms an exciting counterpoint to the building's strictly rectangular outer shape. The façade is made up of over 4,300 flat and curved individual pieces of insulating glass - a masterpiece achieved through 3D modelling. Each glass panel is equipped with LED lights that create mesmerizing lighting effects at night. Inside, there is the Mélia Group hotel, offices, luxury apartments, restaurants, cafes and bars. It is also the only hotel where Zaha Hadid herself designed the interior.

## 2 A VERTICAL PRIMEVAL FOREST ↓ SINGAPORE/DOWNTOWN

Vertical urban gardens are trendy, but covering the entire facade with climbing plants is exceptional, as with the 190-meter-high Oasia Hotel in central Singapore by Woha. Lianas can damage the façade with their roots, so this greenery is not often seen in new buildings. However, they do not harm the perforated aluminium panels that make up the Oasia Hotel. The disadvantage is that the vegetation gradually obscures the view of the city, but a sense of peace and intimacy emerges.



## 5 GATEWAY TO ETERNAL HUNTING GROUNDS / CZECHIA/ŽIŽICE →

Studio Petr Hájek Architekten converted a disused military bunker into an animal crematorium. It is called Eternal Hunting Grounds and is hidden among wild bushes and trees in the open countryside outside Prague. From the outside, a mirrored wall, six meters high and eleven meters wide, attracts attention. The mirror consists of small hexagonal pieces, each with a slightly different slope and angle. Visitors enter the reception hall through a small door on the side of the mirror. From here, an intimate square room for the last farewell is accessed through a tall wooden gate.



## 4 GLOW IN THE SHADOW ↓ OF VENICE / ITALY/MESTRE

Mestre is a boring stopover on the way to Venice for most visitors. Yet there are also attractive destinations, such as the Museo M9 cultural quarter, designed by architects from Berlin-based Sauerbruch Hutton, who have combined eye-catching concrete and 20,000 ceramic tiles in 13 colors. Three new buildings have been constructed in the museum district. Four others have been renovated, including a 16th-century building whose courtyard has been roofed with a lightweight structure of translucent umbrella roofing and now functions as a public passageway.



## 3 THE FLYING ROOF ↑ NETHERLANDS/ASSEN

In the small town of Assen near Groningen, architects from De Zwarte Hond and the Powerhouse Company designed a station building with a roof made of wood. The three sides are 78, 88 and 90 meters long; the fundamental shape is created by a supporting structure made of wooden trusses. But what makes the station particularly eye-catching are the glass spaces that let daylight into the station and onto the platforms. This creates a beautiful play of light and shadow.





**8 NEW IN OLD** ←  
**GERMANY/MÜNSTER**

The LWL Museum for Art and Culture by Staab Architects is adjacent to the old Neo-Renaissance building in Cathedral Square and is connected to the city's public pathways. The boundaries between the city and the museum, between the old and the new, are subtly blended not only on the outside but also on the inside. With different spatial proportions, diverse spatial sequences emerge, which are rhythmically defined by view surfaces of urban and interior situations. The materiality of the external facades is reduced to local sandstone and surfaces of light concrete and plaster.

**6 AN ENGLISH MOSQUE** ←  
**UK/CAMBRIDGE**

Marks Barfield Architects' design for the mosque attempted to connect Islamic culture with England's most English city. The result is a blend of Islamic architectural trends from Central Asia to Cordoba, Spain, and local English building traditions. Technically speaking, 30 structural columns made from prefabricated elements of laminated spruce timber support the net roof structure of the central mosque. This peculiar structure recalls, on the one hand, the stylish Gothic ceiling of the Cambridge chapels and, on the other, the symbolic decoration of historic Islamic architecture.

**7 LIGHTNESS OF BEING** →  
**TENNESSEE/MEMPHIS**

With spectacular views of the Mississippi, the Tom Lee Park community in Memphis is a new gathering place. On 31 acres, Studio Gang and SCAPE Landscape Architecture created a community space with new public amenities centered on the Sunset Canopy, a 16,000-square-foot rooftop structure made of glulam. It is supported by six bundles of steel columns with sloping supports. The roof is designed as a coffered ceiling in the lower part, and it is made up of wooden slats connected in a yoke shape. The area, protected from the sun and rain, is available for various activities and events.







**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.

**We want you here with us. Come and be a part of this.**

**Currently opened positions**



**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.



**Process Engineer**

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



**Manufacturing Supervisor**

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

**KILLER Style**



**Zero Compromise**



You pull the strings. When the lights hit, your work steals the show. This isn't hustle—it's who you are. No fluff. No filler. Just gear that gets it.



# Flexibility Behind Your Show

## **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.

A 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)**

## Flexibility Behind Your Show: Through Innovation and a Growing Team



**Marek Zubor**  
MILOS Brand Manager

### What are some of the key developments from MILOS in 2024?

This year has been an exciting one for MILOS. We successfully mastered bending technology, which allowed us to construct the Invisible Roof in Norway made from bent keder profiles. This innovative design is now featured in the 2025 catalogue, marking a significant milestone for the MILOS brand.

Additionally, our 500kg Concrete Ballast Base has been a great success, and we're expanding on this with a larger, 1.25-ton version. This "bigger brother" will provide even more stability and versatility for our customers' projects. So no need for water tanks anymore. These ballast bases are made for our main towers from truss types M290 and M390.

Another major step is our global expansion. We've opened a new A4I Direct office in Singapore to ensure exceptional support for the growing Asian market. In response to increased demand, we have also ramped up production capacity at our MILOS factory in China.

### What other highlights you would like to mention?

I am very happy, that again, we could host the MILOS Product Academy in China and in the Czech Republic. This time, the main event was in Prague, due to the extension of our headquarters office in Roudnice. However, I still could have a chance to take the attendees through our MILOS factory. These meetings are always great for me because I have the opportunity to talk directly to people, who work on a daily basis with our products, and always – the direct feedback is the best and helps me to drive the brand's focus to future innovations.

### With mentioning future, what can we expect from MILOS in 2025?

We're planning to introduce a completely new roof structure with a very unique design. It's an exciting project, so stay tuned for more details.

Our core focus will remain on customer collaboration. We'll continue to work closely with our clients to co-create customized solutions, living up to our MILOS claim: Flexibility behind the show.

As a result, we needed to welcome new professionals and engineers to our team to meet the growing market demand. We're excited to begin new projects with them starting in early 2025.

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



## MILOS MR2K Delivers the Main Stage at The Land Beyond Festival, Brighton

Event production company, Sussex Events kicked off the 2024 festival season in style with their new MILOS MR2K 12 x 10 Roof System and Layher Event Deck System, which debuted at the Land Beyond Festival, Brighton. The event delivered a jam-packed weekend of uncharted adventure and music to mark the first Bank Holiday of the year in the popular south coast seaside town.

The MILOS MR2K roof system is renowned for its robustness, versatility, and ease of assembly, making it the ideal choice for large-scale events. With a maximum load capacity of 3 tons plus PA Wings, the MR2K can support extensive lighting rigs, sound systems and intricate stage

designs. The build also incorporated two 6x4 MILOS LSGO LED screen support structures on either side of the stage with full video projection and live stage feed during the event.

With Area Four Direct UK now working closely with Layher as a Technical Partner, it was the perfect opportunity to supply, design and configure a complete roof system with the Layher Event Deck base to maximise the roof's potential. This technical partnership meant that they could also offer a comprehensive pre-build training package for both systems on the same day.

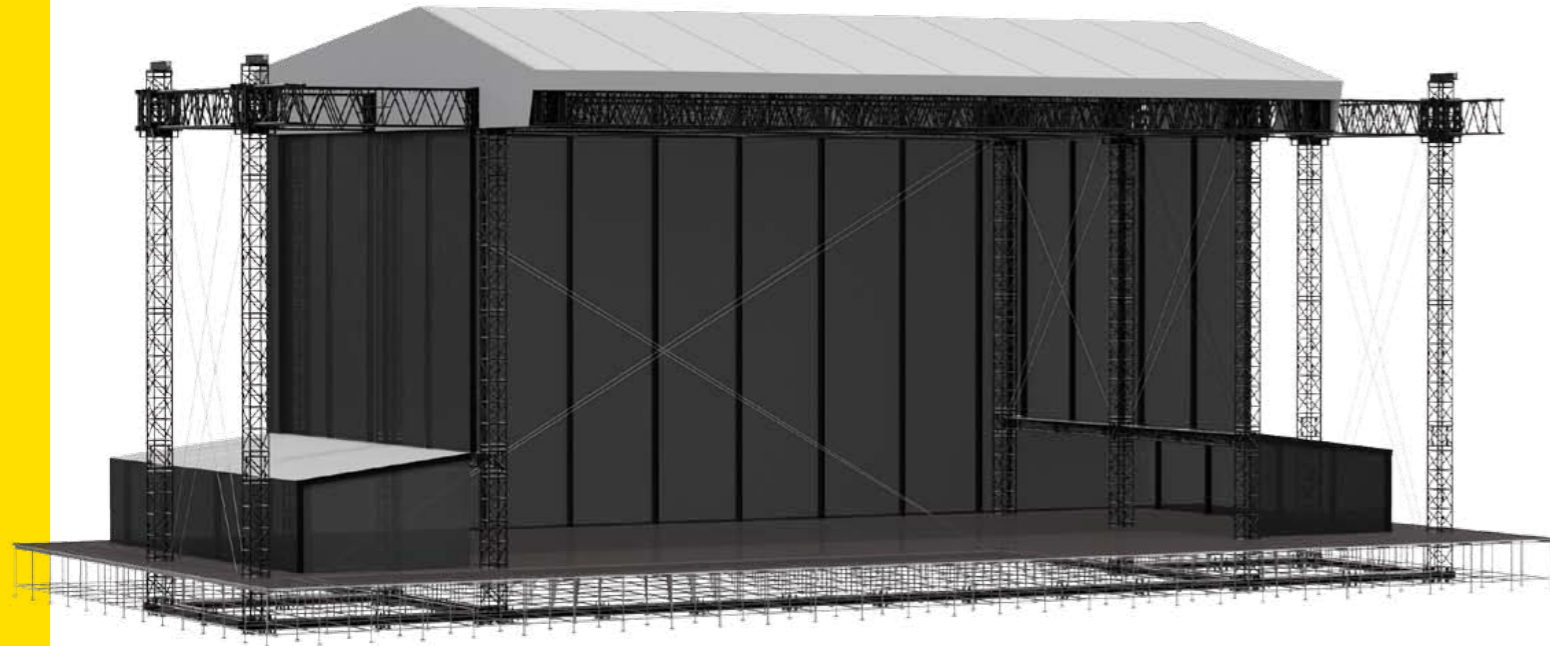
The highly anticipated Land Beyond Festival returned to the picturesque Waterhall

venue with its 2024 'Uncharted' theme which promised an extraordinary experience for festival-goers which included awe-inspiring installations, immersive encounters and a stellar line-up of musical acts including renowned headliners such as Craig David, Rudimental, Example and Sigala.

With the upscale nature of many outdoor client events, it was the perfect time to invest in the MILOS MR2K roof system, which enhances production capabilities for upcoming events and festivals. The advanced roofing solution represents the latest in event technology, ensuring superior performance, safety, and flexibility for a wide range of live outdoor productions.

## S-MR20 Steel roof 32x25m

- UDL on the main roof 60 t
- PA in total 12 tons (4 tons per main PA, 2 tons per sidefill PA)
- Incredible 100 t capacity achievable with 24x25 m stage configuration



## MR6 roof 26x16 m

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



## Concrete Ballast Bases: More Weight, More Possibilities

You might already be familiar with our 0.5 t concrete ballast base, introduced last year to provide reliable and efficient tower support. Now, we're proud to introduce its bigger brother: the new 1.25 t ballast base. Built with the same robust design, this heavier version offers even more stability without requiring additional water supplies, helping you set up your towers faster and more securely.

Both bases are fully connectable and stackable, allowing you to customize your setup with ease. Each base is crafted from steel-reinforced concrete, ensuring durability and strength. By interconnecting blocks, you can achieve the necessary weight and footprint for even the most demanding structures.

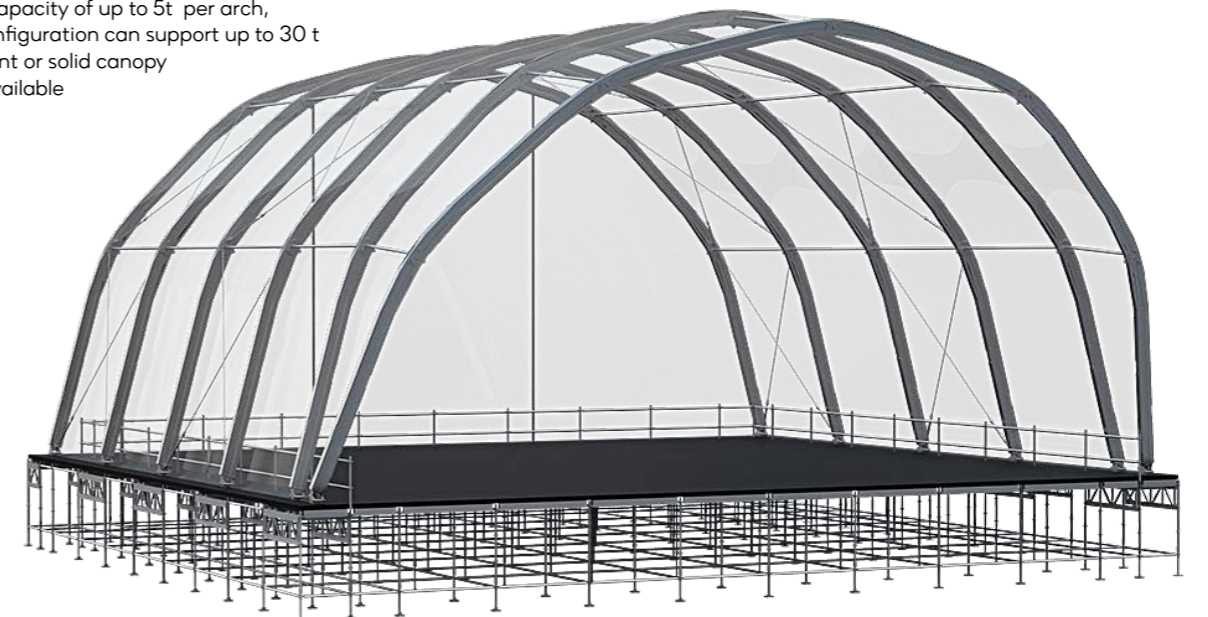
### Key Features:

- **Two Sizes Available:** Choose between the 1250 kg or 500 kg versions.
- **Stackable Design:** Combine units for increased weight or streamlined transport.
- **Inter-connectable:** Create larger ballast formations with expanded footprints.
- **Adjustable Leveling:** Integrated screw-jack sleeve tubes make leveling a breeze.
- **Easy Handling:** Center hanging points and forklift pockets simplify movement and stacking.
- **Seamless Truss Connection:** Designed for M290 and M390 trusses, with thick steel plates and wire lugs for a secure fit.

The new 1.25 t ballast base measures a compact 120 x 120 x 40 cm, matching the height of the 0.5 t version. This uniform size ensures efficient stocking and transportation, saving you time and

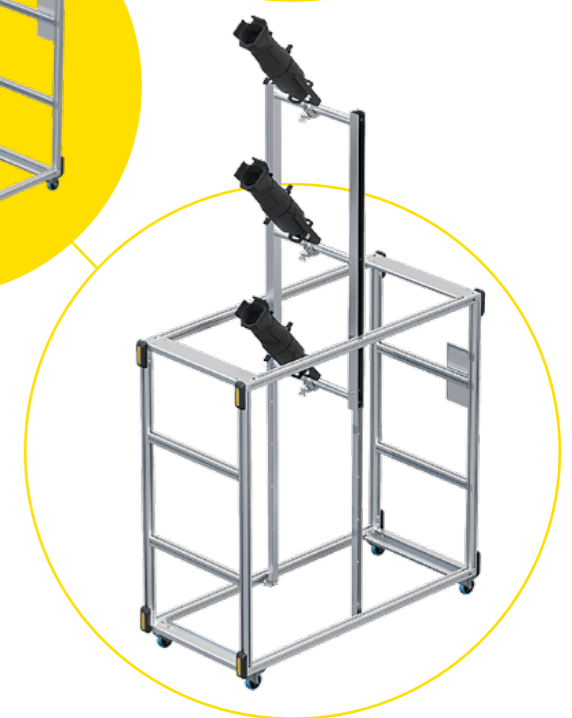
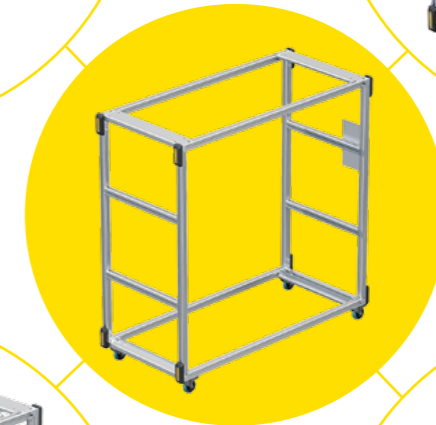
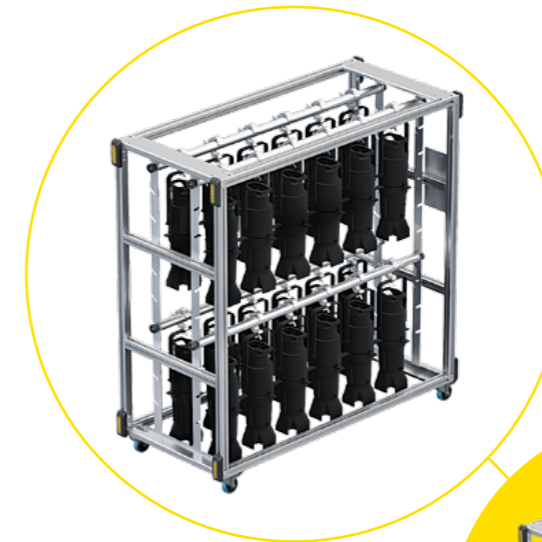
## I-MR4 Invisible roof

- 19x18 m aluminium keder arched roof
- Loading capacity of up to 5t per arch, 6 Arch configuration can support up to 30 t
- Transparent or solid canopy options available



## MILOS Multi-Purpose Aluminium Cart

- Aluminium frame cart for multiple transit & storage solutions (cables, lights, boxes)
- Can be used as simple Pre-Rig tower with telescopic extension accessory
- Cart can carry up to 400 kg of load
- Protective bumpers on all sides
- Standard (100 mm) or outdoor wheels (160 mm)
- Supplied flat-packed for ease of shipping
- Rain/dust protection cover
- Optimised dimensions for transport (1800 × 1800 × 800 mm)
- Easy to assemble and disassemble
- Branded profile covers upon request





Watch the full project video by scanning the QR code.



## MILOS Invisible Roof from bespoke project to standard offer

In the heart of Bergen, Norway, the Bergen Philharmonic Orchestra held two remarkable outdoor concerts on August 22nd and 23rd 2024, offering an unforgettable experience for both musicians and audiences.

Partnering with Creative Technology Norway, MILOS played a key role in this event by designing and installing a custom arched roof structure. Constructed with keder profiles and transparent canopies, this unique roof allowed the orchestra to perform under the open sky while staying fully protected from the elements—ensuring the concerts went smoothly, come rain or shine.

The success of this bespoke design has inspired us to work on including this innovative roof system in our catalogue. We remain committed to pushing the boundaries of event and stage design, bringing groundbreaking solutions to life.





Cathedral Church of Saint Peter



# Steel in the Shadow of Gothic Stone Cathedrals

**When the Notre Dame Cathedral in Paris reopened in late 2024, five years after the fire, guests celebrated the skill of the master carpenters who rebuilt the burnt wooden roof. However, visitors to other famous Gothic cathedrals across Europe usually have no idea that their medieval monumental roofs are often carried by modern steel structures built at a similar time to the Eiffel Tower.**

The existence of Gothic cathedrals, which were built almost simultaneously (from the 12th to the 15th century), is linked to the still unanswered question of where such a sophisticated knowledge of art and craftsmanship came from, who trained thousands of craftsmen in such a short period, and why this knowledge disappeared again after a relatively short time. The gigantic building sites of many cathedrals started to become orphaned around 1400. Some were not revived at all, others underwent gradual efforts at period advances, but these rarely led to the complete completion

of the work. Like warning fingers lamenting to the heavens, people throughout Catholic Europe were left with unfinished sacred buildings that no one could complete for many centuries. What was lacking was the will, the money, and the technical skill to do what is essential for every house — to give it a good roof that will not burn down at the next lightning strike.

The original roofs of the Gothic churches are monumental; thousands of trees, even entire forests, were cut down to build them. The very truss of Notre-Dame Cathedral in Paris, known as the "forest", was made up of more

than 1,300 oaks and was eventually restored similarly. In these tremendous Gothic churches, especially the multi-nave ones, the hammers were supported by trusses on columns, the columns were carried up by struts, and the trusses were supported by pendentives. In the case of high roofs, it was also necessary to take into account the significant wind load on the trusses. Their stability was, therefore, quite problematic, and even more serious was their minimal resistance to fire. All of these problems were only overcome in the 19th century thanks to the massive development of the steel industry and the new technologies it brought.

### THE CENTURY OF STEAM AND STEEL

In addition to new cathedral facades and various towers, the main technical task of the builders of the century was the completion of the nave, including its roofing. The uppermost floors of the Gothic sanctuary additions became a crucial site for the penetration of the burgeoning technical revolution into medieval construction practices. Instead of the massive Gothic timber beams forming the roofs of the original buildings, designers and engineers could now rely on elegant, slender cast-iron columns and bulky truss structures incomparably lighter and more durable than the original timber ones. These new forms were also greatly facilitated by the revolutionary introduction of threaded connections, which began to be used alongside riveting.

### FIRE AS A CATALYST

But even where the metal construction has been spared the formal encroachments



Chartres Cathedral

of neo-Gothicism, it is "Gothic" in character, which is particularly evident when juxtaposed with "true wooden" Gothic construction.

In the case of the cathedrals, this interesting confrontation was made possible mainly by the fires of the historic roof trusses, which provided a welcome opportunity to try out new technologies in reconstruction. The cast-iron roof of Chartres Cathedral in France, built in 1838 according to a plan by Emil Martin, is one of the first structures of its kind to testify that what medieval man dreamed up was capable of symbiosis with the lightness of modern construction.

But the most striking example of a modern addition to a Gothic cathedral is the Cathedral in Cologne, Germany, dedicated to St Peter. This magnificent structure, whose two slender towers rise to a height of 157 meters, contains many treasures, including the supposed remains of the biblical Three Kings. The Cologne Cathedral, the largest building north of the Alps at the time, took 632 years to build and was inaugurated on 15 October 1880 in the presence of Kaiser Wilhelm I of Germany.

For four years, the five-nave cathedral was the tallest building in the world. Before it became it, however, there had to be a drastic change in the view of Gothic architecture when the effort to complete the cathedral was confronted with Catholic dogmatism and the backward views of the conservative part of the bourgeoisie. However, the new economic and production conditions could not be ignored. In 1858, an iron structure was commissioned for the roofing of the nave and transepts, designed by the engineer Richard Voigtel. The truss was not only fireproof but also considerably lighter than the oak construction that had been customary up to that time.

### INDESTRUCTIBLE DOME

The supporting pillar of the truss is a truss made of rolled T-sections spanning fifteen meters. The truss is "Gothically" shaped in its center with a broken arch and is pulled down at the supports by a rod. The structure's total height

is twenty meters, with a roof pitch of seventy-three degrees. The girders are placed in positions corresponding to the spans of the stone structure of the nave and are connected by arch struts and continuous diagonal rods. Interestingly, cast iron is almost entirely absent from the structure, present only in the roof tower structure above the ship crossing, as well as in various auxiliary-shaped parts.

The one-hundred-and-eighty-ton truss is supported by cladding, which, due to the use of lead sheeting (originally zinc sheeting was planned, but this was again rejected due to adverse reactions to the weather), is almost as heavy as the truss itself. The connection of the trusses at the ridge of the roof with a rolled I-profile was a novelty in 1857. Despite its lightweight construction, the roof of the Cologne Dome survived seven aerial bomb hits during World War II unscathed. It was crucial in preserving the entire dome in a relatively easy-to-reconstruct condition.

Another massive wave of iron implementation on the roofs of religious buildings occurred after the Second World War in other places. For example, St. Stephen's Cathedral in Vienna, St. Paul's Cathedral in London and many others burned down after the bombing.

### AS MUCH STEEL AS ON THE STAGE

The Cologne Cathedral's completion history and method were very similar to the completion of St. Vitus Cathedral in Prague, the construction of which began in the 14th century. However, in the case of the neo-Gothic completion project, the approach was less vigorous than in Germany. During the reconstruction of the roof part of the cathedral in 1889, the original wooden roof truss was preserved; only some parts were reinforced with iron elements to increase stability.

The cathedral's extensive newly finished neo-Gothic parts have been given modern steel roofs. The design of these riveted structures naturally follows the shapes of the original Gothic designs, but they carry extreme loads, as the lead roofing panels weigh several dozen



Ulm Minster

tons. A layperson visiting the attic would be overwhelmed by the extensive metal trusses, which more closely resemble the large music stages of Area Four Industries than the Gothic. However, these spaces are only accessible to ordinary mortals on rare occasions.

It remains to be emphasized that Prague's Catholic shrine has not yet been tested by bombing or fire because the Czechs have not fought anyone in the last hundred years except themselves.



St. Vitus Cathedral



# Why spiders on drugs weave strange webs

## (and why riggers shouldn't take a cue from them)

There seems to be almost nothing connecting the spiders creating complex structures out of fibers and the riggers building complex structures out of aluminum and steel parts. The opposite is true.

Both species can solve more complex problems in navigating the environment and building more complex structures. The spider and human nervous systems are similarly affected by psychoactive substances. This is the basis of two scientific experiments showing how drugs affect the abilities of even the most skilled designers and builders, whether they have two legs or eight.

