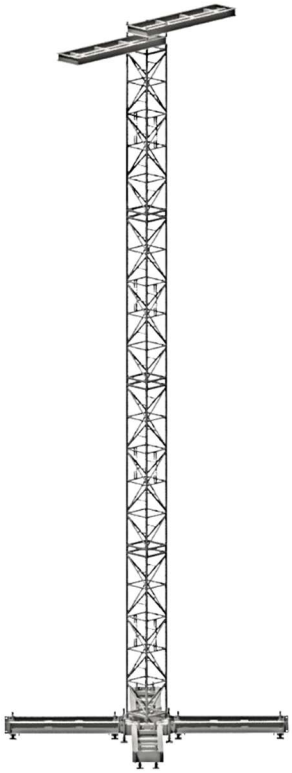
PROLYTE

PROLYTE

Delay Tower S78T-18M

User manual



Original instructions

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We have made every effort to ensure the accuracy of this manual. No liability will be accepted for errors. We reserve the right to change or alter our products or manuals without prior notice.

If you have a warranty claim, malfunction or spare part inquiry, contact your point of sale or the manufacturer.

If you have comments or improvement ideas for this document, please contact us at the e-mail address on the back cover. All comments and ideas will be carefully considered in the future development of the product or this document.

Contents

Change history

Issue	Date	Changes
1	May 2025	First issue

1 Introduction

This manual is intended for truss owners, providers and users. It is also useful for anyone who assembles or is trained to work safely with them.

Towers can have different heights depending on configuration requirements, but they cannot be higher than the maximum certified height. This manual describes the PROLYTE steel S78T-18M delay tower (referred to simply as "tower" in the following). For further information on technical dota, see the structural report.

The tower is assembled using various truss modules and components (see Figure 1 for details). This manual must be read together with the following user manual:

- PROLYTE Trusses user manual, Part 1. General instructions

This manual assumes that you have been trained, or work under the control of a competent or qualified person who has been trained, in safety and assembly.

1.1 About this product

The PROLYTE S78T-18M tower is used to provide vertical support for sound systems, lighting and/or LED screens in temporary installations.

We have paid special attention to product safety when designing the product.

The manufacturer bears no liablility for indirect consequential damage or financial loss. The manufacturer bears no liability for any changes made to the product or for any damage resulting from such changes.

1.2 Related information

For more information about the product, see: www.prolyte.com.

1.3 About this manual

Before working with the product, read this manual carefully and pay attention to the information provided. Use this manual to familiarise yourself with the product, its proper use and the safety regulations.

Make sure that the following documents and manuals are also available at all times to personnel working with the tower:

- Structural report for the tower structure
- PROLYTE Trusses user manual, Part 1: General instructions

1.3.1 Safety conventions

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information that is considered important but which is not hazard-related.

1.4 Terminology

The structure as a whole is referred to by the term "tower" in the following. Truss modules are referred by the term "truss" in the following.

For information on the terminology used with trusses, see PROLYTE Trusses user manual, Part 1: General instructions.

Term	Definition
Ballast	Material that increases the total self-weight of the tower to provide the required stability.
Base element	Part of the tower under the truss, made of plates and equipped with screw jacks. It can be used on its own or with the addition of outriggers.
Head section	The top part of the tower, usually consisting of profiles from which the load is suspended.
Outrigger	A structural element that stabilises a tower while lifting the load. It consists of horizontal profiles that are fixed to the base element and is equipped with an extension element with a screw jack.
Rigging	Attaching, assembling, slinging and suspending load-bearing equipment at heights, for example, by using ropes, chains or chain hoists.
Screw jack	An element used to level the base and the outriggers.
Spirit level	A tool for aligning an object horizontally or vertically.
Spreader pad	A plate beneath a screw jack that distributes the load of the tower.
Tower	A vertical truss structure that supports a grid or a load.

