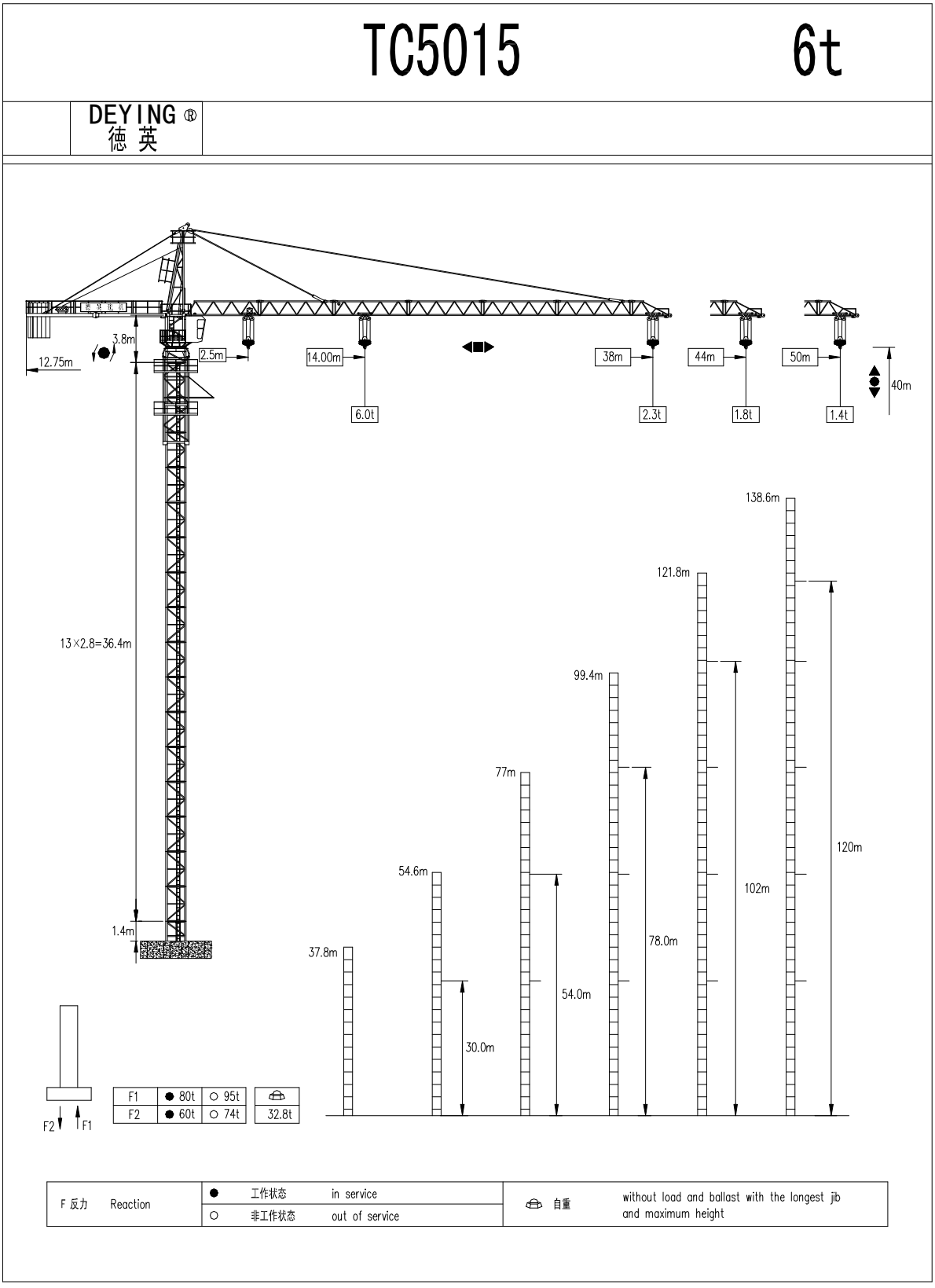
# Tower Crane QTZ80B(TC5015)



