TELECOMMUNICATION
Triangular Tower
DATA SHEET

Product no.	**S CHS-30M-S-ML**
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Latest rev.	03.12.2019

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.

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 BS/EN ISO 1461.

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

	In most areas in England, Cornwall and Wales, (v_{b0}=24 m/s)	In most areas up to Southern Scotland, (v_{b0}=27 m/s)	In most areas up to Northern Scotland (v_{b0}=29 m/s)
Bearing capacity (A_w) for terrain category II	33 m²	24 m²	20 m²

A_w is the maximum total wind drag area incl. shape factor, that can be equally distributed over the top 9 m.

Ladder with hoops from base to top – 0,14 m²/m.

The following feeder load is assumed:
0,20 m²/m for each operator, (total of 0,60 m²/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.