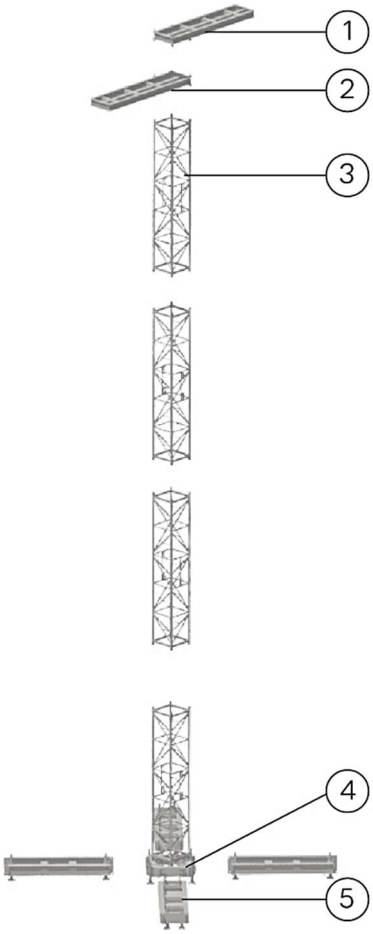
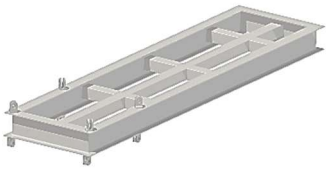
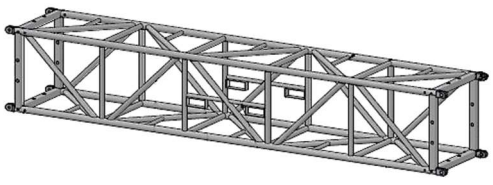
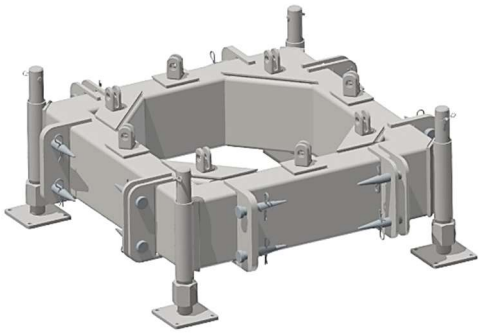


Figure 1: PROLYTE Delay Tower S78T-18M

Item	Name	Product code	
1	Head section 1	S-78T-TOP-01	
2	Head section 2	S-78T-TOP-02	
3	Truss Length of each truss 450 cm (177.2 in)	S-78T-L450	

Item	Name	Product code	
4	Base element	BASE-S78T-01	
5	Outrigger	S-78T-012-3M	

1.5 Standards

See PROLYTE Trusses user manual, Part 1: General instructions.

2 Safety

Before working with the product, see the section entitled "Safety" in the PROLYTE Trusses user manual, Part 1: General instructions. Read the safety information carefully and pay attention to the information provided.

In addition to the safety information in Part 1, make sure you read the safety information provided in this product-specific user manual.

NOTICE

Read these safety texts carefully before working with this product.

NOTICE

Make sure manuals are available at all times for all users and employees.

⚠ WARNING

Do not use damaged or malfunctioning parts.

⚠ WARNING

Mark any damaged or worn material clearly and discard the material immediately.

2.1 Electrical safety

2.1.1 Equipotential bonding

WARNING

ELECTRICAL HAZARD

Truss structures that are in contact with electrical equipment might develop dangerous touch voltages in the event of an electrical fault. Before energising any of the electrical equipment, the user must ensure that the truss structure is properly earthed. This applies to all elements made of electroconductive material that have equipment placed on or attached to them, or across wire and cable runs that, if damaged, could make electrical contact with metal parts.

It is extremely important to earth the truss structures because the audience and installers very often come into direct contact with them when the suspended fixtures are electrically charged.

2.2 Personal protective equipment

For health and safety reasons, people moving, assembling, disassembling, maintaining or transporting the products should wear adequate personal protective equipment such as gloves, hearing protection, hard hats and safety shoes.

All people working with trusses should be instructed and informed about the correct usage and possible hazards before use.

