



GUIL®

Desde 1983

RIGGING TOWERS FOR LINE ARRAY

TMD

CE

2006/42/CE

EN 17206

DGUV 17 & 18

DGUV Rule 115-002

MADE IN SPAIN



Compact design Line Array Tower.

Stowed Volume 1,49 m³.

Maximum Height: 6,43 m | Maximum load: 500 Kg

The TMD-545/N is a Rigging tower for Line Array Systems specially designed to reliably lift speakers of up to 500 kg to a maximum height of 6.25 m using a manual 2000 kg chain hoist. GUIL's engineering department has designed a fully innovative tower **certified for outdoor use in accordance with the European standard EN 13814.**

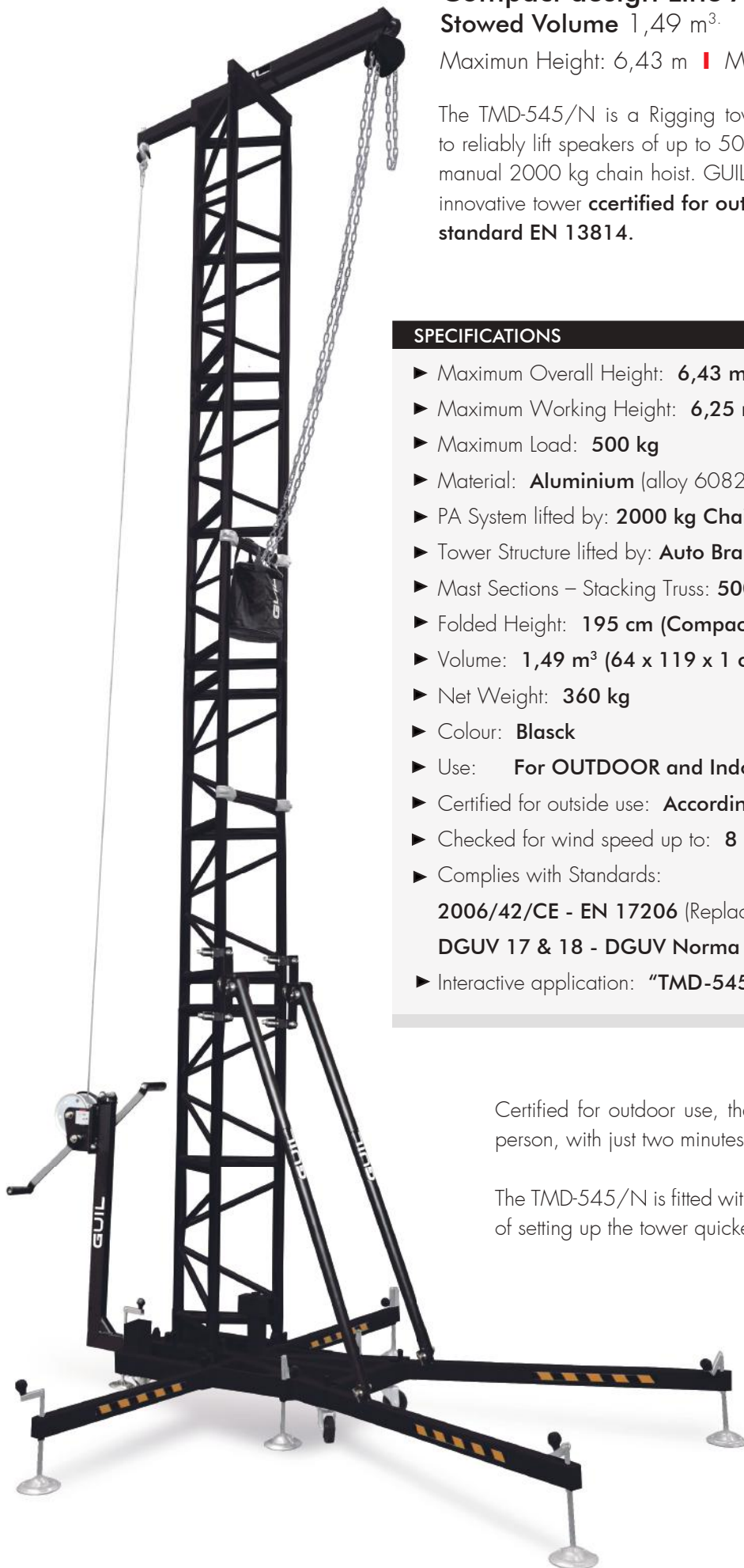
SPECIFICATIONS

- ▶ Maximum Overall Height: **6,43 m**
- ▶ Maximum Working Height: **6,25 m**
- ▶ Maximum Load: **500 kg**
- ▶ Material: **Aluminium (alloy 6082-T6) & Steel (BLACK finish)**
- ▶ PA System lifted by: **2000 kg Chain hoist (Included)**
- ▶ Tower Structure lifted by: **Auto Brake Winch with two handles (Included)**
- ▶ Mast Sections – Stacking Truss: **500 x 500 mm (4 units. Length: 1500 mm)**
- ▶ Folded Height: **195 cm (Compact Design)**
- ▶ Volume: **1,49 m³ (64 x 119 x 1 cm). Everything in 1 piece**
- ▶ Net Weight: **360 kg**
- ▶ Colour: **Blasck**
- ▶ Use: **For OUTDOOR and Indoor use**
- ▶ Certified for outside use: **According to: EN 13814**
- ▶ Checked for wind speed up to: **8 Beaufort**
- ▶ Complies with Standards:
 - 2006/42/CE - EN 17206 (Replaces DIN 56950-1)**
 - DGUV 17 & 18 - DGUV Norma 115-002 (Formely BGV-C1)**
- ▶ Interactive application: **"TMD-545/n APC" (Included)**



Certified for outdoor use, that can be assembled and operated by a single person, with just two minutes help from a colleague during assembly.

