



Made in Germany



# WT 1305L *e.tronic*

## Product Information

Radius [m]			15	30	36	42	48	54	60		
Jib length [m]	60	7.0 - 22.0	 64.0	64.0	45.4	36.9	30.9	26.3	22.8	20.0	Load capacity [t]
	54	6.0 - 22.5		64.0	46.4	37.6	31.3	26.6	23.0		
	48	5.0 - 23.0		64.0	47.4	38.3	31.8	27.0			
	42	4.5 - 23.5		64.0	48.5	39.1	32.5				
	36	4.0 - 24.0		64.0	49.9	40.5					

The loads relate to 45 m hook travel. For longer hook travel distances, the loads are reduced by the additional weight of the hoist rope (with 4-rope mode = 16.0 kg/m hook travel).

Radius [m]			15	30	36	42	48	54	60	66	72		
Jib length [m]	72	9.0 - 24.5	 48.0	48.0	39.0	32.3	27.5	23.9	21.1	18.9	17.0	15.5	Load capacity [t]
	66	8.0 - 25.0		48.0	39.8	33.0	28.1	24.5	21.6	19.4	17.5		
	60	7.0 - 28.0		48.0	44.5	36.5	30.8	26.5	23.1	20.5			
	54	6.0 - 30.0		48.0	48.0	38.8	32.2	27.3	23.5				
	48	5.0 - 30.5		48.0	48.0	39.4	32.6	27.5					
	42	4.5 - 31.5		48.0	48.0	40.5	33.0						
	36	4.0 - 32.0		48.0	48.0	41.0							

The loads relate to 45 m hook travel. For longer hook travel distances, the loads are reduced by the additional weight of the hoist rope (with 3-rope mode = 12.0 kg/m hook travel).

Radius [m]			15	30	36	42	48	54	60	66	72	78		
Jib length [m]	78	10.0 - 35.0	 32.0	32.0	32.0	31.1	26.6	23.2	20.5	18.4	16.7	15.2	14.0	Load capacity [t]
	72	9.0 - 37.0		32.0	32.0	32.0	28.1	24.4	21.6	19.4	17.5	16.0		
	66	8.0 - 38.0		32.0	32.0	32.0	28.9	25.1	22.2	19.9	18.0			
	60	7.0 - 39.0		32.0	32.0	32.0	29.8	26.1	23.3	21.0				
	54	6.0 - 40.0		32.0	32.0	32.0	30.5	26.8	24.0					
	48	5.0 - 41.0		32.0	32.0	32.0	31.3	28.0						
	42	4.5 - 42.0		32.0	32.0	32.0	32.0							
	36	4.0 - 36.0		32.0	32.0	32.0								

The loads relate to 45 m hook travel. For longer hook travel distances, the loads are reduced by the additional weight of the hoist rope (with 2-rope mode = 8.0 kg/m hook travel).

Loads are reduced by up to 3.0t with an integrated auxiliary hoist.

## The WT 1305L *e.tronic* tower crane with luffing jib. Mighty. Convertible. And unshakeable.

### Design.

#### Stability rules.

The WT 1305L *e.tronic* is a mighty crane. After all, it's from the same family as the WT 2405L *e.tronic*. And it's a well-known fact that it's Europe's most powerful luffing jib crane. Here, too, a unique pendular ballast system reduces the torque on the tower of the WT 1305L *e.tronic*. The pendular ballast ensures the jib has the correct tension. And since stability is not a minor matter, the cross-section of the jib is rectangular rather than triangular.

### Modular system.

#### Prepared for anything at all times.

The WT 1305L *e.tronic*'s cleverly designed modular system can match the jib length to the task in hand – from 36 m to 78 m in six-metre lengths. Things really take off when you choose the 5 m long runner head – at maximum jib length a load of up to 4 t can be lifted at a speed of up to 140 m per minute. The slewing unit can be assembled on the 3.3 m wide tower elements, which have a standard length of 5 m. As far as the base element is concerned, flexibility reigns – foundation anchors as well as stationary and mobile elements are available.

The real size of the WT 1305L *e.tronic* is demonstrated by its maximum freestanding tower height of 75 m, which you can realise with standard tower elements and can even exceed with with special wider tower elements if required. Just ask!

### Assembly.

#### A piece of cake.

The WT 1305L *e.tronic* also shows how useful it is if sections can be disconnected. By removing just a few pins the units are easily separated to achieve lower assembly weights if required. Moreover, hydraulic cylinders simplify the setting and extraction of the pins. The well-placed erection platforms make work easier wherever necessary. What's more, drawing in the hoist and luffing cable by means of a winch assembly is also 'a piece of cake'.

### Operator cab.

#### State of the art.

The spacious, side-mounted operator cab of the WT 1305L *e.tronic* is ergonomically designed and affords the crane operator clear visibility through 9 windows. It also

features a touch screen panel which provides him with all the important data he requires – in the language of his choice, of course. Safety is not the only aspect it excels in, but comfort, too – this is shown clearly by the control panel to manage all cabin functions, the generous storage space, heating, large number of sockets and roller blinds, as well as interior lighting and – last but not least – an ergonomically designed king-size operator's seat.

