



METEO TOWER

founded by



THE EXPERT IN FOUNDATION

Regulations & Specifications

- Eurocode 1 , part 1-4 : Construcrion Wind Loads
- **Building Code Load Regulations**
- DIN 1055 , part 5 : Construction Snow & Wind Loads
- **Antiseismic Regulation** E.A.K. 2000 & 2003 revision
- Eurocode 3 , Part 3-1 Design of structures , towers , masts and chimneys

Construction Overview

Construction unit

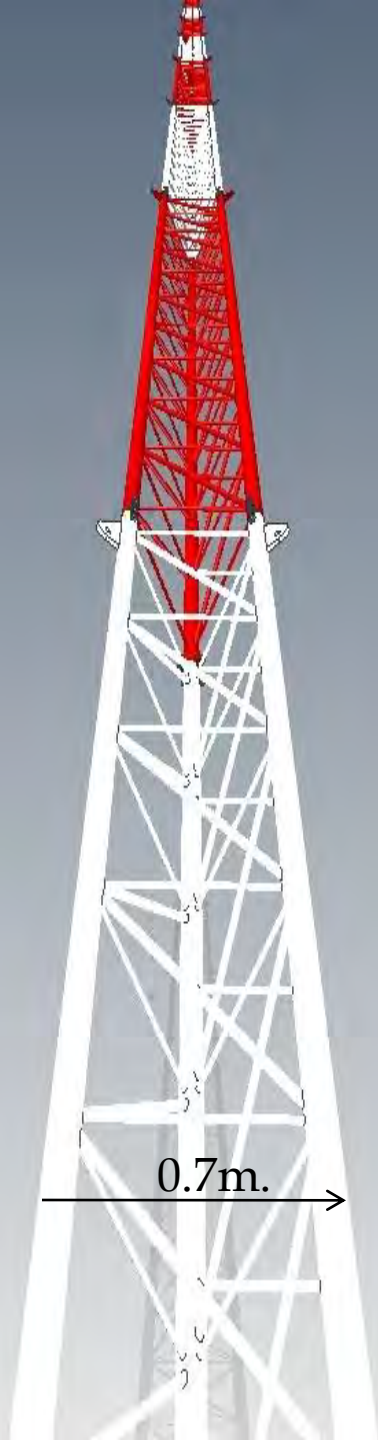
A red lattice tower is shown against a clear blue sky. A vertical arrow on the left side of the tower indicates a specific section, labeled 'Construction unit'. The tower has a central vertical column with diagonal bracing. Two horizontal cables are attached to the tower, one above and one below the indicated unit.