The TMD-545/N is fitted with a double-handled winch, which makes the work of setting up the tower quicker and easier.



The TMD-545/N comes totally equipped with all components and elements necessary for use: complete operating structure, with chain hoist for lifting and double-handled winch for set-up, etc. You get a complete tower, ready to go straight out of the box. Its meticulous design offers easy assembly and handling, and the whole tower occupies only 1.49 m³ in one single block when stowed. The TMD-545/N is supremely manoeuvrable, easy to store, transport and position, and offers safety, strength and reliability for the user. One of the most convenient and functional towers on the market, it is the perfect solution for touring!

The rigging tower TMD-545/N is supplied with an interactive application "TMD-545/N APC", for its use outdoors, establishing the maximum wind speeds depending on your PA System.

A REVOLUTION IN DESIGN



QUICK AND EASY SET-UP: GUIL are well-acquainted with the difficulties met by assemblers who need to set up sound systems like these for outdoor events, and have designed the TMD-545/N, a Line Array tower which can be quickly and easily set up by just one person.

The double-handled winch allows the technician to lift the assembled truss sections upright without needing four or five people to help. Just two minutes help from a colleague to begin to raise the mast is sufficient, and similarly to lower it for takedown.

PRACTICAL & COMPACT FOR STORAGE AND TRANSPORT: With its ingenious design and high capacity, its quick assembly and compact stowed size that fits in just one unit of 1.49 m³, and its convenient transport and handling, the TMD-545/N can be considered one of the most functional line array structures on the market.

Just one fitter can transport the TMD-545/N, using the handlebar to direct it, from the lorry to the set-up location. That's convenience for you! The TMD-545/N is ideal for touring and periodic shows, as well as town or school events, and for any other infrequent use where storage space is also an important factor.



DESIGNED FOR OUTDOOR EVENTS: The TMD-545/N was specially conceived for outdoor use (though, naturally, it may also be used indoors), and is supplied with an interactive application, the "TMD-545/N APC", which helps the user to calculate the maximum permissible wind speed, according to the EU norm (EN 13814) for this purpose, taking into account the weight and height for the line array to be used on each occasion.

MAXIMUM SAFETY AND RELIABILITY: GUIL always takes very seriously the safety of our users and those enjoying the events where our lifters are being used.

This is why we work only with the most state-of-the-art specialised technology and first-class materials to manufacture the devices that our engineers create, and the TMD-545/N follows this rule in every way.



The certified resistance and stability of this tower, manufactured to fly line array of 500 kg weight to a height of 6.25 metres, are achieved by its intelligent design and reinforced construction, and ensure the protection of both the speaker system itself and, of course, of the people near the tower at the event.

MINIMUM TIME & EFFORT ON SET-UP

The TMD-545/N rigging tower has been designed to be set up as quickly and easily as possible, while safety is also of maximum importance to GUIL. The front legs and side stabilisers of the tower are inserted into their housings and held in place with locking pins (Ref. RC-100/L).0

The truss sections of the TMD-545/N are designed to be assembled horizontally on the ground, before being attached to the hinges on the base of the tower and raised into a vertical position with the winch. The seven screw jacks on the legs, side stabilisers and base, and the spirit level on the base are then used to level the tower before use. This system guarantees quick and easy assembly and take-down of the tower, which can be carried out by only two people.



The Line Array System will be lifted by the hand-chain hoist (Ref. POLI/4) which has a certified lifting capacity of 2.000 kg (4409 lb) (CE).

It has 6 m load and hand chains, which make lifting the Line Array system effortless.

A BLC-01 Reinforced Chain Bag is also supplied..

Stacking truss stages are used on the TMD-545/N in order to create an easy-to-assemble high-strength exterior use lifting mast which would also be quick to assemble and take up as little space as possible for minimum storage and transport space.



The sound towers ref. TMD-545/N are a perfect solution for hanging PA equipment at any event, both indoors and outdoors. **Our modular PA towers offer maximum safety for operators and the public, and have been tested and approved in accordance with the EN 13814 standard (tests carried out by the German engineering company Expo Engineering).**



TRUSS SECTIONS: Four 1500mm sections of 500mm x 500mm stacking truss compose the mast of the TMD-545/N, designed to be stacked together vertically on the base for storage and transport. The tower comes with two strengthening braces to reinforce the sections, and the truss sections are connected with zero play for maximum security. The sections stack together on the wheeled base for storage and transport to occupy a mere 1.49 m³ when stowed.

REINFORCEMENT – BRACE BARS: The trusses and the front legs are connected for reinforcement with two brace bars, which are secured with double clamps to the trusses, forming a strong and stable unit.



TOP SECTION

The head block consists of two 1190mm-long aluminium beams and an extension of 400mm that projects from the back of this assembly..

Its frontal part has two functions:

1.- The front side of the top section has a length of 760 mm, this length in combination with the 3° inclination of the truss structure, assures the correct degree of inclination for the line array.

2.- It acts as a reliable arm to fit the 2T chain hoist that lifts the Line Array System.

Its rear part has two functions:

1.- It allows users to fasten the safety hook of the brake winch
The hinge system at the base of the tower allows the mast structure to be lifted with very little effort. Just one-person operation!

2.- Once the tower has been fully assembled, the winch can be tightened slightly to provide a counterbalance stabilising effect.