# 载荷特性 Load Capacity

起重臂 jib (50m)

| R (m) | 2.5-15.00 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q (t) | 6.00 | 5.60 | 4.89 | 4.33 | 3.88 | 3.51 | 3.19 | 2.92 | 2.69 | 2.48 | 2.31 | 2.15 | 2.00 | 1.88 | 1.76 | 1.66 | 1.57 | 1.48 | 1.40 |
| Q (t) | 3.00 | | | | | | | 3.02 | 2.79 | 2.58 | 2.41 | 2.25 | 2.10 | 1.98 | 1.86 | 1.76 | 1.67 | 1.58 | 1.50 |

起重臂 jib (44m)

| R (m) | 2.5-16.00 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q (t) | 6.00 | 5.24 | 4.65 | 4.16 | 3.76 | 3.43 | 3.14 | 2.89 | 2.68 | 2.49 | 2.32 | 2.17 | 2.03 | 1.91 | 1.80 |
| Q (t) | 3.00 | | | | | | | | 2.78 | 2.59 | 2.42 | 2.27 | 2.13 | 2.01 | 1.90 |

起重臂 jib (38m)

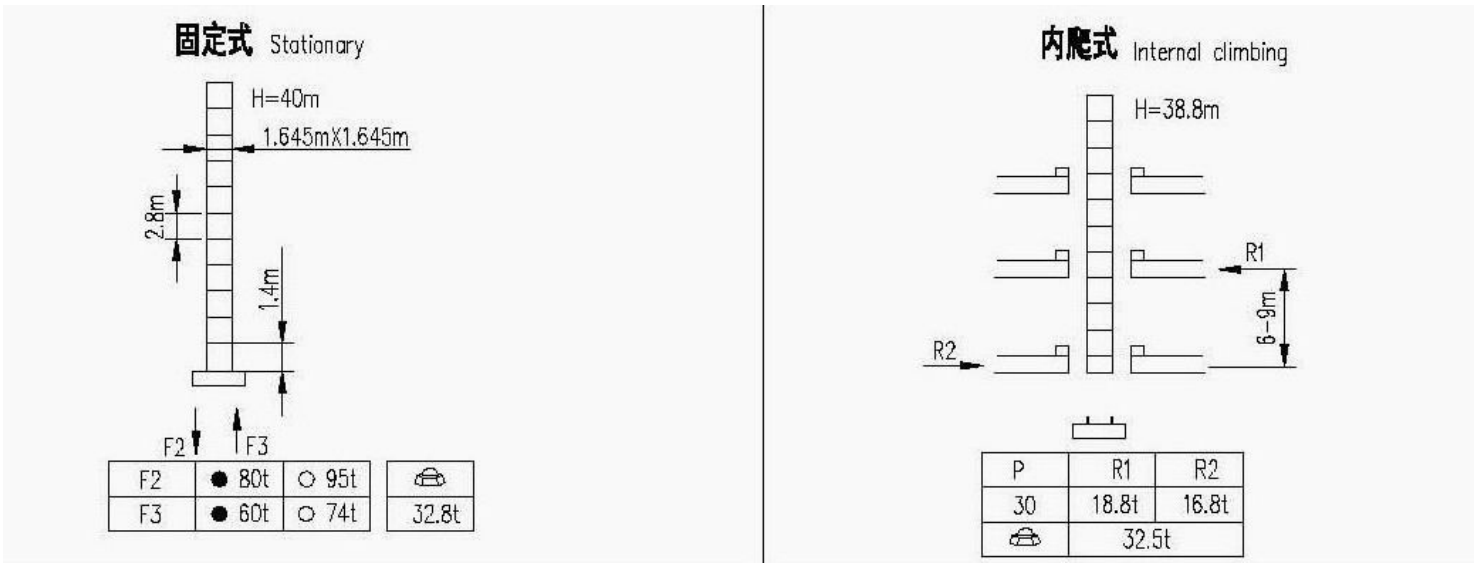
| R (m) | 2.5-16.74 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q (t) | 6.00 | 5.53 | 4.90 | 4.40 | 3.98 | 3.62 | 3.32 | 3.06 | 2.83 | 2.63 | 2.46 | 2.30 |
| Q (t) | 3.00 | | | | | | | | 2.93 | 2.73 | 2.56 | 2.40 |