CONSTRUCTION UNITS

6m length each unit

~300 Kg per Unit

14 Units all up



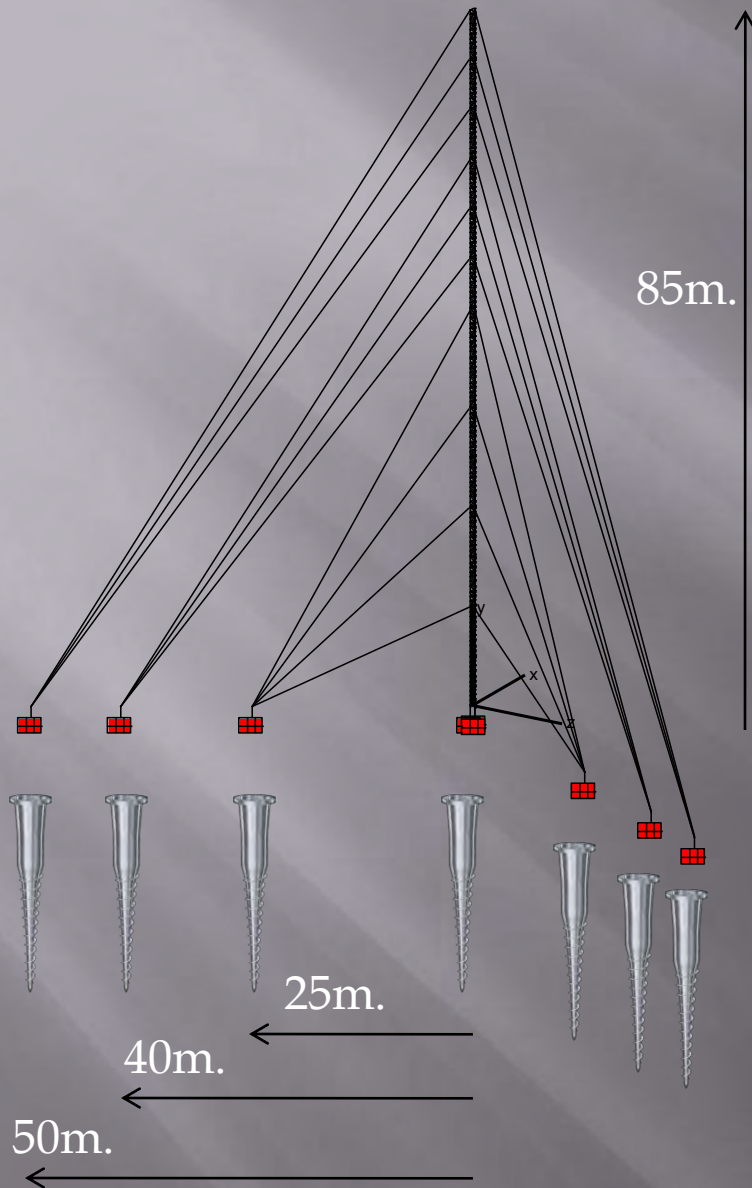
M12 bolts



Structure Width : 0,7 m

12 x M12 bolts connecting units together

3 cables connecting the top of each unit
with the peripheral foundation blocks



MATERIAL :

Structure :

Steel galvanized EN 10027
($f_y=235\text{N/mm}^2$)

Bolts :

DIN7990 ($f_y=640\text{N/mm}^2$)

Cables :