BASE SECTION

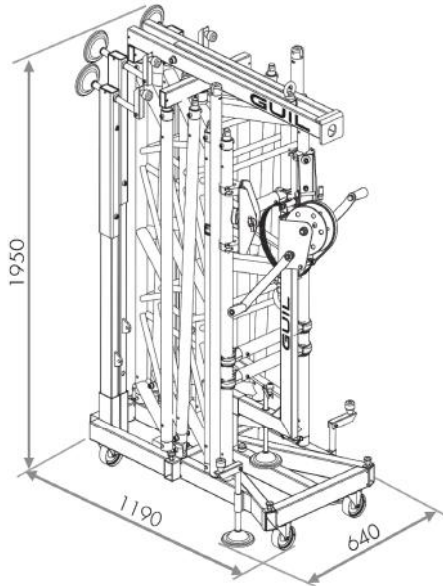
UNIQUE DESIGN: GUIL's engineers rose to the challenge of designing a base for the TMD-545/N that would serve as both the base of the Line Array tower and as the storage unit for all the parts and components of the tower when it is stowed. The truss sections and all the other parts, including the chain hoist and winch, are accommodated on the base (only 640x1190 mm in size), forming a compact block that prevents loss of components during storage and transport.

The base also has a spirit level to be used during set-up to level the tower with the screw jacks prior to lifting the Line Array.



WINCH MOUNTING: The double-handled winch of the TMD-545/N is held on a special mounting which fits into the base for transport and storage, but during set-up is installed in its housing at the back of the tower to form an anchor point for the cable. This creates a brace to provide maximum strength and stability to the rigging tower, and greater support for the load when it is raised.

The crank handles of the brake winch, specially designed for lifting heavy loads, are detachable, in order to prevent any unauthorised manipulation during the event



LEGS AND STABILISERS: The legs and side stabilisers of the TMD-545/N, housed vertically on the base, are extendible to ensure that the tower has the largest, most stable footprint possible. Both the legs and the stabilisers are fitted with screw jack levellers, made entirely of steel with rubber feet on the discs, to make sure that the base is level before starting to lift the line array. In addition, there are three more leveller jacks on the base of the tower, making a total of seven leveller jacks, all with chromed steel discs for maximum strength and reliability. The jacks are also fitted with double-speed threads, to allow the tower to be levelled as quickly as possible. When the legs and stabilisers are installed and extended, and the jacks are deployed to level the tower, they guarantee the 360° support that is essential for a device that operates close to large numbers of people.

Foto: USL -VERANSTALTUNGSTECHNIK BERNA





TMD-545/N: **SAFETY IN LIFTING** **500 kg LINE ARRAY SYSTEMS**

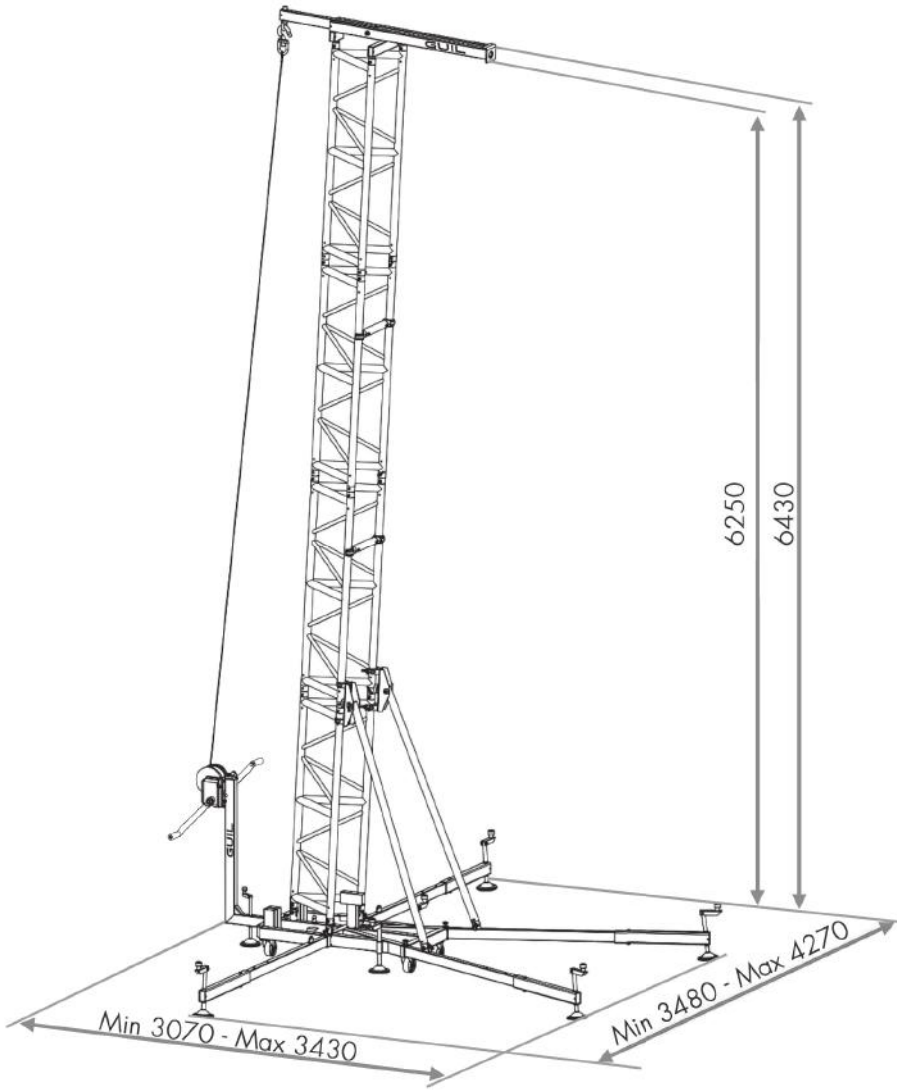
The TMD-545/N Rigging Tower complies with the requirements of safety according to the following Standards and Regulations:

- **Directive 2006/42/CE** on machinery that establish "Essential health and safety requirements relating to the design and construction of machinery".
- **EN 13814:** Fairground and amusement park machinery and structures.
- **EN 17206** (Replaces DIN 56950-1): TEntertainment technology – Machinery for stages and other production areas – Safety requirements and inspections.
- **DGUV Regulations 17 & 18:** Accident prevention regulation. Event and production facilities for scenic presentation.
- **DGUV Rule 115-002** (Formerly BGV-C1): Staging and Production Facilities for the Entertainment Industry..

