

## Series CHS

### 30m CHS - Strong

#### Description:

The given tower is designed as an equilateral triangle, with bolted flange connections between CHS sections, composed of legs and bracings made of circular hollow sections. The 30 m CHS mast is built of 5 sections each being 6 m long.

The tower is prepared for installation of a 2 m toppole.

The Strong series CHS tower is used in areas along the west coast of Jutland (vb=27 m/s, terrain category I).

#### Specification:

Total theoretical tower weight = 2440 kg  
 Leg distance at tower base = 2410 mm  
 Foundation bolts: 18 x M24

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

The design of the lattice tower is made according to:  
 DS/EN 1993-3-1 – Design of steel structures – Towers, masts and chimneys.  
 DS/EN 1991-1-4 – Actions on structures – Wind actions.

The tower is designed for three operators equal to 15 m<sup>2</sup> wind drag area equally distributed over the top 9 m.

Ladder with hoops from base to top – 0,14 m<sup>2</sup>/m.

The following feeder load is assumed:  
 0,20 m<sup>2</sup>/m for each operator, (total of 0,60 m<sup>2</sup>/m) distributed on 2 sides.

#### Foundation types:

Normally a traditional Pier & Pad foundation is designed and casted for a CHS tower.

Carl C. can assist with the design if required, based on site specific geotechnical specifications.

