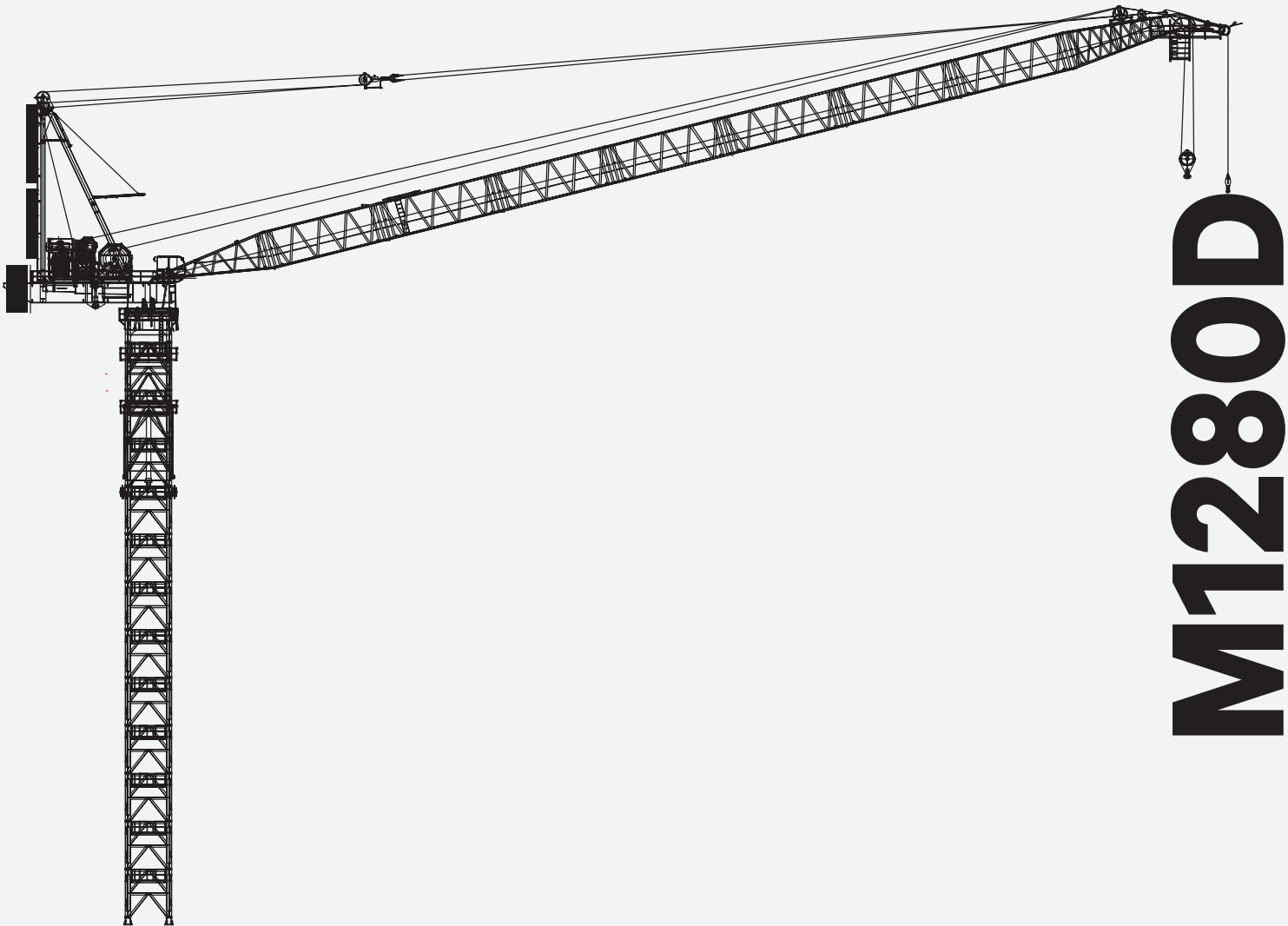




M1280D

TECHNICAL DATA SHEET

M1280D  
TOWER CRANE

| TYPICAL LOADS                                     |        |
|---------------------------------------------------|--------|
| LOAD                                              | RADIUS |
| 13.0T                                             | 80.0m  |
| 33.1T                                             | 60.0m  |
| 50.0T                                             | 45.0m  |
| 100.0T                                            | 25.0m  |
| 132.0T                                            | 20.0m  |
| 150.0T                                            | 17.8m  |
| AUX. HOIST                                        |        |
| LOAD                                              | RADIUS |
| 13.2T                                             | 83.9m  |
| 16.0T                                             | 77.8m  |
| MAXIMUM ALLOWABLE SERVICE WIND<br>SPEED OF 20 m/s |        |