"The people in the zoology department are tired to death. They're trying to film a spider building a web, waiting all night for him to get to work... but the vicious creature refuses to weave for the camera. In the morning, the scientists fall asleep, and when they wake up a few hours later, the spider has created a beautiful masterpiece. This is repeated several times, and one day, a delegation of desperate people comes to me," says, in his memoirs, Dr. Peter Witt, who was an assistant professor of pharmacology at the University of Tübingen in 1948. He was 30 years old at the time, and this event was crucial for his long-standing work (he died in 1998) on the effects of psychoactive substances on humans and animals, especially spiders.

"They knew my research was in drugs, so they asked me to give the spiders something that would make them lose track of time and weave webs at other times than when the scientists were asleep. I was in the middle of testing various drugs like marijuana, mescaline, morphine, scopolamine, and benzedrine... These elicited strange reactions in my human test subjects—fantastic dreams, colorful visions, laughter, crying, and all sorts of emotional responses. However, they did not answer the specific differences between the effects of the various substances. I pointed out to my colleagues that I had no idea how drugs could affect spider behavior. However, I did provide them with some samples to test."

The next day, my colleagues returned with news that was disappointing for them but exciting for me. The substance they had given the spider had not accelerated its performance, but under its influence, it had formed a web of a shape never seen before. "I immediately decided to switch my research from humans to

spiders," Witt says. "Human subjects are moody, complicated, changeable, and tend to carry memories from one experiment to the next. Spiders promised to be much simpler subjects for testing the effects of drugs on the central nervous system. Moreover, they could provide more actionable information — for example, how to identify even tiny amounts of an unknown drug."

The spider of the genus *Zilla* was chosen for the experiments. The main reasons were that 1) the construction of its spider web requires more elaborate planning in the construction of the whole structure so that the effects of different psychoactive substances can be better distinguished; 2) these spiders repeat the same structure over and over again and are not lazy to build a brand new web right after the old one has been destroyed or damaged + moreover, the hungrier they are, the more willingly and quickly they will embark on the construction of a new web; 3) it is relatively easy for scientists to "trick" a spider into behaving naturally even by unnatural means.

Regularly feeding the spiders with drugs required a good deal of improvisation. Spiders, unlike humans, don't get drugged for free. Therefore, the test psychoactive substance was dissolved in a sugar solution to mask its taste. This was injected with a needle into the buttocks of the killed fly at the point where the spider is accustomed to injecting enzymes into its trapped prey to then suck out the poisoned contents.

However, the spider only responds to live prey, which flaps its wings when caught in a web. And so a vibrating metal tuning fork, attached right next to the impregnated fly, had to be used to lure it in. "The spiders liked the sweetened food because they accepted every drug that was given to them in this way," says Dr Peter Witt, describing the details of the experiment.

The effects were, as expected, remarkable — each of the drugs administered led to different but, each time, worse results than if the spider had woven its web in a "sober" state. The summary results, published five years later in *Scientific American*, may have stuck for a long

time, but the same thing was repeated half a century later by scientists at NASA.

In their testing, they expanded the range of psychoactive substances used to include new generations of sedatives, anxiolytics and other pharmacological agents. Still, they came to the same conclusions as Dr. Peter Witt. For example, marijuana, or the active ingredients THC and CBD, leads to the spider indeed building its web correctly — both in the basic construction of the main filaments and in the direction of the radial filaments that encircle its center, but as time goes on, its performance and accuracy deteriorate, and the ends of the web remain unfinished.

Hallucinogenic LSD changes the entire geometry of the network — the directions of some fibres remain natural, but others are entirely missing, and the overall design is chaotic.

Amphetamines and other stimulants create webs that are perfectly elaborate in one part while completely omitting another — the spider, in the hyperactivity induced by these substances, seems to focus on one detail while completely neglecting another.

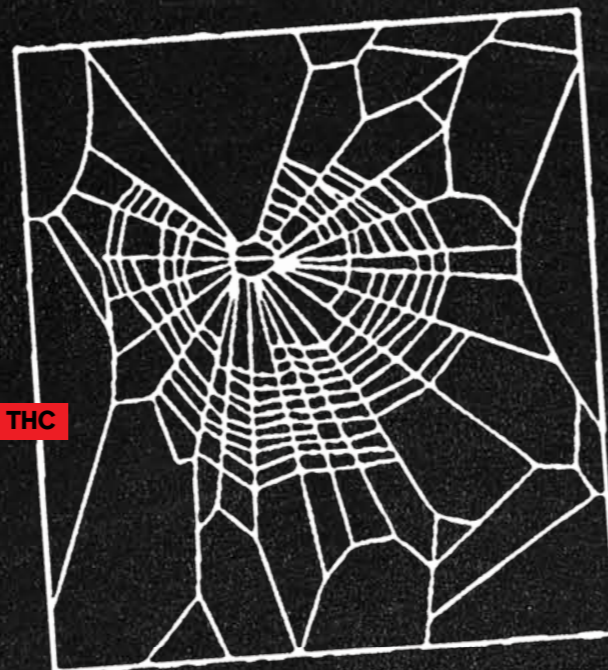
Sedatives and antidepressants such as benzodiazepines or chlorine hydrates show poorly constructed networks with significant gaps, often only partially completed.

The effect of caffeine, first studied on spiders by NASA scientists in 1995, is peculiar in this respect — the result is entirely chaotic webs with no functional structural integrity. The explanation is simple: caffeine is a substance that some plants (coffee, tea, etc...) create as a defence against insect pests. It is essentially a natural insecticide: poisonous to spiders and harmless to humans, even with a stimulating effect. As the example of caffeine just shows, the effects observed in spiders cannot be directly compared to those on humans — after all, there are significant differences in physiological and neurological makeup.

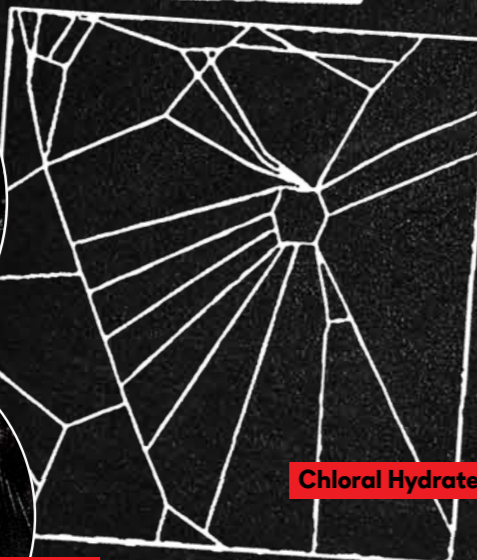
However, the effects of the other psychoactive substances are precisely the same in one respect: the ability to orient, act quickly, and use skills that are otherwise inherent in us — whether innate or learned — affect both spiders and humans, especially riggers, only negatively.



THC



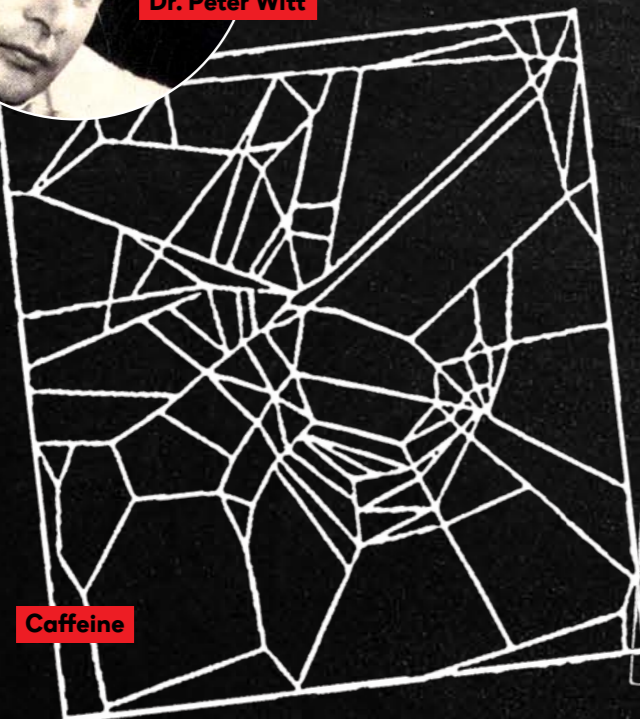
No chemical



Chloral Hydrate



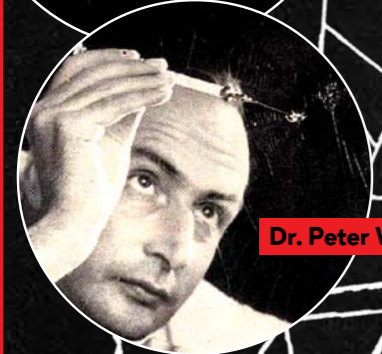
Benzedine



Caffeine



Peyote



Dr. Peter Witt



# Trussworthy Passion Behind Your Show



## Reliability and Passion

This is our story, our daily commitment, and the direction we are heading for the future. Our expertise has been the foundation of our dedication for over thirty years.

By nature, a product represents the pursuit of a solution to a problem or a response to a new need. The entertainment industry relies on a wide range of diverse technologies, each evolving along its own trajectory. Often, these technologies require structural solutions to perform at their best.

In 2024, LITEC continued its commitment to innovation while focusing equally on consolidating achievements from recent years.

Product updates, often developed in collaboration with our clients and users, remain a cornerstone of our approach. The development of roofing solutions for large structures, structural systems supporting the dynamic world of video media, and bespoke project applications were key milestones in 2024 and will remain our targets for 2025.

The exceptional modularity of our systems unlocks endless possibilities, with combinations that, like origami, multiply to create ever-changing effects. Modularity is not the same as standardisation; it is the enabler of creativity.

The following pages provide a glimpse into these outstanding achievements in innovation.

- **In-house development**
- **Custom made solution**
- **Quick delivery**
- **Focus on detail**
- **Italian Design**

**A Catalogue for Every Product Family**  
 LITEC has always been synonymous with innovation, offering an increasingly diverse range of products designed to meet a wide variety of needs. The new communication strategy is based on a selection of specialised catalogues, carefully crafted to simplify the search for information and details, organised by product family.

## Integration and Innovation in Event Industry Structures



**Carlo Ughelini**  
 LITEC Product Strategist

**The challenge of structural evolution:**  
 The event industry demands innovative, flexible solutions to meet complex technical needs and strict safety standards. Integrating systems like steel towers, aluminium structures, and modular scaffolding is key to addressing design challenges and ensuring performance.

**Advantages of material synergy:**  
 Steel offers stability and strength, while aluminium provides lightweight, versatile properties for easy transport and assembly. Combined, they enable modular, high-performing structures adaptable to various scenarios.

**Extreme weather challenges:**  
 Unpredictable weather and intense wind loads, especially with large LED walls, demand advanced designs. Cantilevers are increasingly popular, and add complexity, pushing engineering creativity to new heights.

**Innovative solutions for emerging needs:**

- Black Box effect: enclosed structures designed to enhance immersive stage designs.
- High-performance audio: Suspended sound systems for improved performance.
- Resident configurations: structures designed to remain assembled throughout an entire season, providing flexibility and adaptability for a wide range of setups without compromising quality or safety.
- Strict regulations: Compliance prioritising audience and operator safety.

**Future developments:**

- Transport and assembly efficiency: Modular, lightweight designs targeting untapped small to medium structures, benefiting brands like LITEC.
- Advanced integration: Interoperable systems like foldable stairs streamline customisation and optimisation.
- Interactivity: Seamless integration with our other brands, including EXE hoists, EXE DST motion systems, and the complete ecosystem of EXE Cell and EXE Flexa load cells, delivering comprehensive solutions for our industry.

**Conclusions:**  
 The integration of technologies, materials, and systems is shaping the future of event structures. Innovative solutions address design challenges, enhance performance, and create new opportunities by blending safety, efficiency, and creativity.

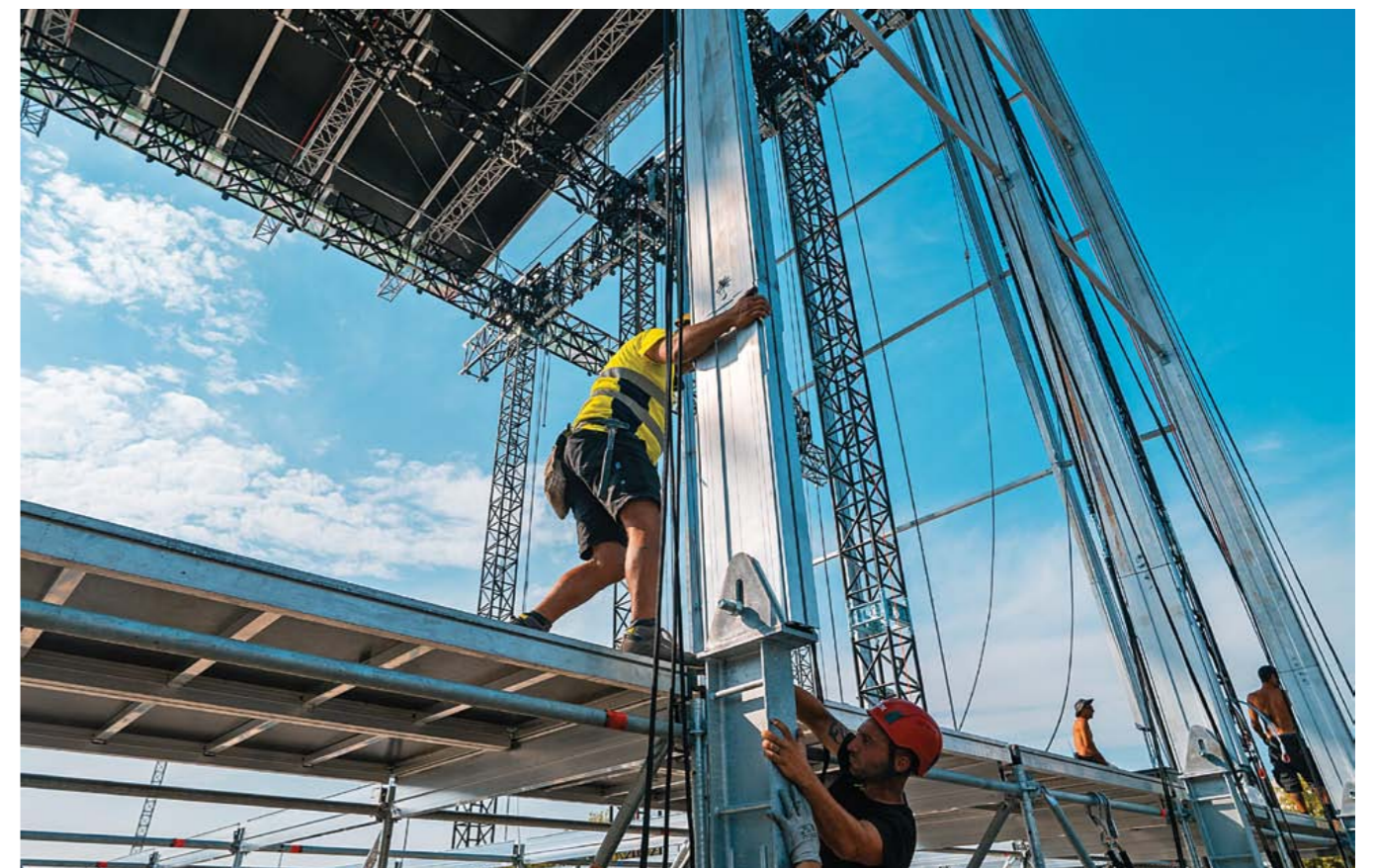


**A symbiosis between print and digital: the 2025 goal**  
 By 2025, LITEC is set to achieve a true symbiosis between print and digital, merging these two worlds into a seamless experience. This integration will maximise the potential of both formats, ensuring that catalogues and the website work hand-in-hand to showcase the breadth and versatility of LITEC's innovative solutions.

# Litec Roofing System

## Steel and Aluminium: Performance and Efficiency

Within the largest exhibition area in Italy, **Fiera di Milano**, a cutting-edge roof system was installed in the summer of 2024. This structure comprises of steel bases and towers, with an aluminium roof. The stage front spans **50 metres** in width, reaches a height of **24 metres**, and extends to **18 metres** in depth. The roof includes a **cantilevered section with a 3.40 metres overhang**.



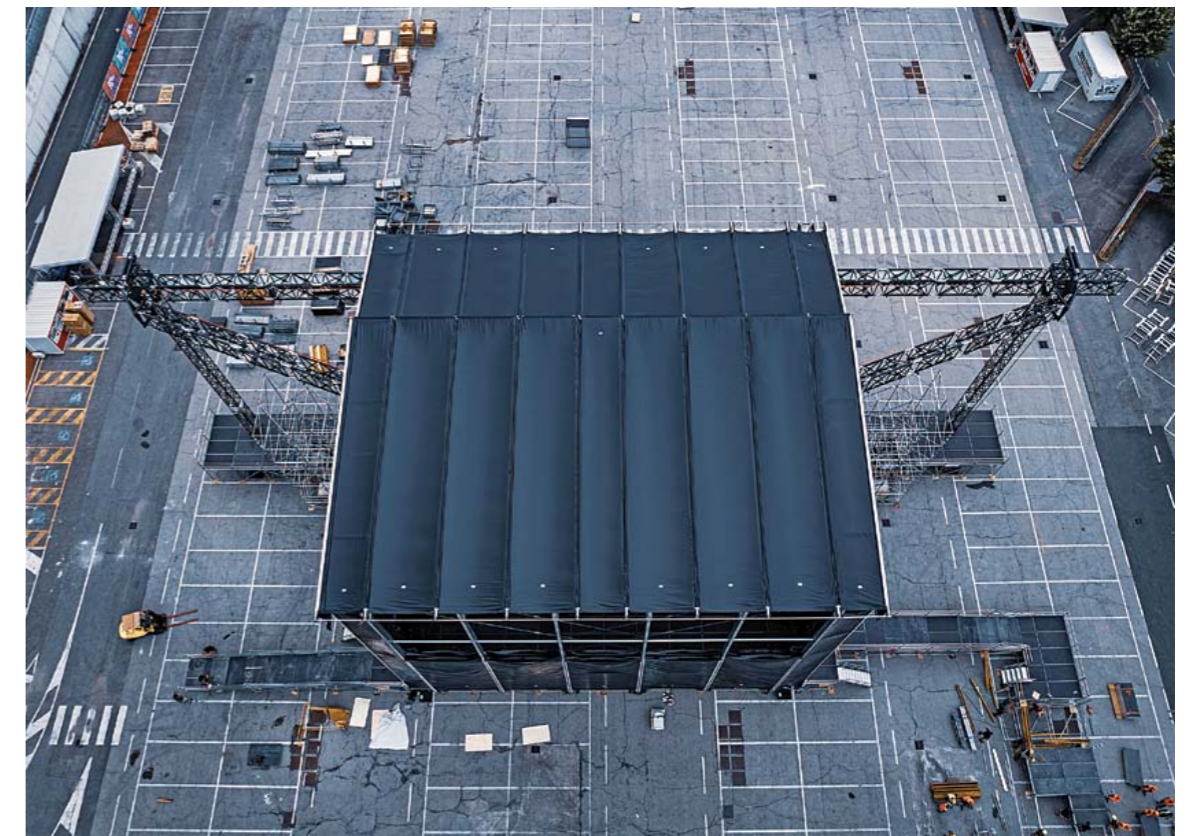
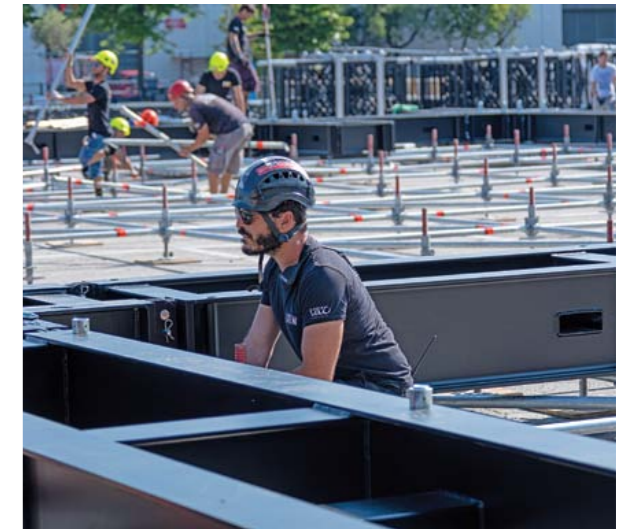


## Modularity and Precision: Perfect Compatibility With Layer Event Scaffolding System

Driven by the modular flexibility of the Layher Event Line system, the **ballastable steel bases** were developed in perfect coordination with the supporting structure.

This approach allowed for a smooth and progressive construction process, culminating in the assembly of the roof and side coverings.

**PVC sheets** were carefully stretched within super-reinforced **aluminium keder profiles**, ensuring a robust and wind-proof shield for the backdrop, side walls, and roof area, including its **cantilever exposure**, where the suspended structure is engineered to maintain stability and safety, even in extreme conditions.





The **ballastable steel bases** are fully compatible with the **Layher Scaffold**, thanks to the **LITEC HiPe Ground System**, which provides a continuous surface for securing the towers and optimising load distribution. This system ensures **structural stability** for the demanding technical and safety requirements of large-scale events.

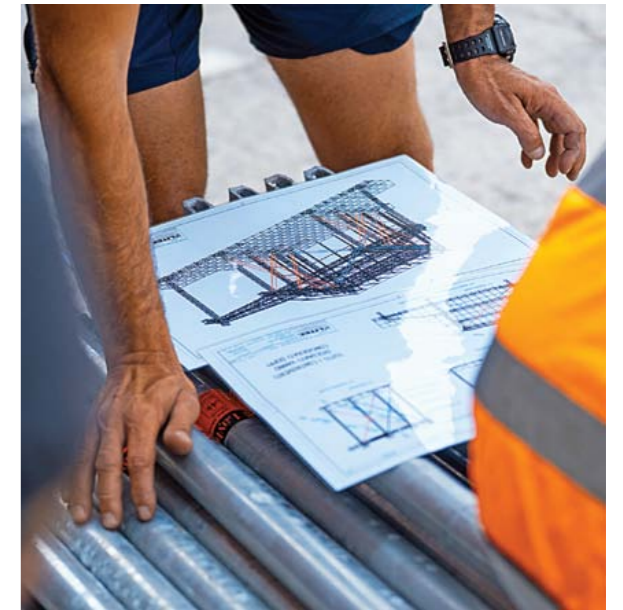
The roof towers, along with the delay towers positioned towards the audience, are the renowned **Litec HiPe CS-76** models made of **S-700 steel**, celebrated for their strength and reliability. For the first time, these steel towers were combined with **LITEC Myt trusses**, custom-built to ensure compatibility with the **Layher Scaffolding System**.



A critical element of this installation was the lifting of the roof, achieved with **10 EXE D8 Double Reeve hoists**, each with a **5-tonne capacity**, providing precision and safety during the structure's positioning.



The LITEC technical team over-saw the entire assembly process, working closely with the construction crew to ensure seamless execution.



## **Resilience and Reliability in Extreme Conditions**

The large structure was assembled in July 2024 and remained operational through to the end of August, hosting both national and international events. During this period, it demonstrated exceptional resilience to **extreme weather conditions**, including heavy rain and strong winds. This was another tough test for the LITEC Outdoor configurations, which once again proved its ability to ensure stability and safety even in the most challenging environments.

# LITEC: Where History Meets Modernity

Working inside the **Arena di Verona**, a venue steeped in history with over 2000 years of performances, is always a unique challenge. For the staging of "La Bohème" by **Giacomo Puccini**, commissioned by the **Fondazione Arena**, LITEC designed a complex stage infrastructure, overcoming the challenges posed by the precious ancient supporting surface and the presence of pre-existing structures.

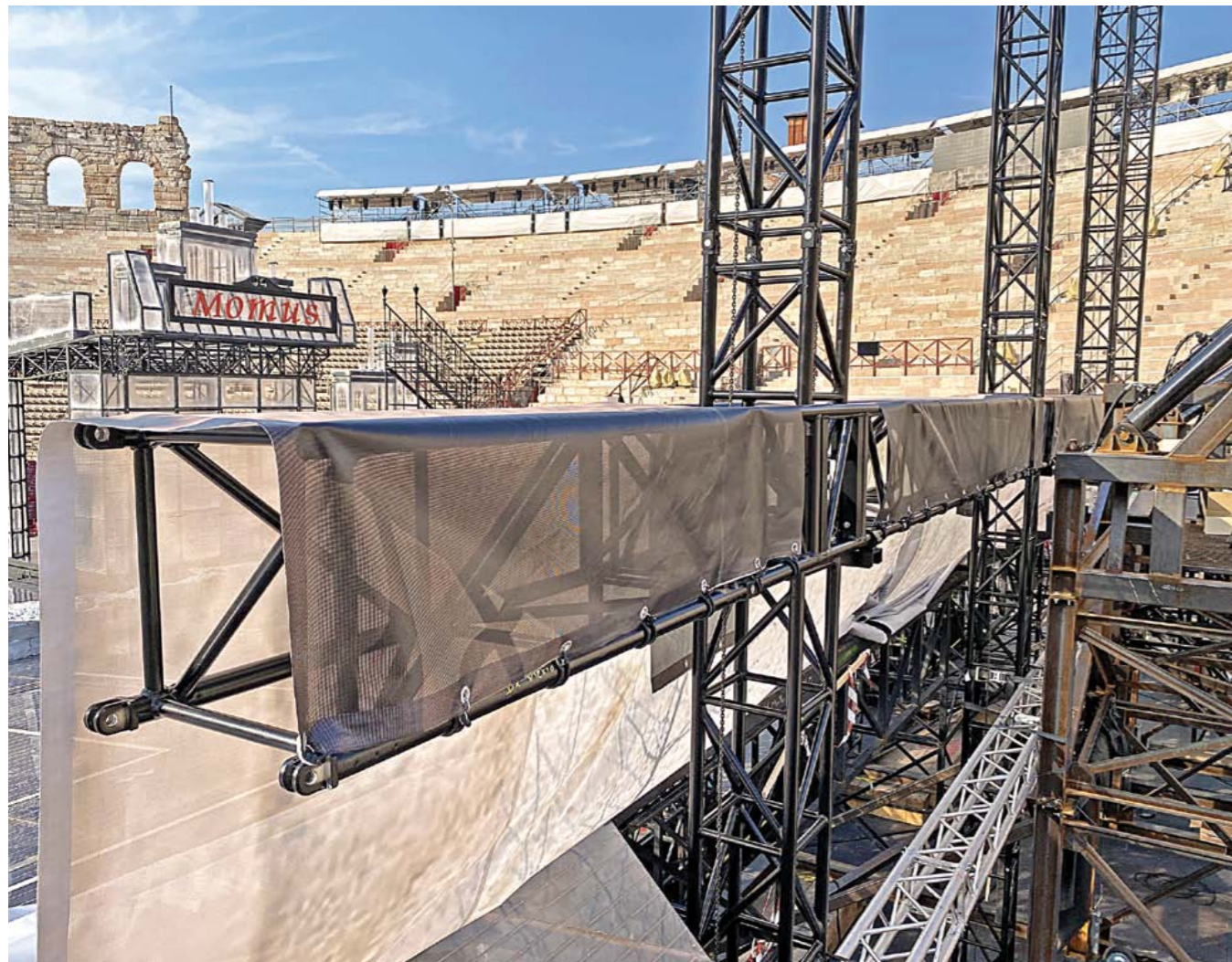
The **LITEC technical team** managed the project from the outset, designing custom-made portals to fit perfectly with the unique characteristics of the Arena. **QL40A custom trusses** were used for the towers, while custom **QL52A trusses** were used for the spans, with each portal specifically designed to meet the required dimensions and structural needs.

