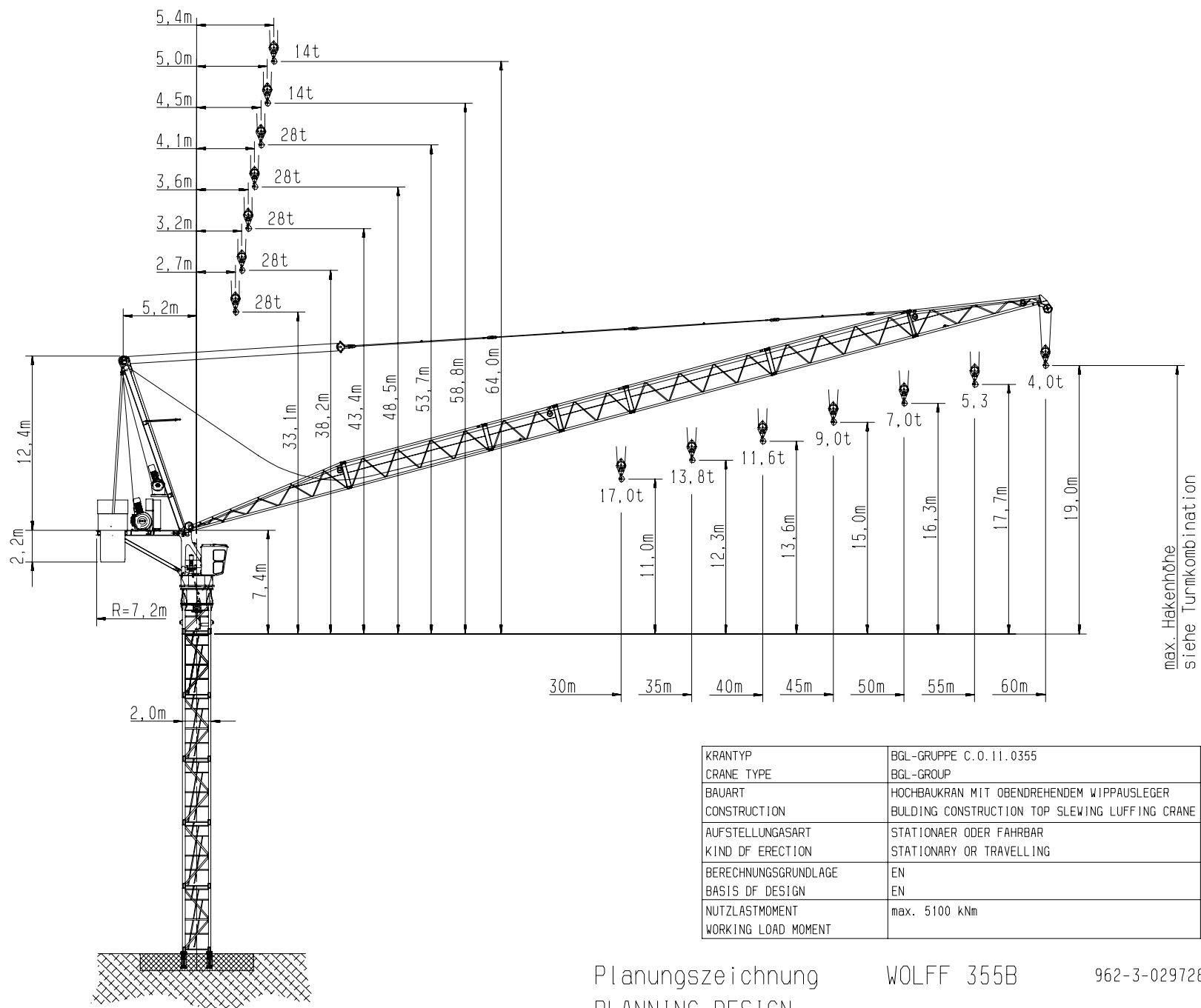




|                      |                                                 |
|----------------------|-------------------------------------------------|
| KRANTYP              | BGL-GRUPPE C.O.11.0355                          |
| CRANE TYPE           | BGL-GROUP                                       |
| BAUART               | HOCHBAUKRAN MIT OBENDREHENDEM WIPPAUSLEGER      |
| CONSTRUCTION         | BUILDING CONSTRUCTION TOP SLEWING LUFFING CRANE |
| AUFSTELLUNGASART     | STATIONÄR ODER FAHRBAR                          |
| KIND OF ERECTION     | STATIONARY OR TRAVELLING                        |
| BERECHNUNGSGRUNDLAGE | EN                                              |
| BASIS OF DESIGN      | EN                                              |
| NUTZLASTMOMENT       | max. 5100 kNm                                   |
| WORKING LOAD MOMENT  |                                                 |

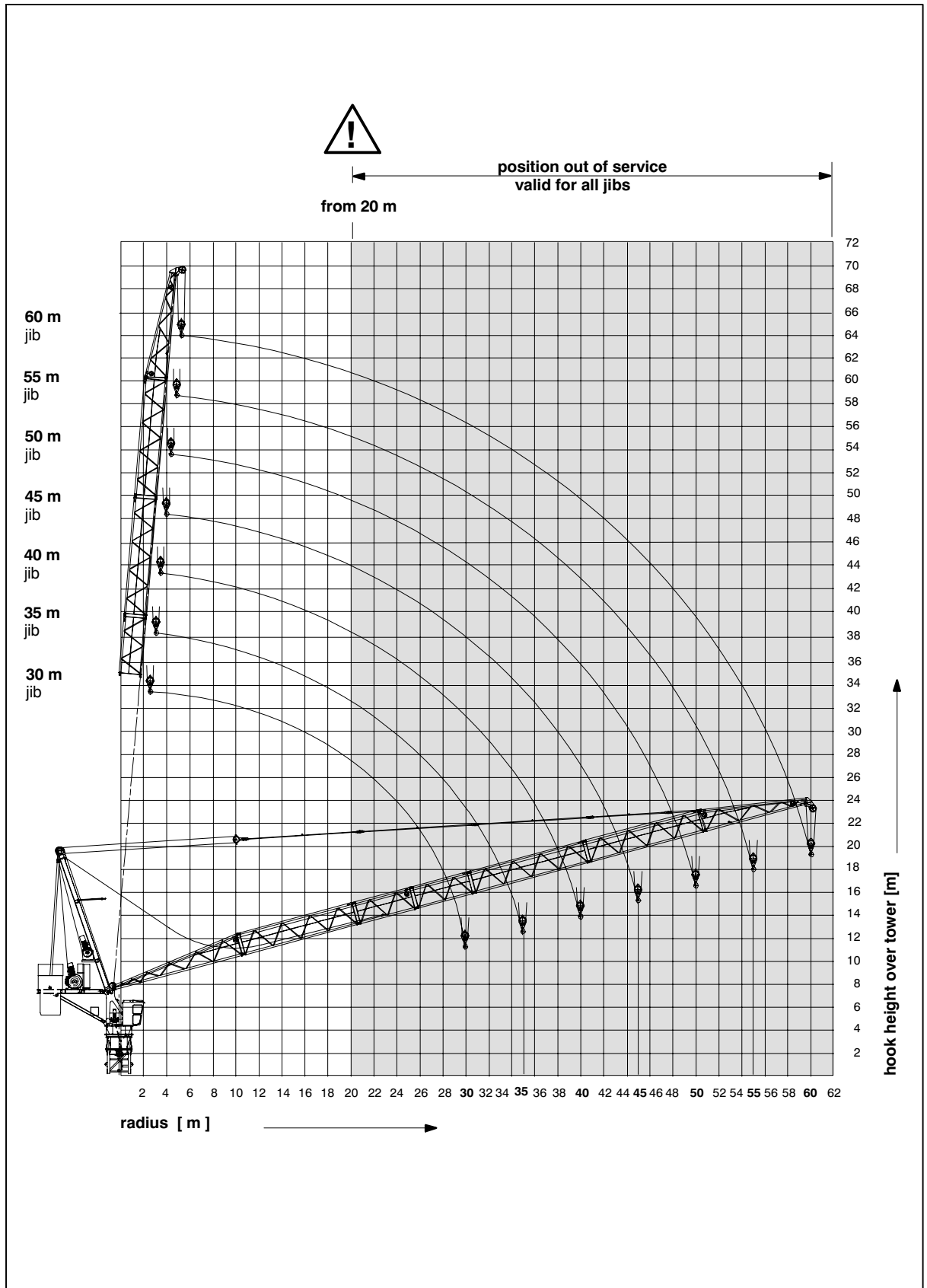
Planungszeichnung  
PLANNING DESIGN

WOLFF 355B

962-3-029728

2.1.2

Hook positions



2.2.1

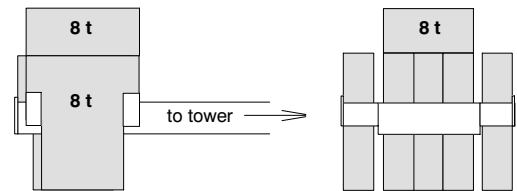
## Load capacity table

| radius [m]    |    |                                                                                   | 20         | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |                   |
|---------------|----|-----------------------------------------------------------------------------------|------------|----|----|----|----|----|----|----|----|-------------------|
| length of jib | 60 |  |            |    |    |    |    |    |    |    |    | load capacity [t] |
|               | 55 |                                                                                   |            |    |    |    |    |    |    |    |    |                   |
|               | 50 |                                                                                   | 4,5 - 16,0 |    |    |    |    |    |    |    |    |                   |
|               | 45 |                                                                                   | 4,1 - 16,5 |    |    |    |    |    |    |    |    |                   |
|               | 40 |                                                                                   | 3,6 - 17,0 |    |    |    |    |    |    |    |    |                   |
|               | 35 |                                                                                   | 3,2 - 17,5 |    |    |    |    |    |    |    |    |                   |
|               | 30 |                                                                                   | 2,7 - 18,0 |    |    |    |    |    |    |    |    |                   |
| radius [m]    |    |                                                                                   | 20         | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |                   |
| length of jib | 60 |  | 5,4 - 27,0 |    |    |    |    |    |    |    |    | load capacity [t] |
|               | 55 |                                                                                   | 5,0 - 28,0 |    |    |    |    |    |    |    |    |                   |
|               | 50 |                                                                                   | 4,5 - 29,5 |    |    |    |    |    |    |    |    |                   |
|               | 45 |                                                                                   | 4,1 - 31,0 |    |    |    |    |    |    |    |    |                   |
|               | 40 |                                                                                   | 3,6 - 33,5 |    |    |    |    |    |    |    |    |                   |
|               | 35 |                                                                                   | 3,2 - 34,5 |    |    |    |    |    |    |    |    |                   |
|               | 30 |                                                                                   | 2,7 - 30,0 |    |    |    |    |    |    |    |    |                   |

The load capacities refer to a tower height of 45,0 m. With greater tower heights the safe working load will be minimized by the additional weight of the hoisting cable (with 2 fall operation = 6,6 kg per meter hook path, with 1 fall operation = 3,3 kg per meter hook path).

## Arrangement of counterweights

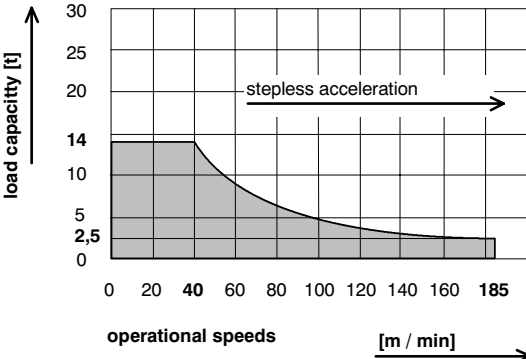
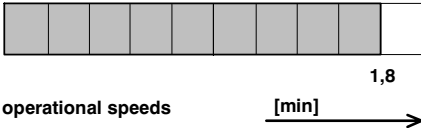
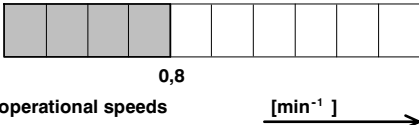
## Hw 28110 FU

| radius [m]     | 60                                                                                  | 55 | 50 | 45 | 40 | 35 | 30 |
|----------------|-------------------------------------------------------------------------------------|----|----|----|----|----|----|
| counterweights |  |    |    |    |    |    |    |
| total weight   | 48 t                                                                                |    |    |    |    |    |    |
|                | 5 x 8 t                                                                             |    |    |    |    |    |    |

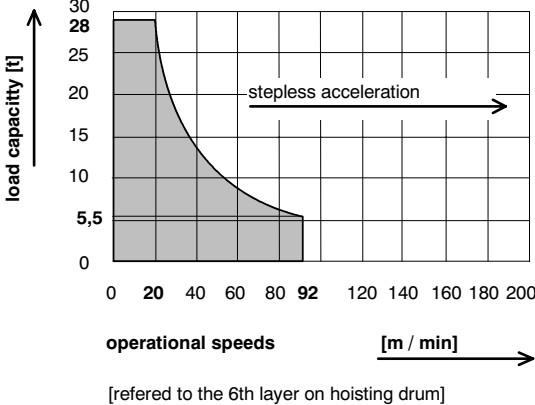
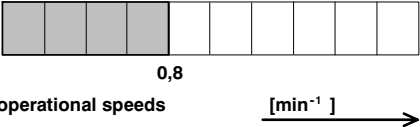
2.2.2.1

## Operational speeds

400 V, 50 Hz

| drive<br>[model]                                                                      | operational speeds<br>load capacity<br>[1-fall operation]                                                                                                                                            | hook path<br>max.<br>[m] | output<br>[kW] | total<br>output<br>[kVA]                                         |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------------------------------------------|
| Hw 28110 FU                                                                           | hoisting                                                                                                                                                                                             | 920                      | 110            | 194<br>total<br>output for a<br>simultaneity<br>faktor of<br>0,8 |
|    |  <p>load capacity [t]</p> <p>operational speeds [m / min]</p> <p>[referred to the 6th layer on hoisting drum]</p> |                          |                |                                                                  |
| Ew 1575 FU                                                                            | jib up - down                                                                                                                                                                                        |                          | 75             |                                                                  |
|  |  <p>operational speeds [min]</p>                                                                                |                          |                |                                                                  |
| Dw                                                                                    | slewing                                                                                                                                                                                              | 1 x                      | 7,5            |                                                                  |
|  |  <p>operational speeds [min<sup>-1</sup>]</p>                                                                   |                          |                |                                                                  |

2.2.2.2 Operational speeds 400 V, 50 Hz

| drive<br>[model]                                                                    | operational speeds<br>load capacity<br>[2-fall operation]                                  | hook path<br>max.<br>[m] | output<br>[kW] | total<br>output<br>[kVA]                                         |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------|----------------|------------------------------------------------------------------|
| Hw 28110 FU                                                                         | hoisting  | 460                      | 110            | 194<br>total<br>output for a<br>simultaneity<br>factor of<br>0,8 |
|    |           |                          |                |                                                                  |
| Ew 1575 FU                                                                          | jib up - down                                                                              |                          | 75             |                                                                  |
|  |         |                          |                |                                                                  |
| Dw                                                                                  | slewing                                                                                    | 1 x                      | 7,5            |                                                                  |
|  |         |                          |                |                                                                  |