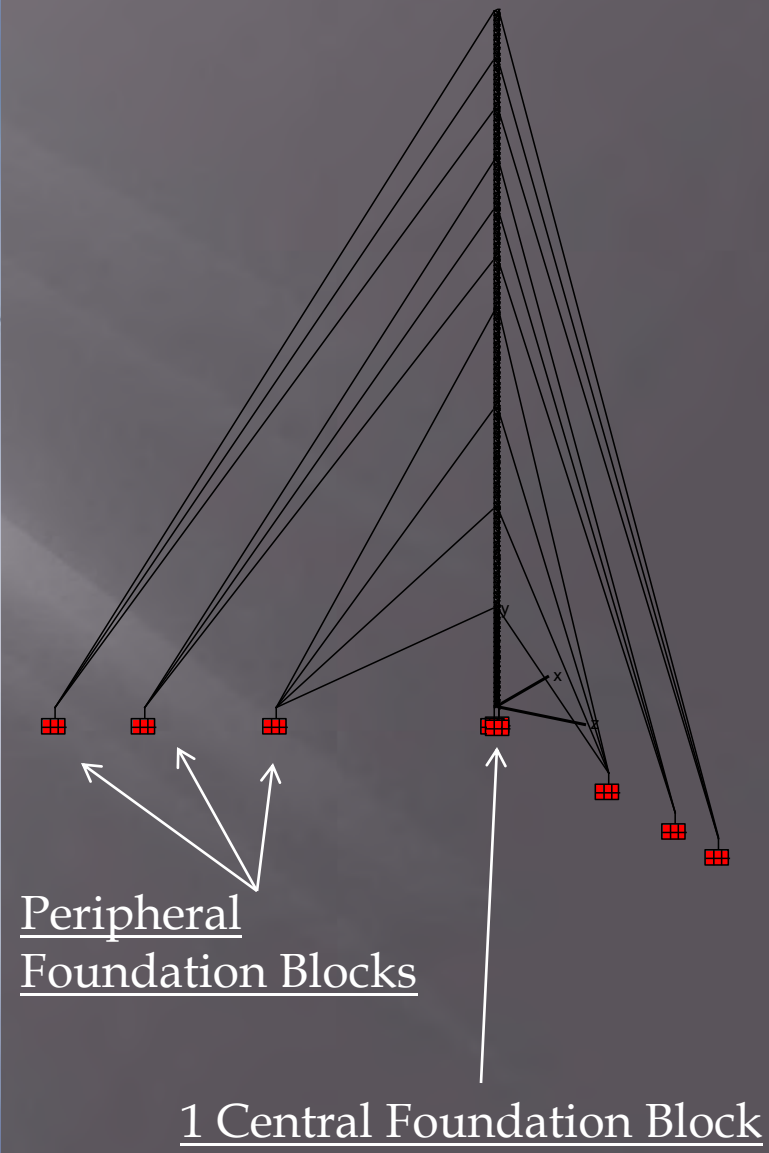
(SE) DIN 3058 , 6x19 , 10mm

Total Weight : 4.591 Kg

Number of Ground Screws :
43 x KSF PV M24 90 x 1600



Foundation



Peripheral
Foundation Blocks

1 Central Foundation Block

Foundation

1 Central Foundation Block

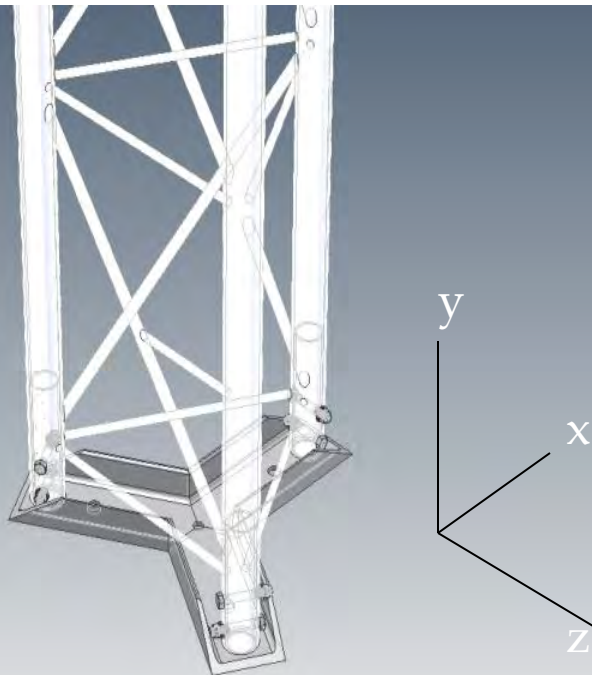
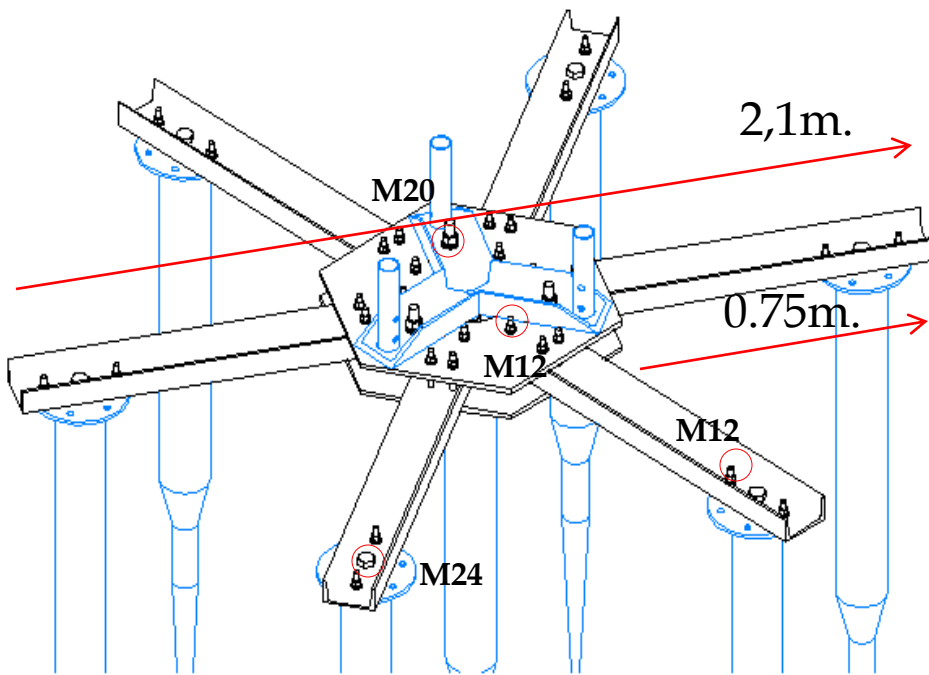
2pc. plates 10mm thickness

6pc. U Profile 120mm-950mm

7pc. KSF PV M24 90 x 1600

Stress conditions :