COMPATIBLE WITH  
100% RENEWABLE  
DIESEL (HVO100)



# M1280D RADIUS & CAPACITY (METRIC UNITS - WITH AUX. HOIST)

| Boom Length | Max Rad.<br>for Max WLL | Min Rad. | WLL at<br>Min Rad. | 1 FALL                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Max Rad. | WLL at<br>Max Rad. |
|-------------|-------------------------|----------|--------------------|-------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------------------|
|             |                         |          |                    | Radius (metres) & Capacity (tonnes) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |                    |
| (m)         | (m)                     | (m)      | (T)                | 7.5                                 | 10.0 | 15.0 | 20.0 | 25.0 | 30.0 | 35.0 | 40.0 | 42.5 | 45.0 | 47.5 | 50.0 | 52.5 | 55.0 | 57.5 | 60.0 | 65.0 | 70.0 | 75.0 | 80.0 | (m)      | (T)                |
| 82.6        | 27.5                    | 8.2      | 50.0               | -                                   | 50.0 | 50.0 | 50.0 | 50.0 | 48.4 | 45.0 | 41.2 | 39.5 | 37.8 | 36.0 | 34.2 | 32.4 | 30.6 | 28.8 | 27.0 | 23.5 | 20.0 | 16.5 | 13.0 | 81.2     | 12.1               |
| 73.4        | 40.0                    | 7.4      | 50.0               | 50.0                                | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 48.0 | 47.0 | 43.9 | 40.8 | 38.1 | 35.3 | 32.7 | 30.0 | 25.0 | 20.9 | -    | -    | 72.3     | 18.8               |
| 64.2        | 42.9                    | 6.7      | 50.0               | 50.0                                | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 48.0 | 44.9 | 41.8 | 39.2 | 36.6 | 33.8 | 31.0 | -    | -    | -    | -    | 63.4     | 27.2               |
| 55.0        | 45.0                    | 6.0      | 50.0               | 50.0                                | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 45.8 | 42.5 | 38.0 | -    | -    | -    | -    | -    | -    | -    | 54.5     | 34.4               |
| 45.8        | 42.5                    | 5.7      | 50.0               | 50.0                                | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 47.0 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 45.6     | 46.3               |
| 36.6        | 36.8                    | 4.9      | 50.0               | 50.0                                | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 36.8     | 50.0               |

| Boom Length | Max Rad.<br>for Max WLL | Min Rad. | WLL at<br>Min Rad. | 2 FALL                              |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Max Rad. | WLL at<br>Max Rad. |
|-------------|-------------------------|----------|--------------------|-------------------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------------------|
|             |                         |          |                    | Radius (metres) & Capacity (tonnes) |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |                    |
|             |                         |          |                    | (m)                                 | (m)   | (m)   | (T)   | 7.5   | 10.0 | 15.0 | 20.0 | 25.0 | 30.0 | 35.0 | 40.0 | 42.5 | 45.0 | 47.5 | 50.0 | 52.5 | 55.0 | 57.5 | 60.0 |          |                    |
| 73.4        | -                       | 7.4      | 80.0               | 80.0                                | 80.0  | 80.0  | 80.0  | 80.0  | 72.0 | 64.5 | 54.5 | 50.8 | 47.0 | 43.9 | 40.8 | 38.1 | 35.3 | 32.7 | 30.0 | 25.0 | 20.9 | -    | -    | 72.0     | 19.1               |
| 64.2        | 24.5                    | 6.7      | 100.0              | 100.0                               | 100.0 | 100.0 | 100.0 | 98.1  | 79.0 | 65.5 | 55.5 | 51.8 | 48.0 | 44.9 | 41.8 | 39.2 | 36.6 | 33.8 | 31.0 | -    | -    | -    | -    | 63.1     | 27.5               |
| 55.0        | 24.7                    | 6.0      | 100.0              | 100.0                               | 100.0 | 100.0 | 100.0 | 98.9  | 80.2 | 66.8 | 56.8 | 52.9 | 49.0 | 45.8 | 42.5 | 38.0 | -    | -    | -    | -    | -    | -    | -    | 54.2     | 34.9               |
| 45.8        | 24.9                    | 5.3      | 100.0              | 100.0                               | 100.0 | 100.0 | 100.0 | 99.6  | 81.2 | 67.9 | 57.0 | 52.0 | 47.0 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 45.3     | 46.4               |
| 36.6        | 25.0                    | 4.6      | 100.0              | 100.0                               | 100.0 | 100.0 | 100.0 | 100.0 | 81.9 | 65.0 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 36.4     | 60.2               |