2.2.3.1 Load capacity [ kg ] for 2 - fall operation

| radius<br>[m] | 30    | 35    | 40    | 45    | 50    | 55 | 60  |
|---------------|-------|-------|-------|-------|-------|----|----------------------------------------------------------------------------------------|
| 16,0          | 28000 | 28000 | 28000 | 28000 | 28000 |    |                                                                                        |
| 17,0          | 28000 | 28000 | 28000 | 27100 | 26160 |    |                                                                                        |
| 18,0          | 28000 | 27190 | 26390 | 25460 | 24520 |    |                                                                                        |
| 19,0          | 26550 | 25710 | 24940 | 23990 | 23050 |    |                                                                                        |
| 20,0          | 25300 | 24400 | 23600 | 22700 | 21700 |    |                                                                                        |
| 21,0          | 24070 | 23170 | 22470 | 21470 | 20540 |    |                                                                                        |
| 22,0          | 23000 | 22070 | 21400 | 20380 | 19460 |    |                                                                                        |
| 23,0          | 22020 | 21070 | 20420 | 19390 | 18470 |    |                                                                                        |
| 24,0          | 21130 | 20150 | 19530 | 18480 | 17560 |    |                                                                                        |
| 25,0          | 20300 | 19300 | 18700 | 17600 | 16700 |    |                                                                                        |
| 26,0          | 19540 | 18520 | 17950 | 16870 | 15950 |    |                                                                                        |
| 27,0          | 18830 | 17800 | 17240 | 16150 | 15240 |    |                                                                                        |
| 28,0          | 18180 | 17130 | 16590 | 15480 | 14580 |    |                                                                                        |
| 29,0          | 17570 | 16500 | 15980 | 14860 | 13960 |    |                                                                                        |
| 30,0          | 17000 | 15900 | 15400 | 14300 | 13400 |    |                                                                                        |
| 31,0          |       | 15370 | 14880 | 13750 | 12840 |    |                                                                                        |
| 32,0          |       | 14860 | 14390 | 13240 | 12340 |    |                                                                                        |
| 33,0          |       | 14380 | 13920 | 12760 | 11860 |    |                                                                                        |
| 34,0          |       | 13930 | 13480 | 12320 | 11420 |    |                                                                                        |
| 35,0          |       | 13500 | 13100 | 11900 | 11000 |    |                                                                                        |
| 36,0          |       |       | 12670 | 11490 | 10600 |    |                                                                                        |
| 37,0          |       |       | 12300 | 11120 | 10220 |    |                                                                                        |
| 38,0          |       |       | 11950 | 10760 | 9870  |    |                                                                                        |
| 39,0          |       |       | 11620 | 10420 | 9530  |    |                                                                                        |
| 40,0          |       |       | 11300 | 10100 | 9200  |    |                                                                                        |
| 41,0          |       |       |       | 9790  | 8900  |    |                                                                                        |
| 42,0          |       |       |       | 9500  | 8610  |    |                                                                                        |
| 43,0          |       |       |       | 9220  | 8330  |    |                                                                                        |
| 44,0          |       |       |       | 8950  | 8070  |    |                                                                                        |
| 45,0          |       |       |       | 8700  | 7800  |    |                                                                                        |
| 46,0          |       |       |       |       | 7570  |    |                                                                                        |
| 47,0          |       |       |       |       | 7340  |    |                                                                                        |
| 48,0          |       |       |       |       | 7120  |    |                                                                                        |
| 49,0          |       |       |       |       | 6900  |    |                                                                                        |
| 50,0          |       |       |       |       | 6700  |    |                                                                                        |
| 51,0          |       |       |       |       |       |    |                                                                                        |
| 52,0          |       |       |       |       |       |    |                                                                                        |
| 53,0          |       |       |       |       |       |    |                                                                                        |
| 54,0          |       |       |       |       |       |    |                                                                                        |
| 55,0          |       |       |       |       |       |    |                                                                                        |
| 56,0          |       |       |       |       |       |    |                                                                                        |
| 57,0          |       |       |       |       |       |    |                                                                                        |
| 58,0          |       |       |       |       |       |    |                                                                                        |
| 59,0          |       |       |       |       |       |    |                                                                                        |
| 60,0          |       |       |       |       |       |    |                                                                                        |

The load capacity refer  
to height of tower of 45,0 m

## 2.2.3.2

## Load capacity [kg] for 1 - fall operation

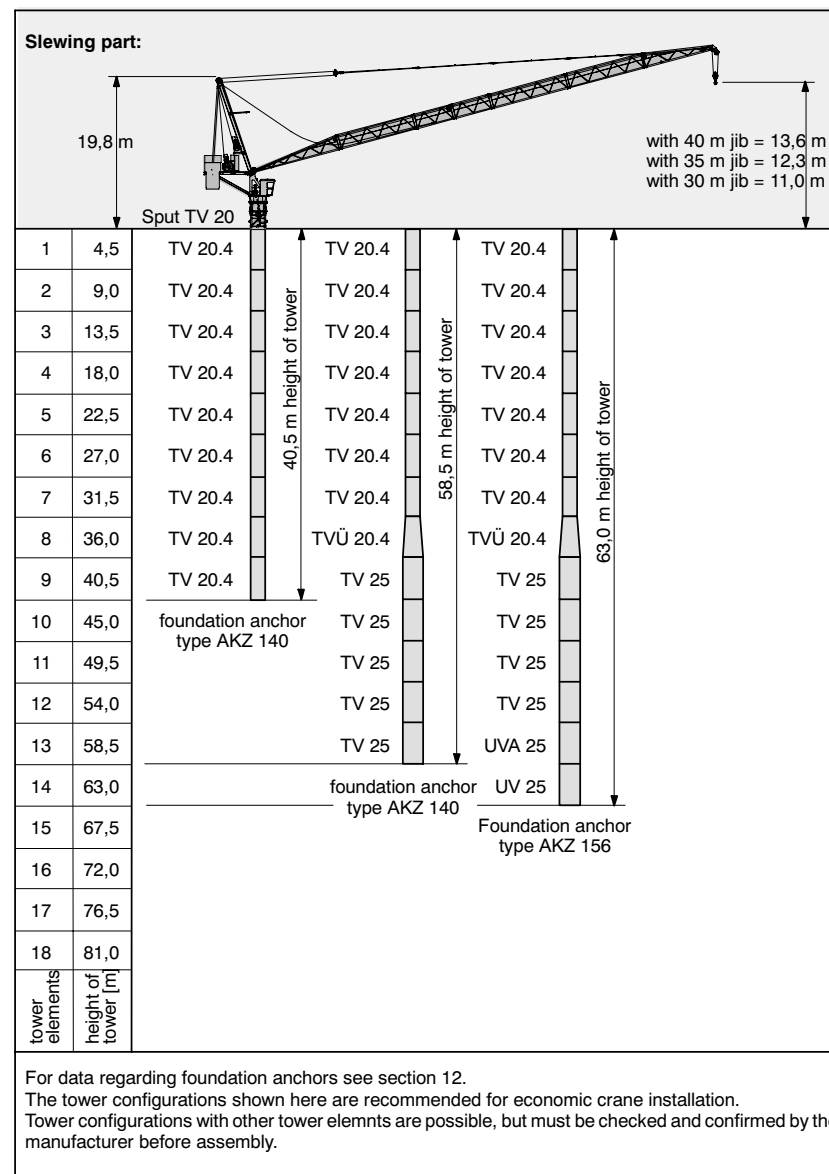
| radius<br>[m] | 30    | 35    | 40    | 45    | 50    | 55    | 60  |
|---------------|-------|-------|-------|-------|-------|-------|----------------------------------------------------------------------------------------|
| 16,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 17,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 18,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 19,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 20,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 21,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 22,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 23,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 24,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 25,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 26,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 27,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 14000                                                                                  |
| 28,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 14000 | 13350                                                                                  |
| 29,0          | 14000 | 14000 | 14000 | 14000 | 14000 | 13390 | 12750                                                                                  |
| 30,0          | 14000 | 14000 | 14000 | 14000 | 13700 | 12800 | 12200                                                                                  |
| 31,0          |       | 14000 | 14000 | 14000 | 13170 | 12280 | 11650                                                                                  |
| 32,0          |       | 14000 | 14000 | 13500 | 12670 | 11780 | 11160                                                                                  |
| 33,0          |       | 14000 | 14000 | 13030 | 12190 | 11310 | 10690                                                                                  |
| 34,0          |       | 14000 | 13780 | 12580 | 11740 | 10870 | 10260                                                                                  |
| 35,0          |       | 13800 | 13400 | 12200 | 11300 | 10500 | 9800                                                                                   |
| 36,0          |       |       | 12970 | 11770 | 10920 | 10060 | 9450                                                                                   |
| 37,0          |       |       | 12600 | 11390 | 10540 | 9690  | 9090                                                                                   |
| 38,0          |       |       | 12250 | 11040 | 10180 | 9340  | 8740                                                                                   |
| 39,0          |       |       | 11920 | 10700 | 9840  | 9000  | 8410                                                                                   |
| 40,0          |       |       | 11600 | 10400 | 9500  | 8700  | 8100                                                                                   |
| 41,0          |       |       |       | 10080 | 9210  | 8380  | 7790                                                                                   |
| 42,0          |       |       |       | 9790  | 8920  | 8090  | 7510                                                                                   |
| 43,0          |       |       |       | 9510  | 8640  | 7820  | 7230                                                                                   |
| 44,0          |       |       |       | 9250  | 8370  | 7560  | 6980                                                                                   |
| 45,0          |       |       |       | 9000  | 8100  | 7300  | 6700                                                                                   |
| 46,0          |       |       |       |       | 7880  | 7070  | 6490                                                                                   |
| 47,0          |       |       |       |       | 7640  | 6840  | 6260                                                                                   |
| 48,0          |       |       |       |       | 7420  | 6620  | 6050                                                                                   |
| 49,0          |       |       |       |       | 7210  | 6400  | 5840                                                                                   |
| 50,0          |       |       |       |       | 7000  | 6200  | 5600                                                                                   |
| 51,0          |       |       |       |       |       | 6010  | 5440                                                                                   |
| 52,0          |       |       |       |       |       | 5820  | 5260                                                                                   |
| 53,0          |       |       |       |       |       | 5640  | 5080                                                                                   |
| 54,0          |       |       |       |       |       | 5470  | 4910                                                                                   |
| 55,0          |       |       |       |       |       | 5300  | 4700                                                                                   |
| 56,0          |       |       |       |       |       |       | 4580                                                                                   |
| 57,0          |       |       |       |       |       |       | 4430                                                                                   |
| 58,0          |       |       |       |       |       |       | 4280                                                                                   |
| 59,0          |       |       |       |       |       |       | 4140                                                                                   |
| 60,0          |       |       |       |       |       |       | 4000                                                                                   |

The load capacity refer  
to height of tower of 45,0 m

## 2.2.6.1

## Tower configurations

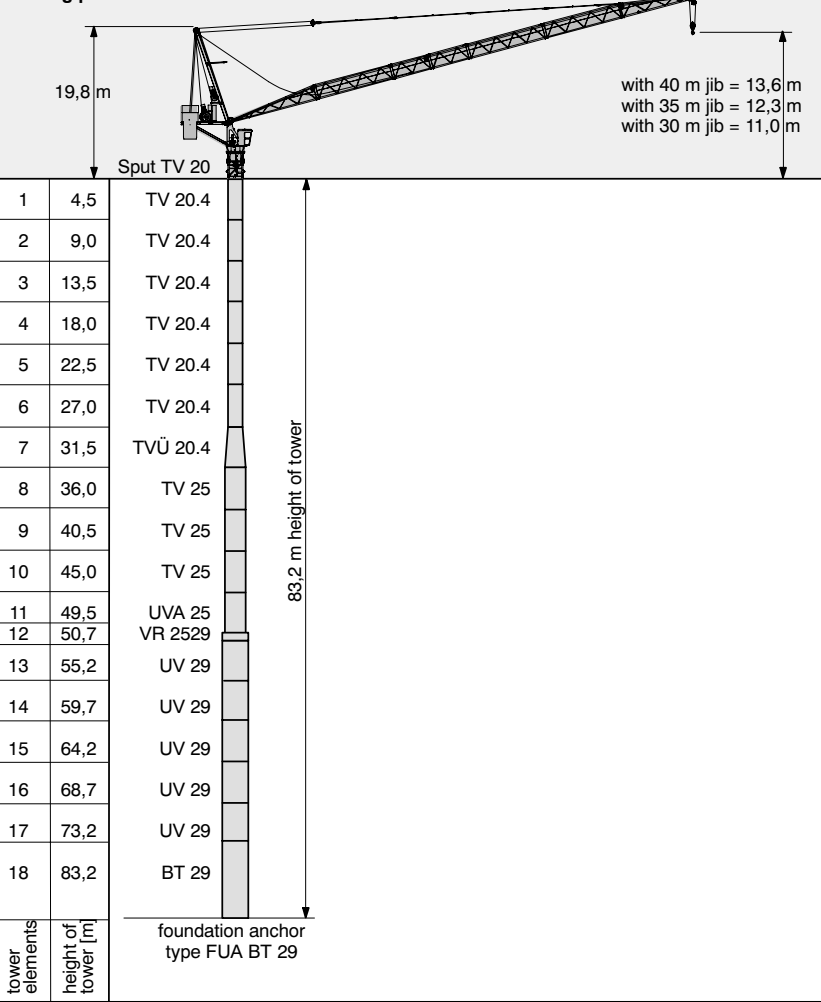
for a free standing stationary crane without climbing device on a concrete foundation



2.2.6.2 Tower configurations

for a free standing stationary crane without climbing device on a concrete foundation

Slewing part:

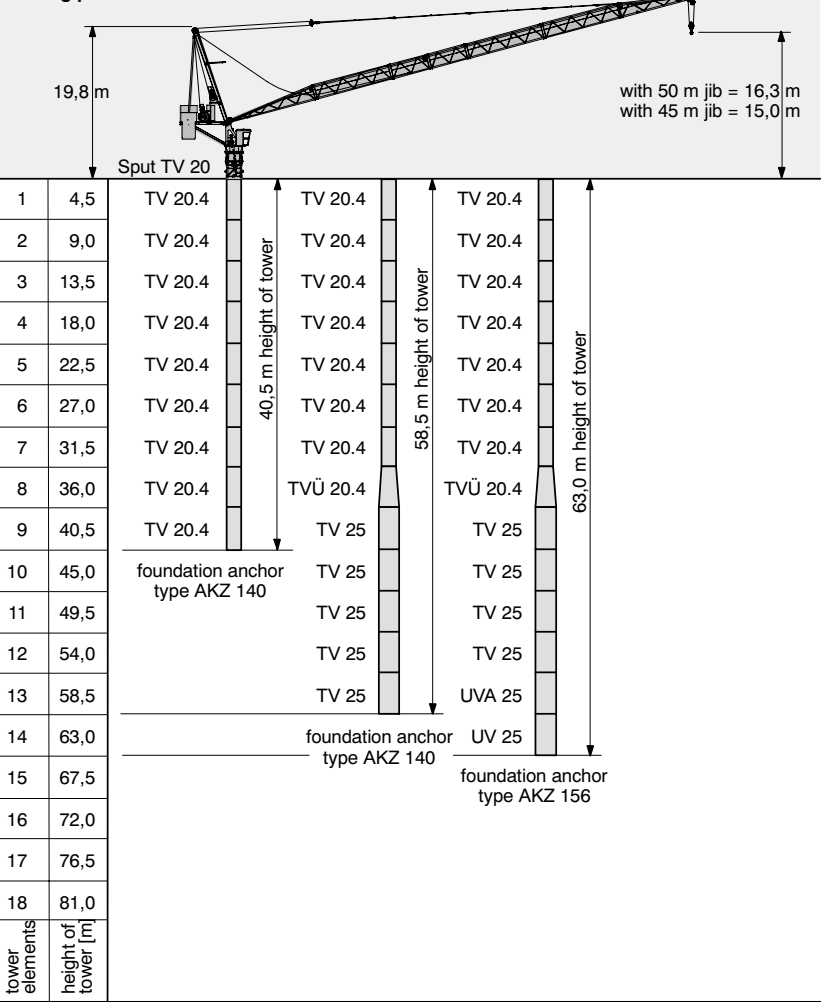


For data regarding foundation anchors see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.6.3 Tower configurations

for a free standing stationary crane without climbing device on a concrete foundation