People working in places where there is a risk of falling must be instructed and informed about the correct safety conventions and possible hazards.

WARNING

PERSONAL INJURY HAZARD

Always wear hard hats, safety shoes, hearing protection and protective gloves when moving, assembling, disassembling, maintaining or transporting the products.

WARNING

PERSONAL INJURY HAZARD

Comply with local noise level regulations when assembling and disassembling the products.

WARNING

PERSONAL INJURY HAZARD

Comply with the local regulations concerning the maximum weight allowed per person when carrying or moving the products.

3 Limitations of use

Use the products only for their specified purpose. Any use other than the specified use is regarded as misuse. The user or operator, not the manufacturer, is liable for any damage or injury resulting from such cases of misuse.

For information on the limitations of use for tower structures, see the structural report. These towers must always be used within the limits of the structural report.

The specified loading data is only valid for static loads. The self-weight of the truss structure is already taken into account.

4 Transport, handling and storage

See PROLYTE Trusses user manual, Part 1: General instructions.

For information on dimensions for transportation, see Section 6.

5 Identification

PROLYTE products can be recognised by identification stickers.

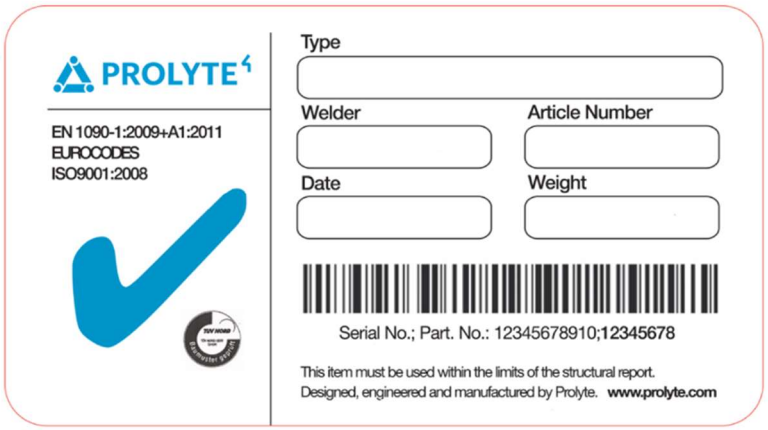


Figure 2: Example of a PROLYTE identification sticker

CAUTION

Make sure only PROLYTE original components are used. For more information, contact your distributor or the manufacturer.