$F_y = -202\text{kN}$, $F_x = 2.14\text{kN}$, $M_z = 10.9\text{kNm}$



Foundation

9 Peripheral Foundation Blocks

1pc. plate 8mm thickness 1x1 m

8pc. L profile 60x60x550mm , thickness 8mm

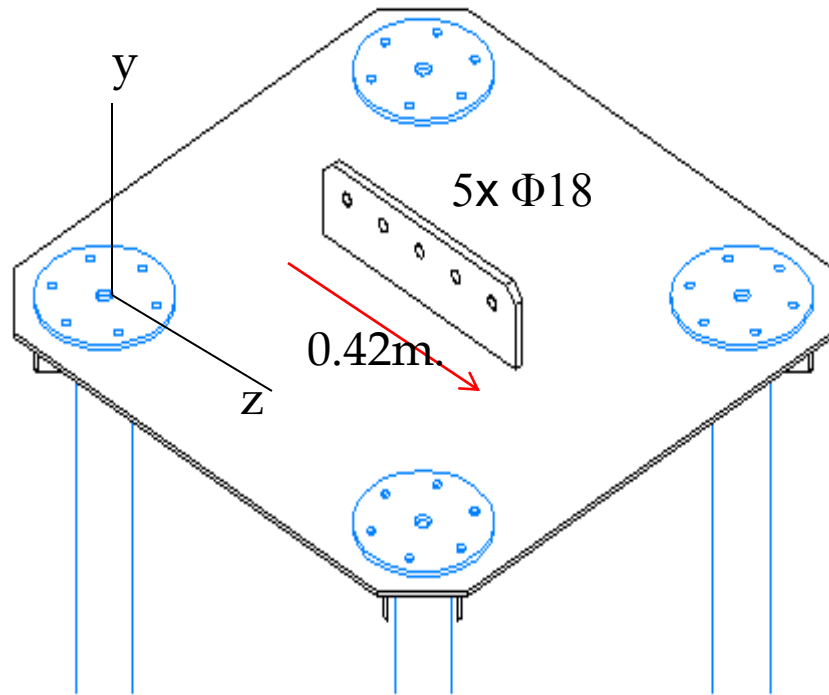
1pc. plate 420x120mm, thickness 15mm

4pc. KSF PV M24 90 x 1600

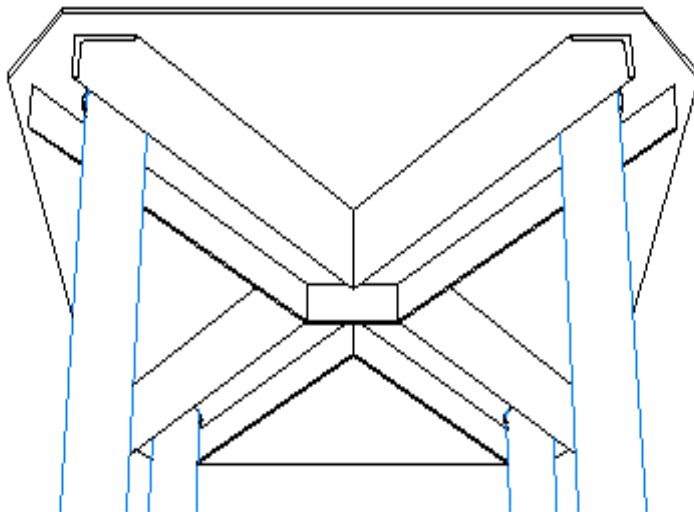
Single Cable max stress force : 16.5kN

Block Stress conditions :

$F_y=38.1\text{kN}$, $F_z=32.44\text{kN}$ = $\underline{\underline{\neq 50^\circ}}$ $\underline{\underline{\Sigma F=50.04\text{kN}}}$



1m.



Material	Stahl, feuerverzinkt nach DIN EN ISO 1461
Länge	1600 mm
Rohr-Ø	88,5 mm
Gewicht	18 kg
Art.Nr.	25751
EAN	40 11072 25751 0
Qualität	<ul style="list-style-type: none">▣ Patentierter Konuskörper aus einem Rohrstück gehämmert▣ Spirale durchgehend verschweißt▣ Genaue Materialangaben auf Anfrage



Für schnellen und bequemen Einbau bieten wir Ihnen verschiedene Eindringhilfen und -maschinen.

Technische Änderungen vorbehalten! ZD408

Foundation

Krinner Screw Foundation

Load Capacity

Compression : 41 kN

Tension : 24.5 kN

Lateral : 11 kN

Result

















Project Evaluation

Project duration with use of KSF : 2 days

Project duration with use of concrete : in excess of 2 weeks

Almost zero need of earth preparation

Zero remaining spoil at project site



KRINNER

The Ground Screw