When GUIL presented their TMD-545 Line Array tower, it was a pioneer in the events industry, enjoying great success due to its ingenious design, which allowed the whole tower to fit on a single base, thus reducing storage space and assembly time.

It is also worth noting that the tower is singularly light for its height and weight capacity. The tower has been improved over the years and is currently manufactured in a black epoxy paint finish, making it more discreet in concerts and other events.

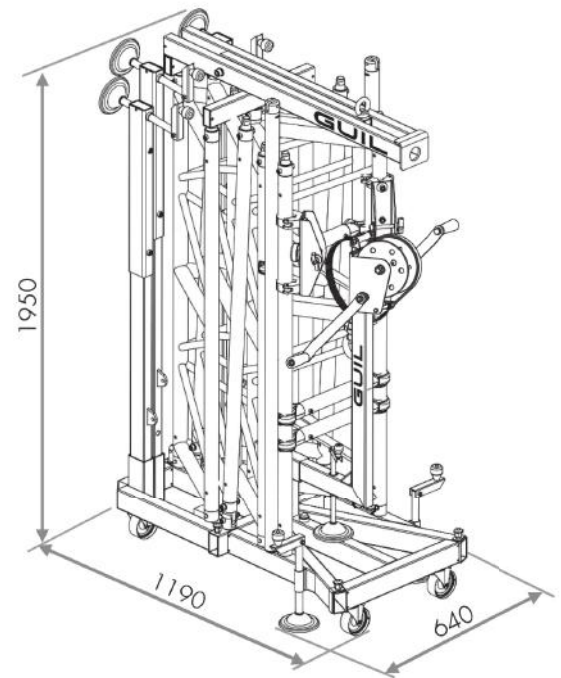
Following the success of the TMD-545/N, GUIL has continued to investigate the needs of events sector professionals, which allows them to design new towers and other products, developing a range of original, compact towers which can lift heavier loads to greater height, such as the TMD-570 for example.



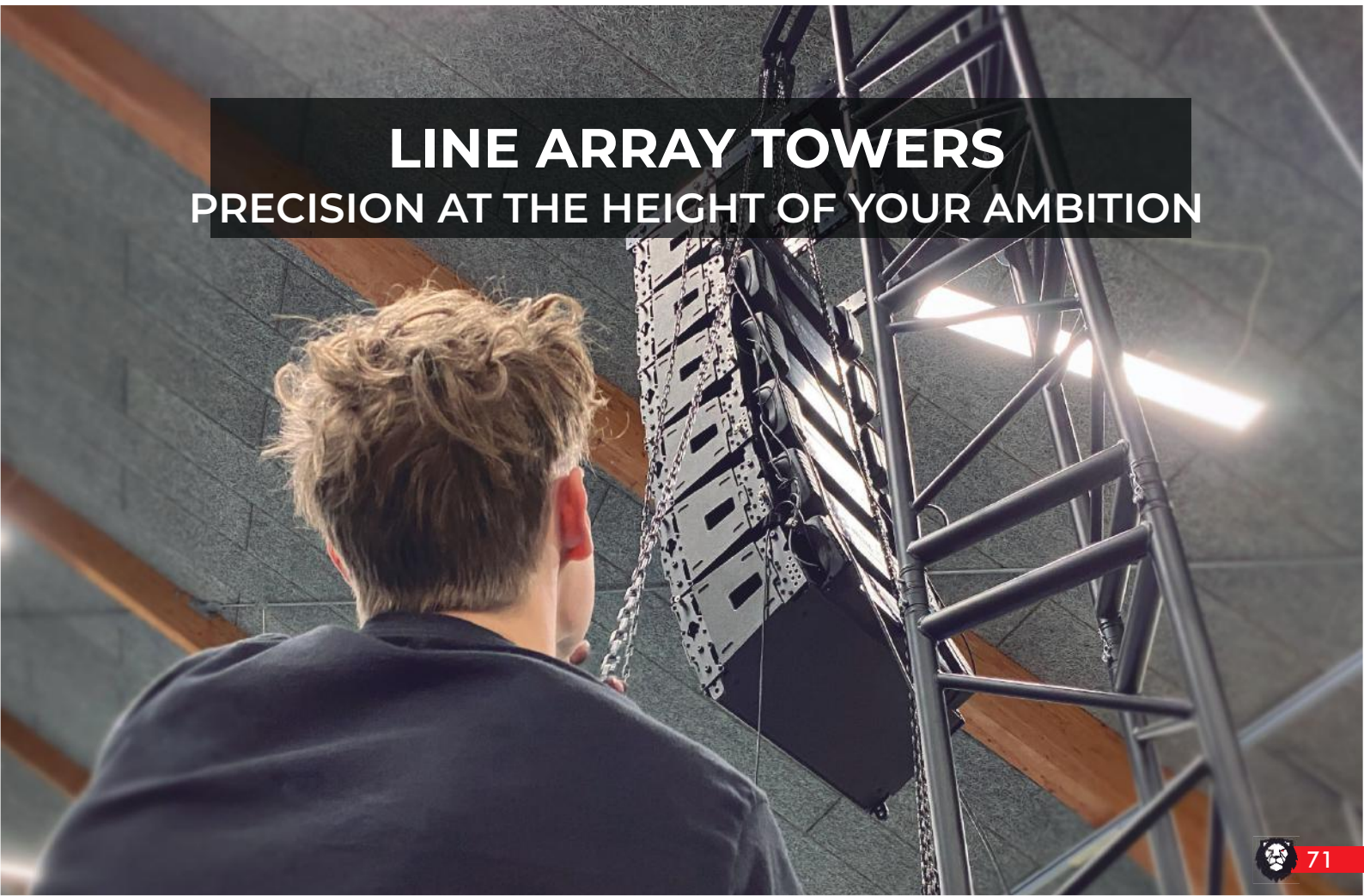
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EXPO
Engineering
according:

EN 13814



LINE ARRAY TOWERS
PRECISION AT THE HEIGHT OF YOUR AMBITION



Compact design Line Array Tower.