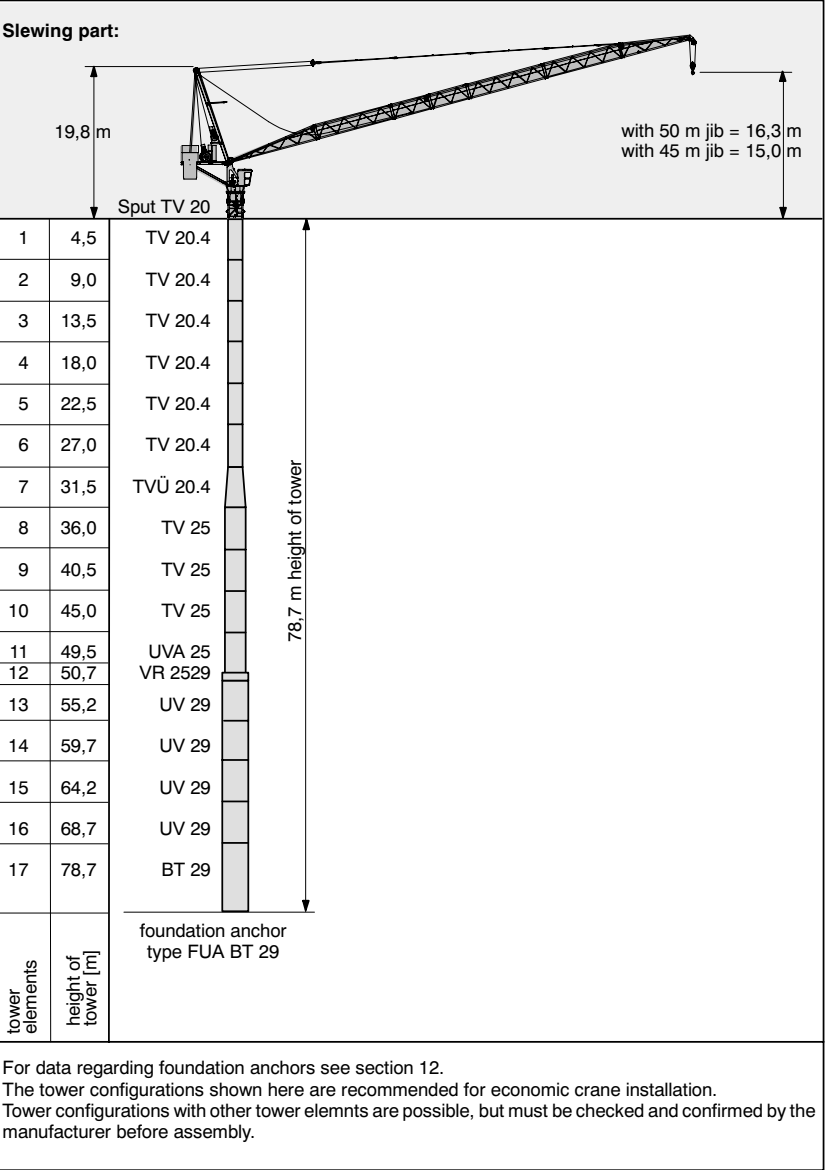
Slewing part:



For data regarding foundation anchors see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

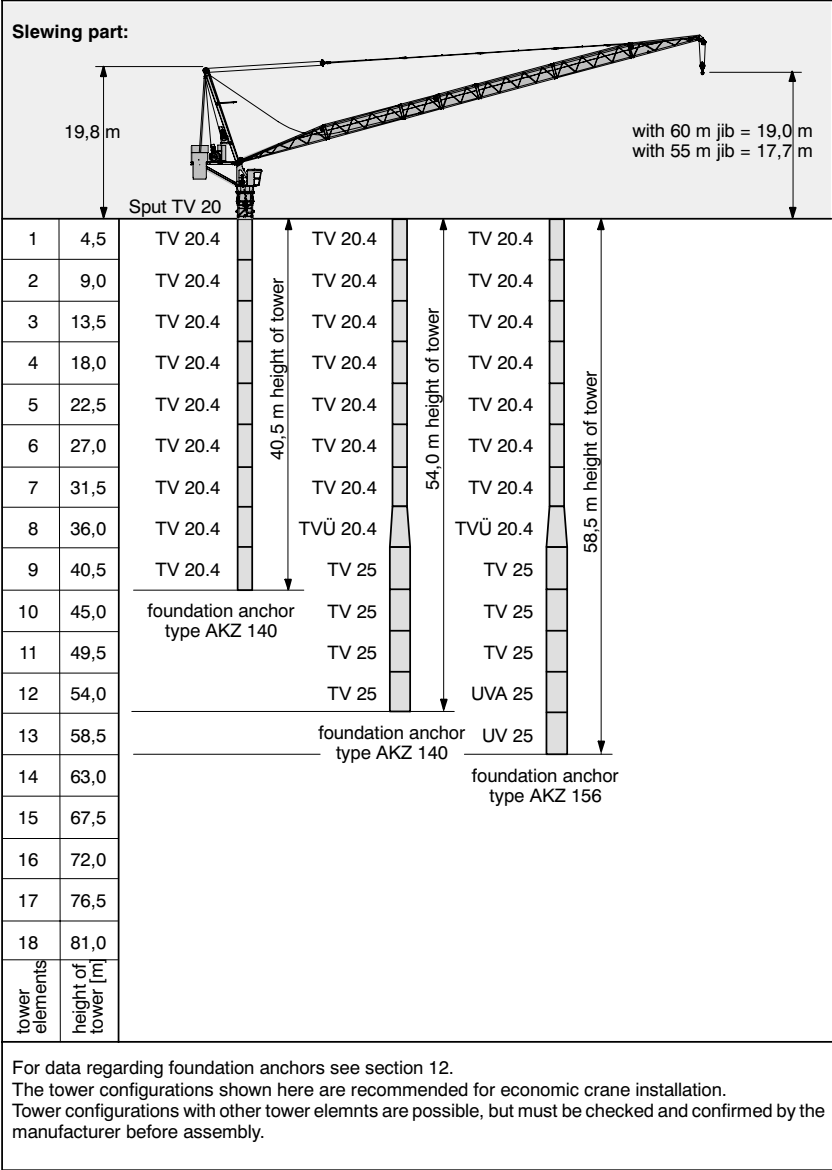
2.2.6.4 Tower configurations

for a free standing stationary crane without climbing device on a concrete foundation



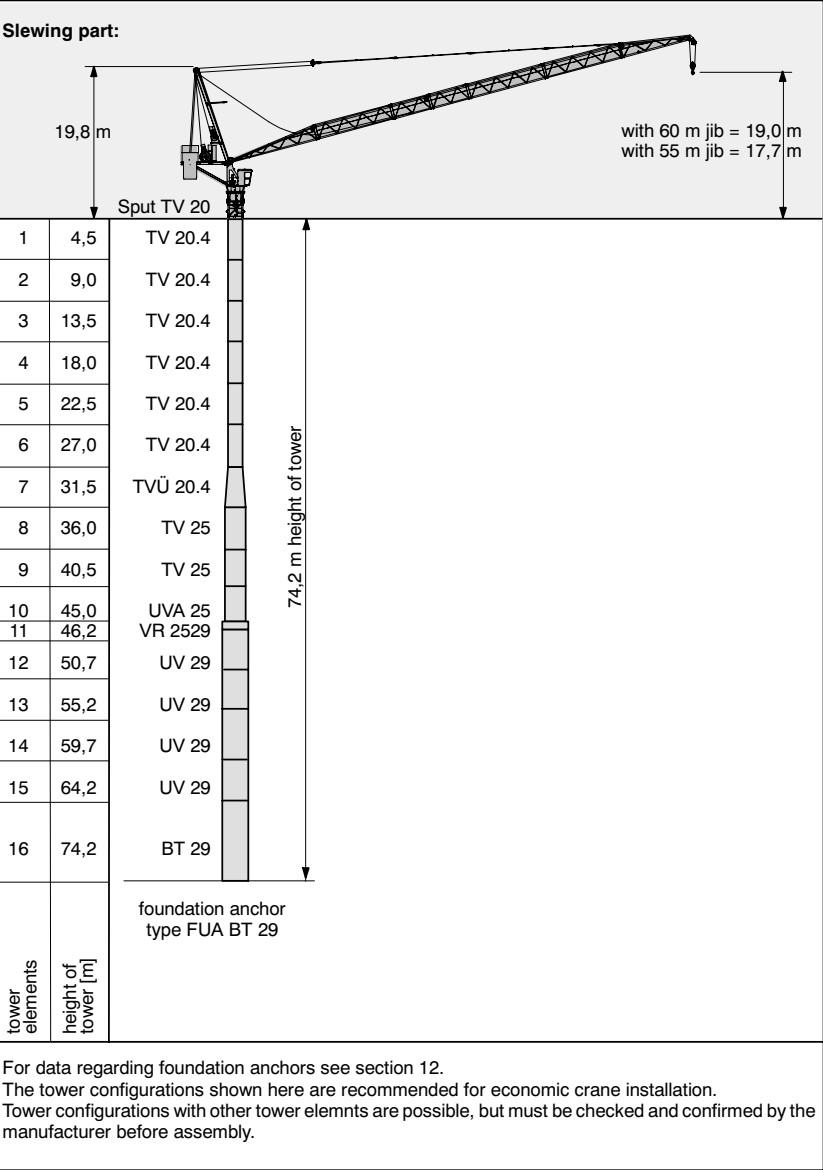
2.2.6.5 Tower configurations

for a free standing stationary crane without climbing device on a concrete foundation



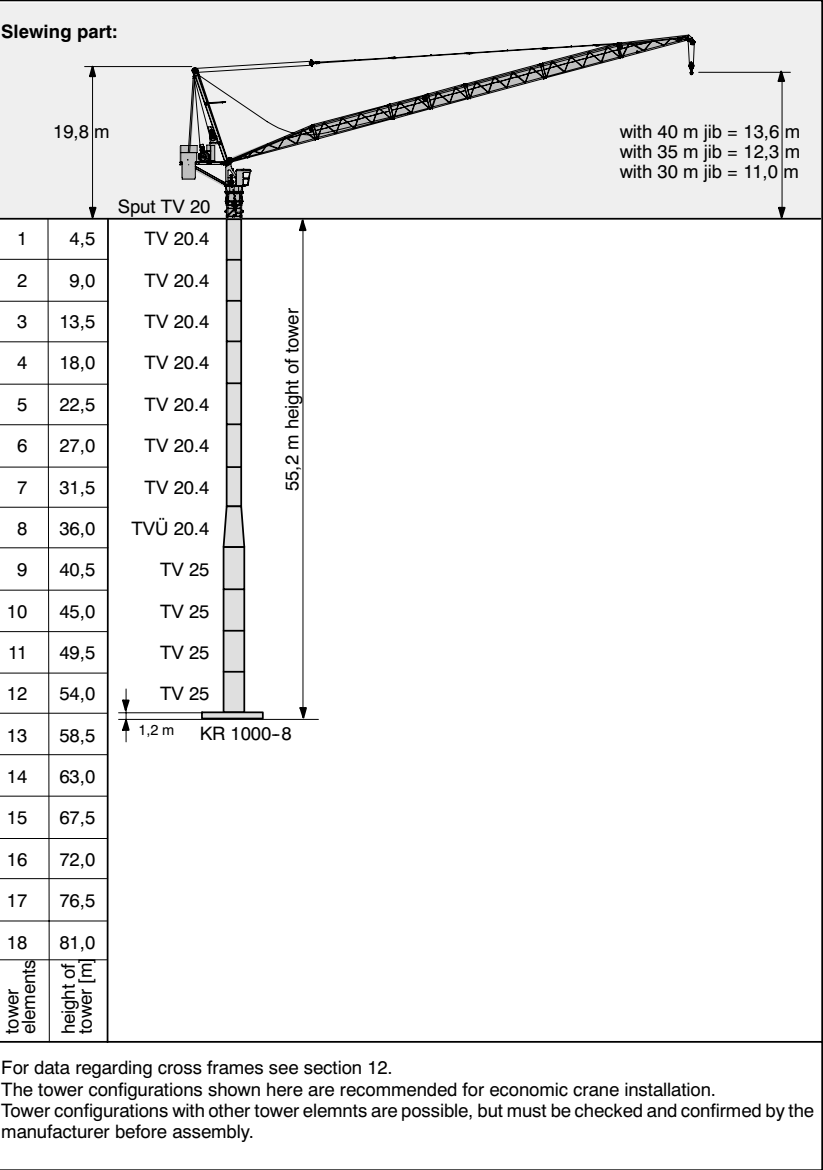
2.2.6.6 Tower configurations

for a free standing stationary crane without climbing device on a concrete foundation



2.2.7.1 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

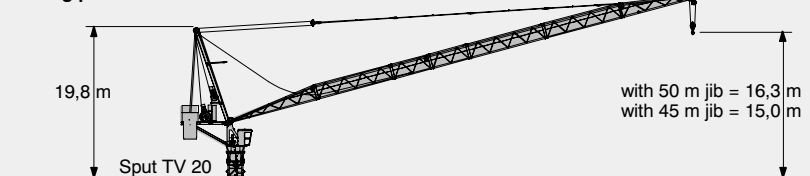




2.2.7.2 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

Slewing part:



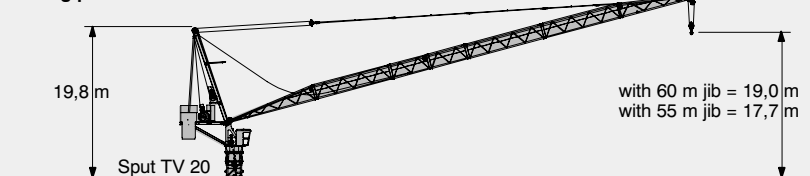
|                |                     |                 |                        |
|----------------|---------------------|-----------------|------------------------|
| 1              | 4,5                 | TV 20.4         | 50,7 m height of tower |
| 2              | 9,0                 | TV 20.4         |                        |
| 3              | 13,5                | TV 20.4         |                        |
| 4              | 18,0                | TV 20.4         |                        |
| 5              | 22,5                | TV 20.4         |                        |
| 6              | 27,0                | TV 20.4         |                        |
| 7              | 31,5                | TV 20.4         |                        |
| 8              | 36,0                | TVÜ 20.4        |                        |
| 9              | 40,5                | TV 25           |                        |
| 10             | 45,0                | TV 25           |                        |
| 11             | 49,5                | TV 25           |                        |
| 12             | 54,0                | 1,2 m KR 1000-8 |                        |
| 13             | 58,5                |                 |                        |
| 14             | 63,0                |                 |                        |
| 15             | 67,5                |                 |                        |
| 16             | 72,0                |                 |                        |
| 17             | 76,5                |                 |                        |
| 18             | 81,0                |                 |                        |
| tower elements | height of tower [m] |                 |                        |

For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.3 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

Slewing part:

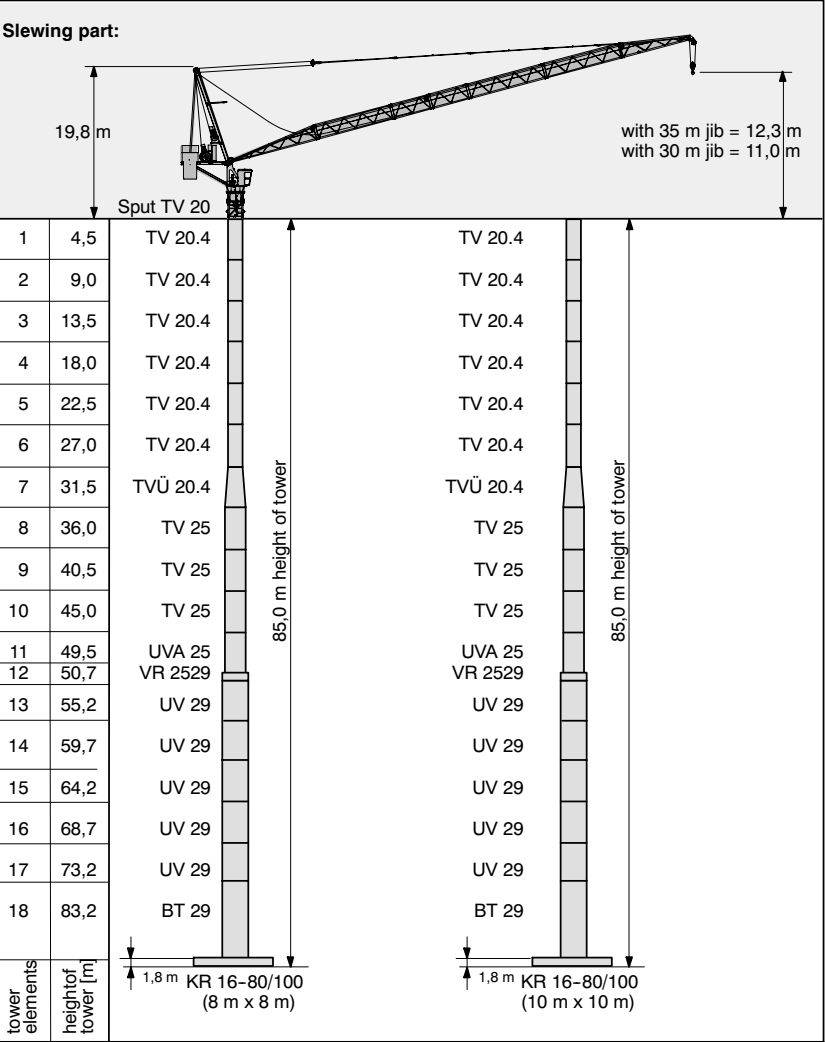


|                |               |                 |                        |
|----------------|---------------|-----------------|------------------------|
| 1              | 4,5           | TV 20.4         | 46,2 m height of tower |
| 2              | 9,0           | TV 20.4         |                        |
| 3              | 13,5          | TV 20.4         |                        |
| 4              | 18,0          | TV 20.4         |                        |
| 5              | 22,5          | TV 20.4         |                        |
| 6              | 27,0          | TV 20.4         |                        |
| 7              | 31,5          | TV 20.4         |                        |
| 8              | 36,0          | TVÜ 20.4        |                        |
| 9              | 40,5          | TV 25           |                        |
| 10             | 45,0          | TV 25           |                        |
| 11             | 49,5          | 1,2 m KR 1000-8 |                        |
| 12             | 54,0          |                 |                        |
| 13             | 58,5          |                 |                        |
| 14             | 63,0          |                 |                        |
| 15             | 67,5          |                 |                        |
| 16             | 72,0          |                 |                        |
| 17             | 76,5          |                 |                        |
| 18             | 81,0          |                 |                        |
| tower elements | Turn-höhe [m] |                 |                        |

For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.4 Tower configurations

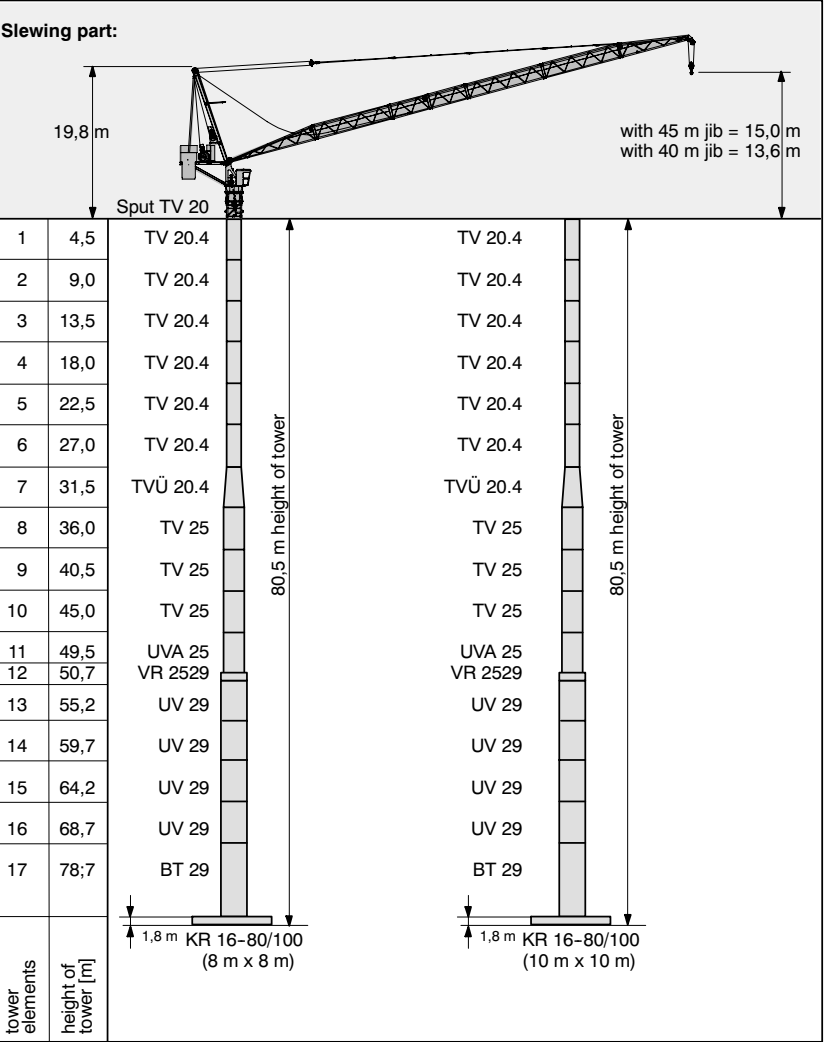
for a free standing stationary crane without climbing device on a cross frame



For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.5 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

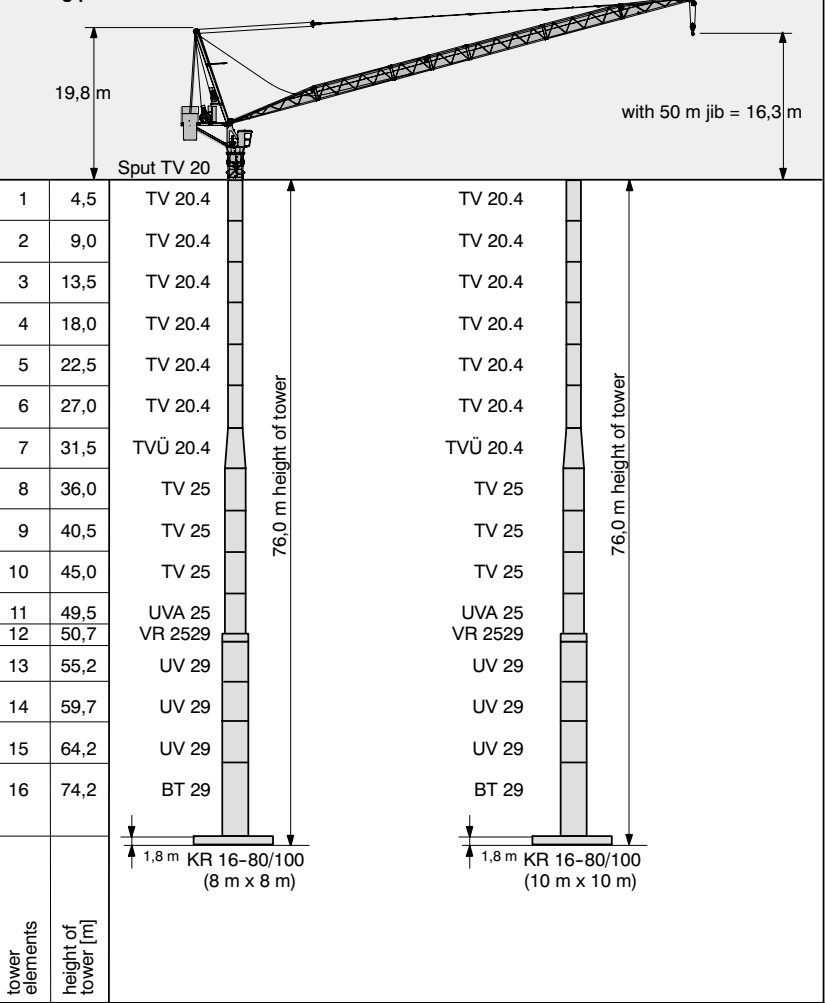


For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.6 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

Slewing part:

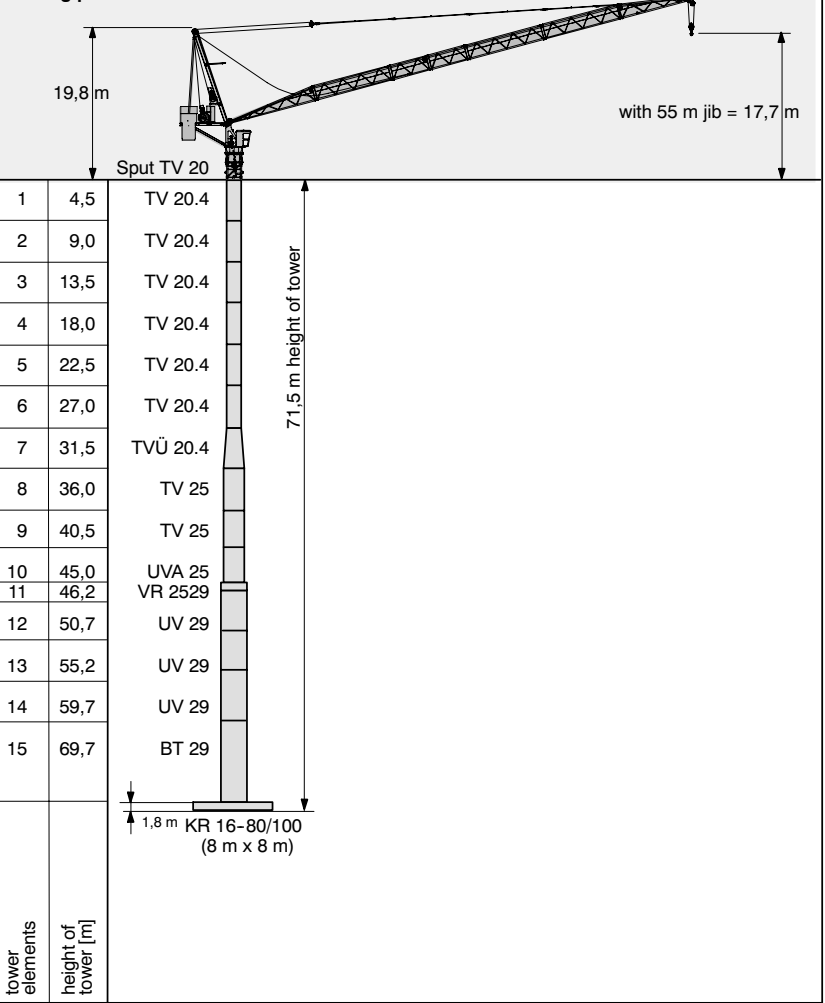


For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.7 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

Slewing part:

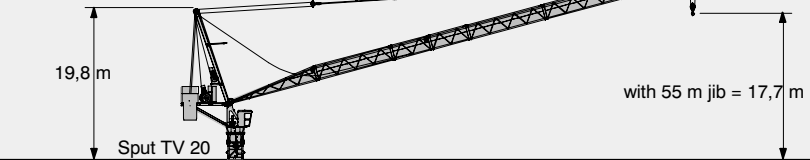


For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.8 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

Slewing part:



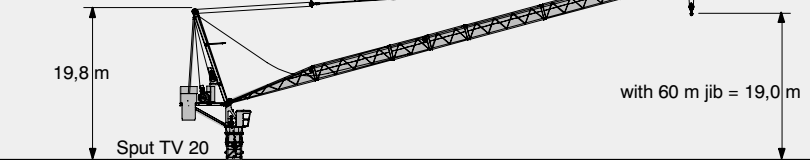
|                |                     |                                     |                        |
|----------------|---------------------|-------------------------------------|------------------------|
| 1              | 4,5                 | TV 20.4                             | 76,0 m height of tower |
| 2              | 9,0                 | TV 20.4                             |                        |
| 3              | 13,5                | TV 20.4                             |                        |
| 4              | 18,0                | TV 20.4                             |                        |
| 5              | 22,5                | TV 20.4                             |                        |
| 6              | 27,0                | TV 20.4                             |                        |
| 7              | 31,5                | TVÜ 20.4                            |                        |
| 8              | 36,0                | TV 25                               |                        |
| 9              | 40,5                | TV 25                               |                        |
| 10             | 45,0                | UVA 25                              |                        |
| 11             | 46,2                | VR 2529                             |                        |
| 12             | 50,7                | UV 29                               |                        |
| 13             | 55,2                | UV 29                               |                        |
| 14             | 59,7                | UV 29                               |                        |
| 15             | 64,2                | UV 29                               |                        |
| 16             | 74,2                | BT 29                               |                        |
|                |                     | 1,8 m KR 16-80/100<br>(10 m x 10 m) |                        |
| tower elements | height of tower [m] |                                     |                        |