| Boom Length | Max Rad.<br>for Max WLL | Min Rad. | WLL at<br>Min Rad. | 3 FALL                              |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Max Rad. | WLL at<br>Max Rad. |      |
|-------------|-------------------------|----------|--------------------|-------------------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------------------|------|
|             |                         |          |                    | Radius (metres) & Capacity (tonnes) |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |                    |      |
|             |                         |          |                    | 7.5                                 | 10.0  | 15.0  | 20.0  | 25.0  | 27.5 | 30.0 | 32.5 | 35.0 | 37.5 | 40.0 | 42.5 | 45.0 | 47.5 | 50.0 | 52.5 | 55.0 | 57.5 | 60.0 |          |                    | 62.5 |
| (m)         | (m)                     | (m)      | (T)                | 7.5                                 | 10.0  | 15.0  | 20.0  | 25.0  | 27.5 | 30.0 | 32.5 | 35.0 | 37.5 | 40.0 | 42.5 | 45.0 | 47.5 | 50.0 | 52.5 | 55.0 | 57.5 | 60.0 | 62.5     | (m)                | (T)  |
| 64.2        | 13.3                    | 6.2      | 150.0              | 150.0                               | 150.0 | 142.4 | 123.0 | 96.9  | 85.8 | 76.5 | 68.7 | 61.9 | 56.1 | 51.0 | 46.6 | 42.6 | 39.0 | 35.7 | 32.8 | 30.1 | 27.7 | 25.5 | 23.6     | 63.4               | 22.9 |
| 55.0        | 17.6                    | 5.5      | 150.0              | 150.0                               | 150.0 | 150.0 | 129.2 | 98.6  | 87.5 | 78.2 | 70.4 | 63.7 | 57.8 | 52.8 | 48.3 | 44.4 | 40.8 | 37.7 | 34.9 | -    | -    | -    | -        | 54.5               | 32.8 |
| 45.8        | 17.7                    | 4.9      | 150.0              | 150.0                               | 150.0 | 150.0 | 130.7 | 99.6  | 89.0 | 79.8 | 71.9 | 65.2 | 59.4 | 54.4 | 50.0 | 46.1 | -    | -    | -    | -    | -    | -    | -        | 45.6               | 45.2 |
| 36.6        | 17.8                    | 4.2      | 150.0              | 150.0                               | 150.0 | 150.0 | 132.0 | 101.5 | 91.0 | 81.9 | 73.5 | 65.0 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -        | 36.7               | 59.2 |

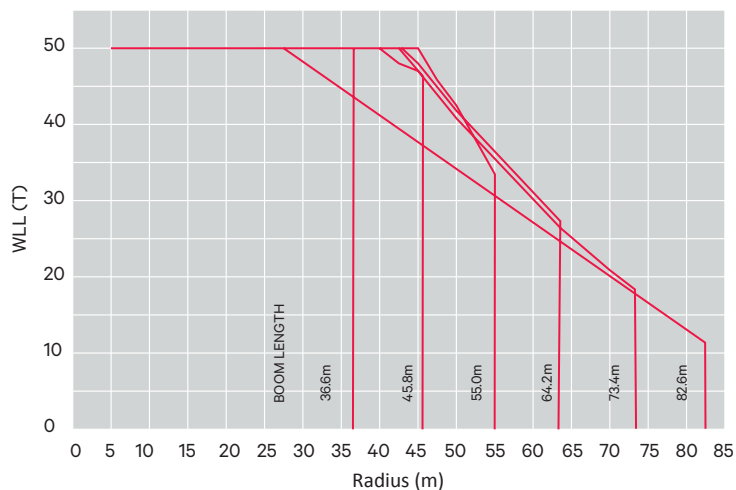
| Boom Length | Max Rad.<br>for Max WLL | Min Rad. | WLL at<br>Min Rad. | AUXILIARY HOIST - 1 FALL            |      |      |      |      |      |      |      |      |      |      |      |      |      | Max Rad. | WLL at<br>Max Rad. |
|-------------|-------------------------|----------|--------------------|-------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------------------|
|             |                         |          |                    | Radius (metres) & Capacity (tonnes) |      |      |      |      |      |      |      |      |      |      |      |      |      |          |                    |
|             |                         |          |                    | 10.0                                | 15.0 | 20.0 | 25.0 | 30.0 | 35.0 | 40.0 | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 |          |                    |
| (m)         | (m)                     | (m)      | (T)                |                                     |      |      |      |      |      |      |      |      |      |      |      |      |      | (m)      | (T)                |
| 82.6        | 77.8                    | 9.1      | 16.0               | 16.0                                | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 14.6 | 83.9     | 13.2               |
| 73.4        | 74.8                    | 8.4      | 16.0               | 16.0                                | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | -    | -    | 74.8     | 16.0               |
| 64.2        | 64.8                    | 7.6      | 16.0               | 16.0                                | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | -    | -    | -    | -    | 64.8     | 16.0               |
| 55.0        | 57.2                    | 6.9      | 16.0               | 16.0                                | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | -    | -    | -    | -    | -    | 57.2     | 16.0               |
| 45.8        | 48.4                    | 6.2      | 16.0               | 16.0                                | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | -    | -    | -    | -    | -    | -    | -    | 48.4     | 16.0               |
| 36.6        | 39.5                    | 5.5      | 16.0               | 16.0                                | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | -    | -    | -    | -    | -    | -    | -    | -    | 39.5     | 16.0               |