Designing and constructing a structure within such an iconic setting, **where the Romans first began creating events over 2000 years ago**, was an exceptional experience for the LITEC team, seamlessly blending tradition and innovation.





This setup was used for all performances of "La Bohème" in 2024 and will be reused for performances in 2025.



## A Staircase that Becomes Stage Deck (and vice versa)

The smart solution to integrate a foldable staircase, available on request for compatibility with all models and brands of scaffolding stage decks.



A brilliant new solution from LITEC: the new **Stage Deck with Built-in Foldable Staircase**.

A lightweight solution, entirely made of aluminium. The steps feature anti-slip treads. The staircase is self-levelling according to the stage height.

The base design is conceived to fit the leading scaffolding stage deck manufacturers worldwide. Your stair deck will be produced to match the stage decks you already own. (Contact our technical office for further information.)



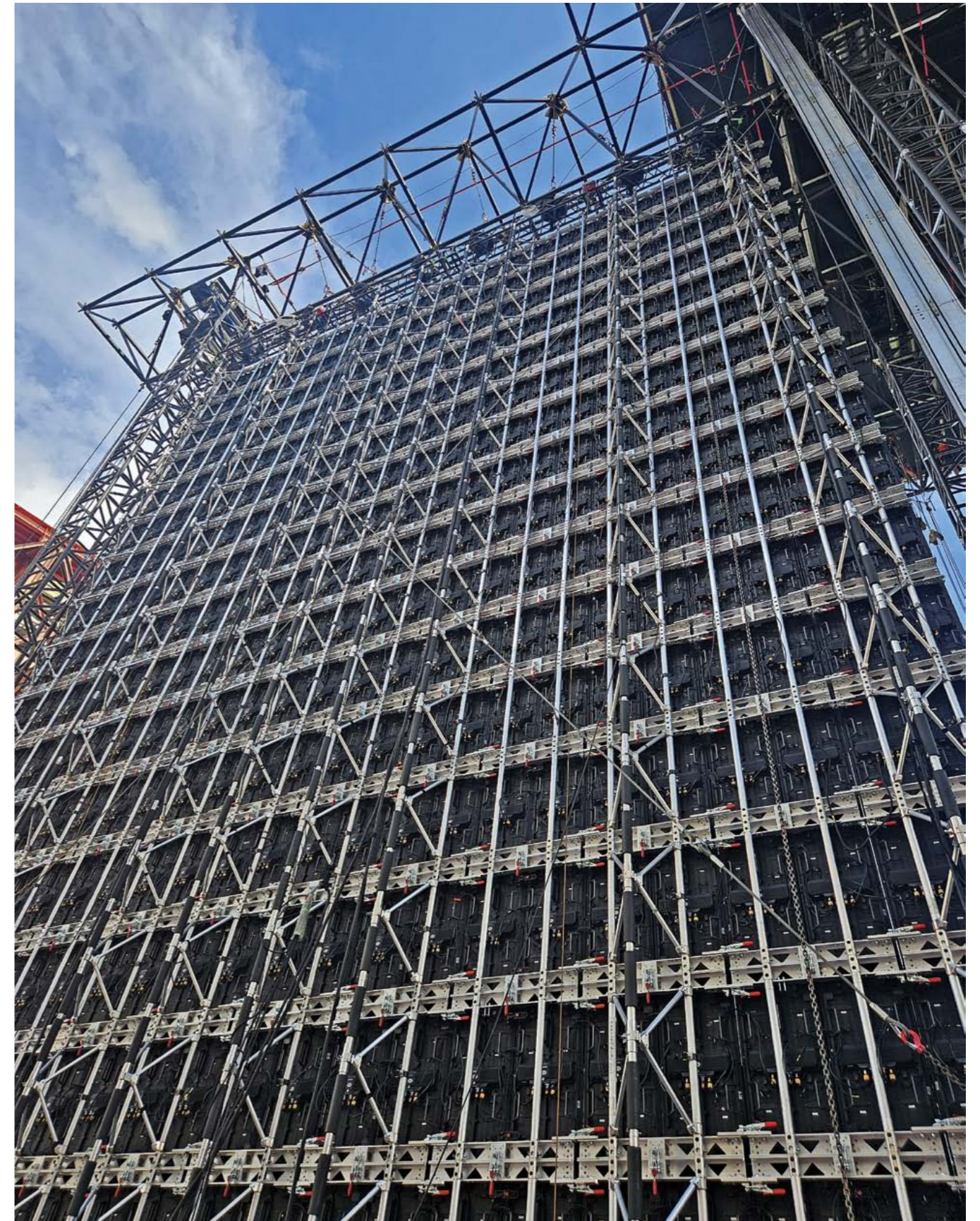


## The Evolution that Enhances Performance

LITEC as an advanced solution for building large LED walls: the Backbone system, now available in both Standard and Slim versions.

The **Backbone Outdoor System** evolves with the introduction of the **Slim version**. This module is designed without the triangular support section at the back and is meant to be connected between two standard Backbone modules.

Where structural conditions permit, you can alternate standard modules with the Slim model. This option lightens the entire structure, simplifies assembly, and reduces overall costs.





## The Backbone System, Standard + Slim

Simpler, more cost-effective. Same performance.

The **Backbone Outdoor**, in both its **original** version and the **hybrid configuration** with the addition of the Slim module, continues to mark a break from traditional methods of assembling large LED panel fronts. This more efficient solution significantly reduces setup time and the number of personnel required, while increasing the structure's robustness and resistance to weather conditions.

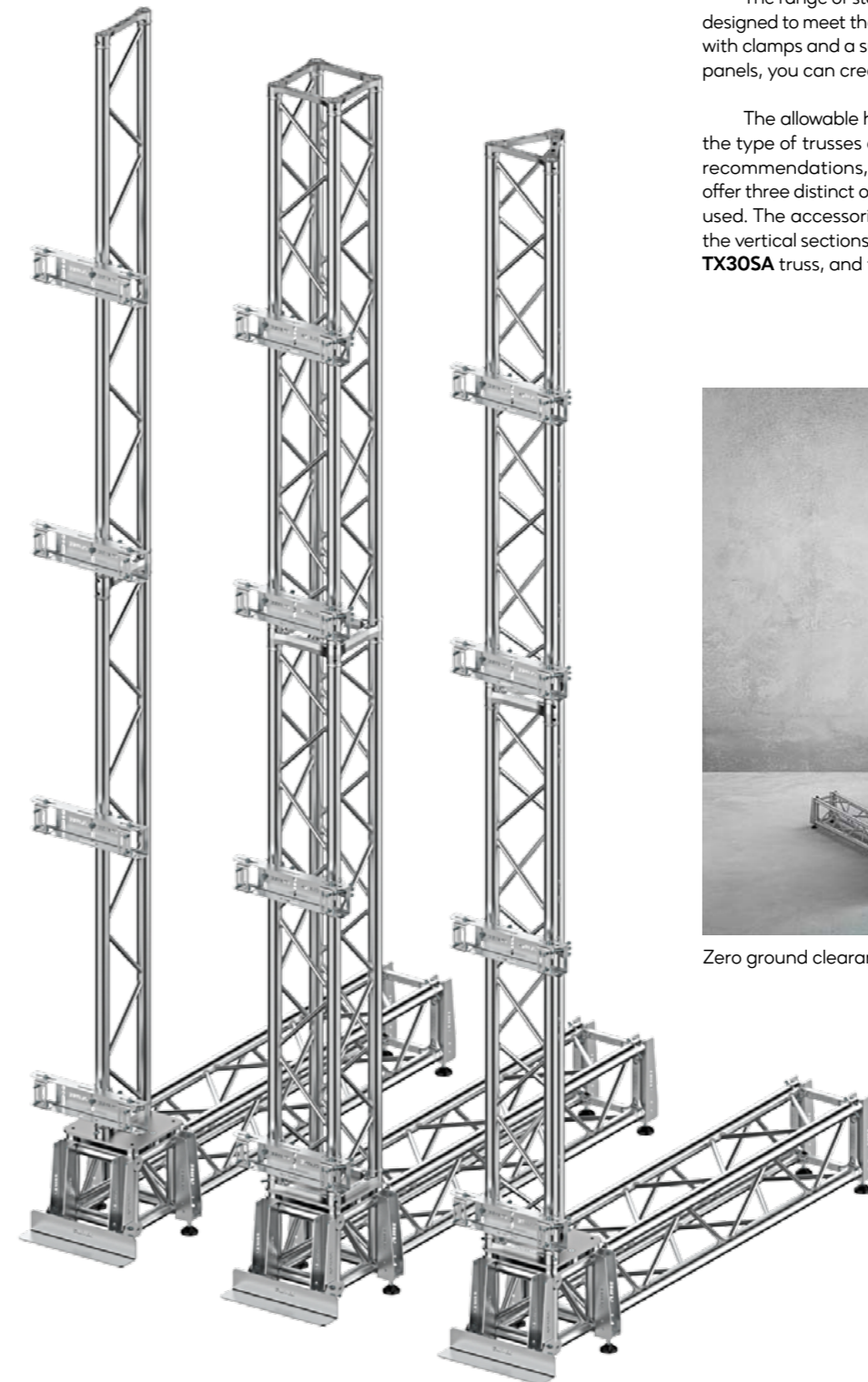
By incorporating the **Slim module**, the system not only offers greater flexibility in installation but also maintains the high standards of durability and performance that are essential for outdoor events, making it a top choice for large-scale LED installations.



# Backbone Indoor Solution:

Now the updated version. Improved and simplified. Designed for quick and easy LED wall setup in just moments.

In addition to large outdoor structures, there is always a strong demand for simple and reliable solutions to set up LED walls within trade show booths, conference halls, retail spaces, and entertainment events. **With just four custom-designed parts**, you can easily convert your trusses into a robust support system for LED panels. Add a few more modules and check your inventory, you'll quickly have a professional, modular system ready to go.



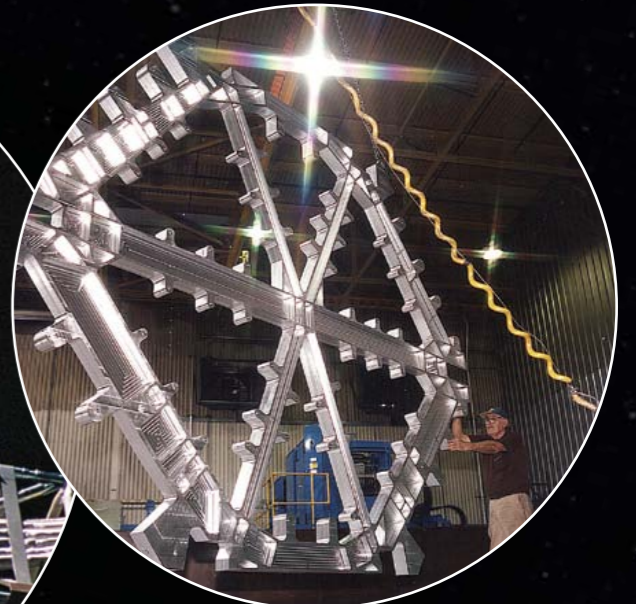
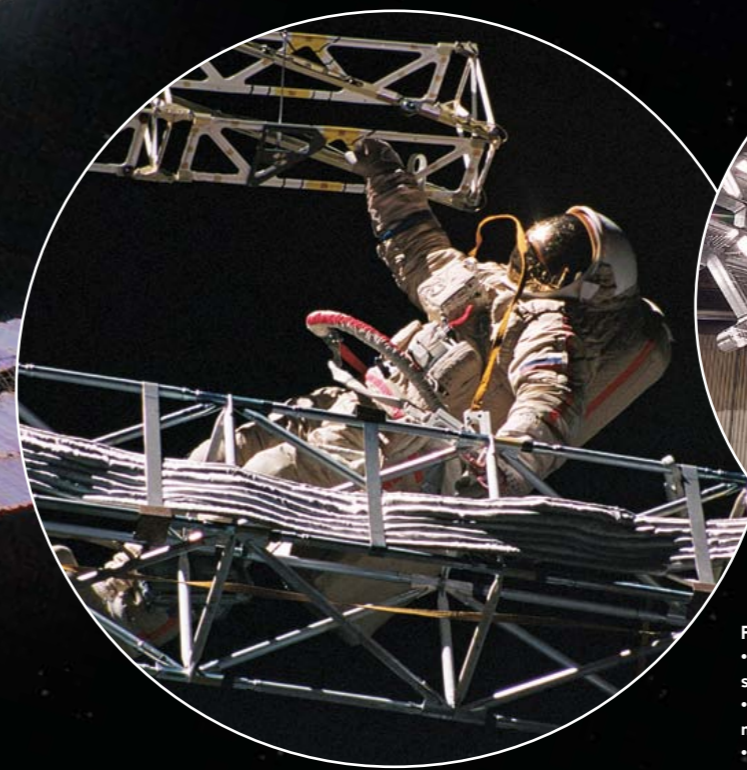
### Modular Solutions

The range of standard products in the LITEC truss catalogue is designed to meet these needs. By simply adding interface modules with clamps and a support base between the trusses and the LED panels, you can create a versatile support system.

The allowable heights for these solutions vary depending on the type of trusses and LED panels used. For specific details and recommendations, please contact us for more information. We offer three distinct options, each tailored to the type of truss being used. The accessories are specifically designed to fit indistinctly the vertical sections of the flat LITEC **FX30SA** truss, the triangular **TX30SA** truss, and the widely used square **QX30SA** truss.



Zero ground clearance



From left:  
 • High elevation view of the truss steelwork, port-side radiators and solar arrays (in 2019).  
 • The Integrated Truss Structure (ITS) is about 110 meters long and made from aluminium and stainless steel.  
 • S3 truss end piece manufacturing at Boeing in Huntington Beach.

# The cosmic truss that holds together the best of what humanity has created

Approximately 350 kilometres above our heads, a unique cosmic structure circulates regularly. The International Space Station (ISS) is the most inaccessible place humans inhabit. But if you look closely, you'll see that it's made up of similar structural elements to the terrestrial concert stages on which space music is sometimes played.

A quarter of a century ago, the first two modules of the future International Space Station (ISS) — the American Unity and the Russian Zarya — joined together during the Space Shuttle Endeavour's STS-88 mission. A Canadarm robotic arm on the shuttle reached out and grabbed the Russian module, which had been in orbit for two weeks at the time, and attached it to the Unity module stored in the shuttle's cargo bay. Thus began the convoluted history of the metallic island of life circling the Earth, which traces its roots back to 1984.

## THE COLD WAR CHILD

Then, at the height of Cold War paranoia, US President Ronald Reagan approved the construction of the first-ever space station. As a promoter of the so-called Star Wars program, he saw the construction of a permanent base in space as the next logical step towards gaining dominance in space. But the Soviets eventually

beat him to the punch, sending their Mir orbital station into space in 1986, which orbited the earth until 2001.

Fundamental changes in the world's geopolitical map have allowed other countries, including eleven European countries or Japan and Brazil, to join the dormant US station project originally called Freedom. However, the 1990s sweet romance between the Americans and the Russians brought their participation and, with it, the welcome know-how associated with the operation of MIR.

The current ISS thus represents in many ways the merger of the previously planned independent stations, the Russian Mir 2 and the American Freedom. In addition to several Russian and American modules planned for these stations, the European Columbus laboratory module and a Japanese module named Kibo are attached to the station. A comparison of the view of the ISS 25 years ago and the picture

today documents the enormous development the station has undergone. It has grown from a two-cell base into a complex organism with many functions.

## THE LIFE-GIVING BACKBONE

But no organism can develop and function without a backbone, a skeleton that holds it all together. For the ISS, it is called the Integrated Truss Structure (ITS), and, in practice, it is a hundred-meter-long truss, or six sub-trusses, made of lightweight and strong aluminium alloys resistant to corrosion.

The ITS beams are modular, meaning they are assembled from individual sections (S0, S1, S3, P1, P3, etc.) transported to the ISS by the Shuttle and then assembled in space. This modularity allows them to be transported and assembled in the limited space of the Shuttle. They were designed to be assembled and repairable by astronauts in extravehicular

activities (EVAs). Mechanical linkages and adapters allow for easy connection and assembly using robotic arms (e.g. Canadarm2).

The beams must withstand the loads caused by the rotation of the ISS, impacts from micrometeoroids and the forces caused by the attachment of large solar panels. The technology used in their design includes advanced Finite Element Analysis (FEA) to simulate and optimize strength.

These are not only structural elements but also serve to support the solar panels and their rotating mechanisms (SARJ - Solar Alpha Rotary Joint), including radiators to dissipate excess heat. The beams also carry the data and power lines that connect the ISS modules.

The entire ITS skeleton was built in several manufacturing plants in the United States that have expertise in space systems design. Production was divided among various specialist contractors who worked together under the supervision of NASA and its partner agencies, with the major part of the production being handled by the world-renowned aircraft manufacturer Boeing.

## TECHNOLOGICAL REFINEMENTS

Before production, the entire structure had to be modelled using computer simulations to analyze its strength, vibration and thermal deformation.

The actual production of the beams and their components required a highly specialized approach related to the unusual environment of their application. The aluminium alloys were machined on precision CNC machines to achieve accurate dimensions and minimal tolerances. Some parts of the beams were formed

by rolling, pressing and bending processes to ensure optimum strength and dimensional stability.

Friction Stir Welding, FSW, was used for welding aluminium. This is a high-strength welding method in which materials are joined by frictional heat and pressure without completely melting them.

Some parts of the beams were made of composite materials combining carbon fiber and resin. These materials have a high strength-to-weight ratio and improve resistance to deformation and wear. Composites have been used mainly for secondary structures and protective covers. Specific parts of the beams that require higher strength and durability use titanium alloys.

The metal parts of the structure are coated with special coatings to protect against radiation and the erosive effects of atomic oxygen in space. The insulation minimizes thermal deformation caused by changes between solar and shadow illumination.

## SECURE CONNECTION

The individual ITS sections are connected by screws and bolts made of titanium and stainless steel. These joints have been designed to withstand the vibrations of a shuttle launch and the long-term effects of microgravity. Latches are used for some temporary connections to allow easy disconnection when maintenance or section replacement is required.

The radiators on the beams are connected by coolant loops that remove excess heat from the ISS. These tubes are held together by flexible joints that allow them to move and expand with temperature changes.

## COSMIC LOGISTICS

After production was completed, individual sections of the beams were transported to the launch site at Kennedy Space Center in Florida by special cargo aircraft (e.g., Super Guppy) or by road in protective containers. Once the beams were carried into orbit by the shuttle, they were joined together using a Canadarm2 robotic arm to ensure the precise positioning of the sections before they were fixed.

During Extra-Vehicular Activity (EVA) astronauts used to fix the joints manually with special tools and wrenches. The beams have alignment pins to ensure precise positioning during assembly and to help stabilize the connection before final attachment. Dampers are also installed on some joints to minimise vibrations caused by ISS movement or handling of heavy components.

## WILL IT SURVIVE 2030?

The International Space Station is the most expensive structure ever built by mankind. The cost estimates vary, with the most commonly quoted figure being \$150 billion.

The station has been permanently inhabited for twenty-one years. A crew of several members usually stays on the ISS for six months. The planned lifetime of the ISS has been extended several times. The US authorities have recently declared that it should be a functioning laboratory and base for at least another seven years. The biggest problem is the age and wear and tear of the components. As several components are beyond their initially intended lifetime, analyses are regularly carried out to ensure the station is safe for continued occupation and operation.

# Behind the Scenes:

## Iconic Stunt Rigs and How They Were Created

In the dazzling world of cinema and theater, rigging combines engineering genius and creative magic. **Stunt rigs enable breathtaking scenes that captivate audiences, combining technical mastery with artistic vision. Let's look at the creation of some of the most memorable stunt rigs in history, featuring insights from the riggers, designers, and directors who brought these spectacular setups to life.**

### THE SPINNING HALLWAY IN "INCEPTION"

#### The Vision

Christopher Nolan's "Inception" features a gravity-defying fight scene in a rotating hallway. Nolan sought to keep the sequence as practical as possible to enhance realism and immersion.

#### The Challenge

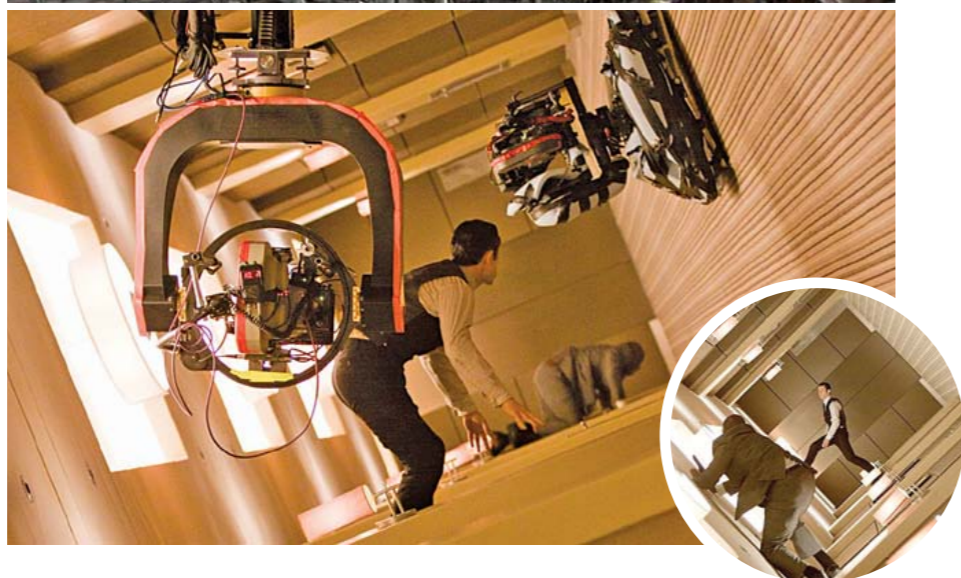
The challenge was to design a rotating set that kept actors and cameras in place while allowing fluid movement for the intense fight scene.

#### The Solution

Guy Hendrix Dyas, the production designer, and Chris Corbould, the special effects supervisor, engineered a groundbreaking setup:

- **Rotating Set:** A 100-foot-long hallway, mounted on giant gimbals at each end, capable of 360-degree rotation.
- **Track and Harness System:** Actors, including Joseph Gordon-Levitt, wore harnesses connected to overhead tracks, enabling free movement while supported.
- **Gyroscopic Camera Mounts:** Cameras were mounted on stabilized tracks to capture dynamic shots without motion blur.
- **Motor Control:** A central computer system synchronized the set's rotation with the actors' and camera movements.
- **Safety Measures:** Multiple redundant harnesses and emergency stop systems ensured everyone's safety.

The result? A mesmerizing, gravity-defying ballet of action and engineering.



### THE BURJ KHALIFA CLIMB IN "MISSION: IMPOSSIBLE – GHOST PROTOCOL"

#### The Vision

In "Mission: Impossible – Ghost Protocol," Tom Cruise's Ethan Hunt scales the dizzying heights of the Burj Khalifa. Director Brad Bird wanted a heart-stoppingly real sequence, with minimal CGI to maximize authenticity.

#### The Challenge

Gregg Smrz, the rigger and stunt coordinator, faced the daunting task of ensuring Cruise's safety at over 2,700 feet, contending with high winds and creating the illusion of a free climb.

#### The Solution

Smrz's team devised a sophisticated rigging system:

- **Custom Harness:** A specially designed full-body harness distributed Cruise's weight evenly, ensuring comfort during the long shoots.
- **High-Tensile Steel Wires:** Nearly invisible high-tensile steel wires, known for their strength and thinness, kept Cruise securely tethered.
- **Computer-Controlled Pulley System:** This system adjusted wire tension dynamically, allowing Cruise to move naturally while remaining securely attached.
- **Multiple Anchor Points:** These distributed the load and provided redundancy, ensuring no single failure point.
- **Wind Stabilization Lines:** Additional lines counteracted the high winds at such altitudes.

This meticulous setup enabled a seamless blend of practical effects and real performance, thrilling audiences worldwide.



The art of rigging combines technical prowess with creative vision, pushing the boundaries of what's possible in entertainment. From scaling skyscrapers to rotating hallways, the stories behind these iconic stunt rigs reveal the dedication and ingenuity of the riggers, designers, and directors who bring these spectacular scenes to life. As technology evolves, the future promises even more thrilling and innovative feats, ensuring the magic of cinema and theater continues to captivate audiences for generations.



### THE CHARIOT RACE IN "BEN-HUR" (1959)

#### The Vision

The chariot race in William Wyler's "Ben-Hur" is a legendary cinematic moment, aiming for a visceral, high-stakes race that would be unforgettable.

#### The Challenge

The main challenge was ensuring the safety of performers and horses while achieving intense, realistic action on a grand scale.