For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.7.9 Tower configurations

for a free standing stationary crane without climbing device on a cross frame

slewing part:

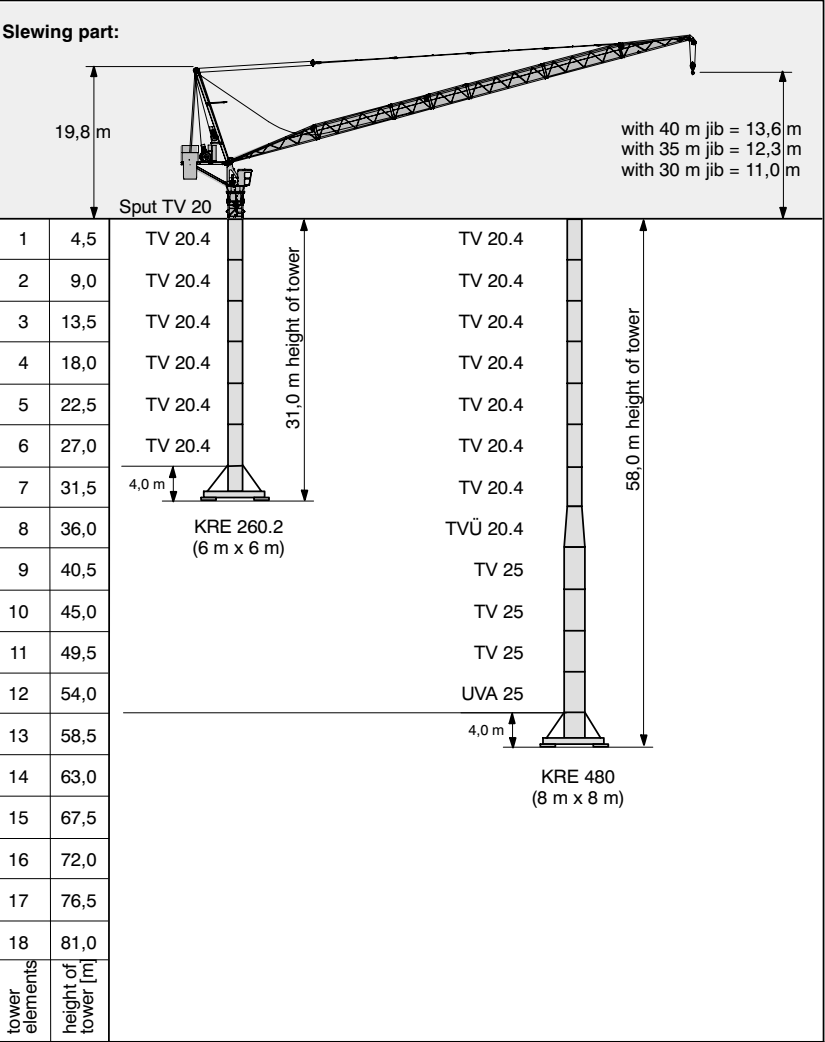


|                |                     |                                   |                        |                                     |                        |
|----------------|---------------------|-----------------------------------|------------------------|-------------------------------------|------------------------|
| 1              | 4,5                 | TV 20.4                           | 71,5 m height of tower | TV 20.4                             | 71,5 m height of tower |
| 2              | 9,0                 | TV 20.4                           |                        | TV 20.4                             |                        |
| 3              | 13,5                | TV 20.4                           |                        | TV 20.4                             |                        |
| 4              | 18,0                | TV 20.4                           |                        | TV 20.4                             |                        |
| 5              | 22,5                | TV 20.4                           |                        | TV 20.4                             |                        |
| 6              | 27,0                | TV 20.4                           |                        | TV 20.4                             |                        |
| 7              | 31,5                | TVÜ 20.4                          |                        | TVÜ 20.4                            |                        |
| 8              | 36,0                | TV 25                             |                        | TV 25                               |                        |
| 9              | 40,5                | TV 25                             |                        | TV 25                               |                        |
| 10             | 45,0                | UVA 25                            |                        | UVA 25                              |                        |
| 11             | 46,2                | VR 2529                           |                        | VR 2529                             |                        |
| 12             | 50,7                | UV 29                             |                        | UV 29                               |                        |
| 13             | 55,2                | UV 29                             |                        | UV 29                               |                        |
| 14             | 59,7                | UV 29                             |                        | UV 29                               |                        |
| 15             | 69,7                | BT 29                             |                        | BT 29                               |                        |
|                |                     | 1,8 m KR 16-80/100<br>(8 m x 8 m) |                        | 1,8 m KR 16-80/100<br>(10 m x 10 m) |                        |
| tower elements | height of tower [m] |                                   |                        |                                     |                        |

For data regarding cross frames see section 12.  
The tower configurations shown here are recommended for economic crane installation.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by the manufacturer before assembly.

2.2.8.1 Tower configurations

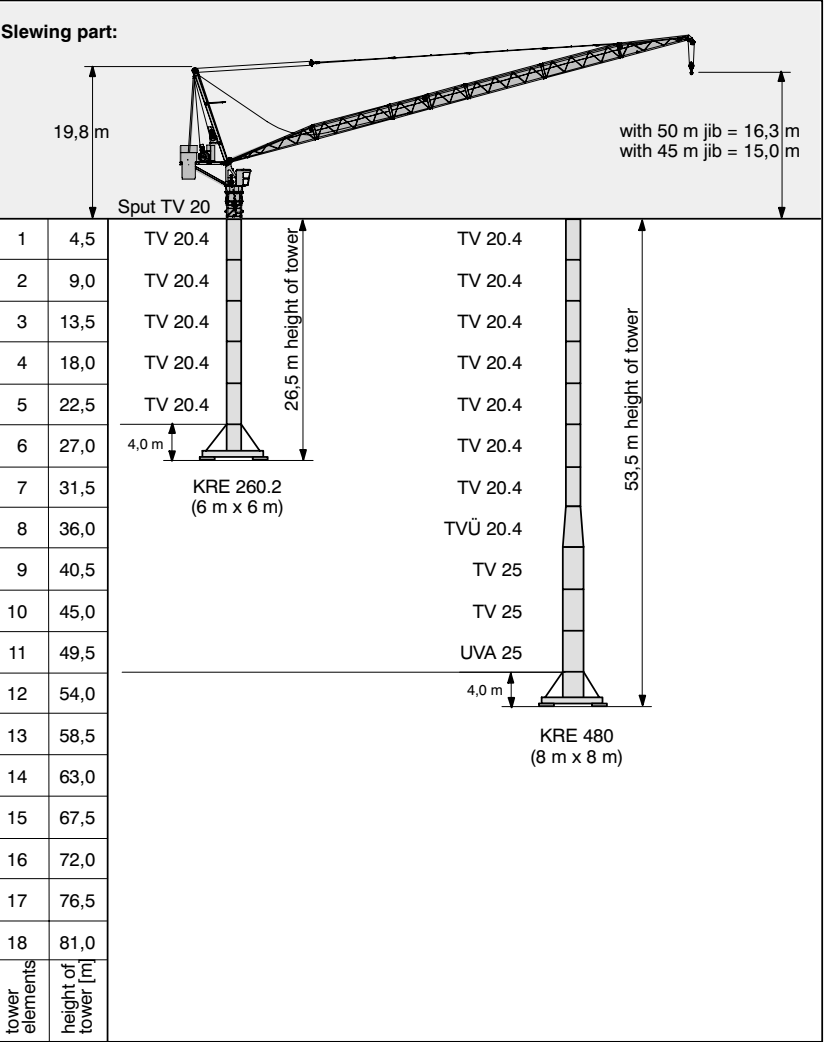
for a free standing stationary tower crane without climbing device on a cross frame element



For data regarding cross frame elements see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.8.2 Tower configurations

for a free standing stationary tower crane without climbing device on a cross frame element

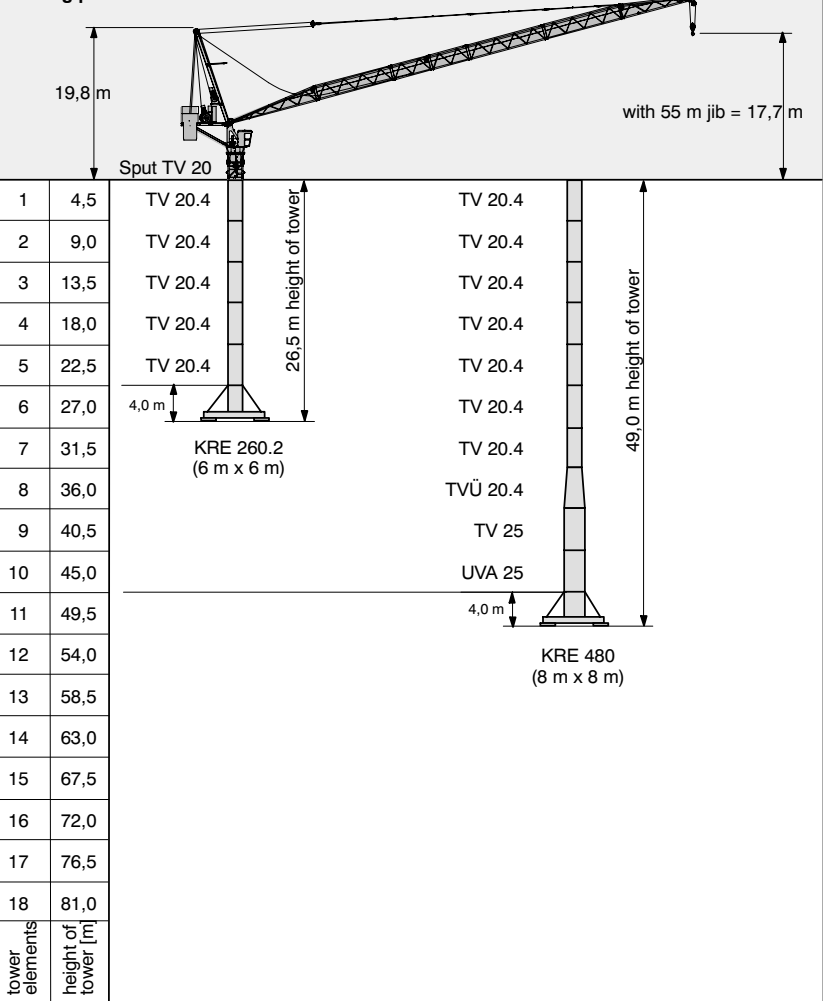


For data regarding cross frame elements see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.8.3 Tower configurations

for a free standing stationary tower crane without climbing device on a cross frame element

Slewing part:

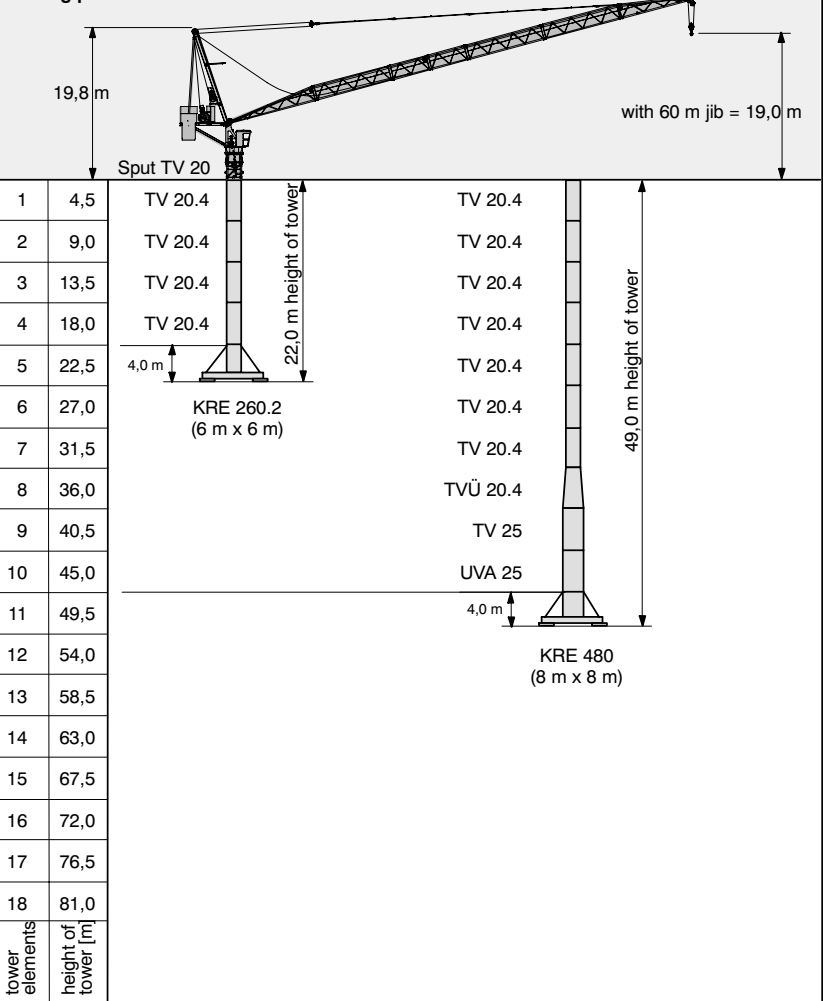


For data regarding cross frame elements see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.8.4 Tower configurations

for a free standing stationary tower crane without climbing device on a cross frame element

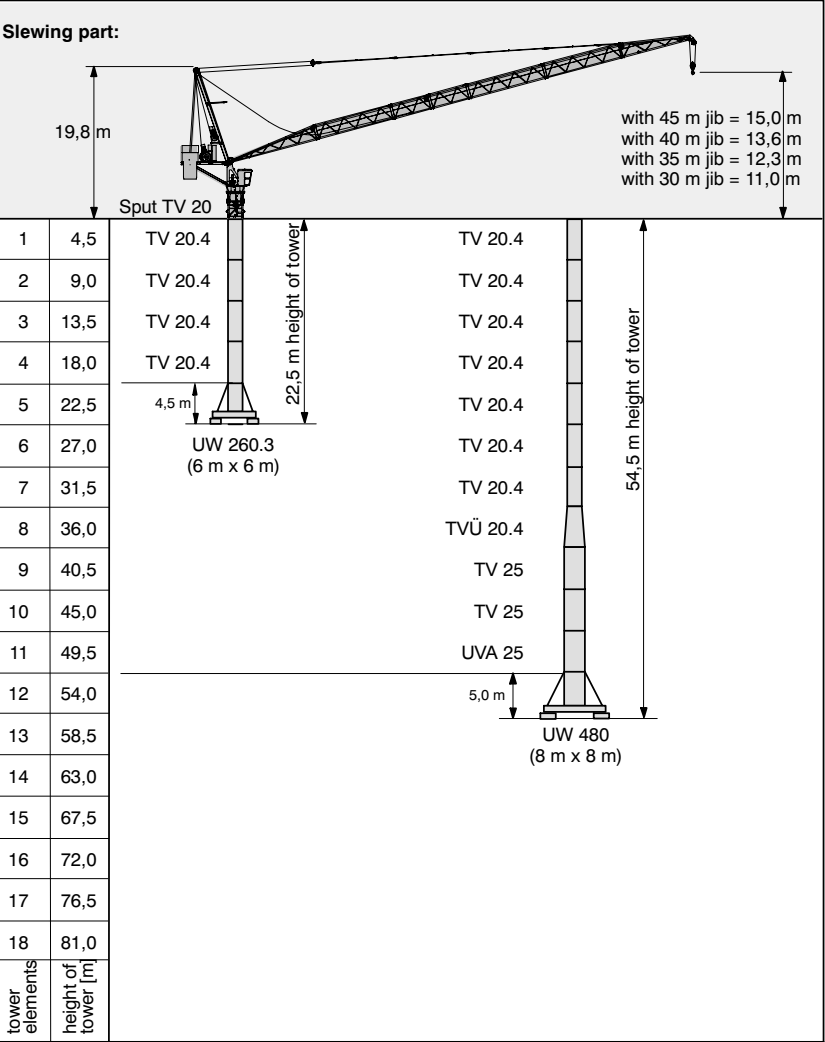
Slewing part:



For data regarding cross frame elements see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.9.1 Tower configurations

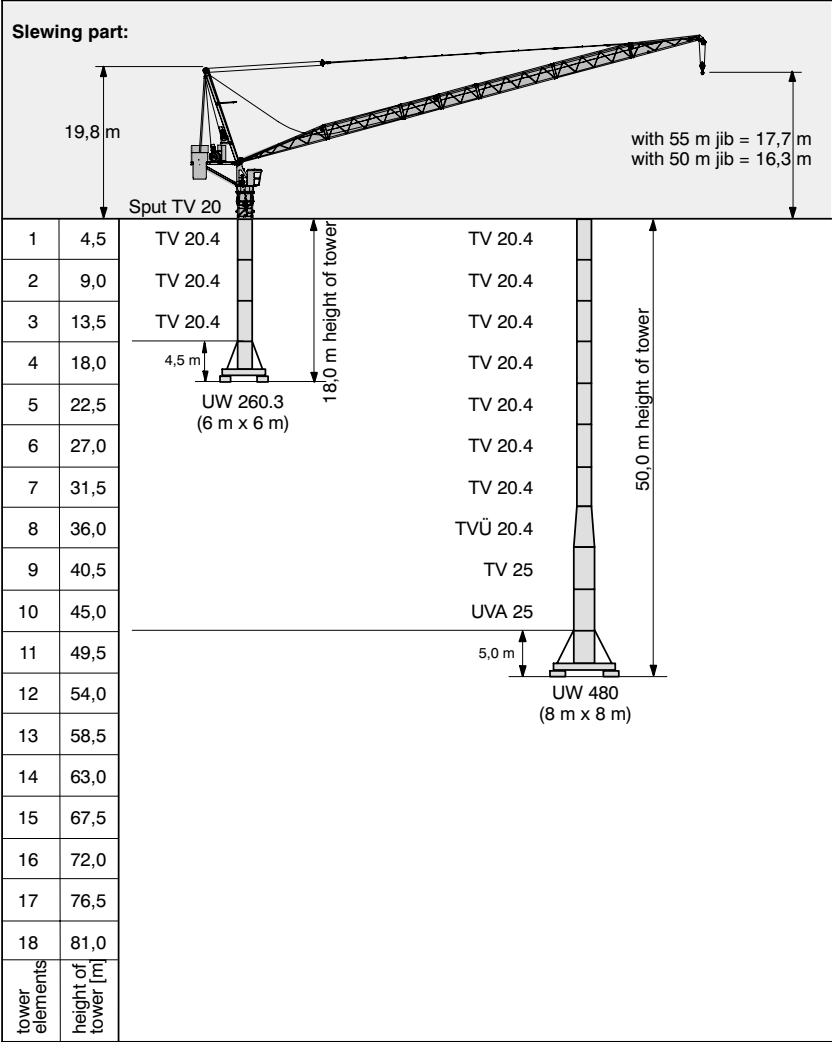
for a travelling tower crane without climbing device



For data regarding undercarriages see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

2.2.9.2 Tower configurations

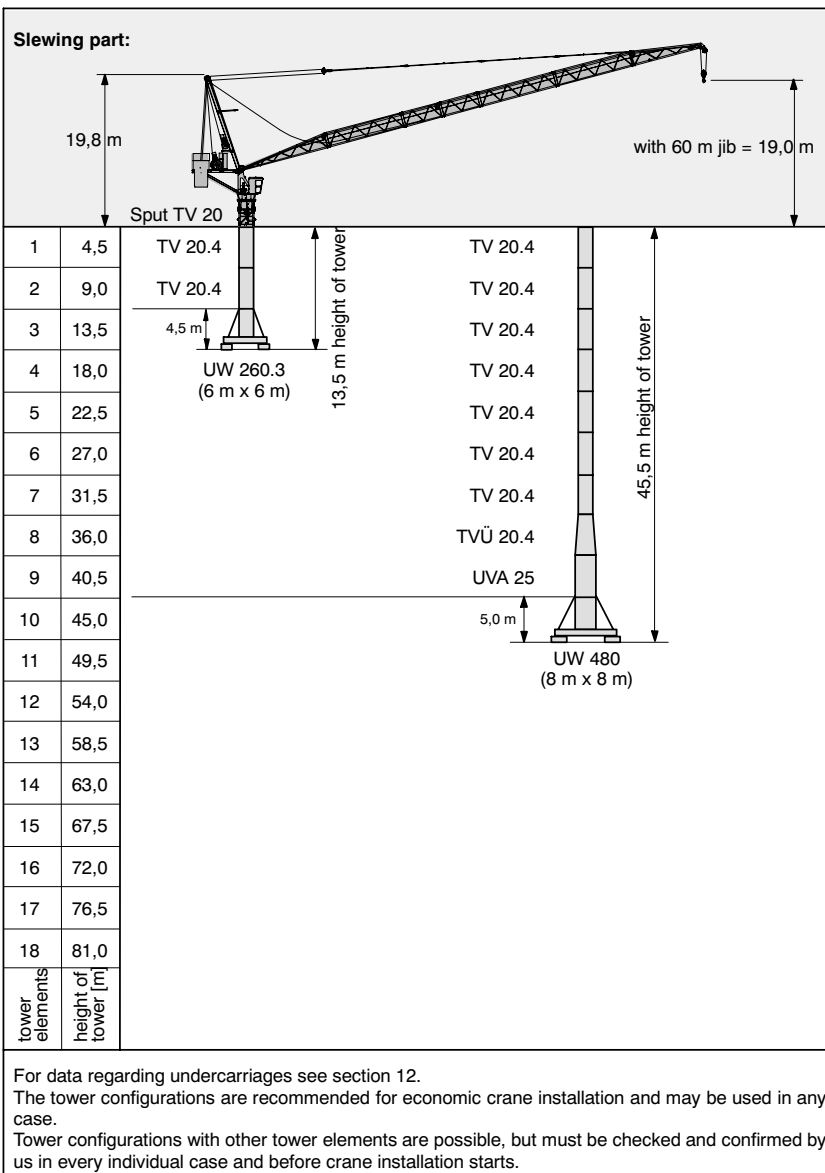
for a travelling tower crane without climbing device



For data regarding undercarriages see section 12.  
The tower configurations are recommended for economic crane installation and may be used in any case.  
Tower configurations with other tower elements are possible, but must be checked and confirmed by us in every individual case and before crane installation starts.

## 2.2.9.3 Tower configurations

for a travelling tower crane without climbing device



## 2.3.1

## Colli list

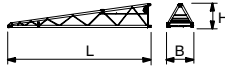
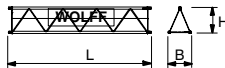
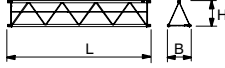
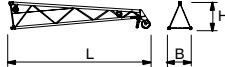
| item | Stck.               | Designation                                                                                                               | Colli | L<br>(m) | B<br>(m) | H<br>(m) | weight<br>(kg) | volume<br>(m³) |
|------|---------------------|---------------------------------------------------------------------------------------------------------------------------|-------|----------|----------|----------|----------------|----------------|
| 1    | 1                   | tower top upper part with luffing drive, pulley block platforms and supports                                              |       | 13,36    | 2,30     | 2,52     | 9800           | 77,44          |
| 2    | 1                   | tower top lower part with, connection support, slewing frame, DV, slewing drive and slirping system                       |       | 7,96     | 2,30     | 2,53     | 15300          | 46,32          |
|      | item 2 disassembled | tower top lower part without connection support, with slewing frame, DV, slewing drive and slirping system                |       | 5,63     | 2,30     | 2,53     | 11700          | 32,76          |
|      |                     | connection support                                                                                                        |       | 3,77     | 2,14     | 2,53     | 3600           | 20,41          |
| 3    | 1                   | driver's cabin                                                                                                            |       | 1,90     | 1,44     | 2,34     | 750            | 6,40           |
|      | 1                   | driver's cabin suspension                                                                                                 |       | 2,80     | 2,07     | 0,51     | 400            | 2,96           |
| 4    | 1                   | Counterjib complete with supports, Hoist drive (Hoisting rope ø 26 mm x 920 m = 3036 kg), platforms and standard handrail |       | 6,58     | 2,30     | 2,95     | 13400          | 44,65          |



**WOLFF 355 B**
**Crane data**
**2 / 51**

2.3.2

**Colli list**

| item | pcs. | Designation                                  | Colli                                                                               | L<br>(m) | B<br>(m) | H<br>(m) | weight<br>(kg) | volume<br>(m <sup>3</sup> ) |
|------|------|----------------------------------------------|-------------------------------------------------------------------------------------|----------|----------|----------|----------------|-----------------------------|
| 5    | 1    | jib part 1<br>with<br>cat walks              |    | 11,92    | 2,22     | 2,00     | 2250           | 52,93                       |
| 6    | 1    | jib part 2<br>with<br>WOLFF-sign             |    | 10,56    | 1,71     | 1,96     | 1710           | 35,40                       |
| 7    | 1    | jib part 3                                   |    | 5,39     | 1,71     | 1,96     | 960            | 18,07                       |
| 8    | 1    | jib part 4                                   |    | 5,39     | 1,71     | 1,96     | 930            | 18,07                       |
| 9    | 2    | jib part 5                                   |    | 10,56    | 1,71     | 1,96     | 1630           | 35,40                       |
| 10   | 1    | jib part 6<br>with<br>cat walks              |  | 10,16    | 1,71     | 1,99     | 2020           | 34,58                       |
| 11   | 5    | bracing parts<br>for 60 m jib<br>(lose part) |  | 10,51    | 0,24     | 0,61     | 1350           | 1,54                        |
| 12   | 1    | hook block                                   |  | 0,68     | 0,26     | 1,63     | 540            | 0,29                        |
| 13   | 1    | box<br>(lose part)                           |  | 1,60     | 0,90     | 0,80     | 300            | 1,15                        |

962-4-030082E

**WOLFF 355 B**
**Crane data**
**2 / 65**

2.5.1

**Assembly weights**

|                                                                                                                                                                                                                                                |          |                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------|
| <b>Tower top upper part</b><br>with build in derricking drive, pulley block and mechanical parts<br>with loose parts:<br>2 supports for counterjib<br>platforms<br>standard handrails<br>compensor                                             | complete | <b>9 800 kg</b>           |
| <b>Tower top lower part</b><br>with connection support<br>with slewing frame, slewing drive and ball race bearing<br>with lower part TV 20<br>with mechanical parts and main supply leads<br>with loose parts:<br>standard handrails and posts | complete | <b>15 300 kg</b>          |
| <b>Driver's cabin</b><br>with driver's cabin suspension and standard handrails                                                                                                                                                                 | complete | <b>1 150 kg</b><br>400 Kg |
| <b>Counterjib</b><br>with switch cabinet, resistors, hoisting winch, hoisting rope 920 m<br>with loose parts:<br>2 supports<br>platforms and standard handrails                                                                                | complete | <b>13 400 kg</b>          |

962-4-030327E

2.5.2

## Assembly weights

|                                                                                                           |          |                  |
|-----------------------------------------------------------------------------------------------------------|----------|------------------|
| <b>jib 60 m</b> (consisting of jib parts 1/2/3/4/5/5/6)                                                   | complete | <b>13 400 kg</b> |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>jib 55 m</b> (consisting of jib parts 1/2/3/5/5/6)                                                     | complete | <b>12 300 kg</b> |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>jib 50 m</b> (consisting of jib parts 1/2/3/4/5/6)                                                     | complete | <b>11 420 kg</b> |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>jib 45 m</b> (consisting of jib parts 1/2/3/5/6)                                                       | complete | <b>10 350 kg</b> |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>jib 40 m</b> (consisting of jib parts 1/2/3/4/6)                                                       | complete | <b>9 450 kg</b>  |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>jib 35 m</b> (consisting of jib parts 1/2/3/6)                                                         | complete | <b>8 350 kg</b>  |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>jib 30,0 m</b> (consisting of jib parts 1/2/6)                                                         | complete | <b>7 200 kg</b>  |
| with mechanical parts, bracing brackets, pigeon trestles, assembly bracing ropes, assembly rope guidance. |          |                  |
| <b>hook block</b> 14 t / 28 t                                                                             |          | <b>540 kg</b>    |

2.7.1.1

## Hoisting rope

for hoisting winch -28110 FU

Cable Ø = 26 mm + 4%  
+ 2%

## First equipment

### CASAR EUROLIFT -

non-twisting,  
flexible hoisting rope with  
compressed strands and  
compressed steel cable core.

**nominal strength** = 1960,0 N/mm<sup>2</sup>  
**calc. breaking strength** = 740,7 kN  
**min. breaking strength** = 614,9 kN  
**weight per meter** = 3,288kg

## Design

langs-lay rope, left handed,  
made from blank cable wire.

middle space factor = 0,720  
middle space spinning loss factor = 0,82  
middle space weight factor = 0,87  
total twist number = 280

number of carrying wires in the outer strands  
is to be judged by the state of wear according to  
DIN 15020 Bl. 2 /  
ISO DIS 4309 = 126

## Basic equipment

|                           |                        |                                                                      |
|---------------------------|------------------------|----------------------------------------------------------------------|
| <b>cable length</b> 320 m | <b>for crane with:</b> | <b>operation radius</b> 2 fall<br><b>tower height</b> 60 m<br>40,5 m |
|---------------------------|------------------------|----------------------------------------------------------------------|

By lengthening the hook path by 1 tower element the necessary cable length increases by 4,5 m for **operation in 1 fall**, by 9 m for **operation in 2 falls** and by 13,5 m.

### Attention!

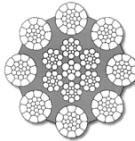
**A wire cable is a complex machine element.**

Conventional cable design frequently doesn't meet the requirements of modern rope drives. Short service life is the result.

!