Stowed volume: 3,68 m³.

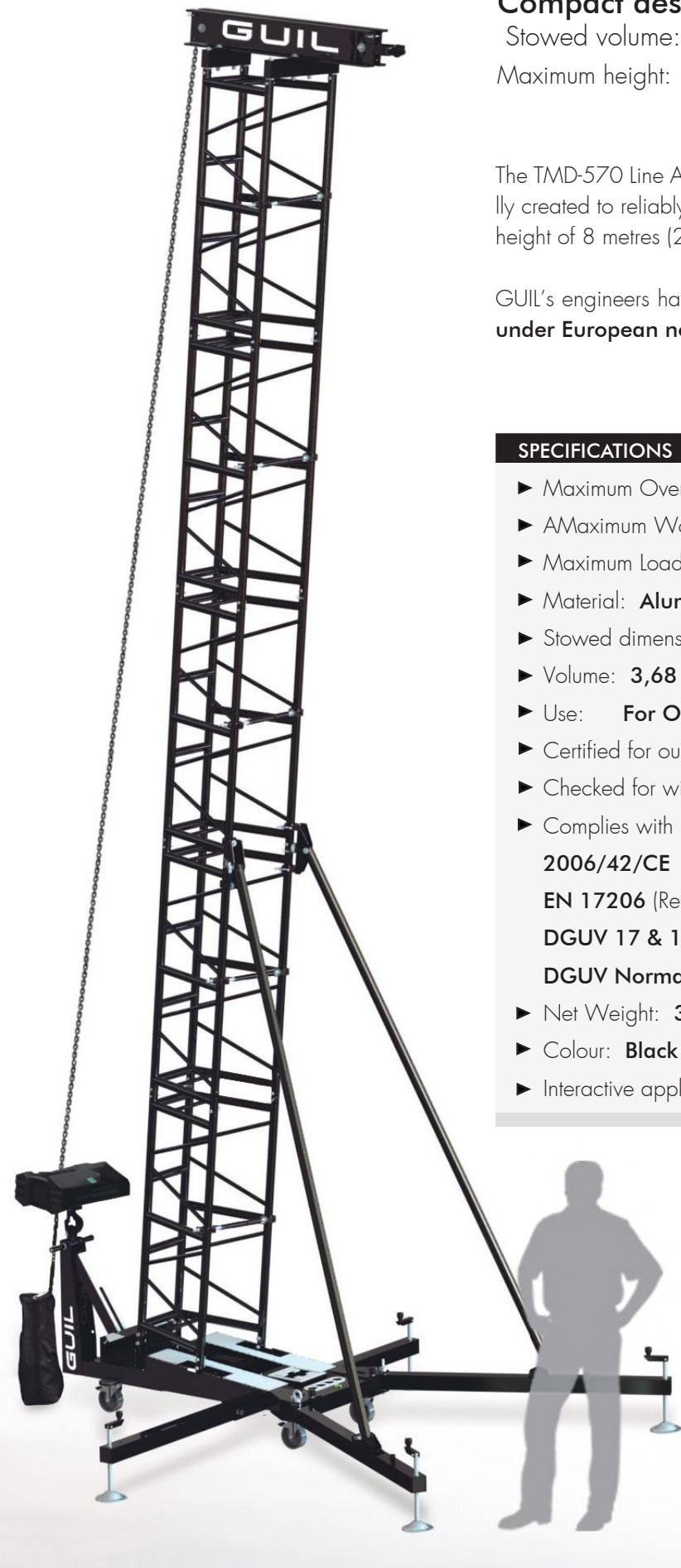
Maximum height: 8,25 m | Maximum load capacity: 800 Kg

The TMD-570 Line Array Lifting Tower is a compact, exclusive design by GUIL, specially created to reliably lift Line Array systems of up to 800 kg (1,760 lb) to a maximum height of 8 metres (26 ft 3 in) using an electric motor.

GUIL's engineers have created a totally innovative tower, **certified for outdoor use under European norm EN 13814..**

SPECIFICATIONS

- ▶ Maximum Overall Height: **8,25 m**
- ▶ Maximum Working Height: **8 m**
- ▶ Maximum Load: **800 kg**
- ▶ Material: **Aluminium (alloy 6082-T6) & Steel**
- ▶ Stowed dimensions: **210 cm (Compact Design)**
- ▶ Volume: **3,68 m³ (94 x 187 x 210 cm)**. Everything in 1 piece
- ▶ Use: **For OUTDOOR and Indoor use**
- ▶ Certified for outside use: **According to: EN 13814**
- ▶ Checked for wind speed up to: **8 Beaufort**
- ▶ Complies with Standards:
 - 2006/42/CE**
 - EN 17206 (Replaces DIN 56950-1)**
 - DGUV 17 & 18**
 - DGUV Norma 115-002 (Formerly BGV-C1)**
- ▶ Net Weight: **373 kg**
- ▶ Colour: **Black**
- ▶ Interactive application: **"TMD-570 APC" (Included)**



Its meticulous design offers quick and easy assembly. The TMD-570 tower is **extremely manoeuvrable**, all the components of the tower fit without spare parts in a single base (with a volume of just **3.68 m³**), making it easy to transport and store.

The tower is supplied with the interactive application **"TMD-570 APC"** for its use outdoors, taking into account the maximum wind speeds permitted by applicable standards.