#### The Solution

Stunt coordinator Yakima Canutt and his team created an enormous, meticulously planned setup:

- **Track Construction:** Built using a mix of sand, dirt, and compacted earth to provide a stable yet realistic racing surface.
- **Reinforced Chariots:** Custom-built with sturdy frames to protect drivers during high-speed collisions.
- **Hidden Harnesses and Cables:** These systems ensured performers could be safely ejected during crashes.
- **Spring Mechanisms:** For dramatic stunts, like a charioteer being launched, hidden spring mechanisms provided safe propulsion.
- **Extensive Rehearsals:** Choreographed rehearsals ensured precise timing and coordination, with rigorous safety protocols.

The result was an epic, adrenaline-pumping race that set a benchmark for practical stunt work.

### THE PLANE HEIST IN "THE DARK KNIGHT RISES"

#### The Vision

Christopher Nolan's "The Dark Knight Rises" opens with a spectacular mid-air hijacking of two planes. Nolan aimed for practical effects to achieve a truly awe-inspiring sequence.

#### The Challenge

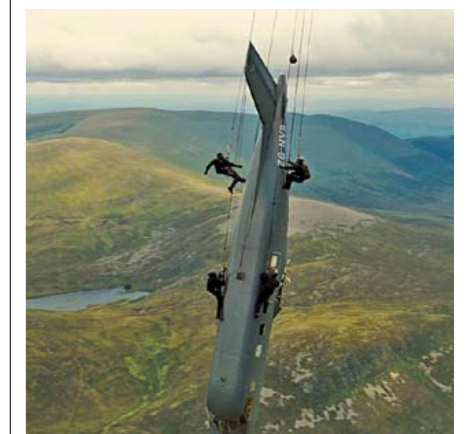
Coordinating a real-time plane-to-plane hijack in mid-air, ensuring the safety of stunt performers, and synchronizing the precise movements of both aircraft were monumental tasks.

#### The Solution

Stunt coordinator Tom Struthers and aerial coordinator Marc Wolff executed a daring plan:

- **Modified Aircraft:** A C-130 Hercules and an Embraer 110 were reinforced to withstand the stunt's stresses.
- **Steel Cables:** High-strength cables connected the planes, anchored to reinforced points.
- **Heavy-Duty Winches and Pulleys:** Installed on the C-130, these devices stabilized the smaller plane during the hijack.
- **Specialized Harnesses:** Stunt performers wore quick-release harnesses, allowing safe mid-air transfers.
- **Aerial Rehearsals:** Extensive rehearsals perfected the timing and coordination required for the sequence.

The outcome was a jaw-dropping, practically executed heist sequence that left audiences on the edge of their seats.

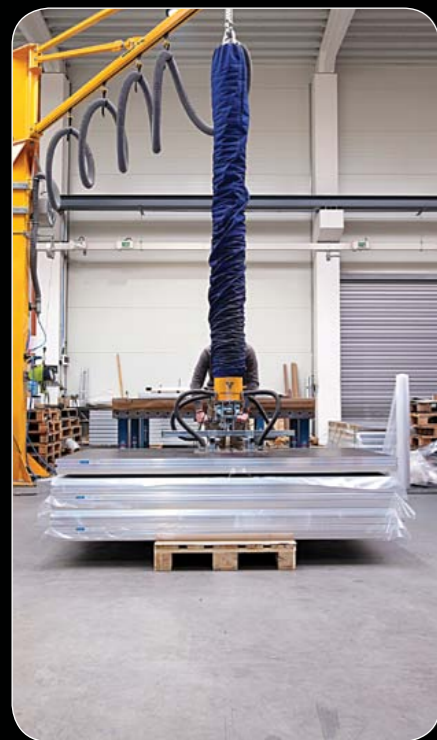


# Art of Manufacturing

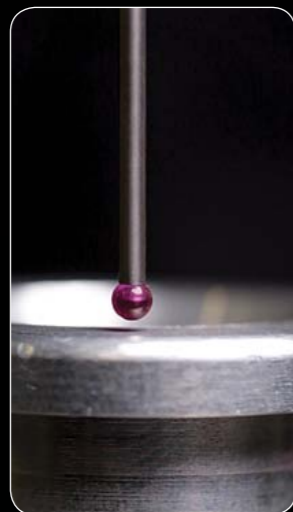
Discover the precision behind our production process. In 2024, we launched a successful series of short videos on social media, offering a behind-the-scenes look at the craftsmanship that defines our work. Watch them now on the [Area Four Industries YouTube channel](#) in the Shorts section, or simply scan the QR code! We are Area Four Industries, and this is [The Art of Manufacturing](#).



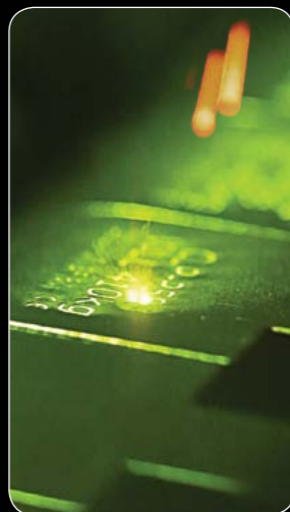
The Beauty of Grinding



Stage Deck and hydraulic arm



Perfect Measurement Technique



Laser Marking



Drilling into metal



The Perfect Cut



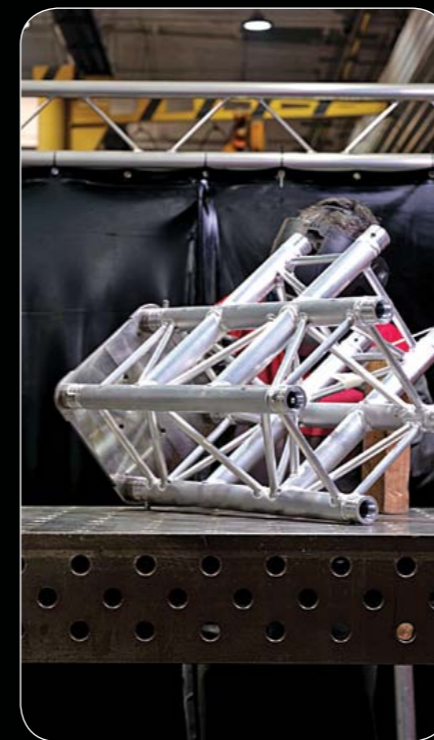
Punching the Pipe



Dot-peen Marking



Velcro on Gloves



Welding



Perfect fit of the Connector



The Screw



# Elevate Your Style with 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



## Built by Riggers, for Riggers

Introducing the New Helmet  
from your favourite brands.

When it comes to working at heights, riggers know that the right gear can make all the difference. That's why Area Four Industries set out to create a helmet that ticks all the boxes: safety, comfort, functionality, and a design that's as sharp as your skills. The result? A helmet built for the toughest jobs, designed with riggers in mind.

This isn't just any helmet—it's your helmet. Lightweight at just 430 grams, it won't slow you down when the pressure's on. Crafted from rugged ABS HI100H material, it meets industrial standards EN397 and ANSI 289.1 Type 1 Class C, so you can trust it to protect you when it matters most. Whether you're rigging a stage, scaling a truss, or handling a load-in, this helmet is ready to perform.

But let's talk about what makes it special. It features an adaptive fit system that feels like it was made just for you, plus ventilation holes to keep your head cool when things heat up. It's got clips for lamps and accessories, space for headphones or hearing protection, and a handy ring to hook it when you need to hang it up. The webbing suspension system with anti-shock padding keeps you comfortable, while the removable padding and suspension system make cleaning easy—because no one's got time for a sweaty, grimy helmet.

And did we mention the style? Available in a range of colors, this helmet isn't just practical—it looks damn good, too. Whether you want to rep your team, your brand, or just your personal vibe, there's a color for that.

At Area Four Industries, we know rigging isn't just a job—it's a craft. That's why this helmet was designed by riggers, for riggers. Every detail was built to make your work safer, more efficient, and, let's be honest, a little more badass. It's not just gear. It's an upgrade.

So, what are you waiting for? Check it out for yourself. Your head will thank you.





# One Step Ahead With Your Show

www.prolyte.com

 PROLYTE<sup>4</sup>

## Precisely aimed at Customer Satisfaction

Prolyte brings something new every year. Located in Leek, The Netherlands, Prolyte has quickly become famous around the world due to its in-house expertise, one-step-ahead in the event industry and knowledge sharing.

The brand focuses on 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 professional rental houses worldwide for strength and durability.

One latest product additions of Prolyte is the GM5 deck, the thinnest deck on the Prolyte StageDex range, with a thickness of 5mm.

Prolyte is part of Area Four Industries, a world leader manufacturer and supplier of aluminium and steel trusses, stage platforms and rigging material, making the implementation of larger projects much quicker and easier. Prolyte is continuously striving to make a lot easier.

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



## Driving Innovation in the Event Industry



**Adela Vagnerova**  
Prolyte Sales Director

**You have joined Prolyte as the new Sales Director. Welcome to the Prolyte family! Could you share your vision for Prolyte's growth in 2025? What key priorities will shape your approach to sales strategy, especially as Prolyte operates within the larger Area Four Industries group?"**

Thank you very much for the warm welcome to all of my colleagues and to our business partners whom I met during the distributor meeting in Prague in October.

My vision for Prolyte's growth extends well beyond 2025, but let's focus on the near future. There are two key areas we will be focusing on in 2025. The first is the geographic expansion. We would like to be more present in high-growth regions of Asia, the Middle East, and South America, where the demand for live events and entertainment projects is rapidly growing. We are restructuring our sales team to be closer to end customers worldwide. The second growth area, however important, is launching an innovative product portfolio. Together with new products we will be launching special sales training for these new products. Thanks to the training our salespeople and distributors will not only have perfect product knowledge, but also they will be able to support our end customers with tailored advice and solutions for their shows.

The key priorities of our sales strategy align with those of many successful companies: innovative product development, extensive geographic reach, advanced training programs (known as campuses) to deepen product knowledge and a strong customer-centric approach. All these elements are central to our vision for 2025. As part of Area Four Industries, Prolyte leverages synergies across the group. Group collaboration allows us to share resources, knowledge, and expertise in marketing, product development and in manufacturing. We are building a stronger, innovation-driven group with a powerful competitive edge.

**Prolyte's commitment to safety, innovation, and quality has built a loyal customer base. How do you plan to deepen these relationships and attract new clients in an increasingly competitive market?**

To deepen customer relationships and attract new clients, Prolyte will improve its customer support by offering tailored solutions. We will expand our product training offer by new topics. Online webinars will accompany interactive campuses in case of new product launches. Our digital presence will be strengthened thanks to the new website, and targeted social media campaigns will be released with every product launch. We plan to introduce a distributor loyalty program and

actively involve our customers in the product development process; further details with respect to these topics will be disclosed soon.

**The live events and entertainment industry has evolved rapidly in recent years. How is Prolyte planning to continue adapting its sales approach to meet the changing demands and expectations of our clients continuously?**

Our sales focus areas for 2025 are perfect showcase how Prolyte adapts to rapidly changing demands and expectations. As said by restructuring of our sales team we will be closer to end customers all around the world, including high-growth regions of Asia, Middle East, and of South America. We are coming up with an innovative product portfolio that has the latest clients' demands as its establishing traits. Our new products will be more modular, safe, and easily transferable and focus on LEDs yet price competitive. I think the best example of our adapting mindset is the current launch of our GM5 deck. Its lightest and thinnest deck at the market saves customer costs at every moment, during manipulation, during transport or during warehousing. We introduced GM5 this fall, and since then, samples have been touring all campuses and entertainment expos all around Europe; we have 200 decks to be delivered by the end of the year, of course, much more to continue in 2025. I would like to thank here to all colleagues who participate on the successful launch of GM5.

**Innovation is at the heart of Prolyte's success. Can you share how the sales team collaborates with other departments to bring our latest products to market and maximize their impact?**

The majority of our product innovations are coming from our customers through the sales team, which means that many product developments already have their customers, ideal development projects. Concerning collaboration of the teams, it's running very efficiently. We have regular meetings between the sales and product management teams where we discuss big projects, product development priorities or new ideas that should be introduced into the plan. Since there is a new A4I group product development director, Jan Purkrabek, we have the discussions and development process even more structured, with fixed deadlines and clear usage of the resources needed for the engineering part of the projects. This should have a positive impact on the



quality and timeline of new product launches. We always strive to improve.

**What do you see as the biggest opportunities and challenges for Prolyte's sales growth in 2025, and how are you preparing your team to address them?**

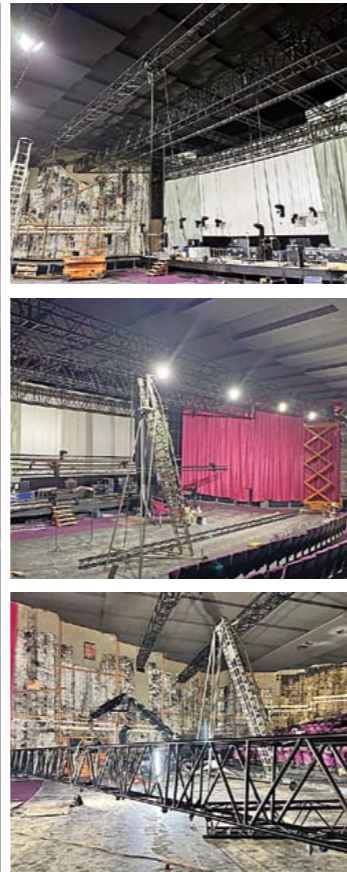
In 2025, Prolyte's sales growth opportunities are strongest in expanding into high-growth markets, introducing innovative new products, and leveraging the combined strength of the Area Four Industries group. However, we also face challenges such as intensifying global competition and geopolitical instability in various regions. These factors

significantly impact market prices and customer purchasing power and drive up costs for raw materials and energy, both critical components of our manufacturing expenses.

**Finally, what is one lesson you've learned as Sales Director that you believe will continue to guide Prolyte's sales philosophy and approach?**

I just got reminded once again that it's the team's enthusiasm that drives the company to go the extra mile. I feel truly fortunate to work alongside such passionate individuals dedicated to our brand and customers. With a team like this, there are no limits—I'm excited about our common BLUE future.





## Universum Theater Landau: From traditional cinema to modern variety theater

**Successful renovation project with trusses from PROLYTE!**

**Universum Theater Landau: From traditional cinema to modern variety theater**

In August 2022, the last films flickered across the screens of the Universum Kino-center in Landau, after which the cinema, which was one of the oldest in Germany, closed its doors. A good two years later, the new Universum Theater Landau is celebrating its opening with a spectacular variety show in the partially listed building. This was preceded by an extensive renovation project that the theater implemented in a relatively short time and in close cooperation with the company PROLYTE.

In order to create hanging points for sound, curtains, lighting and decoration,

a multifunctional and future-proof truss system made of PROLYTE B100RV and C52T was planned and installed.

"The particular challenge of the project was that the structure had to span large spans of up to 24 meters, but there was no space available for columns. The roof of the building was also not strong enough to bear the calculated loads," reports Christian Ruppel from the Universum Theater Landau.

The solution was ultimately provided by special niches that were set into the walls to accommodate the trusses. Only in one position was it not possible to open the wall for fire protection reasons, so a support made of PROLYTE S40T with a new, separate foundation was installed.

The trusses used form a highly load-bearing pre-rig that can handle several tons of load. This enables the theater to model

many different load cases and to adapt to new shows quickly, easily and individually. In order to be even more flexible and to generate additional hanging points, additional smaller truss systems made of PROLYTE H40V, H30V and H30D were installed.

"I am grateful for the customer's trust and am incredibly happy with the result, but also about having contributed to the preservation of this unique cultural site in the heart of Landau," says Jens Kannacher, Account Manager at PROLYTE. "The project had its challenges and ultimately a tight schedule. The collaboration with everyone involved worked really well and ultimately led to a great success."

At the opening show on November 18, guests can expect a program with international artists, world-class artistry and a captivating show ballet as well as a culinary gourmet menu in the first two months.

## Stage Rent Italy - Space Roof

By investing in the Prolyte Space Roof, Stage Rent in Italy made sure that they could set the next steps for many years to come and cope with the growing demand for their events and festivals. With a standard coverage area of 56 by 24 meters and a clearance of 16.2 meters, their Space Roof is a fully modular system. With the available equipment, the roof can be built in several sizes. In the design process, further growth of the roof was taken into consideration, so in the case of bigger demands, the Prolyte Space Roof can be extended.

The Space roof gives designers and riggers unprecedented possibilities, with an option to make a rigging point on every square meter. In addition, the roof structure with the Space frames lends itself to walk-in, which makes working on this roof safe and easy.

Although the training and first build would usually take place at a location from either the customer or at the Prolyte premises, the Space roof was delivered immediately for the first event. The training, given by professional Prolyte trainers, also included a physical load-in for the roof. The first user, Stage Rent, had made the site available a week earlier to properly train the Stage Rent team.

### About the Space Roof

The Space Roof is a modular system based on a space frame structure. The roof can be suspended from standard C52T Prolyte

towers or Prolyte steel towers. The aluminum profiles combine with special node points to create a roof structure of any desired size or shape. The Space Roof can be built up to 56 x 24 meters. The specially designed top canopy guarantees efficient water drainage. Due to the complexity and size of the Space Roof, quotations are made on request only, allowing us to match your requirements with the possibilities this system offers.

### Strong points

- Modular roof system, modular sizes possible.
- Extremely high load-bearing capacity.
- Efficient transportation due to compact transport volume (approx. 1/6th of a comparable truss roof).
- Integrated rigging points.
- Safe and easy rigging access due to a 2 m high frame and measurements comply with standard scaffolding systems.
- Stage sub-structure needs a minimum amount of diagonals, allowing for easy creation of corridors underneath.

### Including

- Tension gear and steel wires
- Structural report according to DIN 4112 / EN13814 C
- Ballast solution
- 8cm wide profiles





# 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.



**Jochen Habermann**  
from VERANTEC

Jochem has been a ProlYTE user for many years. With his company VERANTEC, he continued investing in his stock of materials in recent years and also during the Corona crisis, always looking for new ideas and creative solutions.

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.

This 2023 he invested in our Pre-Rigg-Truss and used them for the Rock Meets Classic Tour. To all these loyalty years and many more to come, this one is for you Jochem!



**Andrés Montes Franco**  
Audio Concept de Colombia

Andres is the commercial advisor and product specialist at Audio Concept de Colombia SAS and has been with the company for 14 years, out of those 12 as a ProlYTE customer.

Loyalty and enjoying the outdoors and nature are two of the main characteristics of Andres. Whoever knows him, will find him enjoying a good walk and a good movie at the movie theatre.

When asked which ProlYTE product was his favorite and how did he feel about being nominated as the Blu Heart-er of the month, Andres responded: "Truss, in general, is my favorite product, due to its versatility and endless possibilities of usage. It feels great to be nominated as a Blu Hearter".

For so many years and many more to come, this one is for you Andres. Thank you for your loyalty and faith in us and our products.



**Eddy Peperkamp**  
LITES Studios

Eddy is a great example of loyalty to our brand. He has been a ProlYTE customer for about 20 years; in which the B100 truss and the H30V truss became their favourite products.

A person who enjoys photography in his spare time and is often described by his friends as someone who likes things to get done, Eddy mentioned that the challenges he has faced throughout the years are some of his best memories in the industry. Cheers!!!

When asked how he felt about being nominated as a Blu Heart-er, Eddy said "It's quite an honor to receive this nomination".

For your loyalty, perseverance and friendship, here's to you Eddy! For many more years to come \*cheers\*.



**Cenk Yildiz**  
owner and founder of Focus Turkey

Cenk is a ProlYTE partner since 1995, and for all these years, the B100 is still his favorite ProlYTE product, due to its fast and easy assembly.

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".

Cenk, this one's for you and a very big thank you for all your loyalty and faith in us and our products. Keep on going strong.



**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.

On a day off, you can find Louis watching a good movie or doing a hike. 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".

For all these years of loyalty and friendship, thank you, Louis!



**Nico Stoessel & Santiago Sarocco**  
Sarocco from Stoessel - Ingeniería en eventos

Stoessel has been a ProlYTE customer for 15 years, and when asking them which was their favorite ProlYTE product, their response was "H30V truss due to its versatility and the circular trusses, due to their optimum strength and high-tech appearance".

Nico and Santiago, two of the well-known faces of Stoessel Ingeniería en Eventos, told us that in their free time you can find them enjoying old cars, playing football, and either spending time with their family or eating a good Argentinian barbecue with some friends.

These pair, described by their colleagues as proactive, creative people, well predisposed to the tasks to be carried out and eager to innovate and learn constantly, are a great example of how the passion behind the trussing industry looks like.

When asked how did they feel about being nominated as Blu Heart-ers just two months after becoming official ProlYTE distributors, they both responded "Being recognized by ProlYTE makes us feel very proud. We have been loyal users of ProlYTE for more than 15 years and starting this year we have the responsibility of representing the brand in South America".

To this 15 years of loyalty and many more to come, this one is for you Nico and Santiago, and the entire team of Stoessel Ingeniería en Eventos.



**Tom Chennells & Adam Nicholls**  
from Yes Events

Tom (top), and Adam (bottom) have been nominated by Mike Clarke, Technical Sales Consultant at Stage Electrics

YES Events has been a ProlYTE customer for 10+ years, with different ProlYTE products in their product range, however, the H40R truss is their favorite ProlYTE product due to its high capacity for size and ease of deployment.

Adam and Tom mentioned that their favorite things to do in their free time range from spending time with their family to attending motorsport events. "Our industry is fast-paced and can be pretty full-on at times. Over the years, we've learnt the importance of stepping away every so often to recharge and make time to do things I love outside of events. We've built a really strong team at YES and that gives me the confidence to leave things in their capable hands.", they said.

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."

To Adam and Tom, thank you for being part of the Blu Family! For many more years to come!



## GM5 Stage Deck: A game changer for your events

GM5 stage deck ensures easiness of handling. With a self-weight of only 28kg for a standard 2x1 meter deck, the weight is lowered to 7kg against the Prolyte Basicline deck and 10kg against the Topline deck.

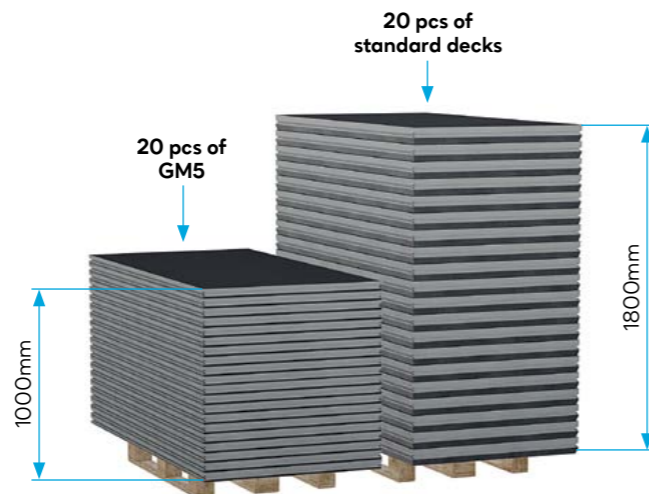
Additionally, it comes equipped with a built-in pocket for a secure grip, facilitating effortless transportation. The surface features a non-slip hexagon layer, guaranteeing safety in various environments.

The GM5 deck boasts an impressive load capacity of 500 kg/m<sup>2</sup>, considering it's a light-weight solution. The universal leg fitting accommodates both square and round leg types.

With a total deck height of only 5 cm, it stands out as one of the lowest profiles available on the market, optimizing storage space and enhancing moveability for your company and crew.

### Advantages:

- Features an ultra-slim design, and is one of the thinnest decks on the market with a total height of just 5 cm.
- Prolyte's lightest deck, weighing only 28 kg, offers exceptional portability.
- Combining its lightweight construction with an impressive load capacity, the GM5 deck supports up to 500 kg/m<sup>2</sup>.
- Enhanced stiffness, which ensures the deck remains stable.
- Same leg pocket compatibility with all Prolyte standard Stagedex legs.



**NEW**



Discover more with the QR code

## Prolyte Rolling Stage: Strength on wheels

**NEW**

### The Ultimate Flexible Staging Solution.

**Product Overview:**

The Prolyte Rolling Stage is designed for versatility and ease of use, suitable for both flat and elevated stage setups. With its modular, foldable design, it reduces setup time and provides an efficient, customizable staging option for events of all sizes.

**Efficient design:**

It's load-bearing wheels allow the entire stage to be rolled with the maximum allowable load, while rotatable 4-way adapters minimize the need for individual support frames, creating open pathways beneath the stage for storage or equipment setups.

**Key Features:**

- **Load bearing wheels:** The wheels are load bearing, which enables to roll the complete stage with the maximum allowable load on it.
- **Quick Assembly:** Tool-free assembly allows for faster and simpler setup, minimizing build times.
- **Modular Base System:** Built with durable frames, forming standard 200x100 cm and 100x100 cm modules for flexible stage configurations.
- **Height Adjustability:** The system offers height settings from 150 cm to 220 cm in 10 cm increments.
- **Foldable Design:** The entire system is foldable, enhancing portability and storage efficiency.
- **Efficient Space Utilization:** Using rotatable 4-way adapters, not every deck needs its own support frame, enabling open pathways below the stage for storage or equipment setups.
- **Robust Load Capacity:** Supports up to 500 kg per square meter, providing the strength needed for heavy equipment and elaborate setups.

Ideal for both large-scale productions and smaller events, the Prolyte Rolling Stage offers a highly adaptable, durable, and professional-grade staging solution for the modern event industry.



## TSU system

**NEW**

Introducing the Prolyte TSU System – the ultimate modular solution for limitless design possibilities. This fully flexible, single-tube system includes a comprehensive selection of components:

- Single Tubes
- Multi Tubes
- T Joints
- Cross Connectors
- H-Frames
- Base Plates

### Why Choose the Prolyte TSU System?

- **Unmatched Flexibility** – Unlock your creativity with a versatile system that adapts to any design.
- **Precision Consistency** – Designed with exact measurements to ensure seamless alignment and flawless setups.

Whether for live events, exhibitions, or unique installations, the Prolyte TSU System empowers your imagination with modular ease and professional-grade durability.