6 Dimensions of Delay Tower S78T-18M

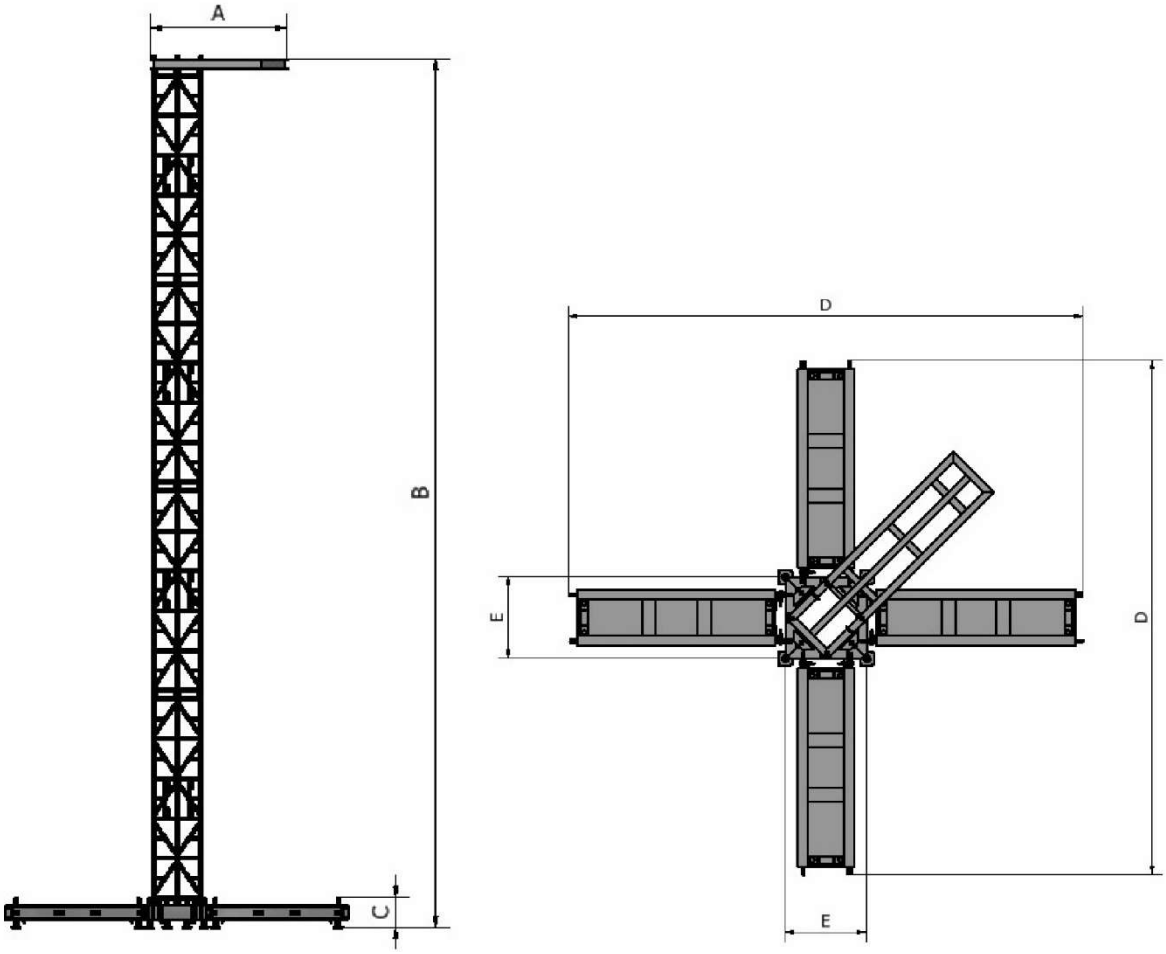


Figure 3: Delay Tower S78T-18M

Dimension	Millimetres	Inches
A	3400	133.86
B	19550	769.68
C	635	25
D	7103	279.65
E	1174	46.22

7 Coatings and surface treatments/finishes

See PROLYTE Trusses user manual, Part 1: General instructions.

8 Assembling and disassembling

8.1 Safety during assembling and disassembling

A competent person or sufficiently instructed personnel under the supervision of a competent person should always assemble the product.

Before assembly, use and disassembly, the competent person is responsible for the following, amongst other tasks:

- Carrying out all of the instructions as described in this manual and in the specific instructions for the applicable truss product.

- Instructing the people carrying out assembly and ensuring that all of the instructions issued by the engineer who verifies assembly are implemented correctly.

8.2 Required tools

- Copper hammer
- Spirit level

8.3 Assembling a Delay Tower S78T-18M

8.3.1 Overview

The steps required to assemble a Delay Tower S78T-18M are as follows:

1. Positioning the base
2. Assembling the truss modules
3. Assembling the head section(s)
4. Assembling the complete tower

For instructions, see the following sections.

8.3.2 Positioning the base element

1.a) Position the BASE-S78T-01 base element on the installation area, taking ground levels into consideration.

⚠ WARNING

Make sure that the tower is installed on stable ground that can support the required loads.

Due to its small footprint, a screw jack can sink into the ground under a vertical load. If necessary to increase the footprint and reduce the surface pressure, provide each screw jack with a spreader pad.

1.b) Adjust the height of the four feet at the four corners of the base element.

1.c) Check that the base element is perfectly horizontal using a spirit level.

