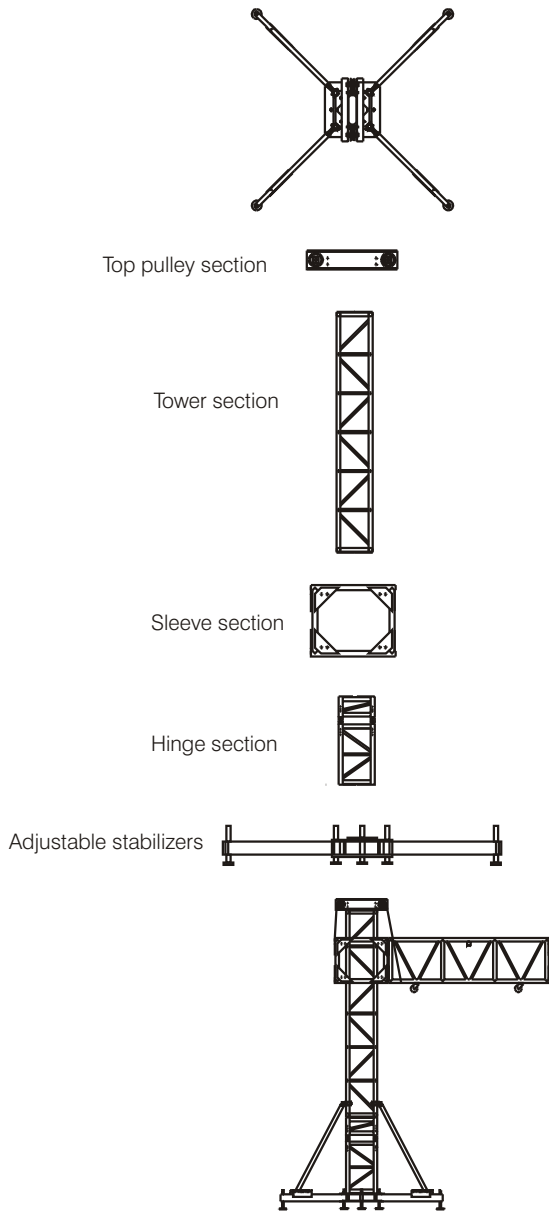


# Ground Support - Series 18



As with the 12 inch ground support, the 18 inch tower interfaces with virtually all Total Structures truss, (where overall truss dimensions allow), and is used where higher load capacity and increased height are required. A full set of associated parts are available as for the 12 inch series. Please refer to structural calculations for allowable loads for various applications.

### Component Weights

Part No	Description	WT (lbs)
HGST10F	10ft. Tower Bolted Connection	86
HGST8F	8ft. Tower Bolted Connection	71
HGST5F	5ft. Tower Bolted Connection	52
HGST3N	3m Tower Bolted Connection	86
HGST2N	2m Tower Bolted Connection	59
HGST1N	1m Tower Bolted Connection	34
HGSTHN	Hinge tower section Bolted Connection	62
HGSTPN	Head Block	41
HGSTB	Base unit	52
HGSTS	Set of adjustable stabilizers W/braces (4 per set)	53

### Load Data 18" Tower

height (ft)	K=1.0	K=1.25	K=1.5	K=2.0
	axial load (lbs)	axial load (lbs)	axial load (lbs)	axial load (lbs)
10	27493	24391	24391	24391
15	27453	22800	22800	22800
20	27412	21208	21208	21208
25	27372	19617	19617	19617
30	27331	18025	18025	14900
35	27291	16434	16434	9897
40	27251	14843	12248	6748
45	27210	12476	8553	4652
50	27170	8812	5996	3196
55	26756	6193	4165	2148
60	22371	4269	2817	1373

If a point is "held in position, but not restrained in direction", then it can be considered as "pinned".

If a point is "held in position and restrained in direction", then it can be considered as "fixed".

Table 1: Factors to determine effective lengths of towers.

Effectively held in position at both ends, but not restrained in direction.	K = 1.0
Effectively held in position at one end, and restrained in direction at both ends.	K = 1.25
Effectively held in position and restrained in direction at one end, and partially restrained in direction but not held in position at the other end.	K = 1.5
Effectively held in position and restrained in direction at one end, but not held in position or restrained at the other end.	K = 2.0