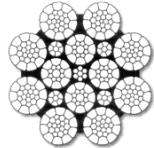
## 2.7.1.2

## Derricking rope

|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------|
| <p><b>Rope Ø = 22 mm</b> <span style="float: right;">+ 4%<br/>+ 2%</span></p> <p><b>Factory equipment</b></p> <p><b>Design</b></p>                                                                                              | <p><b>CASAR TURBOPLAST -</b><br/>cable with 8 strands<br/>made out of compressed<br/>strands (cable core)</p>  <p> <b>nominal strength</b> = 1770,0 N/mm<sup>2</sup><br/> <b>calc. breaking strength</b> = 445,8 kN<br/> <b>min. breaking strength</b> = 384,0 kN<br/> <b>weight per meter</b> = 2,191 kg         </p> <p>langs-lay rope, left handed,<br/>made from blank cable wire.</p> <p>           middle space factor = 0,665<br/>           middle spinning loss factor = 0,85<br/>           middle weight factor = 0,87<br/>           total twist number = 327         </p> <p>number of carrying wires in the outer strands<br/>is to be judged by the state of wear according to<br/>DIN 15020 Bl. 2 / ISO DIS 4309 = <b>208</b></p> |                          |                                        |
| <p><b>Basic equipment</b></p> <table border="1" data-bbox="264 1101 969 1189"> <tr> <td><b>Rope length</b> 195 m</td><td><b>for crane with:</b> 30 m - 60 m jib</td></tr> </table>                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Rope length</b> 195 m | <b>for crane with:</b> 30 m - 60 m jib |
| <b>Rope length</b> 195 m                                                                                                                                                                                                        | <b>for crane with:</b> 30 m - 60 m jib                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                          |                                        |
| <p><b>!</b></p> <p><b>Attention!</b><br/><b>A wire cable is a complexe machine element.</b><br/>Conventional cable design frequently doesn't meet the requirements of modern rope drives. Short service life is the result.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                        |

## 2.7.1.3

## Assembly bracing rope

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                               |                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------|
| <p><b>Rope Ø = 26 mm</b> <span style="float: right;">+ 4%<br/>+ 2%</span></p> <p><b>Factory equipment</b></p> <p><b>Design</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p><b>CASAR TURBOLIFT -</b><br/>cable with 8 strands<br/>in non-overlapped double<br/>parallel construction, made<br/>with compressed strands</p>  <p> <b>nominal strength</b> = 1960,0 N/mm<sup>2</sup><br/> <b>calc. breaking strength</b> = 767,5 kN<br/> <b>min. breaking strength</b> = 636,0 kN<br/> <b>weight per meter</b> = 3,289 kg         </p> <p>ordinary lay rope, right handed,<br/>made from zincd cable wires.</p> <p>each with 2 pressed in thimbles DIN 3091, Ø 51 mm</p> <p>           middle space factor = 0,734<br/>           middle spinning loss factor = 0,83<br/>           middle weight factor = 0,84<br/>           total twist number = 311         </p> <p>number of carrying wires in the outer strands<br/>is to be judged by the state of wear according to<br/>DIN 15020 Bl. 2 / ISO DIS 4309 = <b>208</b></p> |                               |                                        |
| <p><b>Basic equipment</b></p> <table border="1" data-bbox="1379 1069 2085 1157"> <tr> <td><b>Rope length</b> 2 x 29,6 m</td><td><b>for crane with:</b> 30 m - 60 m jib</td></tr> </table> <p><b>!</b></p> <p><b>Attention!</b><br/>The assembly bracing ropes are used and changed paired.<br/>Exactly keep the same length. Cable length from center of thimble hole<br/>to center of thimble hole = 29,6 m.</p> <p><b>!</b></p> <p><b>Attention!</b><br/><b>A wire cable is a complexe machine element.</b><br/>Conventional cable design frequently doesn't meet the requirements of modern rope drives. Short service life is the result.</p> <p>Longer tests on our rope drives led us to the choice of this cable.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Rope length</b> 2 x 29,6 m | <b>for crane with:</b> 30 m - 60 m jib |
| <b>Rope length</b> 2 x 29,6 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>for crane with:</b> 30 m - 60 m jib                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                               |                                        |

# WOLFF 355 B

## Crane data

2 / 86

### 2.8.2 Insertable exterior climbing device KWH 20.6

!

#### Attention!

The assembly of the climbing device with the WOLFF 355 B is possible with operation in 1 falls.

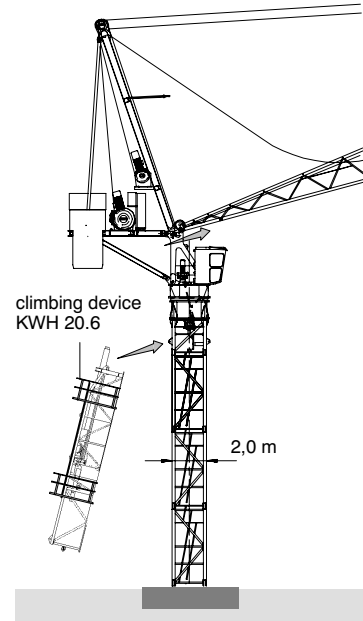
More details about the climbing device KWH 20.6 see additional equipment, section 12.

#### Minimum height with stationary erection:

tower elements TV 20  
= 13,5 m tower height

#### Minimum height with travelling erection:

2 tower elements TV 20 + undercarriage  
appr. 13,5 m tower height



### 2.8.2.1 Table of balancing weights

\* The given balancing weights are the weights of the tower elements or of a load.

\*\* The given radius is measured from the middle of the tower and has to be taken as standard value. An exact balancing will be reached by luffing in and out of the jib with the tower elements or loads given in the table and can be controlled at the locations of the joints of the tower parts by a shiftless separating from one another.

-- balancing not possible

| for climbing in TV 20.4 tower elements | 30 m   | 35 m   | 40 m   | 45 m     | 50 m   | 55 m   | 60 m   |
|----------------------------------------|--------|--------|--------|----------|--------|--------|--------|
| without balancing load *               | --     | --     | --     | 39,2 m** | 36,2 m | 35,9 m | 33,2 m |
| TV 20 = 2,95 t                         | --     | 29,1 m | 27,4 m | --       | --     | --     | --     |
| 5,0 t                                  | 24,4 m | 23,1 m | 22,0 m | --       | --     | --     | --     |



#### Danger!

While climbing, the slewing part of the crane must be locked in the insertion direction of the tower sections. Until the tower has been repinned fully and in all holes, the balancing must be kept and the slewing part must remain locked. (For details, please see operational manual KWH 20.6). The climbing device is an auxiliary device for assembly and mustn't stay at the tower crane WOLFF under normal working conditions.

962-4-030293E

# WOLFF 355 B

## Crane data

2 / 87

### 2.8.4 Insertable interior climbing drive KSH 20 SH

For the assembly of the WOLFF 355B in connection with the climbing drive KSH 20 SH the here shown tower configuration has to be noticed.

More details about the climbing drive KSH 20 SH see additional equipment, section 12.

wind region C 25

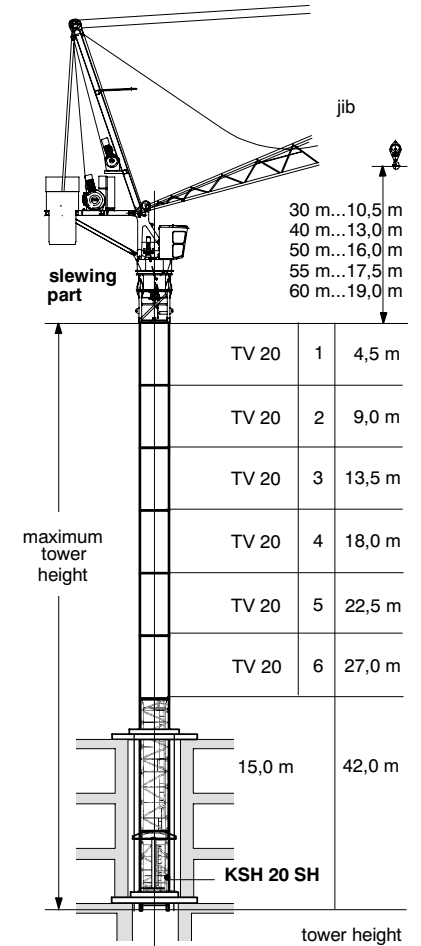
building height < 250 m

### 2.8.4.1 Table of balancing weights

\* The indicated balancing weights are gross-weights of tower elements or load.

\*\* The indicated radius refers to the centre of the tower and shall be treated as standard value. Exact balancing must achieved by travelling of jib with tower element or load and can checked by measuring the distance between corner posts and guide plates. This distance shall be equal at all four corner posts.

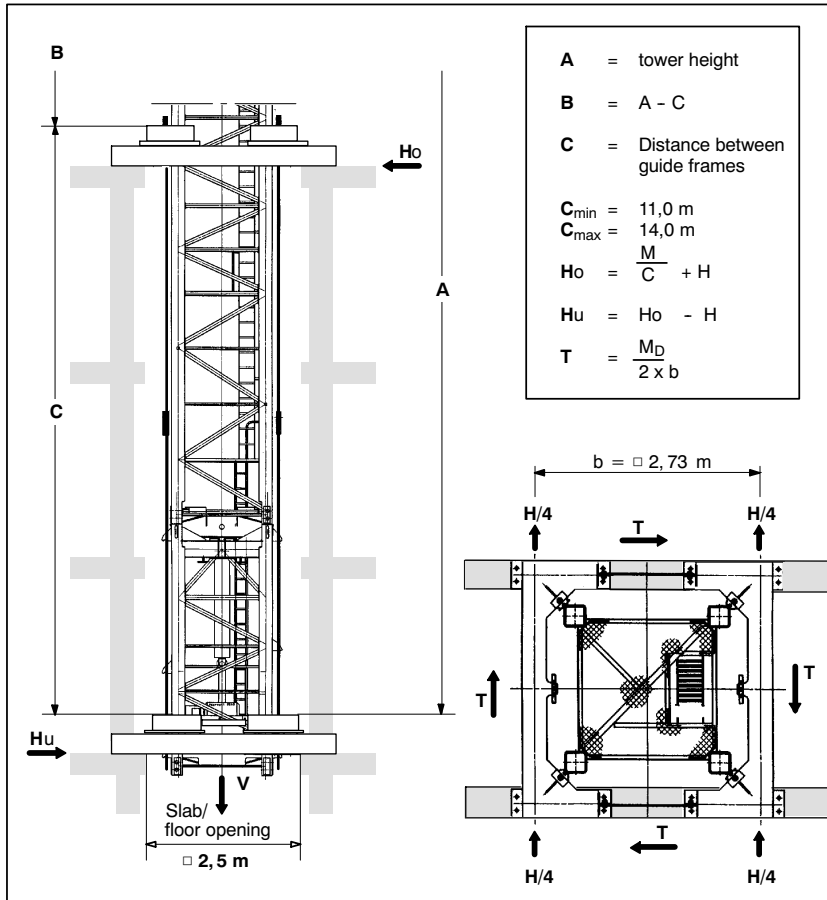
-- balancing not possible.



| 355 B balancing load * | 30 m   | 35 m | 40 m | 45 m | 50 m | 55 m | 60 m     |
|------------------------|--------|------|------|------|------|------|----------|
| without load *         | --     | --   | --   | --   | --   | --   | 51,7 m** |
| TV 20 = 2,95 t         | --     | --   | --   | 41,3 | 39,3 | 39,1 | 37,2     |
| 5,0 t                  | --     | --   | 34,8 | 33,9 | --   | --   | --       |
| 7,5 t                  | --     | 30,7 | 29,5 | --   | --   | --   | --       |
| 10,0 t                 | 25,4 m | 24,7 | --   | --   | --   | --   | --       |

962-4-030294E

## 2.8.4.2 Reacting forces to building for internal hydraulic climbing device KSH 20 SH



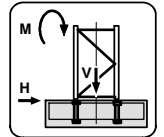
Reacting forces to building (kN)

|                | in service |     |     |     |      |     |     |     | out of service |     |     |     |      |     |     |     |
|----------------|------------|-----|-----|-----|------|-----|-----|-----|----------------|-----|-----|-----|------|-----|-----|-----|
| A (m)          | 42,0       |     |     |     | 37,5 |     |     |     | 42,0           |     |     |     | 37,5 |     |     |     |
| C (m)          | 11         | 12  | 13  | 14  | 11   | 12  | 13  | 14  | 11             | 12  | 13  | 14  | 11   | 12  | 13  | 14  |
| V              | 1519       |     |     |     | 1490 |     |     |     | 1364           |     |     |     | 1335 |     |     |     |
| H <sub>o</sub> | 550        | 510 | 470 | 440 | 530  | 490 | 450 | 420 | 930            | 860 | 790 | 730 | 810  | 750 | 690 | 640 |
| H <sub>u</sub> | 500        | 460 | 420 | 390 | 480  | 440 | 400 | 370 | 650            | 570 | 500 | 450 | 540  | 470 | 420 | 370 |
| T              | 60         |     |     |     | 60   |     |     |     | 0              |     |     |     | 0    |     |     |     |

962-4-030295E

## 3.1.1 Foundation loads according to EN 13001 partial safety factors

Inclusive all dynamic factors, theory order II. taken into account for a stationary tower crane on a concrete foundation according to tower configuration without climbing drive  
**M** = moment **H** = horizontal force **V** = vertical load  
 Permanent effective moment = **2800 kNm**



## Foundation loads

jib 30 m - 40 m

| tower height<br>[m] | crane in service<br>torque moment 340 kNm |           |           | crane out of service<br>(wind region C25) |           |           | assembly   |           |           |
|---------------------|-------------------------------------------|-----------|-----------|-------------------------------------------|-----------|-----------|------------|-----------|-----------|
|                     | M<br>[kNm]                                | H<br>[kN] | V<br>[kN] | M<br>[kNm]                                | H<br>[kN] | V<br>[kN] | M<br>[kNm] | H<br>[kN] | V<br>[kN] |
| 9,0                 | 4200                                      | 27        | 1020      | 3940                                      | 65        | 1020      | 1700       | 10        | 540       |
| 13,5                | 4360                                      | 29        | 1049      | 4280                                      | 72        | 1049      | 1760       | 11        | 569       |
| 18,0                | 4530                                      | 31        | 1077      | 4650                                      | 77        | 1077      | 1810       | 12        | 597       |
| 22,5                | 4730                                      | 33        | 1105      | 5070                                      | 84        | 1105      | 1880       | 13        | 625       |
| 27,0                | 4950                                      | 35        | 1133      | 5530                                      | 89        | 1133      | 1960       | 14        | 653       |
| 31,5                | 5200                                      | 37        | 1162      | 6050                                      | 96        | 1162      | 2040       | 15        | 682       |
| 36,0                | 5480                                      | 39        | 1190      | 6630                                      | 101       | 1190      | 2130       | 16        | 709       |
| 40,5                | 5800                                      | 41        | 1218      | 7280                                      | 108       | 1218      | 2240       | 17        | 738       |
| 45,0                | 6010                                      | 44        | 1261      | 7820                                      | 117       | 1261      | 2330       | 19        | 782       |
| 49,5                | 6330                                      | 46        | 1293      | 8520                                      | 124       | 1293      | 2440       | 20        | 813       |
| 54,0                | 6690                                      | 48        | 1326      | 9290                                      | 131       | 1326      | 2560       | 22        | 845       |
| 58,5                | 7150                                      | 58        | 1661      | 10140                                     | 139       | 1357      | 2690       | 23        | 878       |
| 63,0                | 7591                                      | 60        | 1701      | 10980                                     | 146       | 1398      | 2830       | 24        | 917       |