## NOTE:

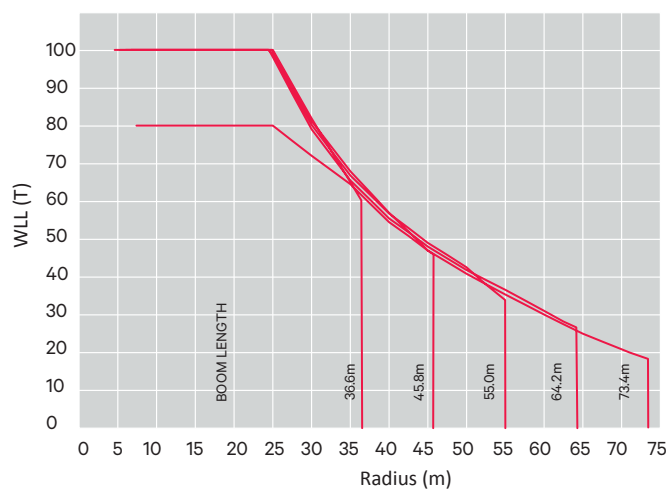
1. ON REMOVAL OF FLY JIB AND FLY HOOK 1.0 TONNE EXTRA CAPACITIES ALLOWED AT ALL RADII

# M1280D LOAD CHARTS (METRIC UNITS)

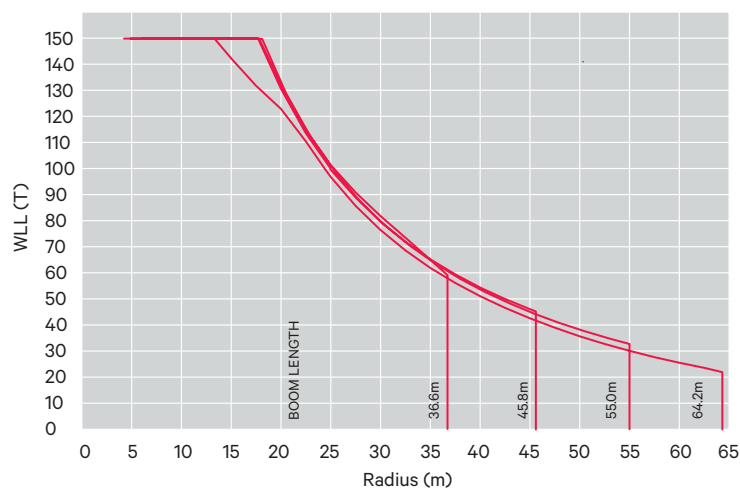
## 1 FALL



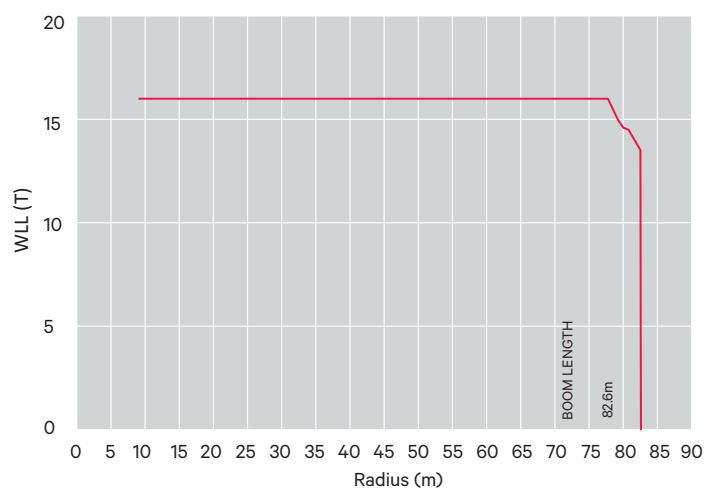
## 2 FALL



## 3 FALL

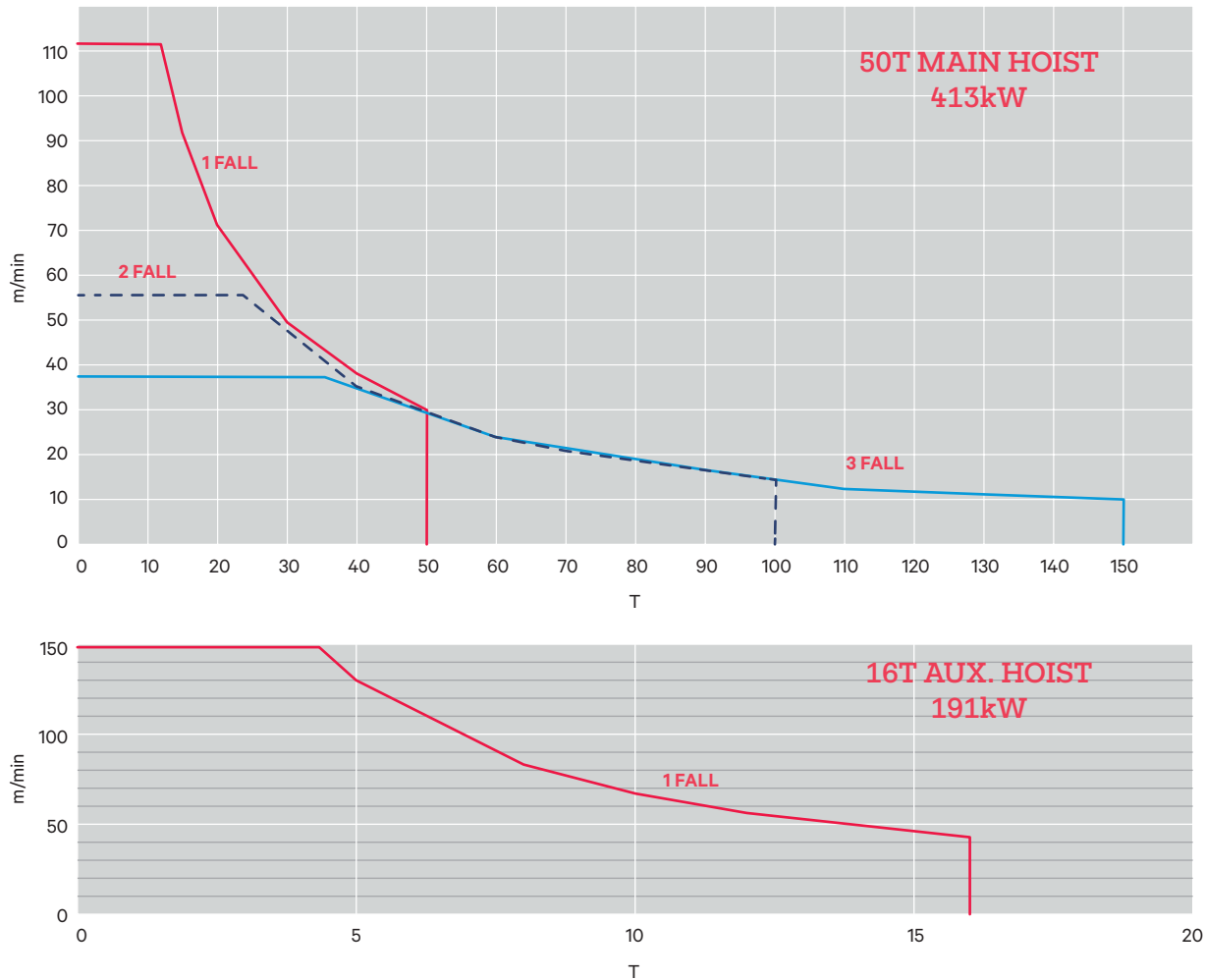


## AUX. 1 FALL 16T



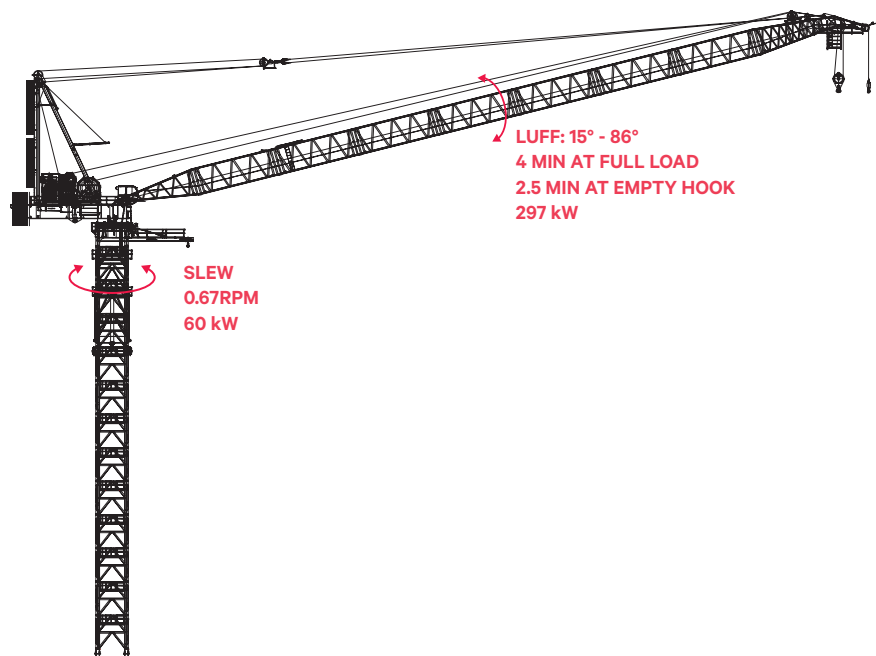
# M1280D SPEEDS

## HOIST SPEED



|               | LOAD (T) | SPEED (m/min) |
|---------------|----------|---------------|
| 1 FALL        | 11.9     | 110.6         |
|               | 15.0     | 90.3          |
|               | 20.0     | 69.8          |
|               | 30.0     | 48.0          |
|               | 40.0     | 36.6          |
|               | 50.0     | 29.5          |
| 2 FALL        | 23.4     | 55.3          |
|               | 40.0     | 34.5          |
|               | 60.0     | 23.7          |
|               | 70.0     | 20.5          |
|               | 90.0     | 16.1          |
|               | 100.0    | 14.6          |
| 3 FALL        | 35.2     | 36.9          |
|               | 60.0     | 22.9          |
|               | 90.0     | 15.7          |
|               | 110.0    | 13.0          |
|               | 130.0    | 11.1          |
|               | 150.0    | 9.7           |
| AUX. (1 FALL) | 4.3      | 148.3         |
|               | 5.0      | 129.9         |
|               | 8.0      | 83.2          |
|               | 10.0     | 67.1          |
|               | 12.0     | 56.3          |
|               | 14.0     | 47.5          |
|               | 16.0     | 42.7          |

