

The diagram illustrates a tower crane with a vertical mast and seven horizontal jibs. The total height of the crane is labeled as  $H + 15.1\text{m}$ . The mast has a width of 21m at the top. The jibs are numbered 1 to 7 from top to bottom. Each jib has a length of 70m and is divided into 10 segments. The height of each jib above the ground is indicated by a vertical arrow on the right, labeled 'Working Height (m) @ Wall tie Location (m)'. The weight of each jib is also indicated by a box labeled with the weight in tons (t).

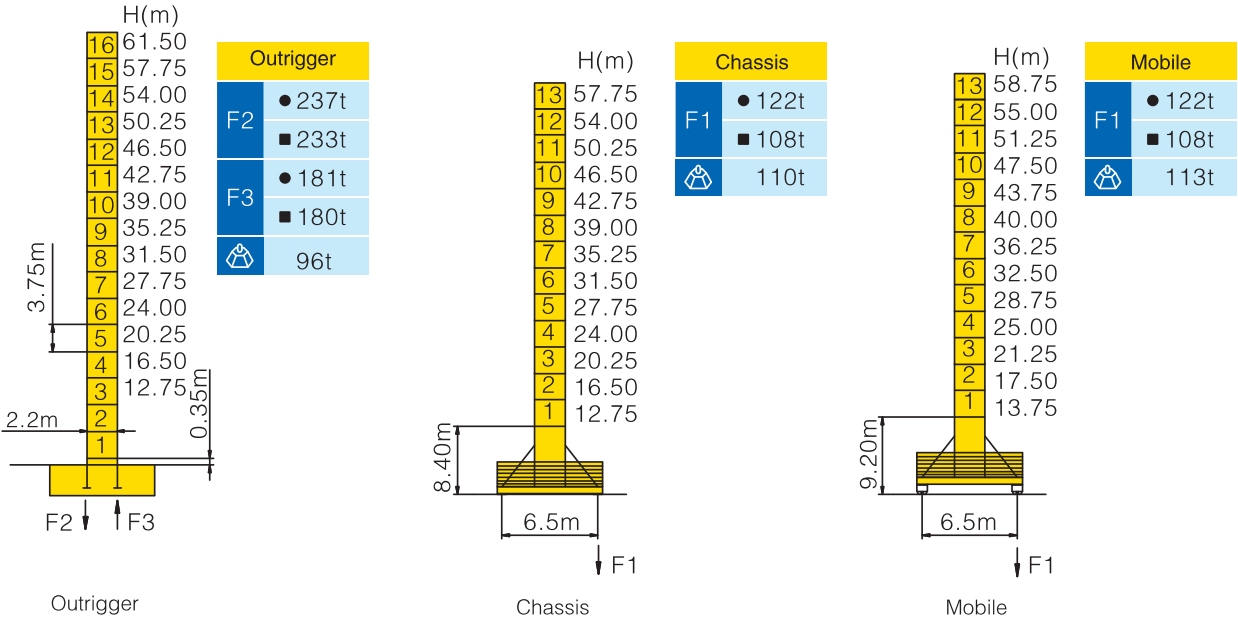
| Jib Number | Working Height (m) @ Wall tie Location (m) | Weight (t) |
|------------|--------------------------------------------|------------|
| 1          | 70m                                        | 3.5t       |
| 2          | 65m                                        | 4.2t       |
| 3          | 60m                                        | 4.9t       |
| 4          | 55m                                        | 5.7t       |
| 5          | 50m                                        | 6.7t       |
| 6          | 45m                                        | 8.0t       |
| 7          | 40m                                        | 8.7t       |

|  |  |  (Kg) | PHZ4000 | PHZ3000 | PHZ2000 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------|---------|---------|
| 70m                                                                                 | 21m                                                                                 | 22000                                                                                    | 3       | 2       | 2       |
| 65m                                                                                 | 21m                                                                                 | 20000                                                                                    | 3       | 2       | 1       |
| 60m                                                                                 | 21m                                                                                 | 19000                                                                                    | 3       | 1       | 2       |
| 55m                                                                                 | 21m                                                                                 | 18000                                                                                    | 3       | 2       | 0       |
| 50m                                                                                 | 21m                                                                                 | 16000                                                                                    | 3       | 0       | 2       |
| 45m                                                                                 | 21m                                                                                 | 14000                                                                                    | 3       | 0       | 1       |
| 40m                                                                                 | 21m                                                                                 | 12000                                                                                    | 3       | 0       | 0       |