THE INNOVATIVE SOLUTION

When GUIL launched their first compact line array tower, the TMD-545 (for 500kg up to 6.40m high) in 2003, it was a PIONEER in the industry, its wide popularity based on its ground-breaking design; cutting down on storage space and setup times. The TMD-570 follows the innovative trail blazed by the TMD-545, and our extensive market research of the requirements of the events industry, to meet the increasingly frequent demands of professionals for similarly compact and original towers capable of lifting bigger sound systems.



QUICK AND EASY SET-UP: Familiar with the problems faced by the technicians to install sound systems of these characteristics for outdoor events, GUIL have designed the TMD-570, which allows a single professional to raise the structure by means of an electric motor.

Its design allows the structure's mast to be raised to the vertical position with no need to rely on four or five people. With the TMD-570 tower, a professional needs only two minutes help from a colleague to start to raise the mast before completing the lifting process with the motor..

PRACTICAL & COMPACT FOR STORAGE AND TRANSPORT: With its inventive construction and high performance, its quick set-up and reduced stowed dimensions in just one piece of 3.68 m³, and its ease of transport and handling, the TMD-570 has the right to be regarded as one of the most practical structures on the market. Just one technician can move the TMD-570 on its wheels, using the handlebar to steer it, from the lorry to the setup location..

The TMD-570 tower is the perfect solution for events where a Line Array tower with a large lifting height and maximum load capacity is required and where storage space and transport are also an important factor.

The TMD-570 is supplied with a chain bag (Ref. BLC-05) to keep the chain of the electric motor.



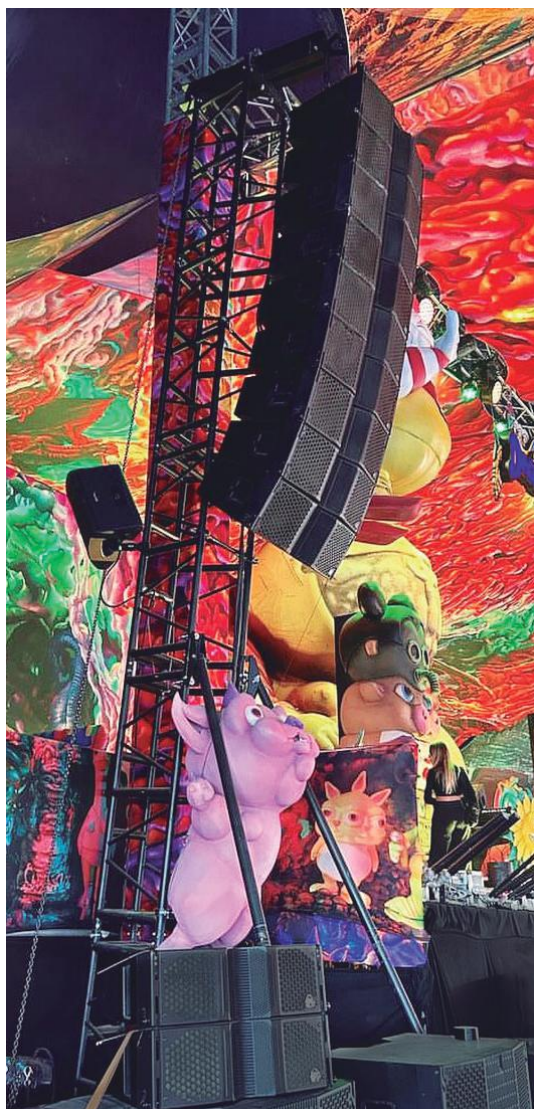
DESIGNED FOR OUTDOOR EVENTS: The TMD-570 was specially conceived for outdoor use (though, naturally, it may also be used indoors), and is supplied with an interactive application, the "TMD-570 APC", which helps the user to calculate the maximum permissible wind speed, according to the EU norm (EN 13814) for this purpose, taking into account the weight and height for the line array to be used on each occasion.

MAXIMUM SAFETY AND RELIABILITY: For GUIL, the first priority at all times is the safety of everybody using or near our products. For this reason, we work only with the most up-to-date technological solutions and the highest-quality materials to fulfil the projects of our engineering department, and the TMD-570 is a clear example of this rule. The certified strength and stability of this tower, conceived and built to hold 800 kg of line array at a height of 8 metres, are achieved by its intelligent design and reinforced construction, and guarantee the protection of both the line array itself and, of course, of the public



MINIMUM TIME & EFFORT ON SET-UP

The TMD-570 rigging tower has been designed to be as quick and easy as possible to assemble, while at the same time making safety a priority. The front legs of the tower are attached to the base, and swing out to be anchored in their splayed position at the front of the tower. The side stabilisers are inserted into their housings and held in place with magnetic locking pins (Ref. RC-100/L).



The truss sections of the TMD-570 are designed to be assembled horizontally, before being attached to the hinges on the base of the tower and raised into a vertical position with the electric motor (not supplied)

The tower is then levelled using the screw jacks on the legs and side stabilisers and the spirit level on the base. This system guarantees quick and easy assembly and take-down of the tower, which can be carried out by only two people.



The trapezoidal section truss stages were created in GUIL's technical department with the aim of designing a high-strength lifting mast specifically for outdoor use which, at the same time, would be quick to assemble and would occupy as little space as possible with an eye to storage and to transport.

In addition to lifting the sound apparatus and raising the aluminium structure to its vertical position, the chain of the motor also acts as an auxiliary strut, giving the tower great solidity and resistance. NOTE: SWe recommend using a motor with 1000Kg load capacity.