## LUFF & SLEW SPEEDS

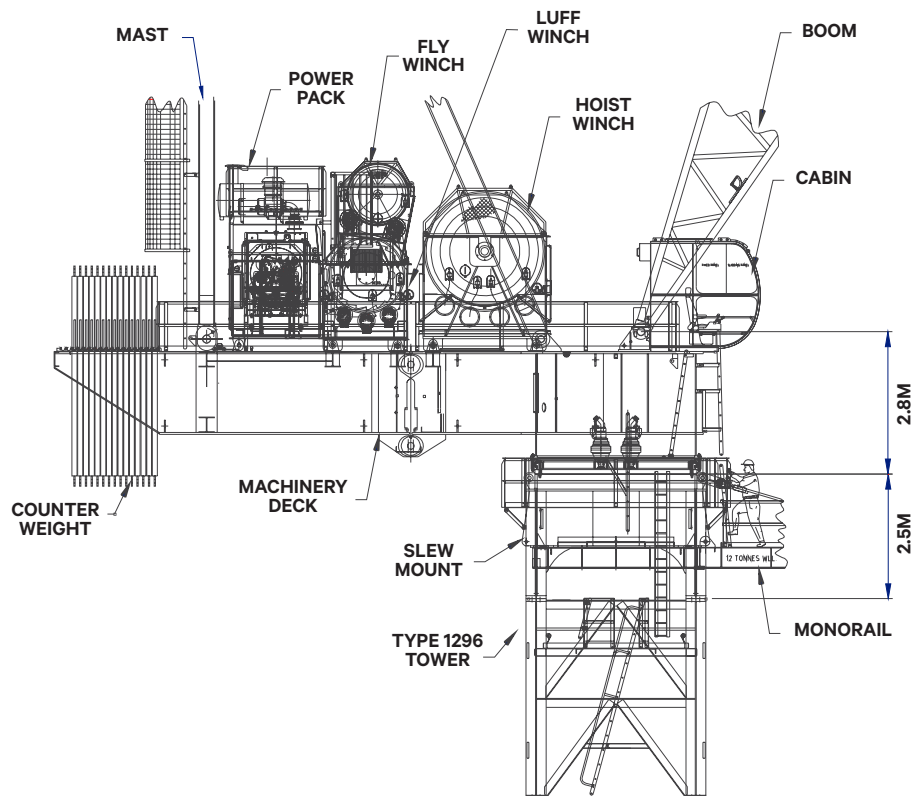




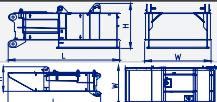
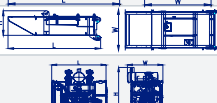
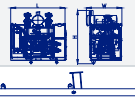
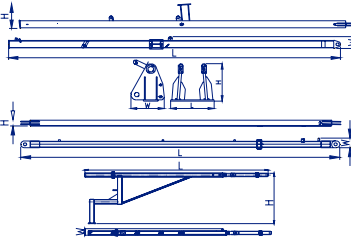
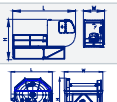
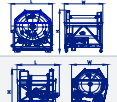
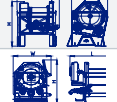
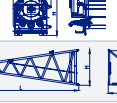
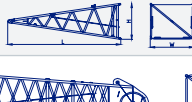
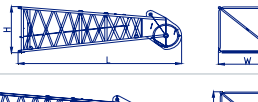
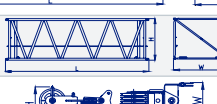
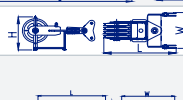
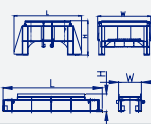
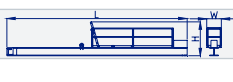
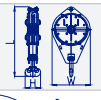
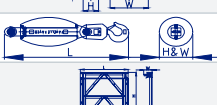
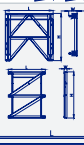
# M1280D GENERAL DIMENSIONS

