

# Meteorology

## Triangular Guy-wire Mast

### DATA SHEET

Product no. B450 80,0M -52  
Ref. nr. 03.02.01.10  
Latest rev. 08.10.2019



## Series B450

40-150 m

### Description:

B450 is designed as an equilateral triangle, with fully welded 3 m sections composed of legs and bracings made of solid round bars. The sections are designed with ladder on all sides and prepared for a safety line. B450 is supported with guy-wires in three directions having one to three foundations at different distances from the mast base.

The leg dimension varies from 20 to 48mm in diameter and bracings from 12 to 20mm.

The weight of the section varies from 55 to 160 kg.

The mast is designed to carry booms for instruments with a small wind drag area.

Distortion does not exceed 1% for the mast and 0.5% for the booms.

Normally 8-12m guy-wire are used. The total length of guy-wires for 80 m mast is approximative 1500m.

### Specification:

The steel is hot dip galvanized according to DS/EN ISO 1461.

Guy-wires IWRC, galvanized.

### The design criteria:

DS/EN 1993-3-1 – Design of steel structures – Towers, masts and chimneys.

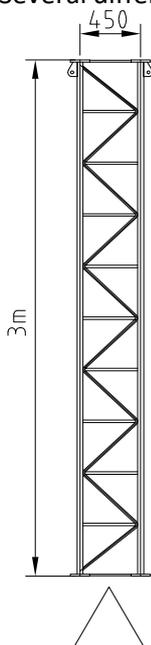
DS/EN 1991-1-4 – Actions on structures – Wind actions.

IEC 61400-12-1 – Power Performance Measurements.

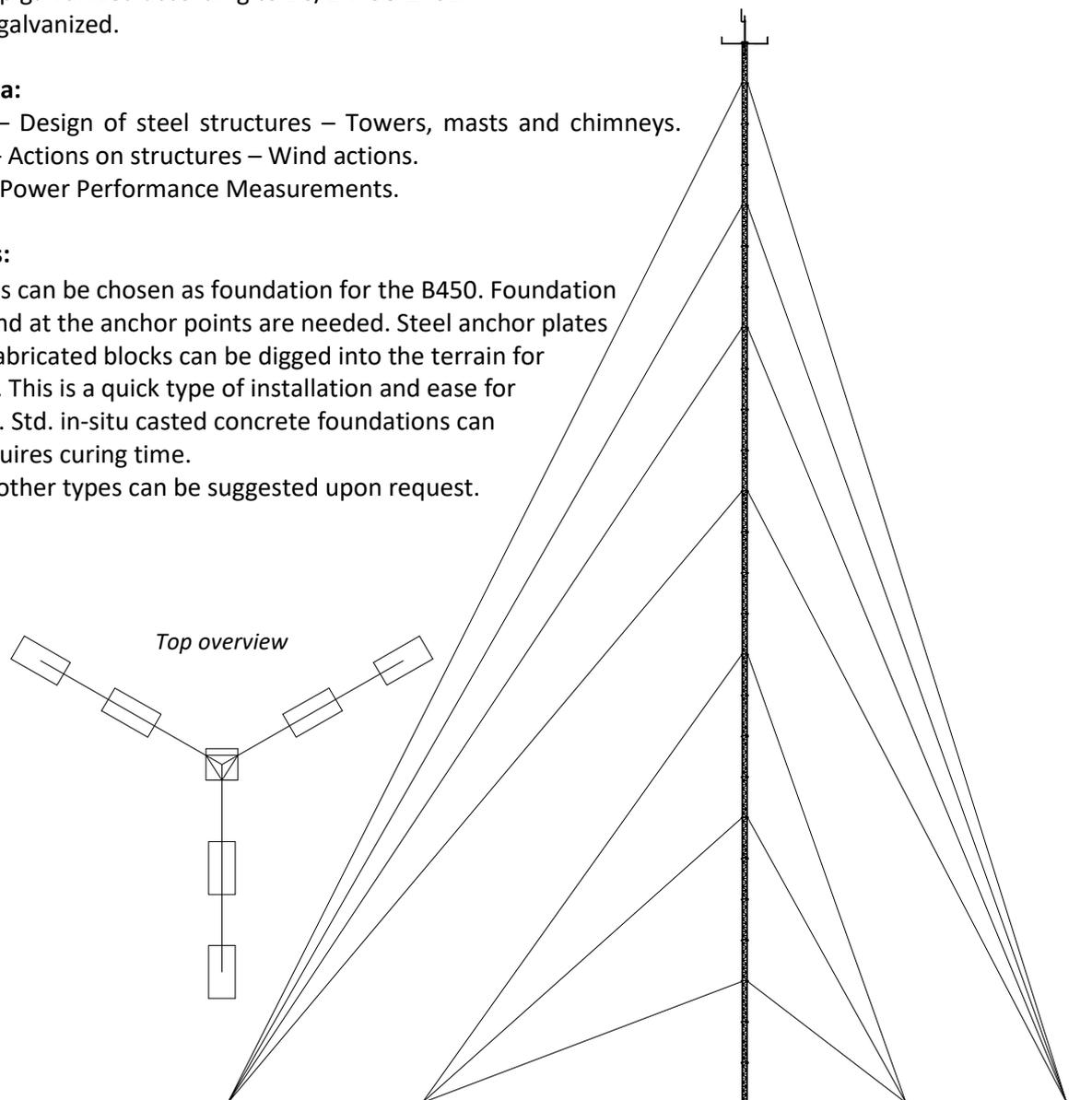
### Foundation types:

Different solutions can be chosen as foundation for the B450. Foundation under the mast and at the anchor points are needed. Steel anchor plates or concrete pre-fabricated blocks can be digged into the terrain for guy-wire anchors. This is a quick type of installation and ease for decommissioning. Std. in-situ casted concrete foundations can be casted but requires curing time.

Several different other types can be suggested upon request.



Section overview



Mast overview