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Engineering
according to:
EN 13814

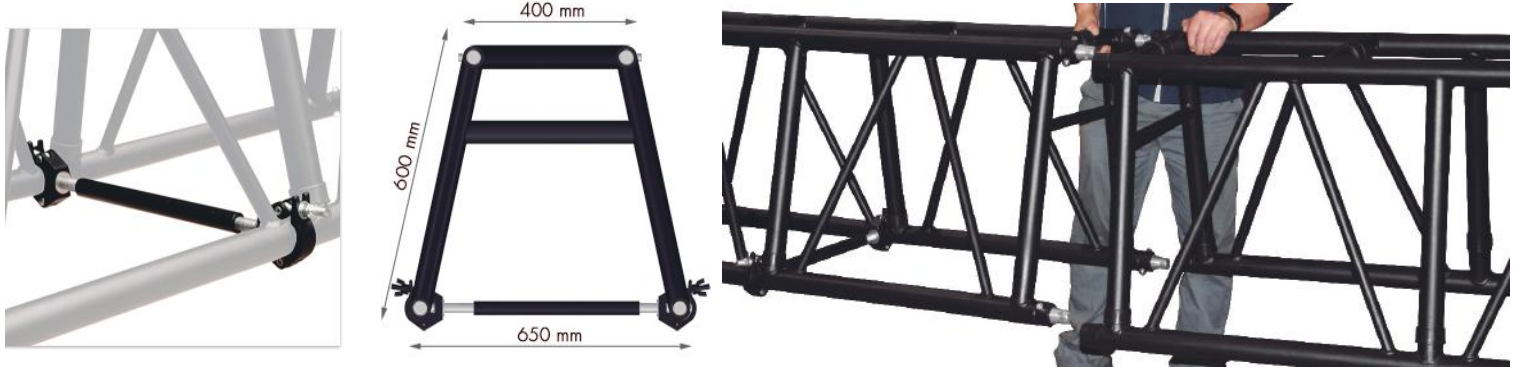
The TMD-570 sound towers provide a perfect solution for hanging PA equipment at any type of event, indoors or outdoor.

Our modular PA towers offer maximum safety for operators and the public, and have been tested and approved in accordance with the EN 13814 standard (tests carried out by the German engineering company Expo Engineering).



STRUCTURE

TRUSS SECTIONS: The mast section consists of five 1500mm sections of truss in a trapezoidal design (400mm wide at the back, 650mm at the front), which allows the sections to be stacked together vertically on the base for storage and transport. Three adjustable strengthening braces are supplied to reinforce the sections, and the truss sections are connected with zero play for maximum security. The truss sections of the tower have been specially designed by GUIL's engineers to provide maximum strength and reliability, while also stacking together for storage and transport to occupy a mere 3.68 m³ when stowed on its wheeled base.



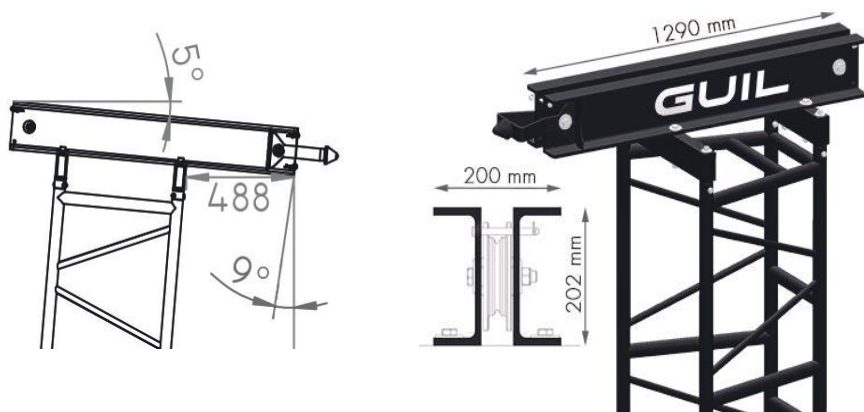
TRUSS SPACERS: Each truss section is supplied with an adjustable truss spacer to reinforce the sections and prevent deformation (5 truss spacers in total).

STRENGTHENING BRACES: The truss tower itself is equipped with two strengthening braces or brace bars to withstand large loads and maintain the stability of the structure. Each brace is secured with a brace fastener with double clamps to the trusses and to the front legs with specially-made brackets, to form a strong and stable unit.



HEAD BLOCK

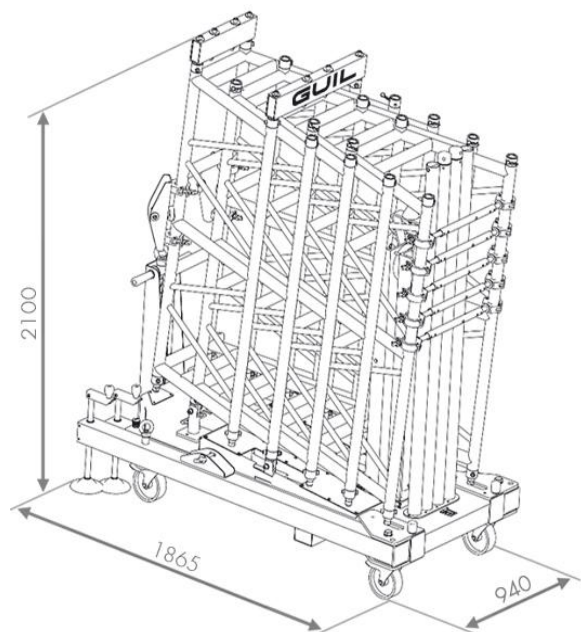
The head block consists of two 1290mm-long aluminium beams and, in combination with the 5° inclination of the truss structure, assures the correct degree of inclination for the line array. It can be detached from the tower to be stored in the base for transport, or also to be placed on the ground to assemble the tower and to install the chain of the motor. The headblock is fitted with a large silentblock to protect it when setting up and taking down the tower.

**BASE - ADVANCED CONSTRUCTION**

UNIQUE DESIGN: The base of the TMD-570 is the result of revolutionary design and pioneering execution, with the dual purpose of forming the foundation of the line array tower when it is in use, and accommodating all the components of the tower in one block for transport and storage, thus avoiding loss of components. The base (with dimensions of just 940x1865 mm) is fitted with custom-made nylon protectors to prevent damage from scratches or blows and to keep your TMD-570 in perfect condition, and also has a spirit level to help with the process of levelling the tower during assembly.