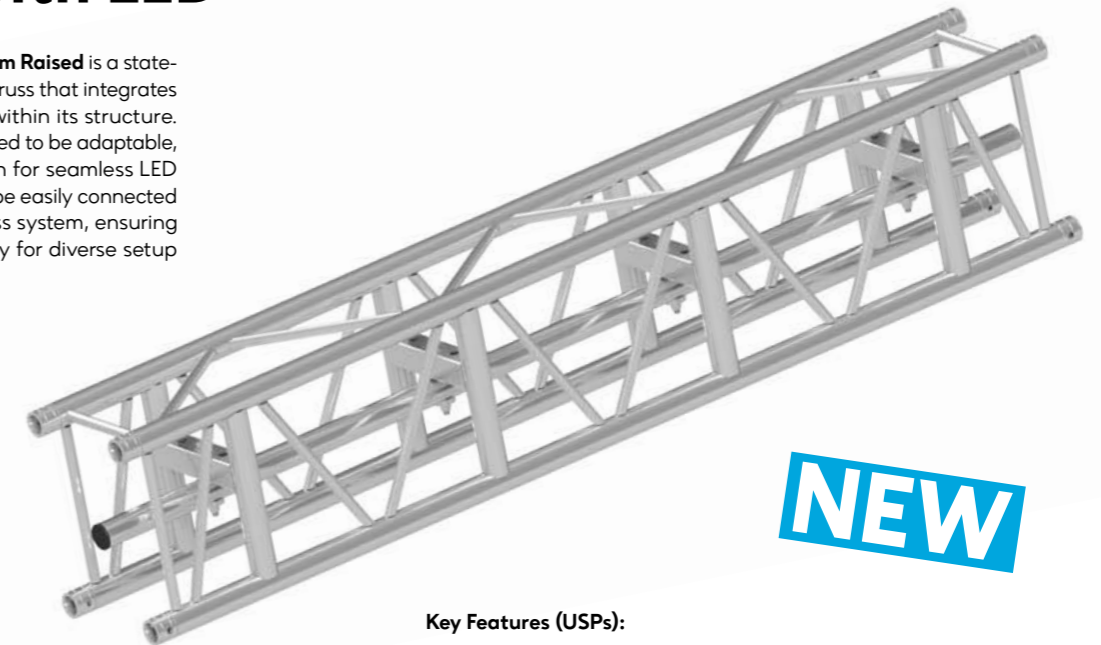


## LSU HS - LED

- **Versatile Extrusion System:** 48.3 mm extrusion integrates Helm 100 profile and adjustable LED panel adapters.
- **Flexible Mounting:** Lower profiles create base with max 3-meter span; adjustable adapters correct deflection.
- **Efficient Access:** Design ensures easy cable management and maintenance for LED screen systems.

## H40R Middle Beam Raised with LED

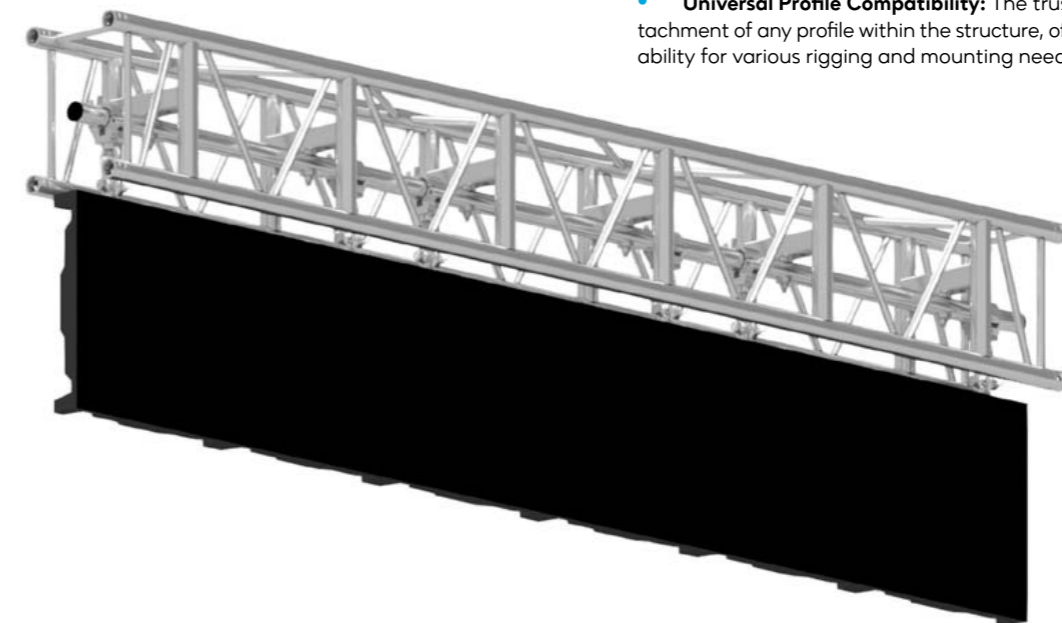
The **H40R Middle Beam Raised** is a state-of-the-art LED suspension truss that integrates a versatile middle beam within its structure. This middle beam is designed to be adaptable, providing an ideal solution for seamless LED screen installations. It can be easily connected to the standard H40R truss system, ensuring compatibility and flexibility for diverse setup requirements.



**NEW**

### Key Features (USPs):

- **Zero Gap with LED Screens:** The middle beam allows the LED screen to sit flush against the truss, eliminating any unwanted spacing and providing a streamlined, professional look.
- **Adjustable Middle Beam Positioning:** Position the middle beam at various points within the truss as needed, ensuring flexibility to accommodate different design setups and weights.
- **Expandable Design:** An extra bar can be added when an additional is needed.
- **Universal Profile Compatibility:** The truss system supports the attachment of any profile within the structure, offering unparalleled adaptability for various rigging and mounting needs.



# Prolyte Verto Truss/ Verto Challenge

**Safe. Fast. Quiet. A simple flick of your wrist will connect the truss sections**

The Verto truss is based on a new principle of truss connection, where a rotating coupler system joins the sections. This system has great advantages over existing systems. The name Verto is derived from Latin, meaning to turn or turn around, which is exactly how this coupler works. A simple flick of your wrist will connect the truss sections.

The Verto truss is designed as an additional system for those circumstances where its specific characteristics come into play, like the silent connection and reduced assembly time. Its structure resembles that of the standard H30V truss.

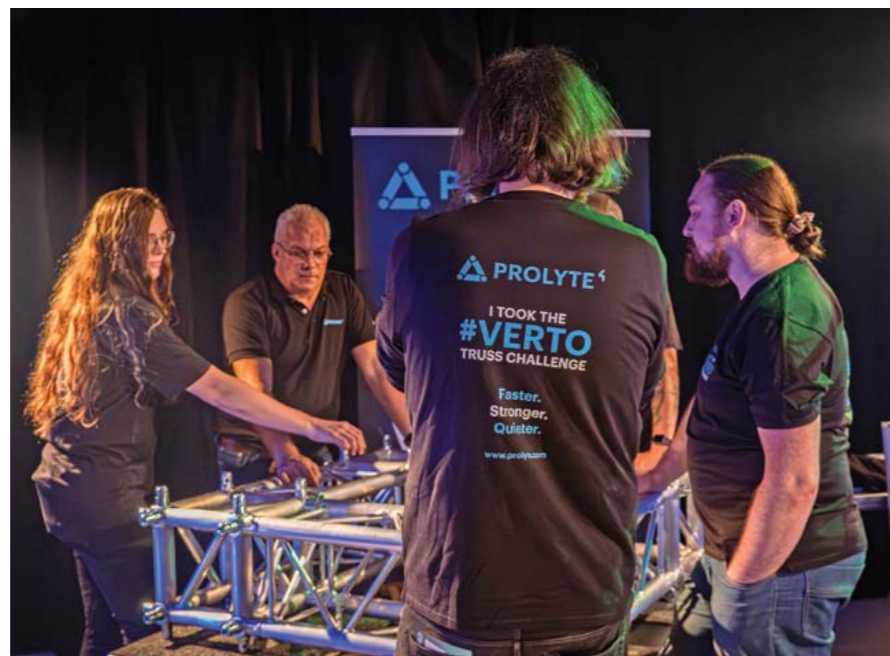
### Bringing benefits to the work floor

This truss can greatly benefit technicians' daily working practice; its tool-less connection is almost completely silent, thereby greatly adding to safety on the work floor. Tested general sound levels are around 55dB, where a conical truss system generates a sound level of 80dB during assembly. Furthermore, it reduces the assembly and disassembly time. Tested general assembly times are up to 5 times faster than those for trusses with conical coupling systems and 10 times faster than any bolted truss.

### Prolyte Verto Challenge:

The Prolyte Verto Challenge is a fast-paced competition where two teams go head-to-head to see who can assemble truss structures quickly. One team uses the innovative Prolyte Verto truss system, which features a rotating coupler mechanism, while the other team relies on traditional trussing methods. Unlike conventional setups, the Verto truss requires no tools for connection, making the process smoother, safer, and nearly silent. Participants race to construct and dismantle truss structures during the challenge, showcasing Verto's speed and efficiency. With Verto, assembly times can be up to seven times faster than traditional trusses, and noise is significantly reduced without the need for hammering.

Ready to take on the Verto Challenge? Scan the QR code to learn more about Verto and our Verto Challenge:



Discover more with the QR code



# Big or Small, We're All In: Your Show Matters to Us

Let's get one thing straight: size doesn't matter. Not to us, anyway. At Area Four Industries, whether you're rigging a cozy local gig or the world's biggest festival, we're here for you. Some folks think, "These guys are the biggest in the business—they don't have time for my little show." But let us tell you something: we've got all the time in the world for every show, because every show deserves to be the best.

It doesn't matter if you're hanging a single lighting truss for a high school play or building an epic structure for a mega-concert—we treat every job like it's the most important one we'll ever do. Because to you, it is. And to us? Well, your success is our success.

All of our brands—**MILOS**, **LITEC**, **TOMCAT**, **PROLYTE**, **JTE** and **EXE Technology**—are built on the belief that every rigger, every stage, and every show deserves the same level of care, precision, and quality.

## IT'S IN OUR DNA

This isn't just some marketing fluff—it's who we are. When **Franti Zyan** founded **MILOS** in his garage, he wasn't building for massive productions. He was building for people like you—dreamers, creators, and riggers who needed reliable, affordable gear. The same goes for our other brands.

At **Area Four Industries**, we believe that the greatest shows start behind the show. And that includes every single one of them. Big or small, every production deserves top-notch support and the best gear in the world. That's our philosophy, and it runs through everything we do.

Think of us as your gateway—not just to the greatest show behind the show, but to

a partner who's as invested in your success as you are.

## EVERY SHOW IS A BIG DEAL

We know that for a smaller gig, your budget is tight, your time is limited, and every piece of equipment has to pull its weight. That's why our products are built for reliability, flexibility, and ease of use. And when it comes to customer service? We bring the same energy to your small order as we do to multi-million-dollar productions.

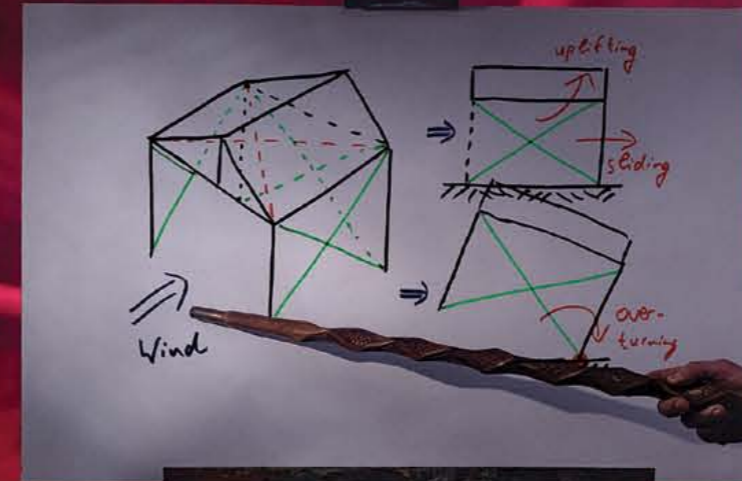
- **MILOS**: Flexible and affordable solutions for every kind of setup.
- **LITEC**: Trussworthy passion, no matter the size of your project.
- **TOMCAT**: American strength, from tiny stages to towering festivals.
- **PROLYTE**: Always one step ahead, helping you work smarter and safer.
- **EXE Technology**: Precision engineering for any scale of operation.

At the end of the day, every show matters. Because for your audience, it's not just a "small show." It's the highlight of their day, their week, maybe even their year. And for us, that makes it a big deal.



# A4 Education: New School

We are getting ready to introduce A4 Education School – a modern school where innovation meets a personal approach. Coming soon, we'll open the doors to the future of education!



# American Strength Behind Your Show

www.tomcatglobal.com



## TOMCAT believes in making truss that are built to last

The TOMCAT story began with one man's vision. Tennessean Mitch Clark foresaw the extraordinary potential of truss. In 1987, he started his own business and founded a brand that has since met with un-equalled and unfailing success.

This success is not only the result of paying attention to each and every product but also of 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 believe in making truss 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 control every step of the 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**

# The Power Trio: Meet the Dynamic Team Behind TOMCAT

Welcome to the U.S. Dream Team: Will Todd (WT), Adrian Forbes-Black (AFB), and Keith Bohn (KB). These remarkable individuals bring a wealth of experience and unique perspectives to the table, making them a powerhouse trio in their field. With years of expertise across various positions, they represent a dynamic blend of creativity, strategy, and leadership. Join us as we dive into their insights, explore their individual journeys, and discover how their collaboration drives innovation and excellence.

## Will, Adrian, Keith, you are the dream team for the U.S. organization. What are your roles, and how did you get here?

WT – As President and CEO of TOMCAT, I've been part of this incredible journey since 2000. I started my career with the company in Midland, TX, as a sales representative and later relocated to Knoxville, TN, where I continue to thrive today. My time at TOMCAT has been a great experience, allowing me to grow both in my professional roles and as an individual. I've truly enjoyed being a part of TOMCAT's evolution and contributing to our success every step of the way.

AFB – I had the privilege of opening TOMCAT UK in 1997, where I first met Will and Keith, marking the beginning of our collaboration. My career has included a role as the European Sales Manager at Columbus McKinnon, after which I relocated with my family to California. Now, as Vice President of Sales & Marketing, I draw on my diverse experiences in both the hoist and truss industries. I believe my knowledge of the European market adds a unique perspective to our team, enriching our strategies and helping us better serve our global clients.

KB – As the Business Development Director at TOMCAT, my journey began in event production, where I honed my skills before joining the company in 1996, just a year before Adrian. For nearly 18 years, I worked in sales and custom projects, gaining invaluable experience. After a stint as North American Sales Manager at Prolyte, I returned to TOMCAT when Area Four

Industries acquired Prolyte in 2019. It felt fantastic to reunite with the team!

I believe my diverse background in production equips me to lead our special projects and builds effectively. Each of us brings unique strengths to the table, and it's great that we can collaborate and draw on one another's expertise to drive our success forward.

## The three of you are based in three different states in the U.S. Can you explain where you are and how that works?

WT – Great question! This is where our teamwork truly shines. Based in Knoxville, TN, at our manufacturing facility and warehouse, I operate on GMT-5. This positioning allows me to be the first person up and ready to assist our European customers and handle inquiries from the East Coast. I can address emergencies right at the start of the day, ensuring that we maintain a seamless operation and provide timely support to our clients. This proactive approach is a key advantage unique to TOMCAT.

KB – I'm based in Texas (GMT-6), which positions me centrally between Ade and Will. Being in Dallas, a major flying hub, makes it easy for the three of us to meet when needed. Our diverse locations put us in close proximity to various population centers, allowing us to leverage our talents quickly and efficiently. With Texas and California being the two largest states in the U.S. by population, our presence in both provides us a significant advantage over the competition. This strategic positioning enhances our ability to serve clients across the country effectively.

AFB – I'm based in California (GMT-8) and oversee our West Coast operations, which allows me to serve our West Coast customers effectively. I often find myself still working as Europe wakes up again, and I'm also well-positioned to connect with clients in Asia. Our ability to cover multiple time zones is a significant advantage—none of our competitors can match our extensive reach.

This geographical coverage means we can quickly respond to our customers' needs. Whether jumping in a car or hopping on a plane, we can be on-site in most locations across the U.S. within hours. This flexibility and responsiveness are huge benefits for our clients, ensuring they receive the support they need when they need it.

Additionally, having two warehouse locations significantly enhances our efficiency, enabling us to ship to customers in the most timely and cost-effective manner possible.

## 2024 was an exciting year for the TOMCAT & A4IA team, can you update us?

WT – It's hard to know where to start, but we've made some exciting advancements! We recently launched Tura—pre-rig 2.0—into the



**Will Todd**  
TOMCAT President/CEO



**Adrian Forbes-Black**  
TOMCAT Vice President of Sales and Marketing



**Keith Bohn**  
TOMCAT Business Development Director

market, setting a new standard for efficiency and versatility. Additionally, our TOMCAT-Dex stage deck system is now in stock at both locations, ready to meet our customers' needs.

We've also re-engineered our truss, allowing us to produce new load tables with higher load capacities and longer spans, all while maintaining the quality of our existing TOMCAT products. On top of that, we've started selling EXE hoists, which are revolutionary for the U.S. market, as they are the only hoists exclusively designed for the entertainment technology industry. These innovations position us to serve our clients better and lead the way in our industry!

## Keith, we hear your specialty is new roof installations, one of which we will see later in the magazine. Can you explain what goes into such a huge project?

KB – Unlike Europe, there's no temporary structure code in the U.S., so every roof system we sell must be re-engineered to comply with local, city, and state guidelines. This requires us to constantly liaise with our customers and various agencies involved in the process. It takes much coordination, but we're happy to provide this service.

In fact, these large projects truly spark my enthusiasm for my job. Tackling big custom projects is what excites me and motivates me to come to work every day! Navigating the complexities and delivering solutions that meet our clients' unique needs is rewarding.

## The sales team expanded in 2024, too. What led to that, and what benefits are there for your customers?

AFB – The addition of Harry Beauregard to our team as EXE Product Manager has been a game changer for us, especially with his leadership in launching the EXE range of hoists in the U.S. Harry is dedicated to supporting our sales team and customers, whether that means jumping on a plane to discuss technical details or assisting our internal sales team with costings and specs. He's always ready to step in whenever needed!

We've also recognized the increasing demand for faster response times in the market, which led us to expand our internal sales team. Having dedicated office-based sales staff allows us to keep up with market demands and provide the most efficient service possible. This enables our sales managers to focus on what they do best—selling!

## Finally, what makes you the 'dream team'?

KB – Knowing each other for almost 30 years gives us a unique advantage. We understand each other's strengths and weaknesses, which allows us to get the best out of one another. This deep-rooted familiarity fosters a collaborative environment where we can push each other to excel.

Compared to our competitors, we bring a robust knowledge of standards writing to the table. We're actively involved in task groups, and our extensive training experience across the globe further enhances our expertise. This combination of long-standing teamwork and industry knowledge sets us apart and enables us to deliver exceptional results for our clients.

AFB – Absolutely! All of these experiences contribute to making us a great team, enabling us to deliver the best of the best to our customers. We pride ourselves on providing exceptional customer service, valuable advice, top-notch training, and, of course, the highest quality products. Our collective expertise and dedication ensure that we meet and exceed our clients' expectations every time. It's all about creating lasting relationships and delivering outstanding value!

WT – I'm truly grateful to have Adrian and Keith by my side, along with a strong management team that supports our vision. Their expertise and dedication make my job so much easier, allowing me to concentrate on what matters most: making the best decisions for our customers. Together, we're committed to delivering exceptional service and ensuring our clients always come first.



# Staging Excellence – Rain or Shine

This semi-permanent roof system was designed and built in 2024 by TOMCAT for the Seattle Theatre Group for a new outdoor venue at Remlinger Farms in Carnation, Washington, USA.

Based on the new Modular XL roof design, the system measured 65' x 50' for the main stage area with an overall footprint of 111 feet wide, including PA wings. The system was anchored using a combination of ground anchors, ballast and concrete threaded anchors, and can support 76,000 lbs.

The setup was almost entirely in rainy conditions, and the system installation presented some unique challenges. With five of the eight towers at different heights and only a portion of them on level ground, many components needed to be lifted by crane and assembled while suspended overhead with the rest of the structure anchored for safety and stability during the installation process. The customer appreciated all the extra effort, and everything was ready to go for the first event.



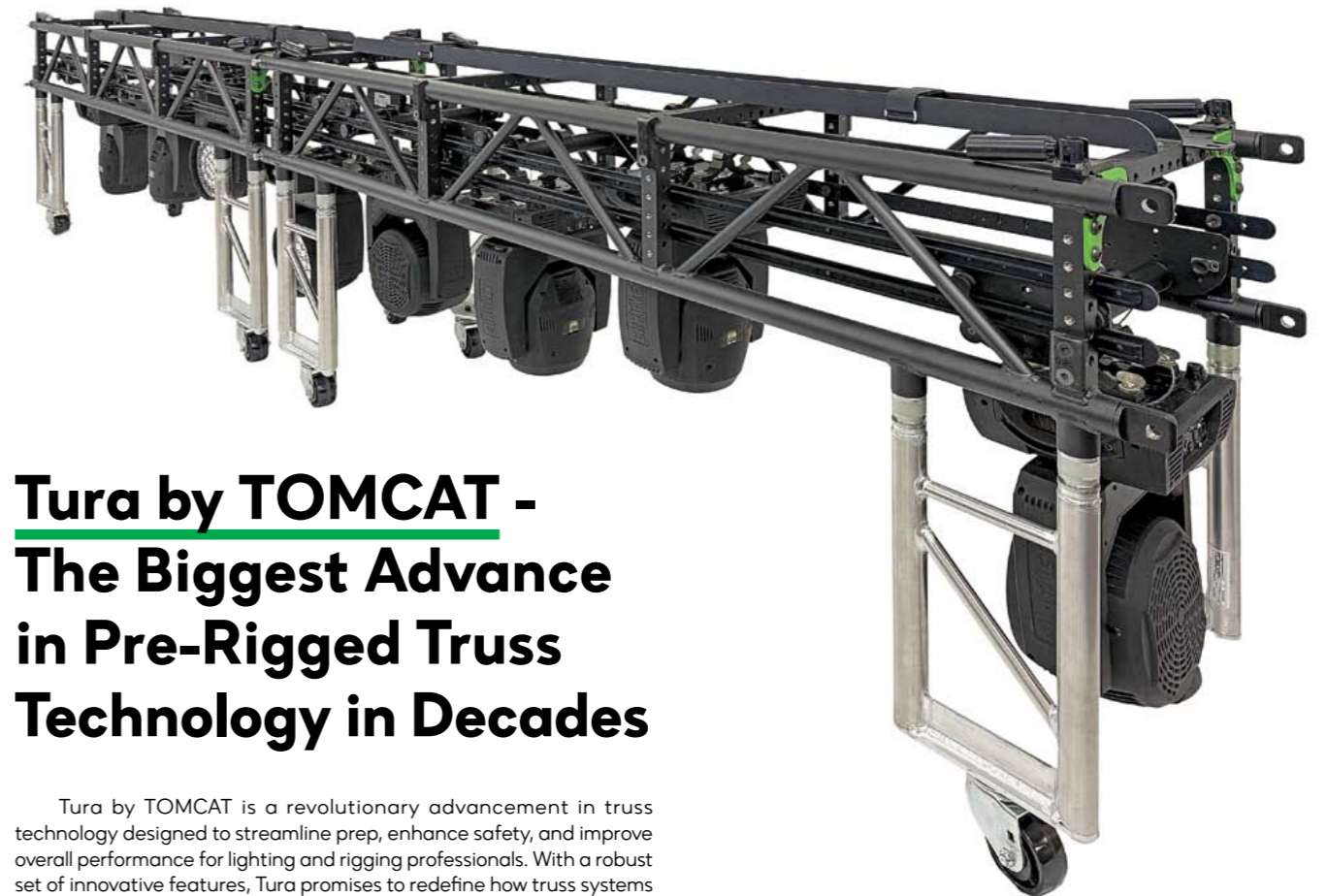
## TOMCAT-DEX - Strength Under Pressure



TOMCAT Dex is a lightweight modular stage deck system. Available in a wide range of deck shapes and sizes the system also provides various leg, handrail, guardrail, and stair options.

The standard deck is comprised of a welded aluminum truss style frame, supporting a matte black painted 11/16" (18 mm) thick plywood walking surface and uses simple and cost-effective nut and bolt connections for deck to deck and deck to accessory junctions.

Multiple hardware connection holes provide connectivity with other industry deck systems. TOMCAT Dex provides a minimum load capacity of 122 lbs. per square foot (600 kg/m<sup>2</sup>).



## Tura by TOMCAT - The Biggest Advance in Pre-Rigged Truss Technology in Decades

Tura by TOMCAT is a revolutionary advancement in truss technology designed to streamline prep, enhance safety, and improve overall performance for lighting and rigging professionals. With a robust set of innovative features, Tura promises to redefine how truss systems are utilized in various applications.

### Explore the Options Available with Tura by TOMCAT

Tura by TOMCAT offers an impressive array of customizable options to meet your specific needs in rigging and lighting. Below is a comprehensive overview of the available configurations:

#### Standard Options

- **Length:** Choose from standard lengths of 10 ft, 8 ft, 5 ft, and 4 ft, with additional custom lengths available upon request, including circular designs.
- **Color:** Standard finish is a black hammertone powder coat, with options for a natural finish and a variety of other powder-coated colors.
- **Stacking Capability:** Available with an option to stack.
- **Leg Style:** Select between slimline or full-length legs featuring the patented Verto connection. Legs are available in natural finish and various powder-coated colors.
- **Leg Height:** Options for leg height result in overall truss heights of 36-1/8 inches, 42-1/8 inches, and 46-1/8 inches.
- **Equipment Mounting Method:** Options include single lamp bar, multiple lamp bars, carriage rail system, and I-beam configurations for rigging and video uses.