# 机构特性 Mechanism specification

| 起升 Hoisting | | | | | | | KW N.m | |
|---|---|---|---|---|---|---|---|---|
| m/min | 80 | 40 | 9 | 40 | 20 | 4.5 | 24/24/5.4 | 320m |
| t | 1.5 | 3.0 | 3.0 | 3 | 6.0 | 6.0 | | |

| | | | |
|---|---|---|---|
| 变幅 Trolleying | m/min | 40/20 | 3.3/2.2 |
| 回转 Slewing | r/min | 0~0.6 | 2×2.2 (2×55) |
| 顶升 Climbing | m/min | 0.6 | 5.5 |
| 供电容量 Necessary electric power | | | 37.2 |
| 电源 Main supply | | ~380V/50Hz | |

| 臂长 Jib length (m) | 50 | 44 | 38 |
|---|---|---|---|
| 平衡重 Counterbalance (m) | 12.0 | 10.2 | 9.1 |




## Main Technical Parameter

| Item | | Unit | Parameter | | | |
|---|---|---|---|---|---|---|
| Metric lifting moment | | KN.M | 630 | | | |
| Max. lifting capacity | | T | 6 | | | |
| Tip load capacity | | T | 1.5 | | | |
| Working radius | | M | 2.5~50 | | | |
| Hoisting Height | Independent | M | 40 | | | |
| | Attachment | M | 138 | | | |
| Hoisting Speed | Fall | | 2 | | 4 | |
| | Hoisting Speed | M/min | 0~40 | 0~80 | 0~20 | 0~40 |
| | Max Lifting Capacity | T | 3.0 | 1.5 | 6.0 | 3.0 |
| Slewing Speed | | R/min | 0~0.6 | | | |
| Trolleying Speed | | M/min | 40/20 | | | |
| Climbing Speed | | M/min | 0.56 | | | |
| Weight | Independent Structure | T | 30.0 | | | |
| | Counter-Balance | T | 12.50 | | | |
| | Stationary Structure | T | | | | |
| Max. Slewing Radius | | M | 50 | | | |
| Counter-Jib Slewing Radius | | M | 12.75 | | | |
| Max. Working Wind Speed | | M/s | 20 | | | |
| Climbing Wind Speed ≤ | | M/s | 13 | | | |
| Working Environment Temperature | | ℃ | -20~+40 | | | |

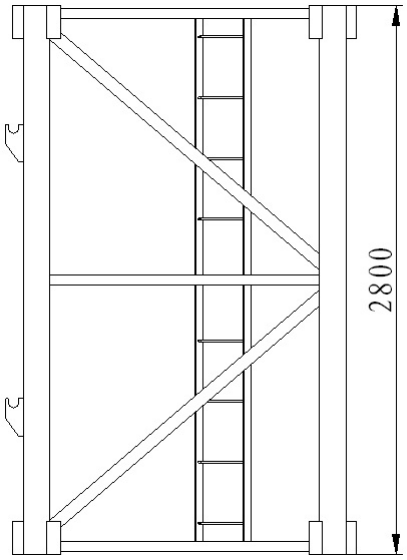
## Tower Crane Electronic Parts

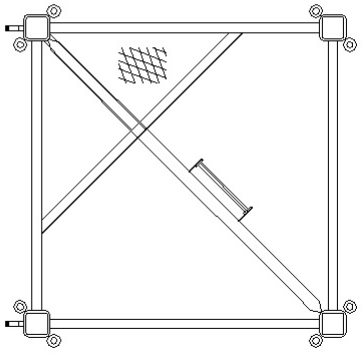
| | | | | |
|---|---|---|---|---|
| Creepage recloser | Breaker | Plastic shell breaker | Main AC contactor | Schneider electric |
| Relay | Time relay | Medium relay | Bridge unit | |
| Transducer | Moment spacing swish | autotransformer | Coder feekback | |
| DC power supply | Kenotron | Avail adapter socket | Retainer adapter | |