| Model Detail | Mast Code | Wall-tie #1  | Wall-tie #2 | Wall-tie #3 | Wall-tie #4 | Wall-tie #5 | Wall-tie #6 | Wall-tie #7  | Wall-tie #8    |
|--------------|-----------|--------------|-------------|-------------|-------------|-------------|-------------|--------------|----------------|
| TC7035B-16   | HQ1-C     | 87.75 @ 47.5 | 114 @ 73.75 | 136.5 @ 100 | 159 @ 122.5 | 181.5 @ 145 | 204 @ 167.5 | 222.75 @ 190 | 241.5 @ 208.75 |

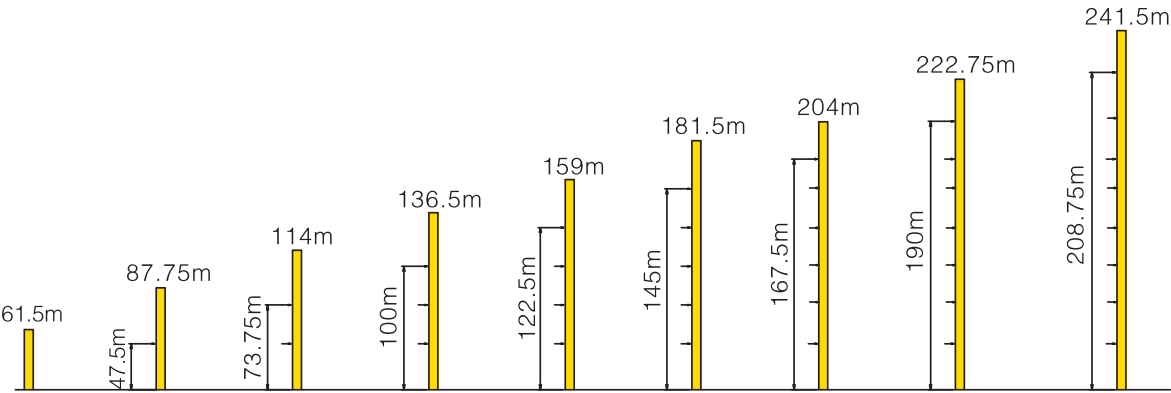


Masts  
Reactions



● Reactions in service ■ Reactions out of service  
⚙ Without load and ballast with longest jib and maximum height  
① For more erecting solutions, consult us!

Anchorage



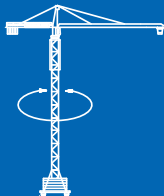
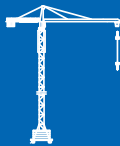
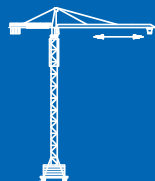
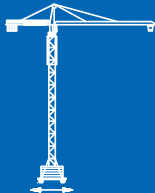