#### Additional Options

- **Cable Raceway:** For organized cable management.
- **Customizable Bumper Protection System:** To safeguard against abrasion during transport.

- **Double-Headed Clevis Pin:** For easy connection and disconnection.
- **Clevis Pin Holder:** Available in two-pin or four-pin configurations for convenient storage.
- **Rotating Spigots:** For enhanced versatility in rigging.

#### Additional Accessories

- **Fixed Corners:** Designed for use with standard spigotted truss.
- **Corner Gates:** Compatible with rotating spigotted truss (specify angle required).
- **Utility Shelf:** For added functionality.
- **Dance Tower Kit:** For specialized applications.
- **Pod Connection Kit:** Available in two-way or three-way configurations.
- **Floor Package System:** For versatile ground setups.
- **Storage/Transport Dolly:** For easy mobility of truss sections.
- **Leg Storage Hamper:** For efficient storage of legs when not in use.

With these extensive options and accessories, Tura by TOMCAT is designed to provide flexibility, efficiency, and functionality for all your rigging and lighting needs. Customize your setup to suit any project with ease!

# Burning Man - the man who disappears in the desert every year

It was sometime in 1986 when a wooden statue of a man first caught fire on a beach near San Francisco. The unhappy man and artist Larry Harvey set it on fire as a symbolic end to his life and the end of a long relationship. By setting fire to the statue of a 2.4-meter-tall man, he loosely followed the solstice fire festivities established several years earlier by sculptor Mary Grauberger. With the first "Burning Man", he unwittingly laid the foundations for a new and now iconic event of the same name, full of freedom, art and radical self-expression.

The TOMCAT company is also part of it, and this year, for the Man Festival, it created a unique outdoor roof structure consisting of two circular truss structures with a diameter of 18 and 4 meters, respectively. Dozens of similar structures are erected at the event today, but when, under the pressure of authorities, Burning Man had to leave the refreshing ocean beaches in 1990 and move to the inhospitable bottom of a dry lake in northern Nevada, you could count the similar stages on one hand. At the time, it was an anarcho-punk affair with no rules, except that the rule that there were no rules. Except for two: "Do not interfere with anyone else's immediate experience" and "no guns".

## A TOWN FOR NINE DAYS

In the early years, the community grew only by word of mouth and all participants were automatically considered performers. Nothing was planned and there were no boundaries between life and art. In 1996, the festival was opened to the public for the first time without changing its concept. The growth in attendance was accompanied by another thing that is now typical of Burning Man — hundreds of professionals and volunteers build Black Rock City every year in the desert, a festival city that disappears again without a trace after nine days of the event.

Black Rock City is characterized by its sophisticated infrastructure. Its circular shape and differently focused zones allow for the fluid movement of people and artifacts. Visitors build their own dwellings here, some modest, others gigantic and supremely extravagant.

The surroundings of the town are surrounded by a so-called "garbage fence", which prevents garbage from escaping into the surroundings - because in the desert there is a practically permanent unpleasant wind, intensified by the ubiquitous fine grains of sand.

There are no commercial sales at Black Rock, except for ice and coffee, the proceeds of which go to charity. Everyone has to provide their own transportation, sustenance and lodging. All of this for \$575, which over 70,000 of this year's participants did not hesitate to pay.

## EVERYBODY WITH EVERYBODY

What started as an underground gathering of bohemians has grown into an event attracting influencers, celebrities and tech leaders. While some criticize this change as a loss of authenticity, others appreciate the diversity the festival now offers. There is absolute freedom of dress at the event and it includes everything from the most outrageous gigantic costumes to complete nudity, which is also ubiquitous. The aim is to create a place in the desert for over a week where people can feel as free as possible and completely exempt from the social criticism of others.

A huge number of monumental allegorical chariots move non-stop through the space, with people listening to music and dancing. Electronic music produced by dozens of sound systems, as well as classic live bands of various genres, resound through the desert space from morning to night.

## AN EXPLOSION OF TECHNOLOGIES AND SHAPES

The emblematic element of Burning Man is the ubiquitous presence of bizarre sculptures and other building and space creations, which are one of the biggest attractions and play a key role in the festival's unique atmosphere. Art installations, often of gigantic proportions, are scattered throughout the Black Rock Desert, each representing a unique combination of creativity, engineering and spiritual inspiration. Many sculptures use advanced technologies such as LED lights, kinetic motion devices, or artificial intelligence. Some sculptures respond to movement or sound and "come to life" when you approach them.

The art at Burning Man isn't just for looking at — it's meant to engage visitors. You can touch them, climb on them, play with their mechanisms or even be part of the performance. The interactivity symbolizes the main idea of the festival — connecting people with art and creating memorable experiences.

The essential element of many installations is, of course, fire. The sculptures are often designed to be lit — either as part of

a performance or a symbolic act. This element not only adds dramatic effect but also reflects a philosophy of impermanence. After all, every sculpture at Burning Man carries a message. The themes range from environmental responsibility to philosophical questions of life and death.

## IN THE SHADOW OF A BURNING MAN

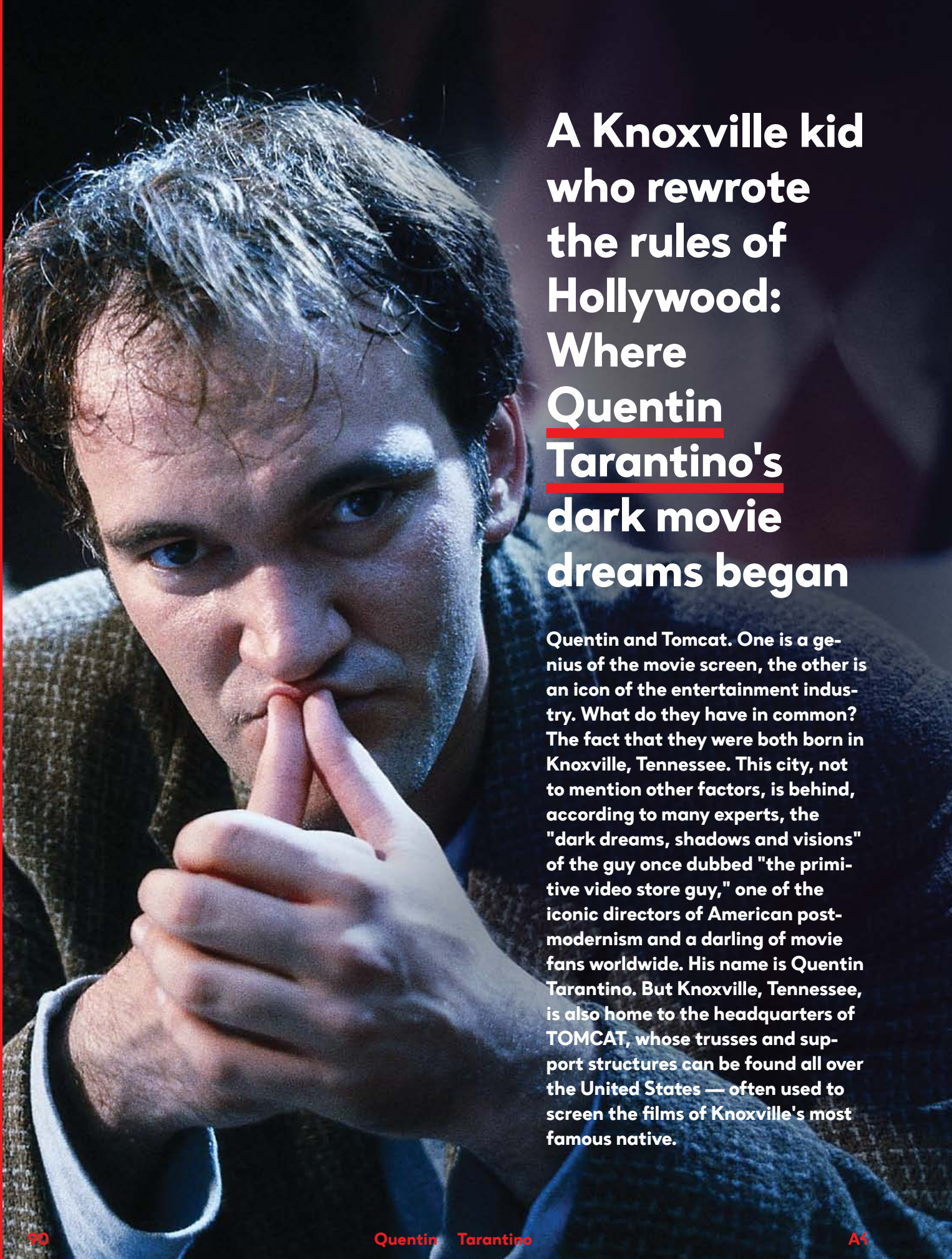
The privileged position among statues and buildings is of course held by "The Man". Every year it has a different design, but it always remains a wooden statue that is ritually burned at the end of the week. This act symbolizes purification, change and community connection.

The "temple" is the spiritual center of the festival. Each year it has a different look, but its purpose remains the same — a place of silence, meditation and remembrance. Visitors bring personal items, letters or photos to be burned with the temple at the end of the festival. The main motif of the temple in 2024 was two hands joined in a gesture of prayer, a symbol of unity, humility and respect across different spiritual traditions. This motif was rendered both literally in the form of two hands forming an arch at the entrance, and abstractly through the neo-gothic refracted arches repeated throughout the design. The temple was 94 feet (about 28.7 meters) in diameter and reached a height of 70 feet (about 21.3 meters).

## DECENTRALIZATION

The absence of any central stage is a characteristic expression of the disjointedness of the events at Burning Man. The festival is built on a participatory culture where participants are also creators, and the main stage could disrupt this dynamic by focusing attention on one group of 'headliners'. Burning Man is not for everyone. It is demanding, physically and mentally, and requires full engagement. But if you're looking for a place where you can truly be yourself, engage in collective creation, and experience something unique, this festival may be for you. You'll leave a lot behind, but you'll take away even more.





# A Knoxville kid who rewrote the rules of Hollywood: Where Quentin Tarantino's dark movie dreams began

Quentin and Tomcat. One is a genius of the movie screen, the other is an icon of the entertainment industry. What do they have in common? The fact that they were both born in Knoxville, Tennessee. This city, not to mention other factors, is behind, according to many experts, the "dark dreams, shadows and visions" of the guy once dubbed "the primitive video store guy," one of the iconic directors of American post-modernism and a darling of movie fans worldwide. His name is Quentin Tarantino. But Knoxville, Tennessee, is also home to the headquarters of TOMCAT, whose trusses and support structures can be found all over the United States — often used to screen the films of Knoxville's most famous native.

L.A., and from 1973, when he was ten years old, again with his grandmother in Tennessee, before returning to L.A., comes from the cult movie Kill Bill 2. The protagonist, known as the Black Mamba (the brilliant Uma Thurman), arrives on her quest for revenge to meet a former hit man named Budd, called Rattlesnake (the great Michael Madsen), who makes a quiet living as a bouncer and lives in a crappy trailer, exactly the kind of bleak environment that was strongly imprinted on Quentin Tarantino's childhood. Although Budd (the brother of Bill of the film's title) shoots Mamba and buries her alive, Mamba nevertheless saves herself, subsequently killing Elle Drive (Daryl Hannah), who had previously dispatched Budd, and setting out to find Bill himself...

## IT HAS COME FULL CIRCLE

Being born in Knoxville in 1963 was no jackpot win. Especially if the person in question was born to a mother who had been abandoned shortly before by her husband and his father, and into not very comforting, though not drastic, social circumstances. Tarantino still managed to become a renowned film director and a worldwide celebrity. The place of his birth, where he absorbed his first impressions of the world, has marked him as much as any other person.

One of my American acquaintances, whom I asked about Knoxville, Tennessee, because he grew up and lived nearby for many years, replied, "the town is not interesting at all, but it's livable, unlike Tarantino's childhood, when it would have been a desperately boring, dirty asshole of the universe." As much as I understand him in a way, I don't think that's fair. If nothing else, Knoxville has a pretty interesting history. It was founded in the 1880s, gained prominence like many other cities in central and western America after the railroad reached it in the mid-1850s, and was the first capital of the state of Tennessee (today it's Nashville, which is also the "country music capital of America").

In the second half of the 19th century, Knoxville was heavily affected by the Civil War (the city was part of the Confederate South from 1861, and the Battle of Fort Sanders occurred in November 1863). In the 20th century, the economic and social effects of the Great Depression (1929-1933) were particularly harsh, and Knoxville continued to recover from the Depression, with some exaggeration, until the 1980s, when it benefited greatly from hosting the '82 World Energy Expo. Even then, however, it was no "big deal" for life. But that "big deal" went to Tarantino's head.

## FLASHES OF CHILDHOOD IN QUENTIN'S HEAD

Perhaps the most significant scene refers to Tarantino's childhood, which took place in the aforementioned Knoxville, then in Los Angeles, or Torrance, a port town southwest of

rightly said, "Always look at where any director grew up to see what he is."

## DARK SPECULATIONS

A huge amount of literature has been written about Quentin Tarantino, as well as his films (Reservoir Dogs, Pulp Fiction, Jackie Brown, Kill Bill: Volume 1 and Volume 2, Death Proof, Inglorious Basterds, Django Unchained, Once Upon a Time in Hollywood, and others). He has also written a number of texts himself, most recently the sensational book Cinema Speculations; to understand his film poetics, how he "sees" film, this is the best thing you can read. As brilliant as the entire book is, I will mention - with respect to Tarantino's hometown of Knoxville and the state of Tennessee — one of his lesser-known films, namely Grindhouse: Death Proof (2007).

Tarantino's childhood, spent partly in Tennessee, is perhaps best reflected in this sensational, first-rate, perfectly shot "gore" about a psychopathic stuntman (the wonderful Kurt Russell) who kills young women in fake car crashes. It's a celebration not only of the aforementioned genre, but also of the long-gone glory and beauty of the so-called muscle cars, which were popular with young Americans in the 1960s and especially the 1970s (among other things because they were not only beautiful, powerful and noisy, but also affordable) and rampaged through the streets of cities. The plot is not important at all, what matters is the "seventies", animalistic beauty of the three friends (Arlene, Shanna and DJ "Jungle" Julia), the aforementioned cars, the dirty atmosphere of Texas (which was undoubtedly not dramatically different from the director's native Tennessee), the shabby bars, the characteristic music... In short, if you want to see what Quentin Tarantino grew up with and what atmosphere and poetics shaped him, just watch Death Proof, it's no more evident in any of his other films.



# The Future of Rigging: How Virtual Reality and Automation are Changing the Game

The world of rigging in cinema and theater has always been at the cutting edge of innovation, combining engineering brilliance with artistic flair. Today, this field is transforming thanks to Virtual Reality (VR), Augmented Reality (AR), and automation. These emerging technologies are revolutionizing how rigging is designed, executed, and even trained, offering new possibilities that were once the stuff of science fiction.

## VR AND AR: TRANSFORMING DESIGN AND TRAINING

### Designing the Impossible

Virtual Reality is changing the game by allowing riggers to visualize and design complex setups in a fully immersive environment. Imagine stepping into a virtual space where you can walk around your rig, adjust its components, and see how it interacts with its surroundings—all before a piece of hardware is assembled.

Using VR headsets like the Oculus Rift or HTC Vive, riggers can create detailed 3D models of their setups. These models can be manipulated in real time, providing instant feedback on the feasibility and safety of a design. This virtual sandbox allows for experimentation and refinement, reducing the risk of costly mistakes during actual construction.

### Training in a Virtual World

Training riggers has always been challenging, often requiring hands-on experience that can be risky and expensive. Enter VR and AR. These technologies offer a safe and cost-effective way to train new riggers in a virtual environment that closely mimics real-world conditions.

Using VR simulations, trainees can practice setting up and operating rigs, experiencing the challenges and complexities of the job without any real-world consequences. This immersive training helps build muscle memory and problem-solving skills. Additionally, AR can overlay virtual instructions and guidelines onto physical equipment, guiding trainees through complex procedures step-by-step in real time.

## AUTOMATION: PRECISION AND EFFICIENCY

### Robotic Assistants

Automation is bringing unprecedented precision and efficiency to the field of rigging.

Robots and automated systems can handle tasks that require extreme accuracy and repeatability, freeing human riggers to focus on more creative aspects of their work.

For example, robotic arms can be programmed to position and adjust rigging components with millimeter precision. These robots can operate tirelessly and consistently, ensuring every rig is assembled according to specifications. In high-stakes environments where safety is paramount, the reliability of automated systems can make a significant difference.

### Smart Rigs

The next generation of rigs will be "smart"—equipped with sensors and connected to the Internet of Things (IoT). These smart rigs can monitor their own condition, detect potential issues, and even perform self-adjustments to maintain optimal performance.

Consider a complex stunt rig with embedded sensors that monitor tension, load distribution, and structural integrity in real time. If a sensor detects an anomaly, it can alert the rigging team immediately, preventing accidents before they happen. Some smart rigs might even be able to autonomously adjust tension or redistribute loads to compensate for shifting weights, enhancing both safety and performance.

## CASE STUDY: THE FUTURE IN ACTION

### Virtual Pre-Visualization

A recent high-profile example of VR in rigging design comes from a major blockbuster film. The rigging team used VR to pre-visualize a complicated aerial stunt. By donning VR headsets, the riggers could walk through the entire setup, identify potential obstacles, and optimize the rig's design long

before physical construction began. This process saved time and money and significantly enhanced the safety and efficiency of the actual stunt execution.

### Automated Rigging Systems

In live theater, an automated rigging system was recently deployed for a Broadway production. This system used robotic winches and pulleys controlled by a central computer. The automation allowed for incredibly precise and synchronized movement of set pieces and performers, creating seamless transitions and spectacular effects that would have been impossible with traditional rigging.

### The Road Ahead

The integration of VR, AR, and automation into rigging is still in its early stages, but the potential is enormous. As these technologies continue to advance, we can expect to see even more innovative applications that will push the boundaries of what is possible in cinema and theater.

### Collaborative Platforms

Future advancements might include collaborative VR platforms where riggers, designers, and directors worldwide can meet in a virtual space to design and plan rigs together. This global collaboration could lead to a cross-pollination of ideas and techniques, driving the industry forward at an unprecedented pace.

### AI-Driven Design

Artificial Intelligence (AI) could also play a significant role in the future of rigging. AI algorithms could analyze past rigging setups and outcomes to suggest optimal designs for new projects. This data-driven approach could enhance safety, efficiency, and creativity in rigging design.





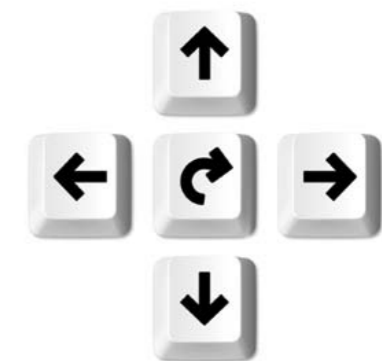
## **EXE Technology: Hoist, Controllers, DST Motion System and the Load Monitoring Platforms**

In recent months, the EXE Technology family has successfully integrated the complete EXE Cell (Wired) and EXE Flexa (Wireless) ecosystems. The motion sector, driven by the DST (Dynamic Stack Track) system, has continued to expand its product range while focusing on the development of customised projects.

EXE Technology is now a major aggregator of load motion technology, offering an impressive safety factor thanks to the most extensive range of products for load detection and management.

The chain hoist range is constantly being updated, now including a specialised version tailored for use in extreme environmental conditions.

The different product lines are part of a unified vision that seamlessly blends top-tier performance with outstanding safety. We offer everything required to lift, move, and control, enabling limitless combinations of tailored solutions.



**TOMMOROW  
INVENTED FOR  
YOUR SHOW**

## The new product lines, ready to launch for the 2025 market.



### Raffaella Giampaglia EXE Technology Brand Manager

Known for their safety, precision, and reliability, EXE products are ideal for live events, concerts, and theatrical productions. In the following pages, you'll find the **latest updates and innovations for 2025**, with fresh solutions designed to meet the evolving needs of the industry. Highlights include:

- **Extreme Chain Hoist version**, offering enhanced corrosion resistance;
- **EXE D Controller**, for intuitive and precise control; advanced Load Cells for flexible load monitoring;
- **Dynamic Stack Track (DST)** system, providing expanded motion versatility.
- **New EXE Flexa Dynamic Load Cell line** introduces enhanced real-time monitoring with advanced IoT solutions, further optimising performance across all types of events.

#### EXE Technology: A Single Brand, Comprehensive Solutions for Load Motion

EXE Technology is a leading brand in the entertainment lifting industry, dedicated to designing and producing advanced systems for the control and motion of suspended loads.

The EXE Technology ecosystem is undoubtedly the most extensive collection of load management solutions for the events industry. Four major equipment families cater to the highest demands for extreme reliability and safety.

## CHAIN HOIST

**EXE RISE**   **EXE ACE**   **EXE VARIO**

EXE Chain Hoists are reliable electric hoists designed for lifting stage sets, lighting, and LED walls. With fixed or variable speeds, they deliver smooth, safe performance for any event.



## CONTROLLER

**EXE DRIVE**   **EXE SENSE**

EXE Technology Controllers ensure precise motion control and synchronisation of chain hoists. Their intuitive interface simplifies complex stage setups, ensuring safe and smooth performance.



## LOAD CELL

**EXE CELL**   **EXE FLEXA**

EXE Load Cells provide real-time load monitoring in wired or wireless versions, measuring weight and load distribution with instant readings. Available as integrated or standalone models, they offer flexibility for various setups. These tools ensure structural stability, minimise risks, and deliver advanced safety control with continuous load feedback.

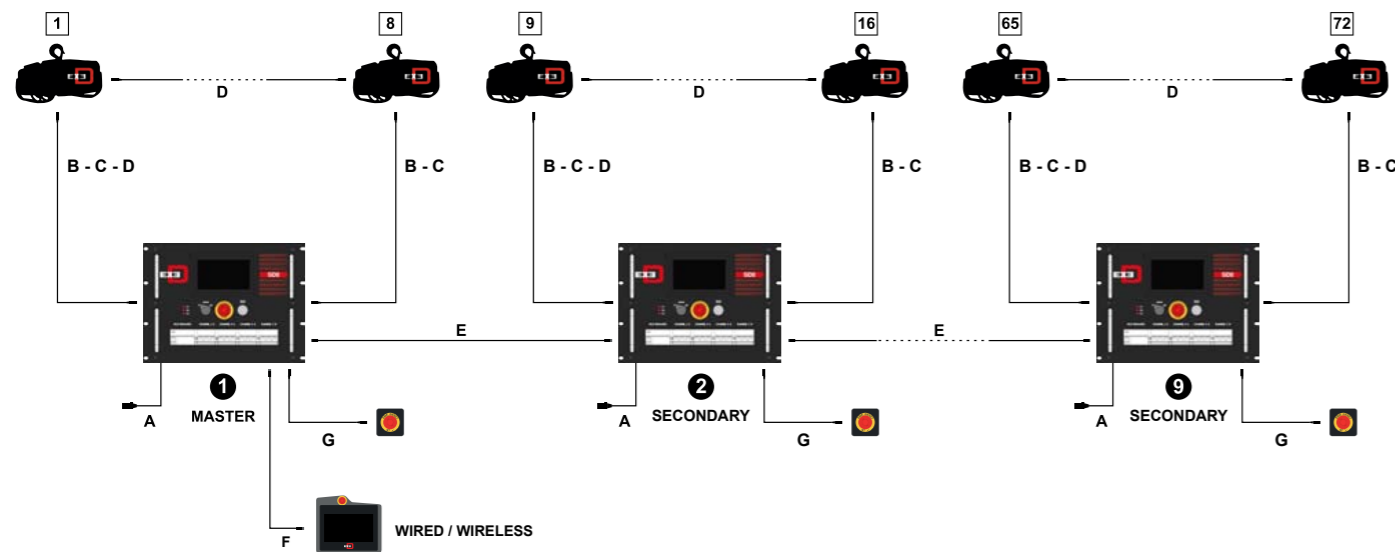


## DYNAMIC STACK TRACK

**EXE DST**

The EXE Dynamic Stack Track (DST) system offers versatile motion for LED screens, stage sets, and lighting, with horizontal, vertical, and 360° movements. Its modular, stackable design ensures easy operation, storage, and efficient handling of heavy loads.





### System Configuration

1 MASTER + 8 SECONDARY WIRINGS

**EXE D** – A cutting-edge touchscreen controller for load monitoring and position control, designed as part of our All for One systems.

The platform connects seamlessly with various **EXE D hoists** and **controllers**, providing an integrated solution for lifting and motion needs. Its intuitive interface allows operators to monitor loads and manage positioning with ease. With a streamlined design, EXE D platform simplifies installation, offering a quick, hassle-free setup.

**EXE D: Where Innovation Meets Simplicity**

**Up to 72 hoists can be linked using 9 controllers.**

The Master controller manages its own 8 hoists and oversees the other 8 controllers.

A wide array of panel connectors provides extensive connectivity within the EXE D ecosystem, including a remote interface display for managing all connected hoists.

Features include a general E-stop function or individual stop for each controller.

**Everything under control, everything safe. Everything made easy.**

## For Extreme Conditions, Extreme solutions: Superior Corrosion Resistance, Low Maintenance



For outdoor events, from beach shows to rain-drenched performances, harsh weather can threaten equipment durability. The EXE Chain Hoist Extreme is designed to withstand these conditions, with enhanced protection against corrosion and environmental damage for reliable performance in tough settings.

### Upgrade Highlights:

- **Water Protection:** Advanced seals guard internal components.
- **Durability:** Reinforced materials preserve mechanical integrity in humid conditions.
- **Extended Lifespan:** Key parts are built to endure adverse environments.
- **Rust Resistance:** Ideal for marine and humid areas, minimising oxidation.