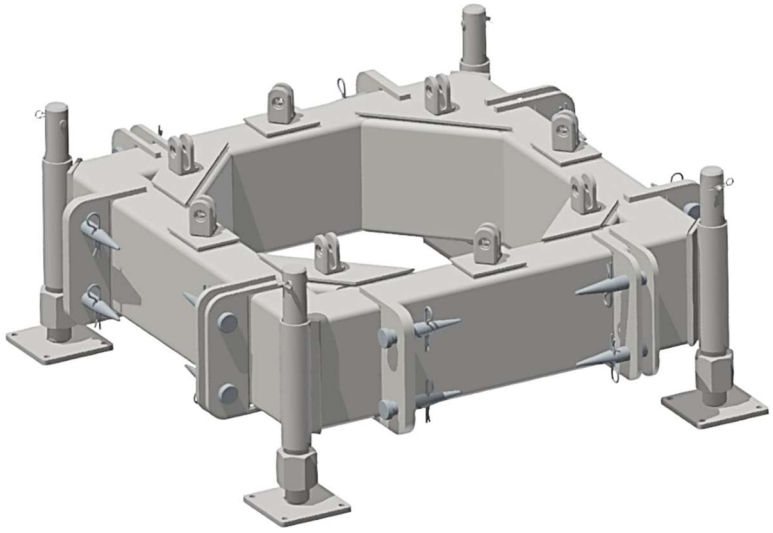


Figure 4: Base element BASE-S78T-01

8.3.3 Assembling the outriggers

3.a) Position the S-78T-012-3M outriggers correctly by moving them until the holes of the forks align with the pin holes of the base element.

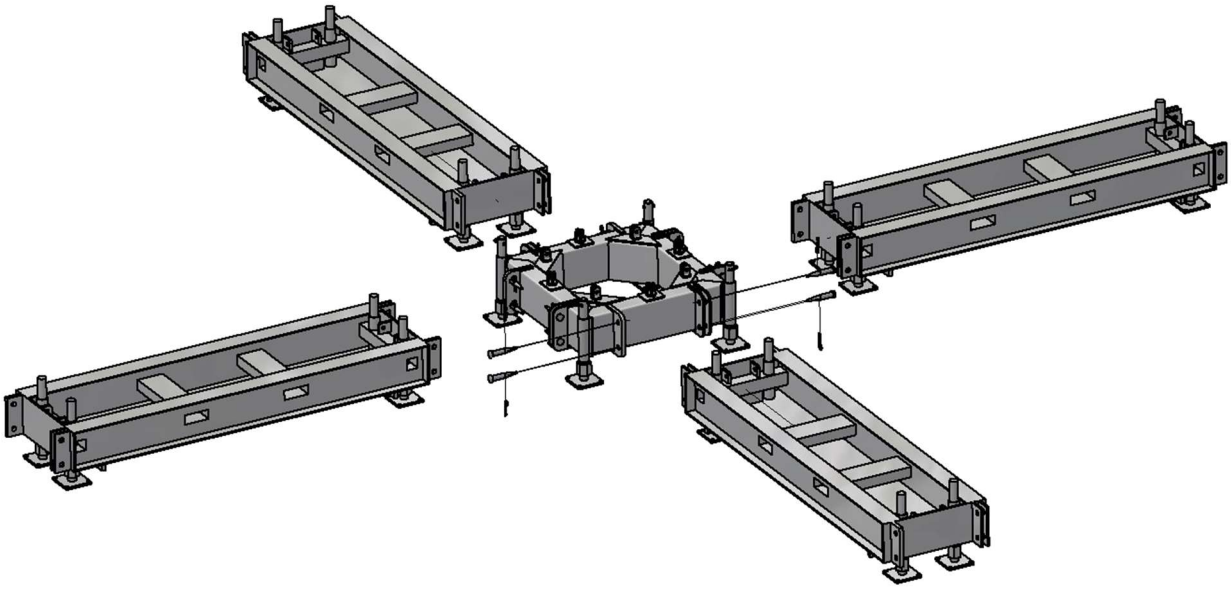


Figure 5: Connecting the outriggers

3.b) Insert and adjust the S-78T-012-3M outrigger by moving the screw jacks until its holes are aligned with the holes of the base element.