## MACHINERY DECK ASSEMBLY

### M1280D



# M1280D TRANSPORTATION & ERECTION (Indicative for information only\*)

| ITEM | QTY                                                                  | DESCRIPTION                                                                             |                                                                                      | LENGTH<br>L (mm) | HEIGHT<br>H (mm) | WIDTH<br>W (mm) | WEIGHT<br>PER ITEM<br>(kg) |
|------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------|------------------|-----------------|----------------------------|
| 1    | 1                                                                    | SPLIT DECK-FRONT (INCL. SLEW DRIVE, PINS & HANDRAILS)                                   |    | 6130             | 2745             | 3796            | 17207                      |
| 2    | 1                                                                    | SPLIT DECK-REAR                                                                         |    | 7400             | 2190             | 3796            | 11440                      |
| 3    | 1                                                                    | POWERPACK (INCL. 850L OF OIL)                                                           |     | 3245             | 3695             | 2201.68         | 6092                       |
| 4    | 2                                                                    | MAST FRONT LEG                                                                          |    | 15659            | 1921             | 1034            | 6090                       |
|      | 1                                                                    | MAST HEAD                                                                               |                                                                                      | 1580             | 1503             | 1144            | 1522                       |
|      | 2                                                                    | MAST BACK LEG                                                                           |                                                                                      | 14671            | 352              | 390             | 2046                       |
|      | 2                                                                    | BUFFER (2 PARTS)                                                                        |                                                                                      | 5937             | 224              | 1779            | 344                        |
|      | MAST ASSEMBLY (INC. SHEAVES, HEAD PIN, LADDERS,BUFFER AND PLATFORMS) |                                                                                         |                                                                                      |                  |                  |                 | 19221                      |
| 5    | 1                                                                    | CABIN & PLATFORM ASSEMBLY                                                               |     | 3538             | 3900             | 1788.8          | 2288                       |
| 6    | 1                                                                    | MAIN HOIST WINCH ASSY (EMPTY DRUM)                                                      |     | 2785             | 3337             | 2683.2          | 16281                      |
| 7    | 1                                                                    | AUX. HOIST WINCH ASSY (EMPTY DRUM)                                                      |    | 1817             | 2062             | 1612            | 3902                       |
| 8    | 1                                                                    | LUFF WINCH ASSY (EMPTY DRUM)                                                            |    | 2370             | 2481             | 2080            | 5958                       |
| 9    | 1                                                                    | BOOM BOTTOM 9.1m (INC. WALKWAY&PINS)                                                    |   | 9323             | 3196             | 3744            | 2582                       |
| 10   | 1                                                                    | BOOM TOP 9.1m (Without Fly)<br>(INC. DEFLECTOR, SHEAVES & PINS)<br>(PENDANT & PLATFORM) |  | 10138            | 3237             | 3744            | 6509                       |
|      |                                                                      | BOOM TOP 9.1m (With Fly)<br>(INC. DEFLECTOR, SHEAVES & PINS)<br>(PENDANT & PLATFORM)    |  | 12635            | 3237             | 3744            | 7283                       |
| 11   | 7                                                                    | BOOM EXTENSION 9.2m AND PENDANT BARS<br>(BRIDLE PLATFORM 443 kg)                        |  | 9336             | 3196             | 3744            | 3450<br>(3910)             |
| 14   | 1                                                                    | BRIDLE                                                                                  |   | 2867             | 1447             | 1625.52         | 2668                       |
| 15   | 1                                                                    | SLEW MOUNT (INCL. PLATFORMS 760Kg)                                                      |   | 4795             | 2584             | 3909.36         | 15714                      |
|      | 1                                                                    | SLEW RING(INCL. BOLTS)                                                                  |                                                                                      | 3404 DIA         | 200              |                 | 2930                       |
|      | 1                                                                    | MONORAIL                                                                                |                                                                                      | 3440             | 632              | 1075.36         | 1060                       |
|      | Total                                                                |                                                                                         |                                                                                      |                  |                  |                 | 20492                      |
| 16   | 1                                                                    | EXTERNAL CLIMBER                                                                        |                                                                                      | 11745            | 2000             | 4505            | 33280                      |
| 17   | 1                                                                    | MONORAIL                                                                                |  | 7318             | 2084             | 1048.32         | 3372                       |
| 18   | 15                                                                   | COUNTERWEIGHT                                                                           |                                                                                      | 4410             | 100              | 3236            | 7831                       |
| 19   | 1                                                                    | HOOK - 3/2 FALL (150/100T)                                                              |   | 3250             | 470              | 1456            | 4680                       |
| 20   | 1                                                                    | HOOK - 1 FALL (16T)                                                                     |  | 1493             | 400              | 416             | 514                        |
| 21   | 2                                                                    | MAIN PANEL                                                                              |   | 3600             | 4000             | 672.88          | 4067                       |
|      | 2                                                                    | SIDE PANEL                                                                              |                                                                                      | 2800             | 3940             | 224.64          | 804                        |
|      | 1                                                                    | DIAGONAL BRACE                                                                          |                                                                                      | 3868             | 150              | 156             | 110                        |
|      | TOWER SECTION<br>(INC. LADDER, HAND RAIL, PLATFORM)                  |                                                                                         |                                                                                      | 3600             | 4006             | 3744            | 10246                      |
| 22   | 1                                                                    | HOIST ROPE (Ø54mm) @ 14.15kg/m                                                          | 400m                                                                                 |                  |                  |                 | 5886                       |
| 23   | 1                                                                    | FLY ROPE (Ø32mm) @ 4.95 kg/m                                                            | 300m                                                                                 |                  |                  |                 | 1544                       |
| 24   | 1                                                                    | LUFF ROPE (Ø42mm) @ 8.56 kg/m                                                           | 275m                                                                                 |                  |                  |                 | 2448                       |

\*WEIGHTS CAN VARY BY INDIVIDUAL CRANE. PLEASE CONTACT US FOR FURTHER INFORMATION.

Due to continuing product development Favelle Favco reserves the right to alter specifications of its products as appropriate.