## Load diagrams

|  |    | Max.Capacity<br>m/t | 18.0  | 23.0  | 25.0  | 30.0  | 35.0  | 40.0 | 43.0 | 45.0 | 48.0 | 50.0 | 53.0 | 55.0 | 58.0 | 60.0 | 63.0 | 65.0 | 68.0 | 70.0 |
|-----------------------------------------------------------------------------------|----|---------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 70m<br>(R=71.1)                                                                   | ⌋  | 3.75—35.4m<br>8t    | 8.00  |       |       |       |       | 7.60 | 6.37 | 6.04 | 5.59 | 5.32 | 4.96 | 4.74 | 4.44 | 4.26 | 4.00 | 3.85 | 3.63 | 3.50 |
|                                                                                   | ⌋⌋ | 3.75—18.4m<br>16t   | 16.00 | 12.30 | 11.10 | 8.89  | 7.33  | 6.16 | 5.60 | 5.26 | 4.82 | 4.55 | 4.18 | 3.95 | 3.66 | 3.48 | 3.23 | 3.07 | 2.86 | 2.72 |
| 65m<br>(R=66.1)                                                                   | ⌋  | 3.75—37.9m<br>8t    | 8.00  |       |       |       |       | 7.52 | 6.91 | 6.55 | 6.07 | 5.78 | 5.39 | 5.16 | 4.84 | 4.64 | 4.37 | 4.20 |      |      |
|                                                                                   | ⌋⌋ | 3.75—19.7m<br>16t   | 16.00 | 13.30 | 12.00 | 9.67  | 7.99  | 6.74 | 6.13 | 5.77 | 5.29 | 5.01 | 4.62 | 4.38 | 4.06 | 3.86 | 3.59 | 3.42 |      |      |
| 60m<br>(R=61.1)                                                                   | ⌋  | 3.75—39.6m<br>8t    | 8.00  |       |       |       |       | 7.91 | 7.28 | 6.90 | 6.40 | 6.10 | 5.69 | 5.44 | 5.11 | 4.90 |      |      |      |      |
|                                                                                   | ⌋⌋ | 3.75—20.5m<br>16t   | 16.00 | 14.00 | 12.70 | 10.20 | 8.44  | 7.14 | 6.50 | 6.13 | 5.62 | 5.32 | 4.91 | 4.67 | 4.33 | 4.12 |      |      |      |      |
| 55m<br>(R=56.1)                                                                   | ⌋  | 3.75—41.2m<br>8t    | 8.00  |       |       |       |       | 7.61 | 7.22 | 6.69 | 6.38 | 5.96 | 5.70 |      |      |      |      |      |      |      |
|                                                                                   | ⌋⌋ | 3.75—21.3m<br>16t   | 16.00 | 14.60 | 13.30 | 10.70 | 8.85  | 7.49 | 6.83 | 6.44 | 5.92 | 5.60 | 5.18 | 4.92 |      |      |      |      |      |      |
| 50m<br>(R=51.1)                                                                   | ⌋  | 3.75—42.9m<br>8t    | 8.00  |       |       |       |       | 7.98 | 7.57 | 7.03 | 6.70 |      |      |      |      |      |      |      |      |      |
|                                                                                   | ⌋⌋ | 3.75—22.2m<br>16t   | 16.00 | 15.40 | 13.90 | 11.20 | 9.31  | 7.89 | 7.20 | 6.80 | 6.25 | 5.92 |      |      |      |      |      |      |      |      |
| 45m<br>(R=46.1)                                                                   | ⌋  | 3.75—45.0m<br>8t    | 8.00  |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                                                                                   | ⌋⌋ | 3.75—23.7m<br>16t   | 16.00 |       | 15.10 | 12.20 | 10.10 | 8.60 | 7.86 | 7.42 |      |      |      |      |      |      |      |      |      |      |
| 40m<br>(R=41.1)                                                                   | ⌋  | 3.75—40.0m<br>8t    | 8.00  |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                                                                                   | ⌋⌋ | 3.75—24.0m<br>16t   | 16.00 |       | 15.30 | 12.30 | 10.30 | 8.72 |      |      |      |      |      |      |      |      |      |      |      |      |



Mechanisms

|                                                                                     |               |                                | Hoisting                                                                                                                                  |    | QE1675E                                                                               |     |             |
|-------------------------------------------------------------------------------------|---------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------|-----|-------------|
|    | Slewing       | HVV145B1.130A<br>HVV145B2.130A | <br>60 kW                                              | V  |    | 4t  | 75 m/min    |
|                                                                                     | 0 ~ 0.6 r/min | 2× 145 N.m                     |                                                                                                                                           |    |    | 8t  | 37.5 m/min  |
|    | Trolleying    | BP110A                         | <br>600mⓈ<br>( 6 layers )<br>ⓈConsult us<br>If overtop | IV |    | 8t  | 37.5 m/min  |
|                                                                                     | 0 ~ 100 m/min | 11 kW                          |                                                                                                                                           |    |  | 16t | 18.75 m/min |
|  | Travelling    | ZAH52A-D<br>ZCH52A-D           |                                                                                                                                           |    |                                                                                       |     |             |
|                                                                                     | 0 ~ 25 m/min  | 4×5.2 kW                       |                                                                                                                                           |    |                                                                                       |     |             |
|  |               | 380V(+10%–10%) 50Hz            | 86+4 × 5.2 kW                                                                                                                             |    |                                                                                       |     |             |

For more mechanisms optional, consult us!