3.c) Insert the pins and R-clips, as shown in Figure 5.

8.3.4 Assembling the complete tower

4.a) Proceed by assembling the S-78T-L450 truss modules using the pins and R-clips, as shown in Figure 6, until the required tower height is reached.

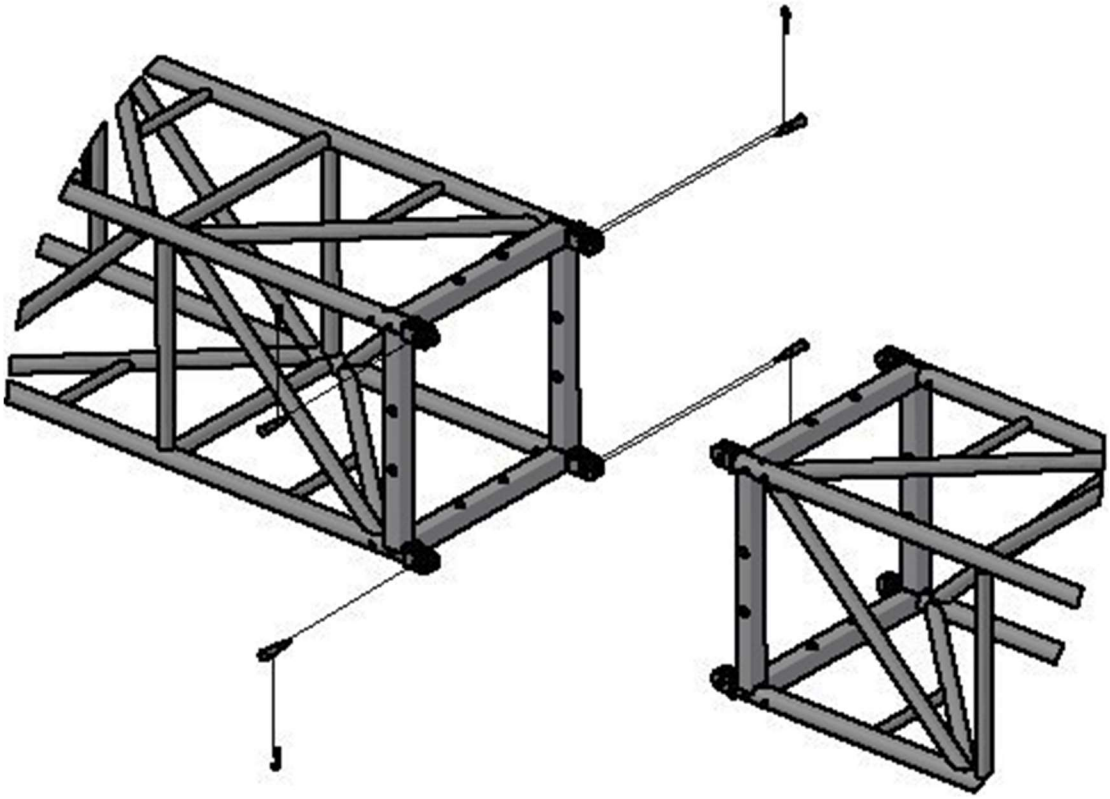


Figure 6: Connecting the truss modules

4.b) Connect the S-78T-TOP-01 head section to the end of the final length of truss using the pins and R-clips, as shown in Figure 7. Then connect the S-78T-TOP-02 head

section on top of the S-78T-TOP-01 head section in the required direction using the pins and R-clips.