MOTOR MOUNTING: For the electric motor, GUIL have created a special mounting which fits under the base for transport and storage, but is pulled out to form an anchor point for the chain, which creates a brace to provide maximum strength and stability to the rigging tower, and greater support for the load.



LEGS AND STABILISERS: The folding legs are installed on the base, and the side stabilisers are housed in the side members of the base, they are fitted with leveller screw jacks that have reinforced nylon injection moulded spin handles (ergonomic design) with double thread and speed which facilitates the levelling task. Their non-slip foot plates ensure a perfect adjustment of the tower to the floor surface.

The legs and side stabilisers provide further support for the lifter and guarantee the 360° support that is essential for a device that operates close to large numbers of people.



TRANSPORT: The base is fitted with four 150mm-diameter wheels with brakes for easy transport, making the TMD-570 highly manoeuvrable, and the motor support includes a handlebar to steer it.

A single technician can move the base loaded with all the components of the TMD-570 wherever necessary. Just one person moving a whole line array tower to lift 800kg to 8 metres height: **who can resist that?**





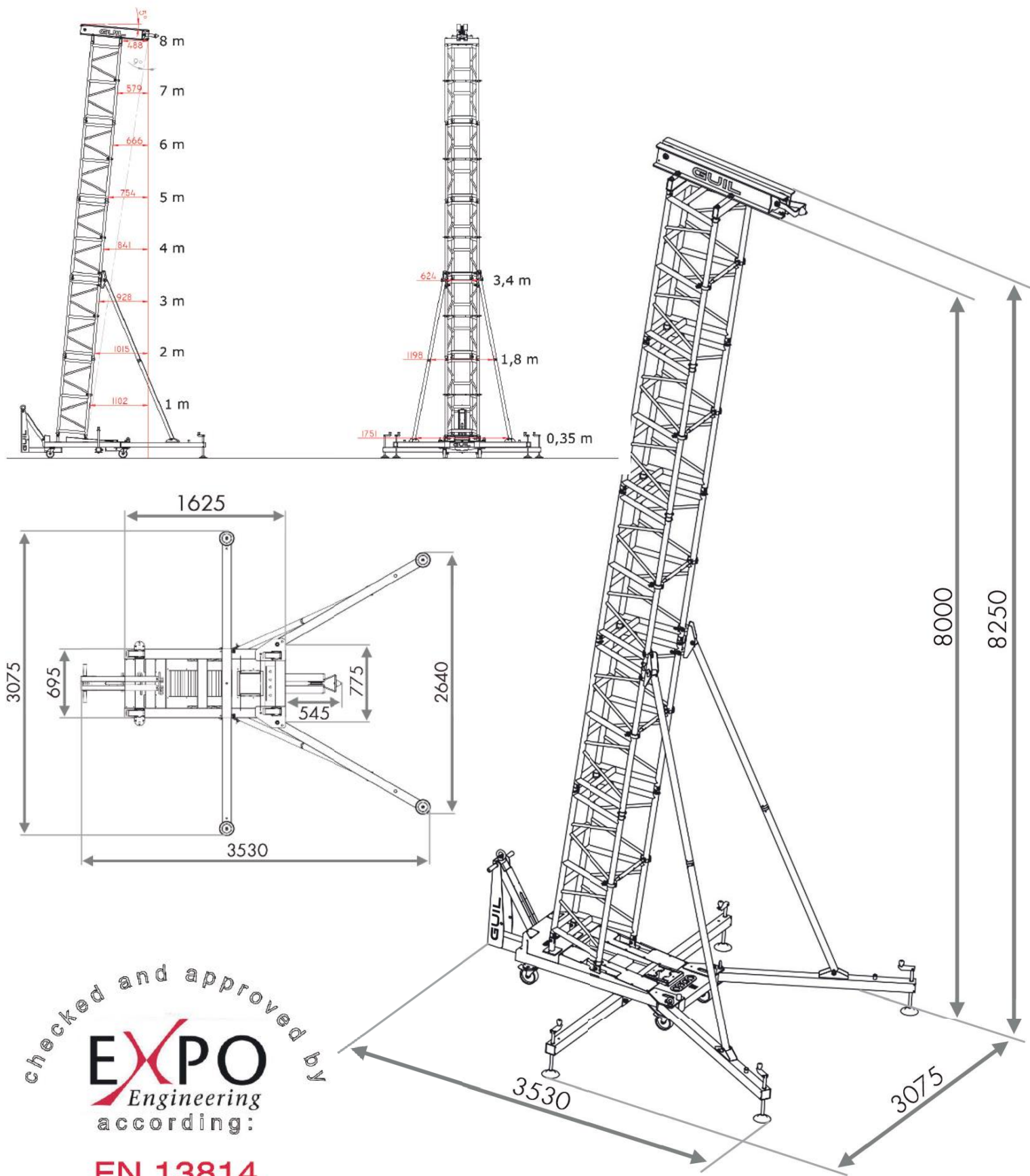
Foto: VTECHNICS

TMD-570: SAFETY IN LIFTING 800 kg LINE ARRAY SYSTEMS

The TMD-570 Rigging Tower complies with the requirements of safety according to the following Standards and Regulations:

- **Directive 2006/42/C** on machinery that establish "Essential health and safety requirements relating to the design and construction of machinery".
- **EN 13814**: Fairground and amusement park machinery and structures..
- **EN 17206** (Replaces DIN 56950-1): Entertainment technology – Machinery for stages and other production areas – Safety requirements and inspections.
- **DGUV Rule 17 & 18**: Accident prevention regulation. Event and production facilities for scenic presentation.
- **DGUV Norma 115-002** (Formely BGV-C1): Staging and Production Facilities for the Entertainment Industry.





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