## Attention! Tower configuration with basis tower BT 29

|      |      |    |      |       |     |      |      |    |      |
|------|------|----|------|-------|-----|------|------|----|------|
| 65,2 | 7420 | 62 | 1773 | 11120 | 153 | 1470 | 2850 | 25 | 990  |
| 69,7 | 7960 | 65 | 1819 | 12050 | 162 | 1516 | 3000 | 27 | 1036 |
| 74,2 | 8480 | 67 | 1866 | 13060 | 170 | 1562 | 3160 | 28 | 1083 |
| 78,7 | 9040 | 70 | 1911 | 14120 | 260 | 1608 | 3330 | 30 | 1129 |
| 83,2 | 9660 | 72 | 1959 | 15970 | 274 | 1655 | 3520 | 31 | 1175 |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |
|      |      |    |      |       |     |      |      |    |      |

962-4-030315-1E

**WOLFF 355 B**

## Static data

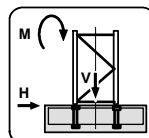
3 / 2

### 3.1.2 Foundation loads according to EN 13001 partial safety factors

Inclusive all dynamic factors, theory order II. taken into account for a stationary tower crane on a concrete foundation according to tower configuration without climbing drive

**M** = moment    **H** = horizontal force    **V** = vertical load

Permanent effective moment = **2800 kNm**



## Foundation loads

**jib 45 m - 50 m**

[illegible]

**WOLFF 355 B**

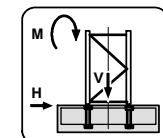
## Static data

3 / 3

### 3.1.3 Foundation loads according to EN 13001 partial safety factors

Inclusive all dynamic factors, theory order II. taken into account  
for a stationary tower crane on a concrete foundation  
according to tower configuration without climbing drive

**M** = moment    **H** = horizontal force    **V** = vertical load

Permanent effective moment = **2800 kNm**

## Foundation loads

**jib 55 m - 60 m**

[illegible]

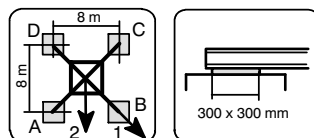
**WOLFF 355 B**

## Static data

3 / 5

#### 3.2.1.1 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030316-1E

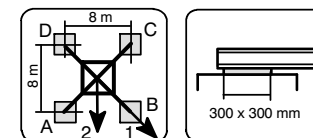
**WOLFF 355 B**

## Static data

3 / 6

### 3.2.1.2 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030316-2E

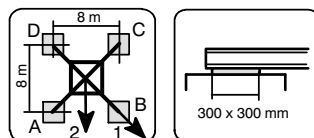
**WOLFF 355 B**

## Static data

3 / 7

### 3.2.1.3 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030316-3E

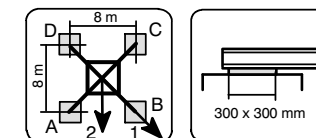
**WOLFF 355 B**

## Static data

3 / 8

#### 3.2.1.4 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

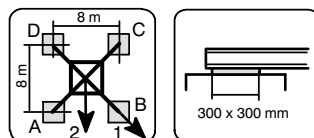
[illegible]

962-4-030316-4E



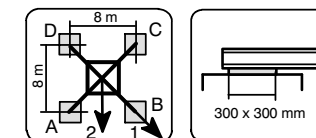
### 3.2.1.5 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

### 3.2.1.6 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

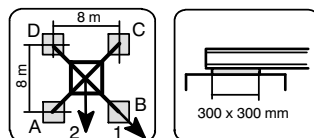
**WOLFF 355 B**

## Static data

3 / 11

### 3.2.1.7 Centerballast and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

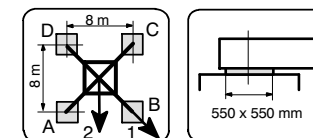
[illegible]**WOLFF 355 B**

## Static data

3 / 12

### 3.2.2.1 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

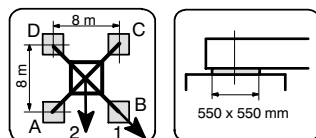
**WOLFF 355 B**

## Static data

3 / 13

### 3.2.2.2 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

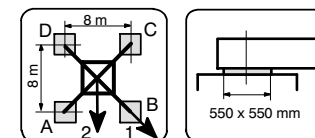
[illegible]**WOLFF 355 B**

## Static data

3 / 14

### 3.2.2.3 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

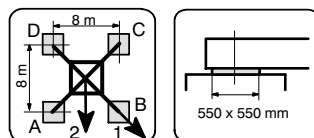
**WOLFF 355 B**

## Static data

3 / 15

#### 3.2.2.4 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

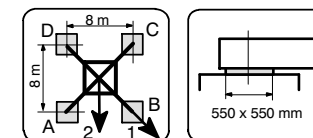
[illegible]**WOLFF 355 B**

## Static data

3 / 16

### 3.2.2.5 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

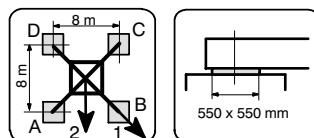
**WOLFF 355 B**

## Static data

3 / 17

### 3.2.2.6 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030317-6E

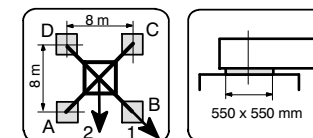
**WOLFF 355 B**

## Static data

3 / 18

### 3.2.2.7 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030317-7E

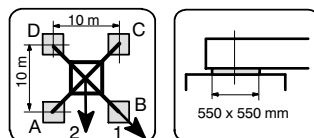
**WOLFF 355 B**

## Static data

3 / 19

### 3.2.3.1 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

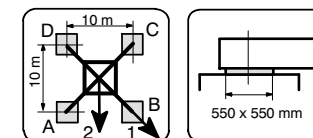
[illegible]**WOLFF 355 B**

## Static data

3 / 20

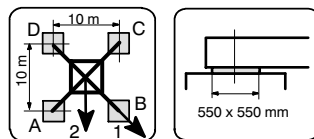
### 3.2.3.2 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

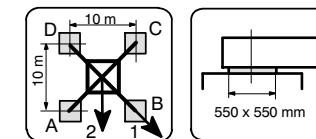
### 3.2.3.3 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

#### 3.2.3.4 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

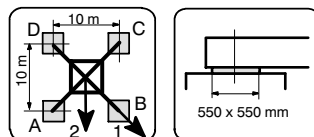
**WOLFF 355 B**

## Static data

3 / 23

### 3.2.3.5 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030318-5E

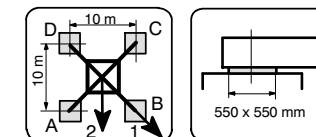
**WOLFF 355 B**

## Static data

3 / 24

### 3.2.3.6 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

962-4-030318-6E



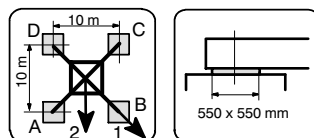
**WOLFF 355 B**

## Static data

3 / 25

### 3.2.3.7 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame  
without climbing drive

[illegible]

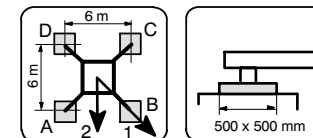
**WOLFF 355 B**

## Static data

3 / 26

#### 3.3.1.1 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

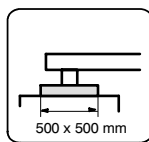
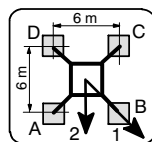
**WOLFF 355 B**

## Static data

3 / 27

### 3.3.1.2 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030319-2E

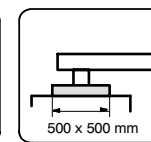
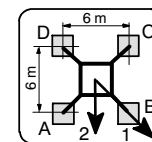
**WOLFF 355 B**

## Static data

3 / 28

### 3.3.1.3 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030319-3E

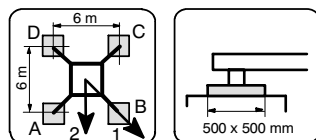
**WOLFF 355 B**

## Static data

3 / 29

#### 3.3.1.4 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030319-4E

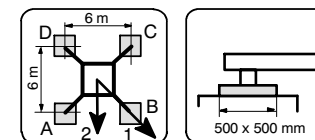
**WOLFF 355 B**

## Static data

3 / 30

### 3.3.1.5 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030319-5E

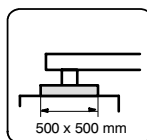
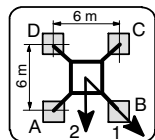
**WOLFF 355 B**

## Static data

3 / 31

### 3.3.1.6 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030319-6E

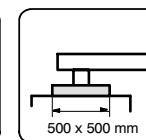
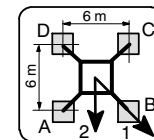
**WOLFF 355 B**

## Static data

3 / 32

### 3.3.1.7 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030319-7E

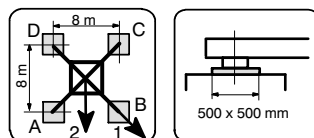
**WOLFF 355 B**

## Static data

3 / 33

### 3.3.2.1 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

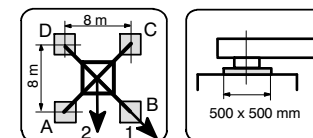
[illegible]**WOLFF 355 B**

## Static data

3 / 34

### 3.3.2.2 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

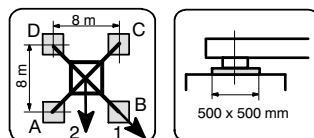
**WOLFF 355 B**

## Static data

3 / 35

### 3.3.2.3 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030320-3E

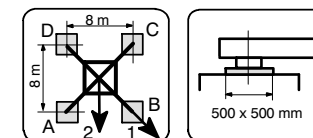
**WOLFF 355 B**

## Static data

3 / 36

#### 3.3.2.4 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030320-4E

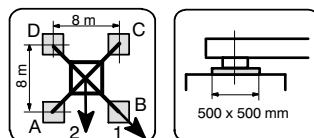
**WOLFF 355 B**

## Static data

3 / 37

### 3.3.2.5 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

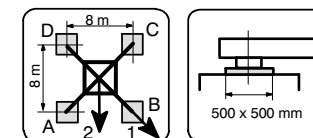
**WOLFF 355 B**

## Static data

3 / 38

### 3.3.2.6 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

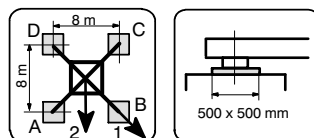
**WOLFF 355 B**

## Static data

3 / 39

### 3.3.2.7 Centerballasts and cornerloads acc. to EN 13001

for a stationary tower crane on a cross frame element  
without climbing drive

[illegible]

962-4-030320-7E

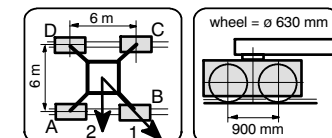
**WOLFF 355 B**

## Static data

3 / 40

#### 3.4.1.1 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030321-1E



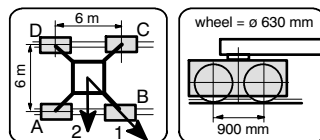
**WOLFF 355 B**

## Static data

3 / 41

#### 3.4.1.2 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030321-2E

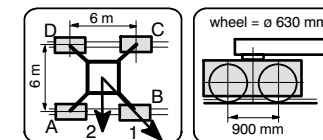
**WOLFF 355 B**

## Static data

3 / 42

#### 3.4.1.3 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030321-3E

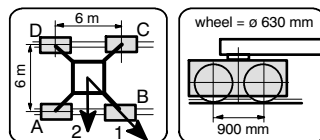
**WOLFF 355 B**

## Static data

3 / 43

#### 3.4.1.4 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030321-4E

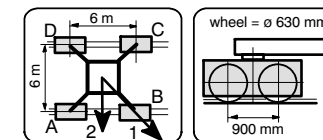
**WOLFF 355 B**

## Static data

3 / 44

#### 3.4.1.5 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030321-5E

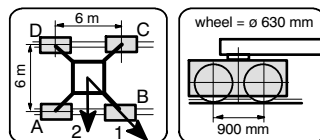
**WOLFF 355 B**

## Static data

3 / 45

#### 3.4.1.6 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

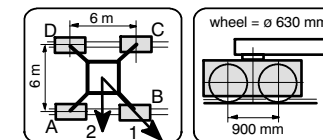
**WOLFF 355 B**

## Static data

3 / 46

#### 3.4.1.7 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

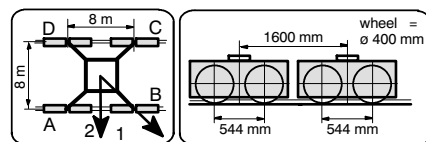
**WOLFF 355 B**

## Static data

3 / 47

#### 3.4.2.1 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

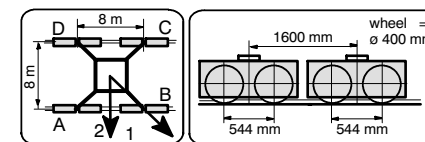
[illegible]**WOLFF 355 B**

## Static data

3 / 48

#### 3.4.2.2 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

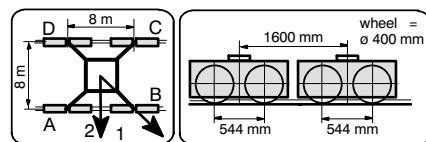
**WOLFF 355 B**

## Static data

3 / 49

#### 3.4.2.3 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

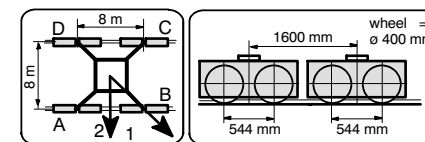
**WOLFF 355 B**

## Static data

3 / 50

#### 3.4.2.4 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

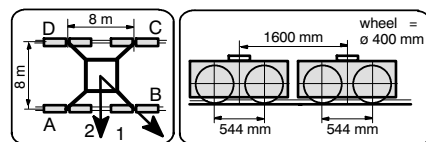
**WOLFF 355 B**

## Static data

3 / 51

#### 3.4.2.5 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030322-5E

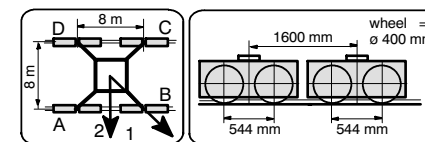
**WOLFF 355 B**

## Static data

3 / 52

#### 3.4.2.6 Centerballasts and cornerloads acc. to EN 13001

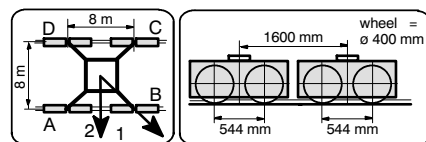
for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]

962-4-030322-6E

#### 3.4.2.7 Centerballasts and cornerloads acc. to EN 13001

for a travelling tower crane on an undercarriage  
without climbing drive

[illegible]