## Visible and Hidden Details That Make an Extreme Difference



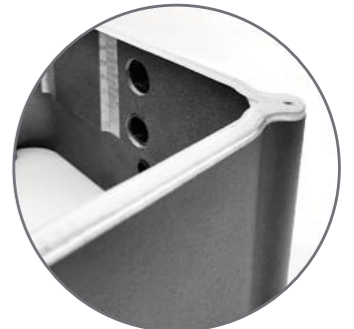
**Chain Hook Block**  
Fully stainless steel,  
ensuring durability



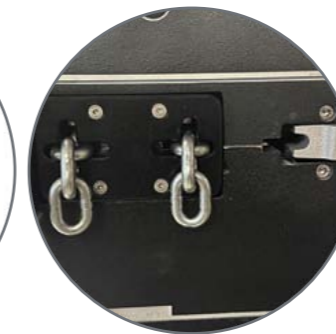
**Galvanised Chain:** Made from galvanised alloy steel for superior rust resistance, even in humid or marine settings.



**The brake** features optimised materials and sealing, enhancing corrosion resistance, durability, and performance, with interlocking geometry and a PVC cap ensuring protection.



**Silicone Seals:** Upgraded to waterproof silicone to protect mechanical parts from water ingress.

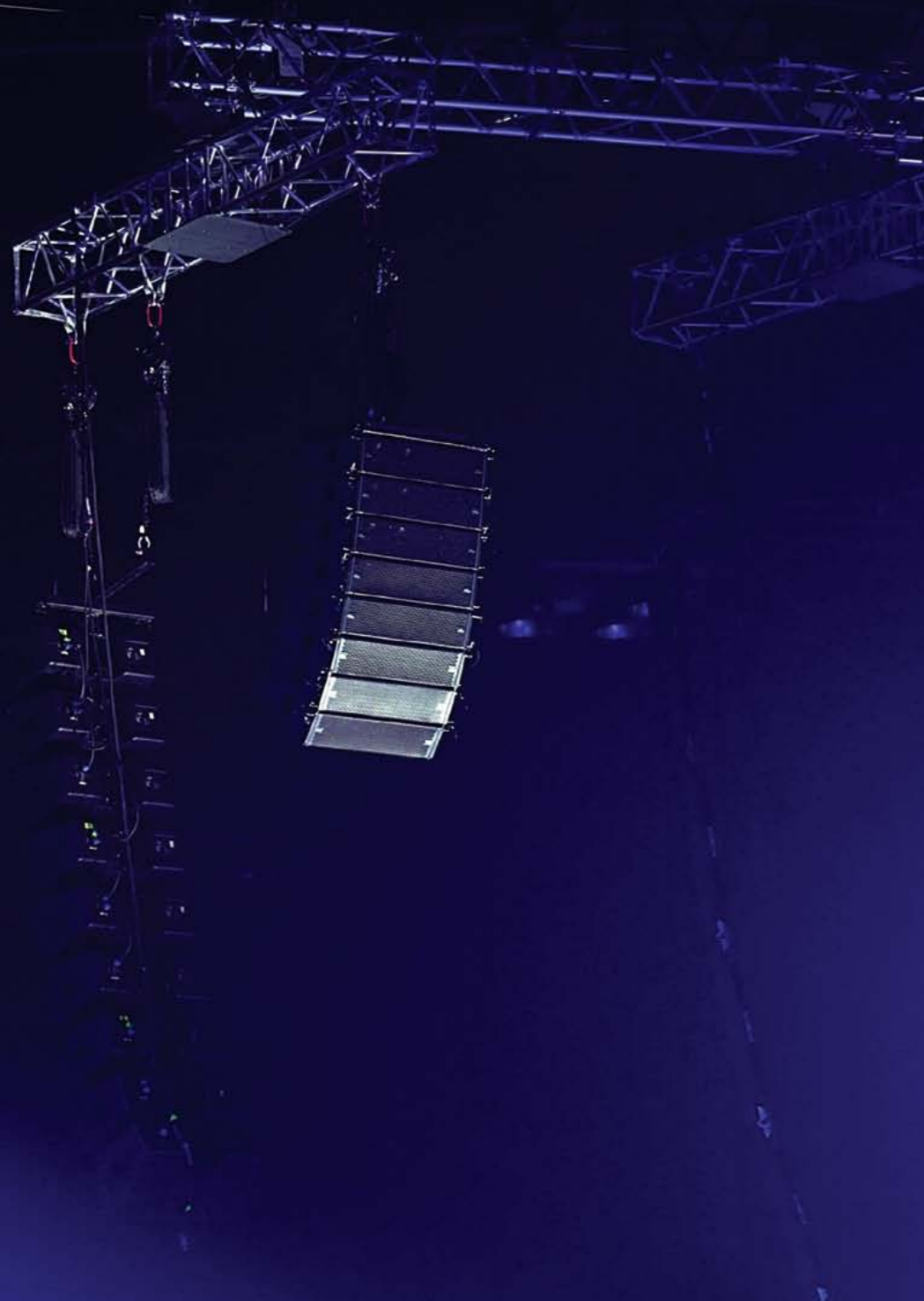


**Stainless Steel Components:** Key parts, including screws, chain bag brackets, carabiners, screws and nuts for handles, now use corrosion-resistant stainless steel.

## Motion That Creates Emotions

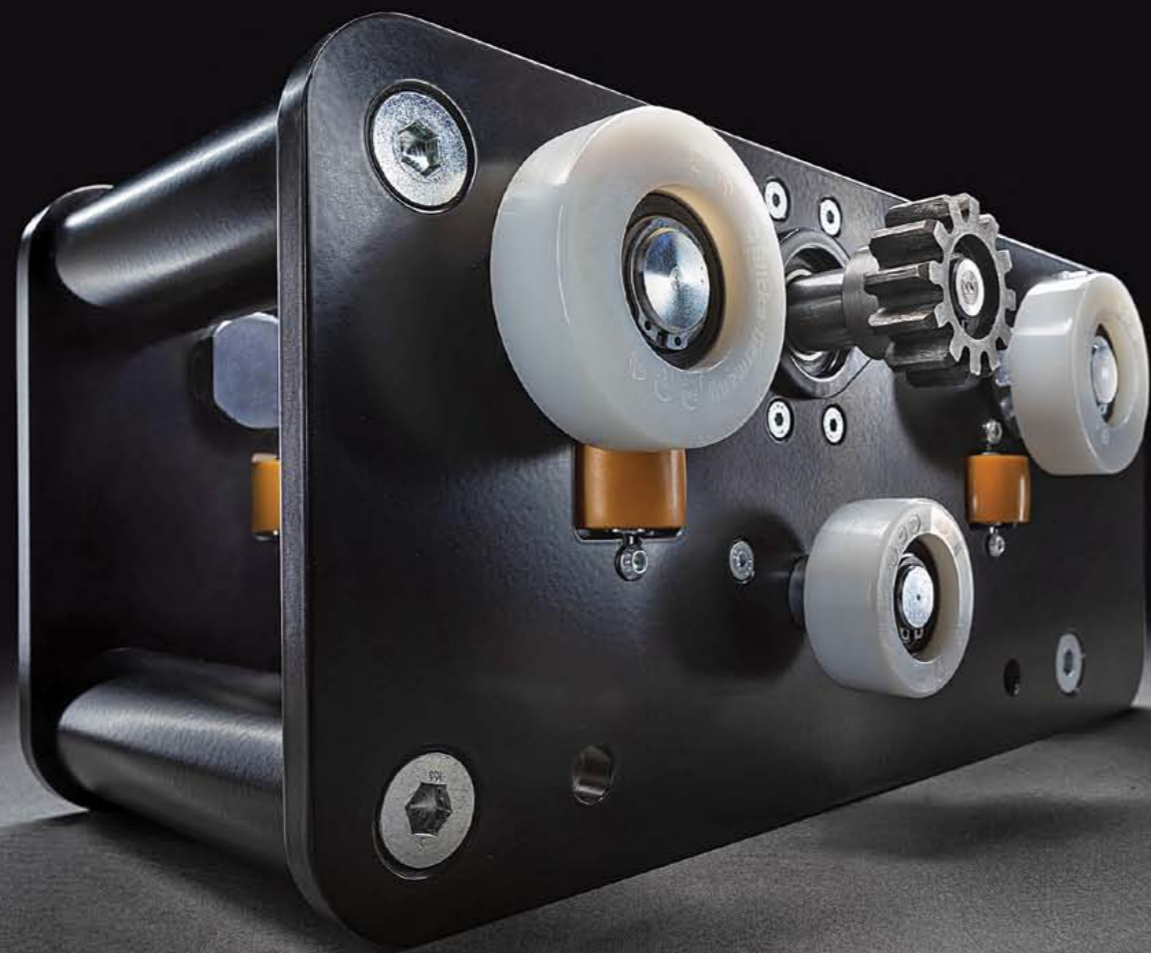
The motion of stage sets unlocks exciting creative possibilities for show designers. EXE DST brings accuracy and ease to this process. **It's motion that creates emotions.**

**EXE DST**, the strength of today's range. The commitment to expanding it with new solutions for tomorrow's challenges.



## Motion and Rotation, The EXE DST System

The **DST (Dynamic Stack Track)** is an advanced **automated motion system** designed for LED Walls and other stage sets, tailored to meet the dynamic and technical demands of the event industry. It offers a wide range of solutions with both manual operated and motorised trolleys available for towing.



The structure is highly customisable, featuring 52cm trapezoidal or square trusses. The **Trapezoidal** line can be stacked for easy storage and transport. Alternatively, customised **IPE beams** can be used for permanent installations.

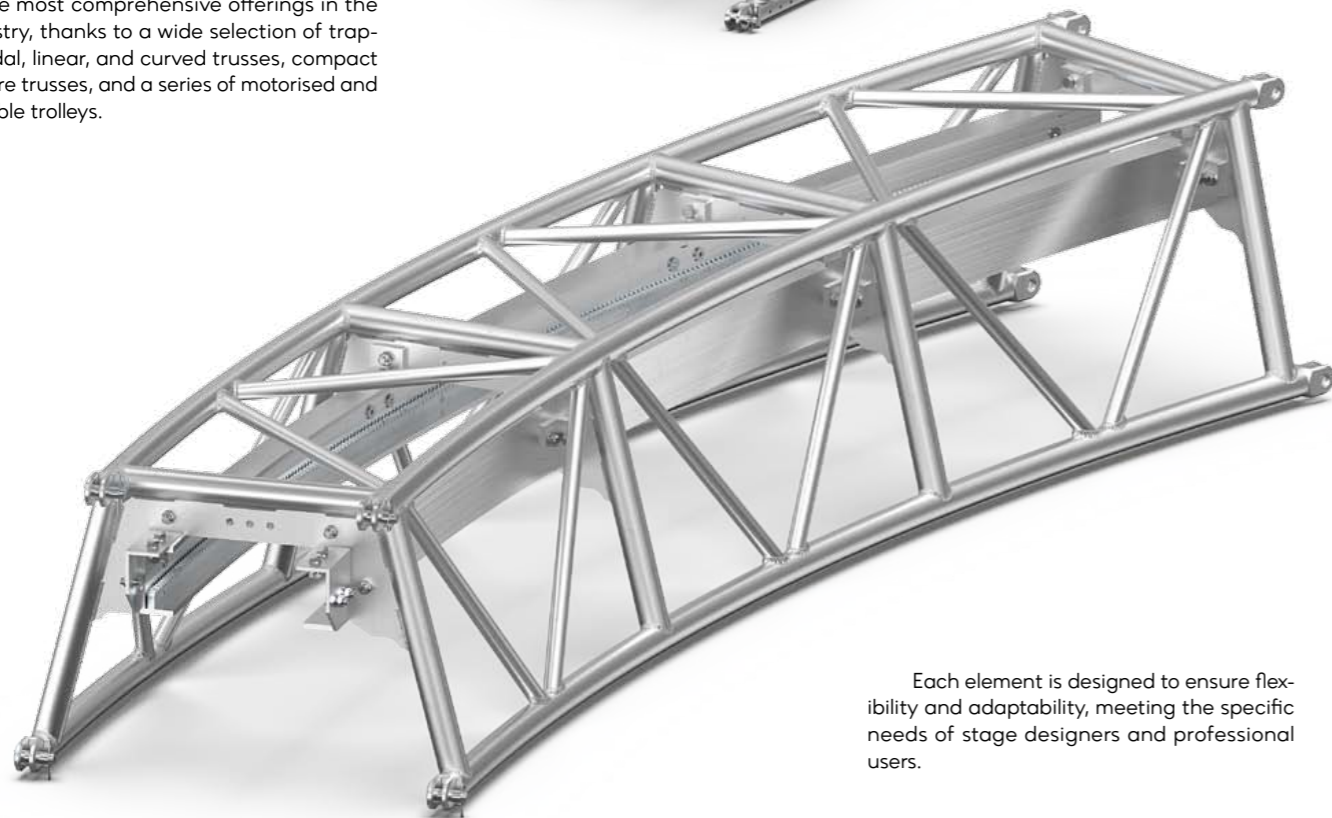
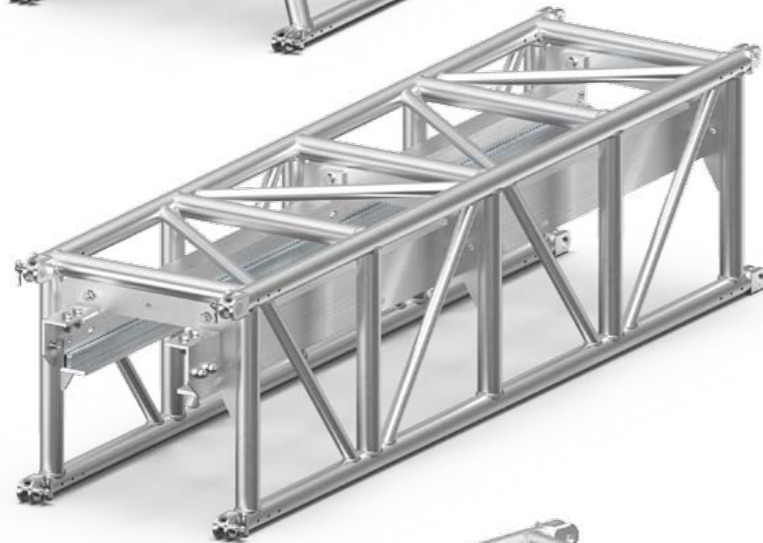
The truss system is available in standard modular or custom-made configurations, with options for straight and curved structures. Curves can be produced according to standard specifications or custom designs, offering maximum flexibility.

A key feature of the DST is its ability to maintain **pre-configured operational setups**, thanks to intelligent storage and transport solutions. These include specially designed dollies that accommodate trolleys within the truss system, greatly reducing setup and teardown times.



The system excels in advanced movement control, ensuring precise positioning and rotation. It integrates seamlessly with the **EXE Technology** hoist and controller line or with other hoist's brands. A wide range of accessories is available, supporting LED walls, video monitors, audio systems, and stage sets, providing a comprehensive setup solution.

The DST system is available in both **silver aluminium** and **black powder-coated** finishes, offering aesthetic flexibility for various settings. Additionally, pre-configured integrated solutions are available, further reducing preparation time and enhancing operational efficiency.



## The Strength of the DST Range

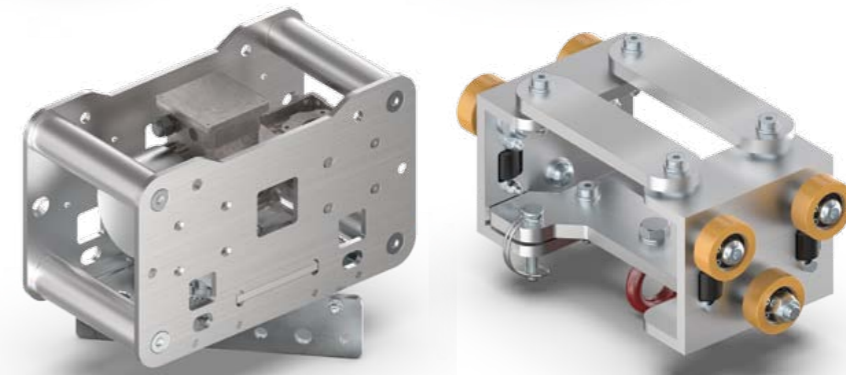
### Standard or on-demand

The creation of a coordinated motion system has been an ambitious project, designed to meet the complex demands of the events industry.

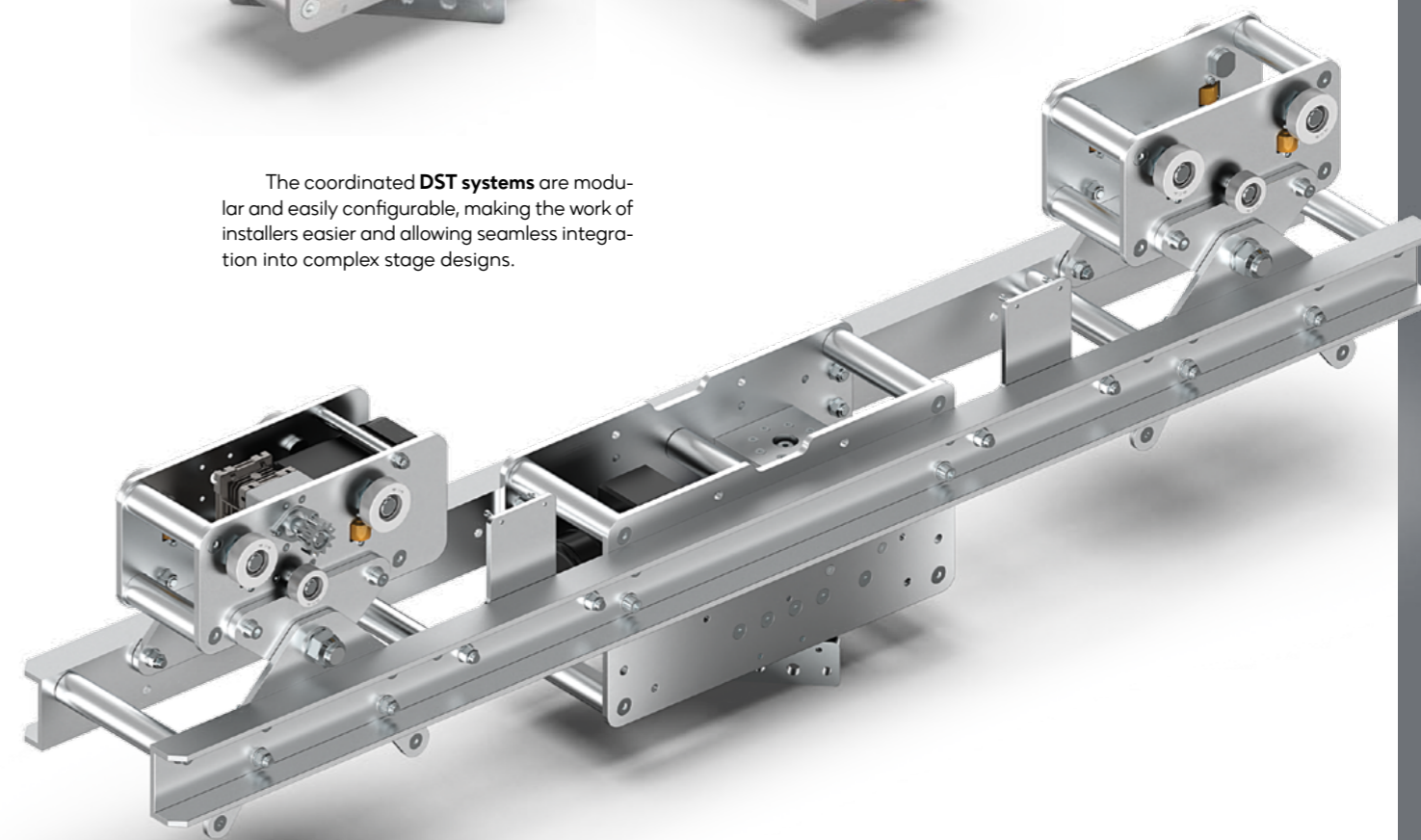
However, the constant evolution of stage setups requires continuous innovation and expansion of the range of solutions.

Today, the **DST system** stands out as one of the most comprehensive offerings in the industry, thanks to a wide selection of trapezoidal, linear, and curved trusses, compact square trusses, and a series of motorised and towable trolleys.

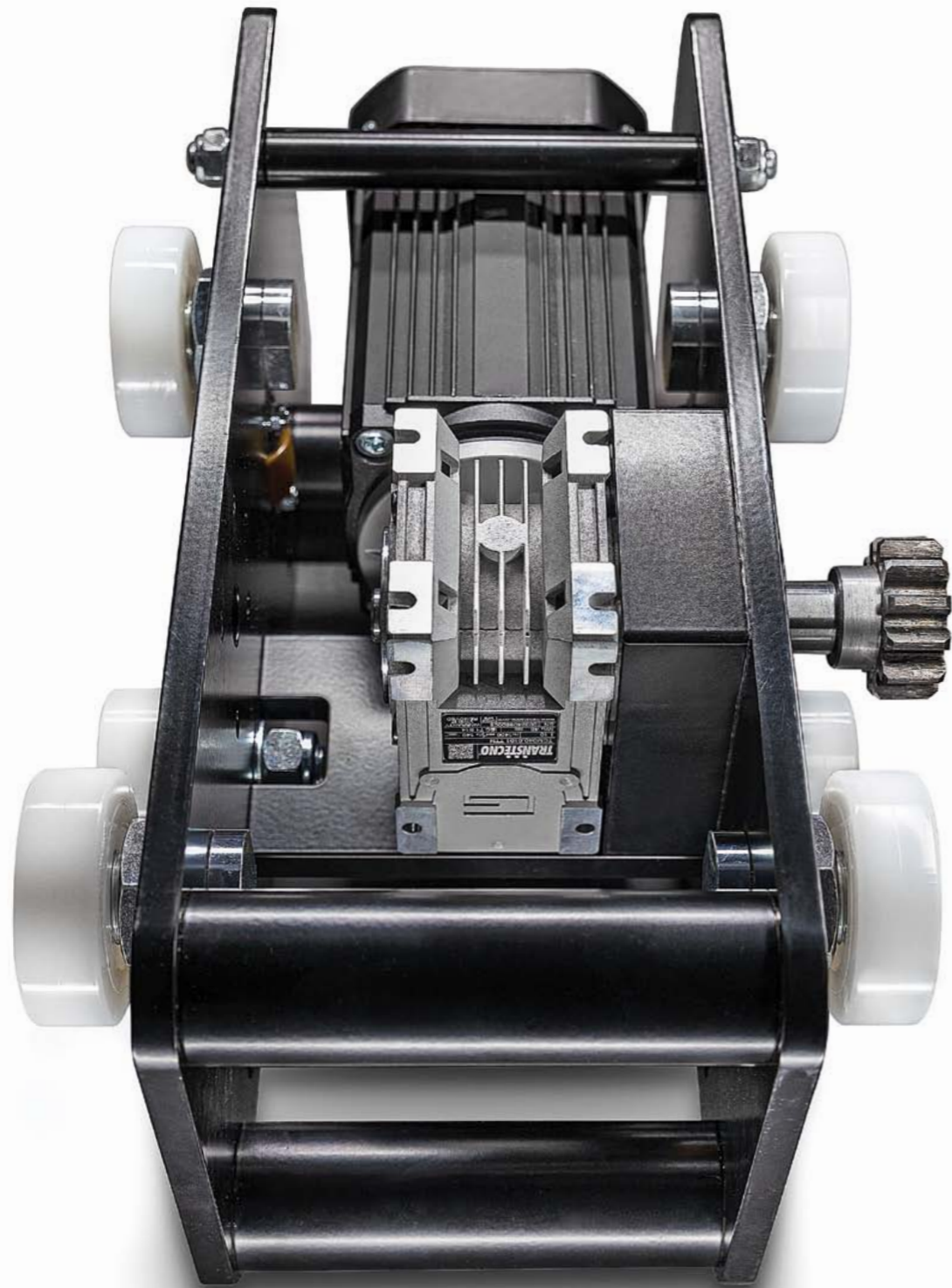
Each element is designed to ensure flexibility and adaptability, meeting the specific needs of stage designers and professional users.



The coordinated **DST systems** are modular and easily configurable, making the work of installers easier and allowing seamless integration into complex stage designs.

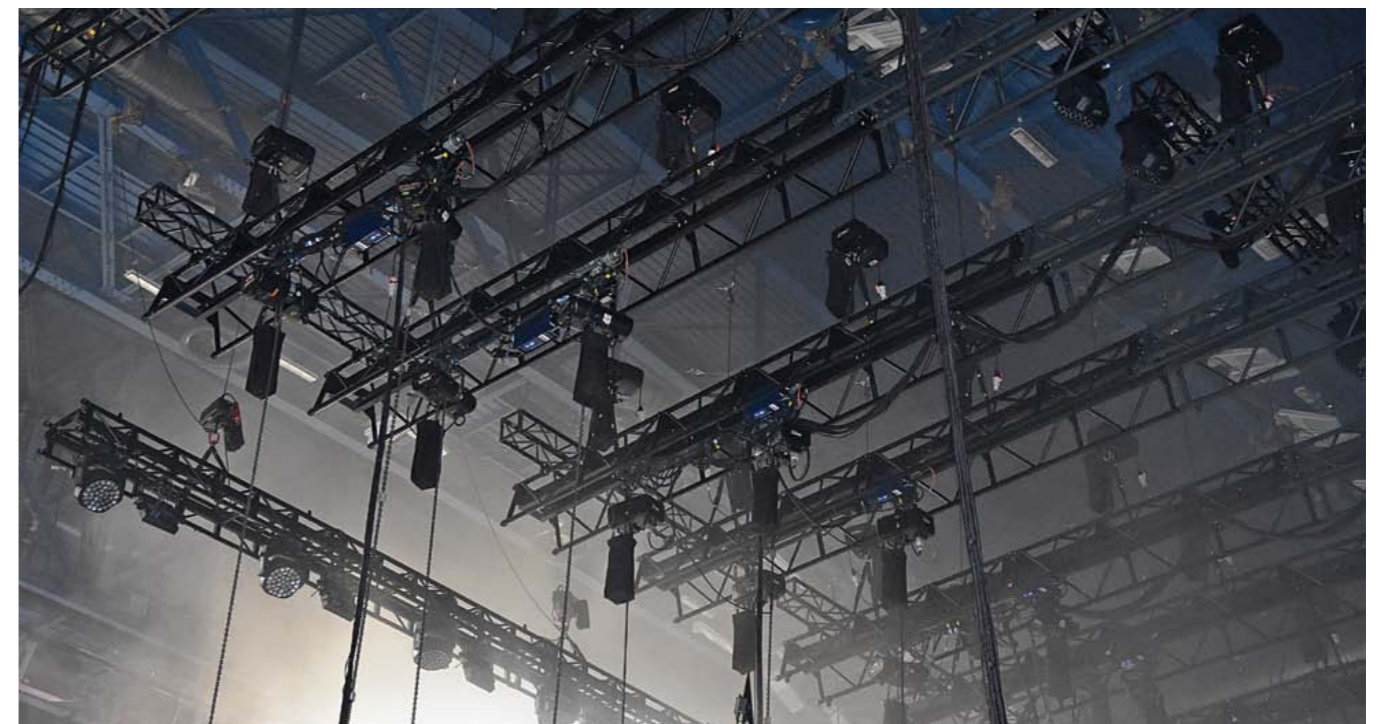


**EXE DST:** Style in design, robustness in every component. Reliability as the ultimate goal. State-of-the-art solutions for motion applications.