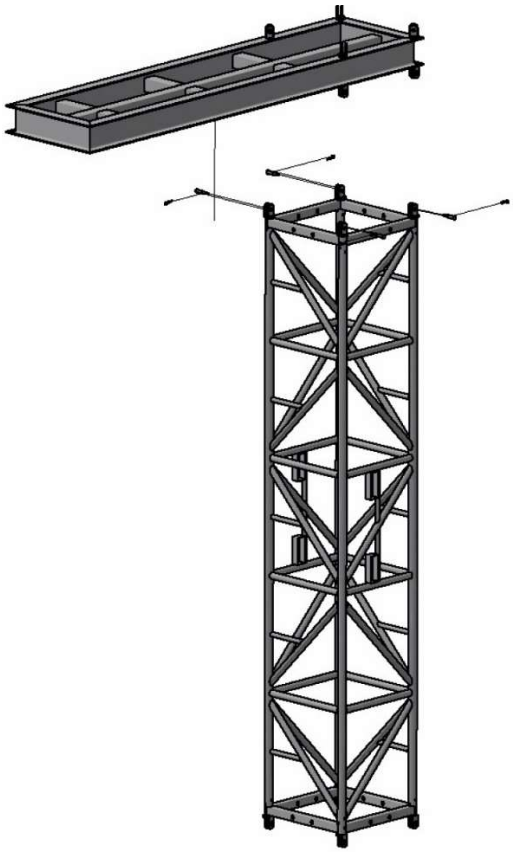


Figure 7: Connecting the head section

4.c) Connect the tower including the head section(s) to the base element using a crane to lift the tower to a vertical position. Align the forks of the bottom length of truss with the forks on the base element and connect them using pins and R-clips.

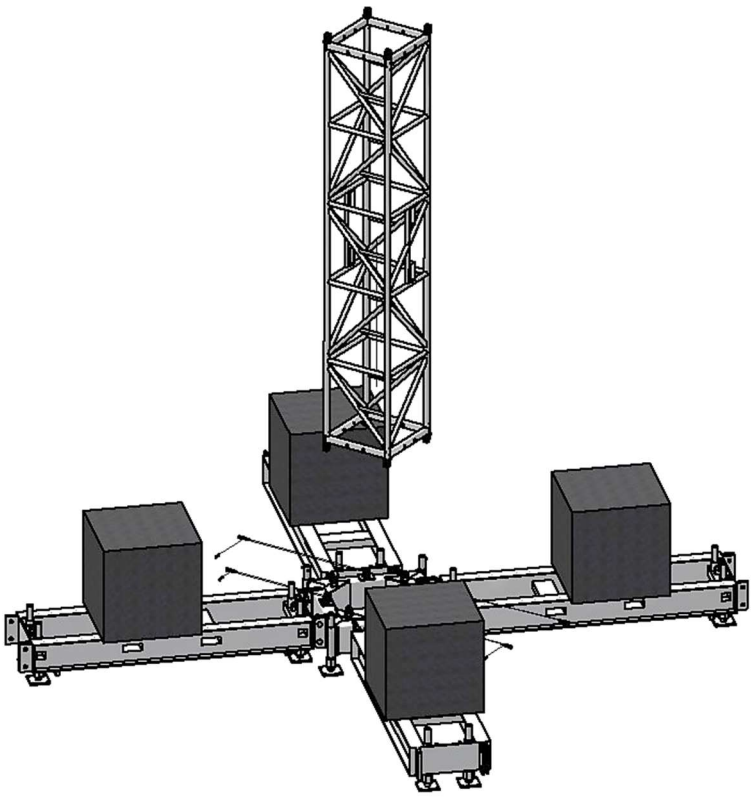


Figure 8: Connecting the tower to the base element

WARNING

Make sure that the necessary ballast is in position before the tower truss is connected to the base element.

8.4 Disassembling a Delay Tower S78T-18M

Disassembly is carried out in the reverse order of assembly.

9 Maintenance

Take special care with towers that are stored outdoors for an extended period of time, especially in areas with a high level of industrial pollution, near saltwater, near tram lines or near swimming pools. Towers should be individually inspected each time before being used to determine whether any pollution has had a corrosive effect.

10 Inspection

See PROLYTE Trusses user manual, Part 1: General instructions.

11 Discard criteria

See PROLYTE Trusses user manual, Part 1: General instructions.

12 Warranty

See PROLYTE Trusses user manual, Part 1: General instructions.

13 Certificates

13.1 CE Declaration of Conformity

See PROLYTE Trusses user manual, Part 1: General instructions.

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