## Main Parts Parameter

| Item | | | | Parameter |
|---|---|---|---|---|
| Hoisting Mechanism | Electromotor | Model | | YZTD225$L_2$-4/8/32 |
| | | Power | Kw | 24/24/5.4KW |
| | Reducer | Model | | JD566 |
| | Steel rope | | | 12NAT6X19W |
| Slewing Mechanism | Electromotor | Model | | YTLEJ112L-55-4 |
| | | Power | N.m | 2x55 |
| | | Turning rate | R/min | 960 |
| | Reducer | Model | | XX4-80.195C |
| Trolleying Mechanism | Electromotor | Model | | YDEJ132S-4/8 |
| | | Power | Kw | 8 |
| | | Turning rate | R/min | 700/1450 |
| | Reducer | Model | | BXJ45 |
| | | Speed Ratio | | i=45 |
| | Steel rope | | | 8NAT6X19W |
| | | Power | Kw | 5.5 |
| | Hydraulic pump | Cylinder model | | HSGK01-169/110BE |
| | | Route of travel | mm | 1600 |
| | Discharge of Hydraulic pump | | L/min | 11 |
| | Working Pressure | | MPa | 20 |

## Main Metal Parts List

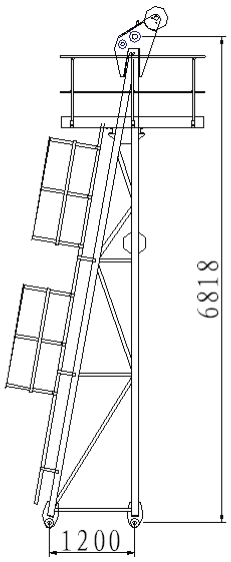


| Mast Section | External Dimensions<br>1645×1645<br>Overall Height:2800 |
|---|---|
| The mast composition consists of a quantity of standard sections. The number of standard sections is determined by the height of the crane. Standard section consists of main chord, horizontal brace and tilting brace, which are welded to a spatial trussing. The length of each standard section is 2.8m, the section size is 1.645×1..645m | |

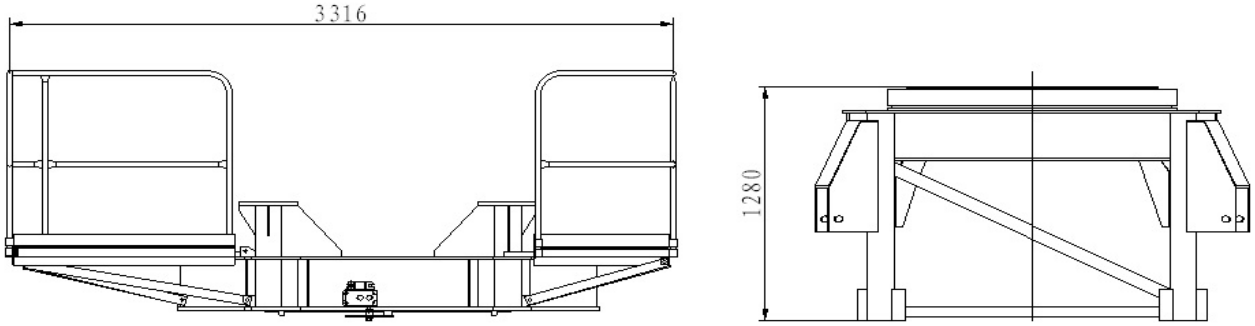
### Jib

The hoisting jib is non-uniform section and isosceles triangle type, the upper and lower chord is a square tube welded by two angle bars, the tilted brace and horizontal brace are made of seamless tube. Both the upper and the outside surface of the lower chord are kept horizontal and vertical, thus, the lower chord can also be used as a rail for jib trolley