**Precision in design, the use of high-quality components, meticulous attention to every phase of assembly, and rigorous testing on every single piece produced.** This is our philosophy, reflecting our pride in delivering craftsmanship that ensures the performance demanded by our professional operators.

**EXE Rise and EXE DST:** to lift, rotate, and move with safety and efficiency.





# The Evolution of Chain Hoists: From Manual to Electric

Chain hoists have long been pivotal in industries requiring the lifting and moving heavy loads. Their evolution from basic manual mechanisms to advanced electric models has markedly improved efficiency and safety. Here, we explore the historical development and technological advancements in chain hoists, highlighting how these innovations have transformed their usage.

## EARLY BEGINNINGS: MANUAL CHAIN HOISTS

The concept of lifting heavy loads using mechanical aids dates back thousands of years. Ancient civilizations, such as the Egyptians and Greeks, used rudimentary lifting devices, often involving ropes and pulleys. However, the manual chain hoist as we know it began to take shape in the 19th century during the Industrial Revolution.

### Key Features of Early Manual Chain Hoists:

- **Simple Mechanism:** Early designs consisted of a pulley system with a chain or rope wound around a drum. The operator would pull on one side of the chain to lift the load.
- **Labor-Intensive:** These hoists required significant human effort, limiting their effectiveness for heavy loads.
- **Mechanical Advantage:** Despite the required effort, they provided a mechanical advantage that made lifting easier than purely manual methods.

### Historical Milestones:

- **1830s:** The advent of the modern chain hoist began in the early 19th century with the development of more sophisticated pulley systems and the introduction of durable materials like steel for chains.
- **Mid-19th Century:** Manual chain hoists became widespread in factories and warehouses, significantly enhancing productivity.

## THE ADVENT OF ELECTRIC CHAIN HOISTS

The late 19th and early 20th centuries saw significant technological advancements, including the development of electric motors. These innovations paved the way for the electric chain hoist, which began to replace manual hoists in many industrial applications.

### Advantages of Electric Chain Hoists:

- **Increased Efficiency:** Electric motors greatly reduced the physical effort required to lift heavy loads, allowing for faster and more efficient operations.
- **Enhanced Safety:** Using electric power minimized the risk of injuries associated with manual lifting.
- **Higher Load Capacities:** Electric hoists could handle much heavier loads than manual hoists, making them suitable for a wider range of applications.

### Historical Milestones:

- **Early 20th Century:** The first electric chain hoists were introduced, featuring basic electric motors and simple controls.
- **Mid-20th Century:** Advancements in electrical engineering and materials science led to more reliable and powerful electric hoists, which became standard equipment in many industries.

## TECHNOLOGICAL ADVANCEMENTS IN ELECTRIC CHAIN HOISTS

The development of electric chain hoists continued throughout the 20th and into the 21st century, with numerous technological advancements enhancing their functionality and safety. Modern electric hoists incorporate features such as variable speed controls, overload protection, and remote operation capabilities.

### Notable Innovations:

- **Variable Speed Controls:** Allow operators to adjust lifting speeds for better control, enabling more precise operations.
- **Overload Protection:** Prevents the hoist from lifting beyond its safe capacity, reducing the risk of accidents.
- **Remote Operation:** Enables operators to control the hoist from a distance, improving safety and convenience.
- **Smart Technology:** Integration with IoT (Internet of Things) devices and sensors for real-time monitoring and maintenance alerts.

### THE IMPACT ON INDUSTRY

The evolution of chain hoists from manual to electric has profoundly impacted various industries. Electric hoists have streamlined assembly line processes in manufacturing, increasing productivity and reducing downtime. In construction, they have made it possible to lift heavy materials to great heights safely. Warehouses and logistics centers have benefited from the ability to efficiently handle large volumes of goods.

### Industry Applications:

- **Manufacturing:** Enhanced assembly line efficiency and safety.
- **Construction:** Improved the ability to lift and place heavy materials at high elevations.
- **Logistics:** Facilitated the handling and movement of large quantities of goods.

The journey of chain hoists from manual devices to advanced electric models underscores the significant strides in lifting technology. These innovations have improved the efficiency of various industrial processes and markedly enhanced safety standards. As technology advances, we can expect further improvements in the capabilities and applications of electric chain hoists, solidifying their role as essential tools in heavy lifting operations.



# The New EXE Flexa Wireless Dynamic Line on Cloud and On-premises

## **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.**

## The New EXE Flexa Wireless Dynamic Line

**EXE Flexa Dynamic line, available with both on Cloud and On-Premises configurations, to address the varied requirements of industry professionals.**

This new series combines the best of the debut lines, Real-time and IoT, bringing together their strengths for a more flexible and high-performance solution.

A Single Solution for Cloud and On-Premises with the Dynamic Line, a single gateway can support both Cloud and On-Premises solutions.

The Cloud solution is designed to manage a large number of load cells or other IoT devices, providing extensive and versatile management capacity.

For local applications, the On-Premises solution is ideal: an efficient WEB server enables real-time transmissions, perfect for use on live event stages or in theatres.



### Advanced Gateway Technology

Data updates can range from one second to several minutes, with the option to select the speed or allow an algorithm to adjust it automatically according to operational needs.

The Dynamic Line also offers two types of gateways: one tailored for outdoor use and a more compact option for indoor use. Additionally, system coverage can be extended over a wide area, up to several square kilometres, by utilising multiple gateways within the same system.

Both gateways are equipped with LAN ports and a SIM slot for independent Internet access, while the user interface, accessible via a WEB portal, allows for data management and sharing with other users according to hierarchies defined by the admin.

The system also provides the option to set triggers for email notifications and allows remote intervention, ensuring constant control and efficient management.



### Real-time Data Updates

A key feature of the Dynamic Line is its flexibility in managing data update speeds, which can be adjusted by the operator as needed. The update interval can range from one second to several minutes or be automatically managed by an algorithm that optimises the settings according to operational conditions.



### EXE Flexa Dynamic: a distinct platform that integrates with the existing range of wireless load cells.

The EXE Flexa wireless load cell range is one of the most extensive in the world and is continually evolving. The Dynamic line has been **designed with circuits that are perfectly adaptable** to the entire series of cells, making interchangeability possible when needed.

The integration exclusively concerns load cells equipped with sensors. For compatibility between different platforms, it is necessary to replace the internal circuits and recalibrate the load cell.

**Intuitive Interface and Flexible Management**

Data is managed through a dedicated **WEB Portal**, allowing information sharing with other users based on hierarchies defined by the administrator. This architecture provides full control over operations, ensuring maximum security and scalability.



The Dynamic Line circuit is also **integrated into the EXE hoist line**. In the hoists, a shock-resistant antenna is used, offering a radio propagation capacity superior to that of standard free-standing load cells.

**Superior to Bluetooth and WiFi Solutions**

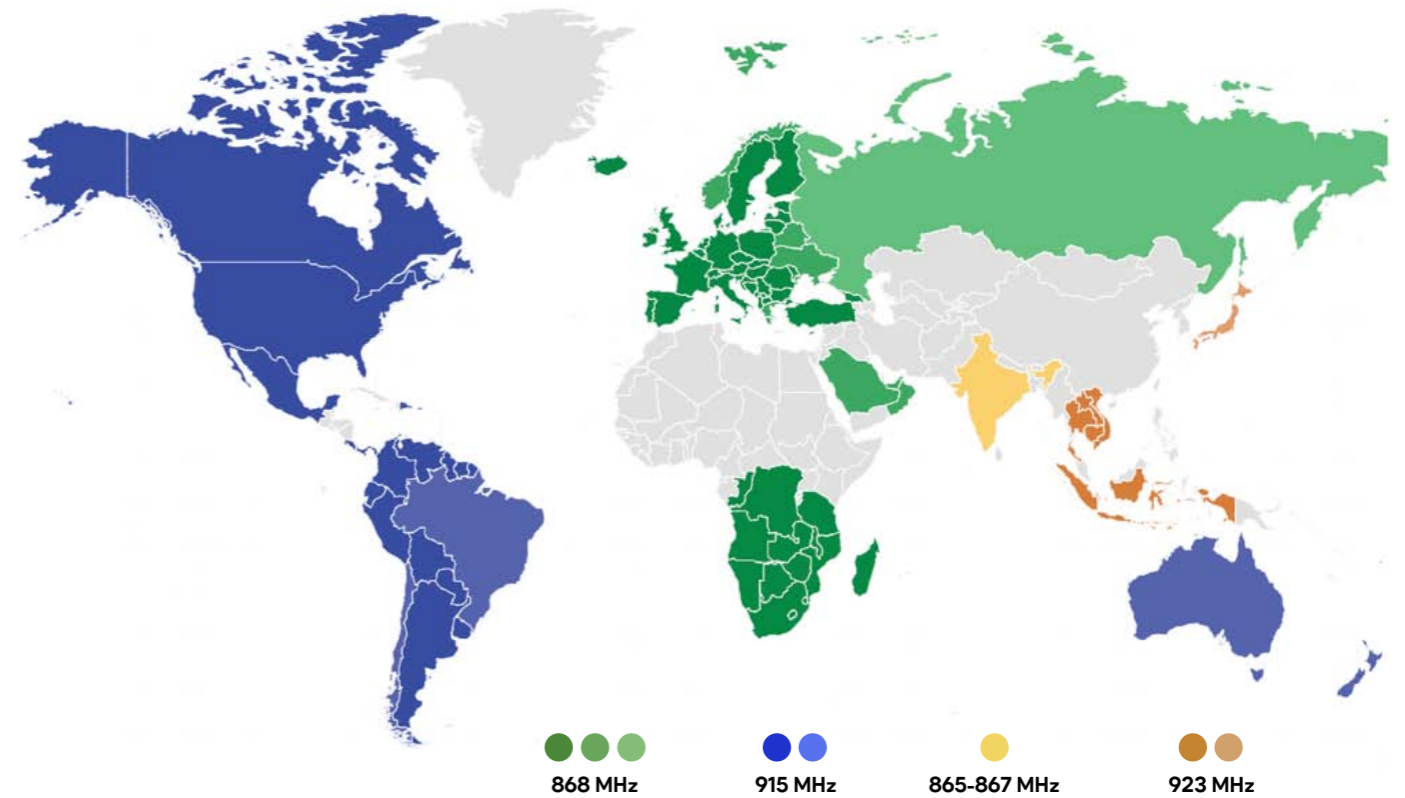
The choice of **Sub-1GHz frequencies** offers significant advantages in terms of coverage, enabling longer transmission distances compared to **Bluetooth** or **WiFi** solutions (which operate at **2.4GHz**). This reduces interference with widely used wireless technologies

**Global Compatibility with Sub-1GHz Frequencies**

Like the EXE Flexa Real-time, the EXE Flexa Dynamic line operates on the same frequencies common Long Range Low Energy solutions:

- **EU868 (868 MHz):** for Europe, the Middle East, and Africa.
- **US915 (915 MHz):** for the USA, Canada, South America, and part of Australia.
- **AS923 (923 MHz):** for Asian countries such as Japan, Singapore, Thailand, and Taiwan.
- **IN865 (865-867 MHz):** for the Indian subcontinent.

To meet local regulations, EXE Flexa provides dedicated firmware that ensures compliance without compromising performance. The choice of Sub-1GHz frequencies coverage without interference compared to the more popular 2.4GHz Bluetooth or WiFi frequencies.



**A Solution Built on a Strong Foundation**

Each device is designed, assembled, and tested in Italy, supported by a reliable cloud with global coverage.

The latest addition to the family brings with it all the expertise and reliability of the EXE Flexa wireless line.



# Natural Born Trusses

Truss structures, sometimes called strut frames, are a fundamental subject for civil engineering and design university students. But they are also apparently the intuitive equipment of many living organisms — animals and plants.

The definition of trusses is that they are structures consisting of durable load-bearing elements reinforced with members of the rolled section, connected by welding or riveting, usually in a triangular configuration so that together they provide far greater strength and stability than the simple sum of their load-bearing capacity and resistance.

Humans can consciously build these structures because they can calculate the vital values of the various opposing forces acting on the structure under load, and they have also mastered the technology of joining materials into a single unit. But the very same principle applies not only to the construction of bridges, cranes, masts or podium structures but also, for example, to animal riggers and their webs, birds' nests or beaver dams — and in the micro world, for instance, to the construction of leaves, snail shells or bone structures.

## 1. WEBS:

Spider webs are also truss structures - the radial (load-bearing) and spiral (reinforcing) fibers of spider silk (a special material with unique properties that in many ways surpass even steel, aluminium or composites) form interlocking triangles and other geometric shapes that distribute the load evenly and allow prey to be captured without damaging the web. One new study of the so-called tent spider demonstrates that the geometry of its webs is structurally efficient and more "advanced" than the most modern roof truss designs.

## 2. BIRD NESTS:

Most bird nests are based on the principle of strut frames — not counting nesting habitats such as tree cavities or birdhouses. The bird must first establish a foundation of beams in a suitable location, on and around which it then builds the truss structure — without having a welder, screws or rivets at its disposal. Their

bonding material is grass. And they do all this with their beaks.

## 3. CORAL REEFS:

Although they look like underwater shrubs or trees, corals are animals. Their branching bodies, growing around underwater reefs, form main "trunks" interconnected like trusses to withstand changing directions and intensities of water currents.

## 4. BONE STRUCTURES:

Bones, especially in larger animals, have an internal truss arrangement. The trabecular structure inside long bones consists of interlocking reinforcements and beams that maximize its strength while minimizing its weight.

## 5. LEAVES AND VEINS:

The network of veins in tree leaves often exhibit "truss patterns". Primary and secondary veins form triangular or polygonal shapes that help distribute nutrients and water efficiently and provide structural strength to the leaves (which are the chemical-energy complexes that keep the tree alive and growing).

## 6. TREE BRANCHES:

After all, the very distribution of branches on (naturally growing trees) is, in a way, a truss system, but as if upside down. The arrangement of the branches must correctly distribute the weight of leaves and fruits (after all, a mature oak has half a ton of leaves and the same weight of acorns on it at a specific moment), in addition to resisting wind and rain.

## 7. INSECT WINGS:

The wings of insects such as dragonflies or bees have a network of veins forming triangular or multi-angular units. This truss structure provides rigidity and support while maintaining a low weight.

## 8. BEE HONEYCOMBS:

Although not a purely truss structure, honeycombs use hexagonal cells that effectively distribute the load across the entire honeycomb area.

## 9. SHELLS AND EXOSKELETONS:

Some shells and exoskeletons exhibit truss patterns in their microscopic structure, providing strength against external pressures and predators.

## 10. ANIMAL CONSTRUCTIONS:

Other animal riggers from various parts of the animal kingdom use truss systems (at least partially) in the construction of their buildings — for example, beavers in the construction of their dams and especially their "castles" with an entrance located underwater, or ants in the construction of a labyrinth of tunnels in what at first glance resembles only a pile of pine needles.





Discover more  
with the QR code

## Rigging Commandos

**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!**

Top row from left:

### **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.

### **Siobhan Colleen**

She is a 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.

### **Eric Porter**

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

Bottom row from the left:

### **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.

### **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.

### **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.

### **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.

# A4I.tv: The First Video Portal for Riggers

If rigging is your stage and the world of entertainment your spotlight, it's time to level up. **A4I.tv by Area Four Industries** is here to transform how riggers like you learn, grow, and connect. Imagine a place where every tip, trick, and tool you need is just a click away. That's **A4I.tv – the first-ever video portal made for riggers, by riggers.**

**WHAT'S ON THE A4I.TV PLAYLIST?**  
A4I.tv is your backstage pass to expert knowledge, featuring **high-energy content designed specifically for the entertainment industry.** Dive into carefully crafted sections that will light up your rigging game:

- Design Basics** – Lay the groundwork for spectacular builds.
- Educational** – Deep dives into techniques that separate pros from amateurs.
- On-site Videos** – Real-world rigging in action, straight from event setups.
- Product Basics** – Master the gear that keeps the show running.
- Rigging Basics** – Essentials for beginners and refreshers for veterans.

Every video is packed with practical insights and actionable knowledge. Whether you're rigging for festivals, tours, theater, or arena gigs, you'll find the expertise to elevate your craft.

**EXCLUSIVE BRAND CHANNELS**  
A4I.tv isn't just about rigging—it's about rigging **right**. Get brand-specific insights from the leading names in the industry: **MILOS, PROLYTE, LITEC, JTE, TOMCAT, and EXE TECHNOLOGY.** From modular truss systems to automation solutions, the gear you rely on gets the spotlight it deserves.

**STAR-STUDED CAST OF RIGGING EXPERTS**  
Meet your all-star lineup of industry icons:

- Norbert Tripp** – the wizard of structural engineering.
- Eric Laanstra** – the guru of Prolyte know-how.

- Eric Porter** – the calm, collected voice of rigging wisdom.
- Will Todd** – a Tomcat legend with a knack for storytelling.
- Adrian Forbes Black** – the dynamic educator with hands-on tips.
- Siobhan Coleen** – bringing clarity and precision to every session.

These pros know the ropes—literally—and they're ready to share their hard-earned knowledge with you.

**RIGGING COMMANDOS: YOUR SECRET WEAPON**  
The **Rigging Commandos** team powers the educational engine of A4I.tv. Think of them as your go-to mentors, delivering top-notch training that's as entertaining as it is informative. Their goal? To keep you safe, efficient, and at the top of your game.

**WHY A4I.TV?**  
In the high-stakes world of entertainment rigging, there's no room for guesswork. **A4I.tv is your one-stop shop for all things rigging.** From event prep to tear-downs, it's loaded with tools to make your job easier, safer, and more impressive.  
And here's the best part: It's all designed for riggers who thrive on adrenaline and the magic of live events. A4I.tv doesn't just teach—it inspires.

**JOIN THE SHOW**  
Ready to hit play on a new level of expertise? Visit **www.a4i.tv** and join thousands of riggers who are already sharpening their skills and learning from the best.  
The spotlight's on you—make your next gig your best one yet. See you on A4I.tv!



Discover more with the QR code



Watch the full video by scanning the QR code.



## Behind the Scene: Helmets

Do you enjoy the world behind the scenes? Come and see what it's like behind the scenes of the new Area4Industries helmet commercial.

It all starts with the assignment. The original helmets are designed by riggers for riggers. That's not an advertising slogan; it's a fact. Designers from a renowned helmet manufacturer (name?) sat down with selected riggers and designed a helmet that fits all requirements. It's lightweight, well-ventilated, super secure to fasten, easy to tighten and has plenty of attachments for accessories so you can clip on almost anything a rigger needs for their job — headphones, light, hat, visor and GoPro for recording work at height. Plus, it comes in 5 colors from each brand in A4I's portfolio.

Original helmets deserve original advertising. We agreed right from the start that we didn't really want to advertise. We have a huge advantage. You, our audience, make the show! So I'm sure you won't fall for any cheap ads. Am I right?

We decided to pay tribute to all you girls and boys who work on small and big shows. From fashion shows to the biggest outdoor concerts. And our helmets designed by riggers symbolise the community you belong to. It won't be a commercial but an original music video. Starring riggers who take us on a journey through the backstage of various shows. Whether they take the form of a sports match, a fashion show, a theatre, an opera, a museum or a concert, knowing that the video would only be seen in an online environment, we wanted to grab attention and come up with something original — we decided to combine live-action characters set in an animated environment. We couldn't think of anything more complicated and laborious, but on the other hand, we enjoy solving complicated things.

Normally we would pick music and shoot a video clip with riggers in different environments, edit it, color it, add some graphics and get it out there.

But the combination of real characters and animation interacting with each other is a different thing. This technique requires an entirely different process, and, above all, you can't go back to the previous step. In short, if there's a mistake at the beginning of the production line, there's a mess at the end.

First, a completely accurate picture scenario must be created, where it is determined from where who will go, what they will do, and how the animated background will move. Once it's agreed upon, this scenario — the shooting board — is set in motion, and a working video called an animatic is created. The goal is to test the functionality of the ideas



and, most importantly, to fine-tune the lengths of the scenes. Of course, the animatic is edited many times. But it's for the best; all the components of the production know exactly what to do and, above all, how much space they have. At the same time as the animatics, the artwork is created, the music is composed, and the actors are found. In our case, we decided to combine actors, dancers and real riggers who know best how to move around the trusses.

The next step is to produce the final animated environment from the artwork. All animation must match what will be in the video, including the timing of the music. We then sprout the real "actors" on top of it, and the trusses and effects come before them.

After a month of work, we are finally in the film studio. It is dominated by a huge green

background and a green gangway simulating the reeds on which the riggers will move in the final film. The guys not only have to move to the rhythm but also to fake the movements of the animated environment, which, of course, they can't see. Each scene is repeated several times until the timing of each movement is quite perfect. Just to give you an idea — the first three actors in the film have to play a passage almost 30 seconds long in a row with absolutely no mistakes.

And back to the animation studio. The green background from the shoot goes away to leave us with just the actors on a transparent background and we then insert them, shot by shot, into our animated environment. We may live in an age of AI and great programs, but it's still a lot of manual work. Window by window. Riggers need to be painted

out. Helmets to match the real colors, effects, and graphics. Again, a lot of time and handwork.

We're finally going to the finals. We're recording the commentary and doing the final mix of sound and music. It's been a couple of months of work and the result is 1 minute and 26 seconds long. Finally, you know the business. A lot of work and then one performance. But you have the huge advantage of seeing your audience and knowing if they liked the show. I envy you that. So check out our video (youtube link) and let us know how you enjoyed it.

Take care of yourself, protect your head and enjoy the work, which is hard work but definitely fun. And if you ever want to invite me backstage, don't hesitate, I'd love to come and see you.



# Framing Stellar Moments of Entertainment

*"Billions of years are behind us; billions of years are ahead of us. Amid this infinity of time, short stories of people are unfolding. Starry seconds of human creativity occasionally shine through in them," says Franti Zykan, founder of Area Four Industries. "And it is for these shining moments that our company produces structures. We are the framers of the entertainment world."*

## Do we have to frame the experience?

Without borders, everything would be dissolved and diluted. We'll have time for indeterminacy when life is over. But we need boundaries in the course of it, otherwise we go mad with the ungraspable. Go to the gallery. The paintings have frames, often elaborate and exquisitely technical. The frame gives the paintings their shape and their place in the environment. It amplifies the effect, attracts attention, and deflects the distractions of the surroundings. When a painting does not have a frame, something is missing; we feel it is unfinished, and the impression of it fades away.

## You don't make picture frames, though...

But we do. Czech, English and other languages know the term "picturesque", which refers to pictures and paintings. Our products are frames for sound and visual paintings. A construction made of aluminium or iron is not a shapeless abstract mass but a concrete and meaningful work to attract people's attention, to concentrate their senses on one brief moment, on the starry hour of humanity.

## Is this a reference to the famous book?

Yes, to Shooting Stars by Stefan Zweig. But the original German title (Sternstunden der Menschheit — The Starry Hours of Humanity) better captures the essence of the idea — no artist is an artist for twenty-four hours of his daily life. He manages to achieve everything essential in just a few moments of inspiration. It always takes millions of people in any nation to raise a genius; it always takes millions of tedious hours before the historic, stellar hour strikes. And it's those starry hours we're focusing on. It doesn't matter if it's a rock concert, a theatrical performance, a car show or a travel fair; we always strive to make our designs frame the result of people's often years

of creative endeavour in a dignified and beautiful way. We don't help them create them; we help them present the result.

## Is that just your perception, or is it the perception of others in the company?

I, Fabio Prada, the sales director; Aleš Rouček, the head of marketing, understand it; Petr Kekule, the warehouseman; Petr Hájek, the forklift driver, and Jiří Holcman, the welder, understand it; everyone in the company understands it. There are hundreds and hundreds of people. They know precisely what they do, what they produce and for whom they produce it. It's our mental setup. That's why we're a healthy and successful company.

## Why is it important?

If a welder were mindlessly welding a piece of metal to metal, he would not enjoy his work. He would be just a cog in the system and would have no idea what the purpose of his work was. He would work only for money.

But he knows that he is making, for example, a podium to be taken to Singapore or a structure for the Burning Man festival or that stage he worked on is being played by Iron Maiden. Because he knows what the whole piece will look like, not just the tiny piece he's involved in. But even on that small piece, there is a label where, besides the technical details, his name is printed, e.g. Šimo, Zdražil, Čermák, Holcman, etc. The individual is responsible for the whole and the whole for the individual. And we all know that we make frames for the starry hours of mankind.

**Franti, that would be a nice end to the conversation. But you are Czech and Czech society is characterized by ironic humor that challenges every conclusion and statement. So last question: you have welding robots in your company.**

**They do the same work as welders. They do it with the same quality and maybe even faster. Even the robots, these orange comrades, are conscious of the whole. Do they understand that they are making frames for mankind's starry hours?**

Sure. All of our Panasonic robots have names and are part of the work team. They have fun with us, they eat in the same canteen as us, they laugh at the same jokes, they listen to the same music, they go to the pub for a beer after work, they play football on Sundays, they have the same hobbies. Our robots are just like us, but they play pool better, can't make coffee, and have better catches on the fish. And unlike us, they release the fish back into the river.

**"If a welder were mindlessly welding a piece of metal to metal, he would not enjoy his work."**



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