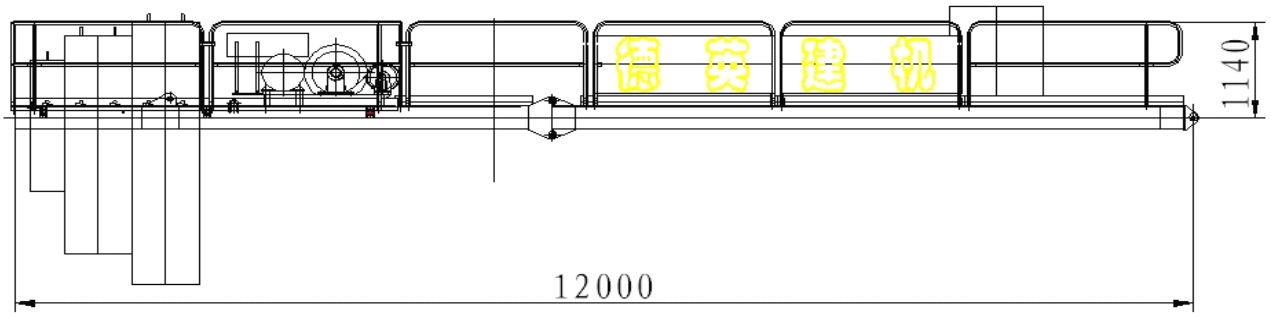



## Tower Cap

The cat head is a triangular spatial trussing. The front and rear chord is welded as a square tube by two angle bars, the brace of which is made of the seamless tube. Its bottom is connected with the slewing tower by pin roll. The front and rear side of which are installed with pulling plates that hinged to tie bar of the hoisting jib and the counter jib respectively. The upper part of the cat head has a platform, the installation person can stand on it to disassemble the crane and thread the hoisting wire rope.

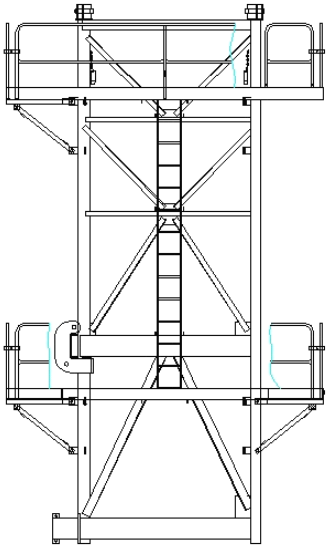



Upper and lower pedestal are case structure welded by plate.



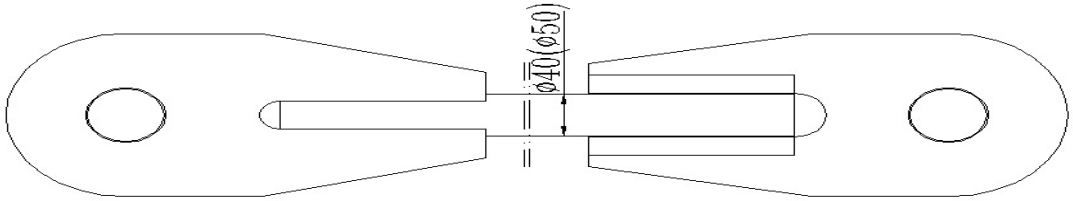

## Counter jib

The counter jib is a spatial trussing composed of four angle bars.
The hoisting mechanism locates at the rear of the counter jib and the counter blocks are located at the tail.



## Frame

Space frame structure welded by channel steel, angle steel and steel board




## Jib Tie Bar

Tie bar of the jib is welded by the solid round steel.