Would you rather have luxury than standard? Then our spacious deluxe operator cab holds many extras in store for you! What about separate toilet facilities with a 200 litre fresh water tank, together with a 250 litre waste water tank, and wash basin? And how about air-conditioning, visual monitoring of the hoist gear, rupture-proof roof panel with wipers and a 24 V refrigerator?

### Control.

#### Reliability well-stored.

The WT 1305L *e.tronic* is equipped with the *e.tronic* programmable logic control system, featuring 230 V powerful relay switches which are rated category AC 4 – so operational wear and tear is not an issue here. The total connected load is 325 kVA. And because the entire control system is housed in an air-conditioned container, this steadfast worker can withstand even the most extreme temperatures. The safety-related measuring systems are fitted in duplicate and comply with EN ISO 13849. Since the frequency converter controlled absolute encoders are identical for all drives, they are completely interchangeable. A GSM modem makes remote maintenance or query of the operational status possible at all times while in operation.

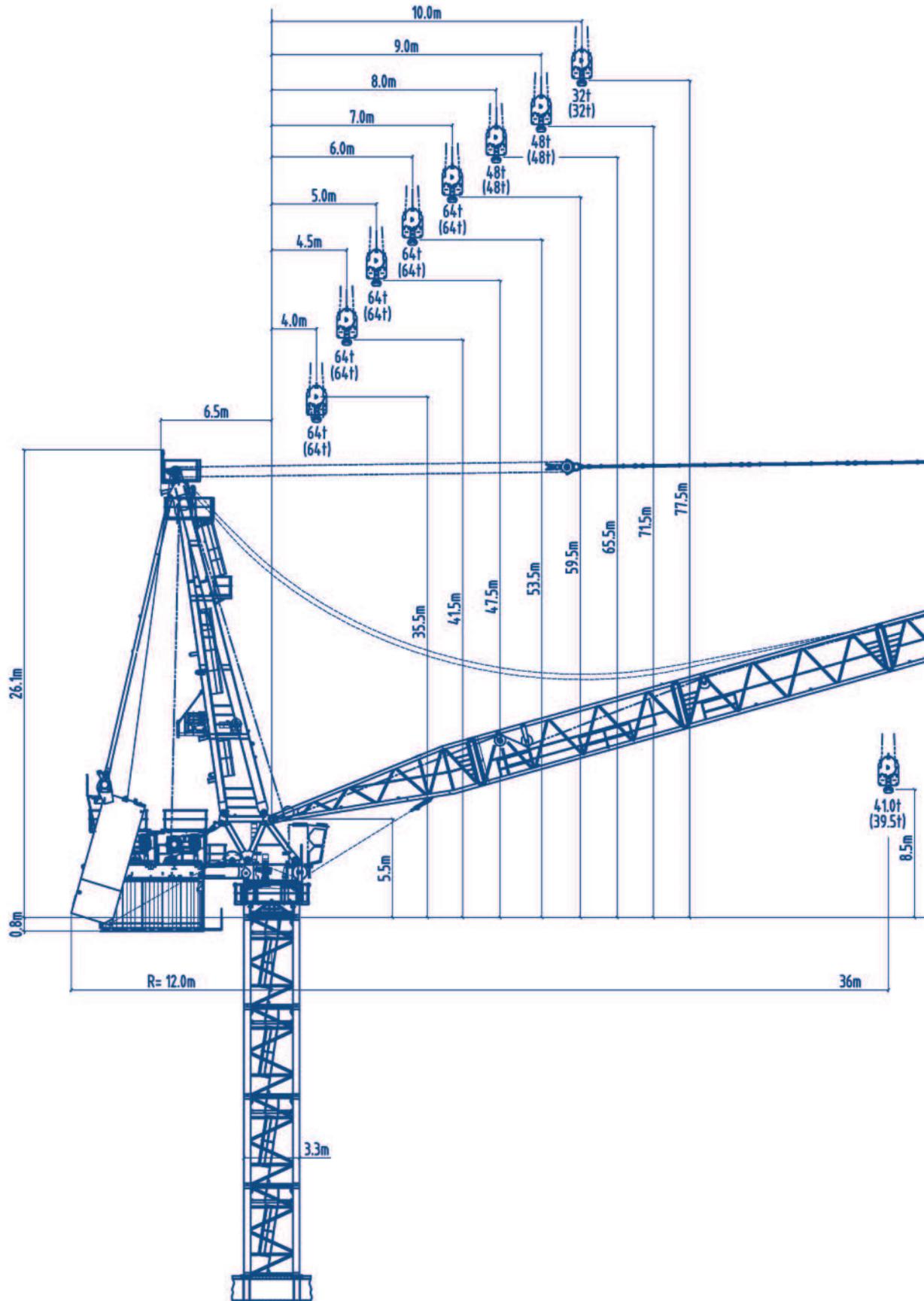
The *e.tronic* includes an operating range limit with 8 polygons each with a maximum of 8 corner points.

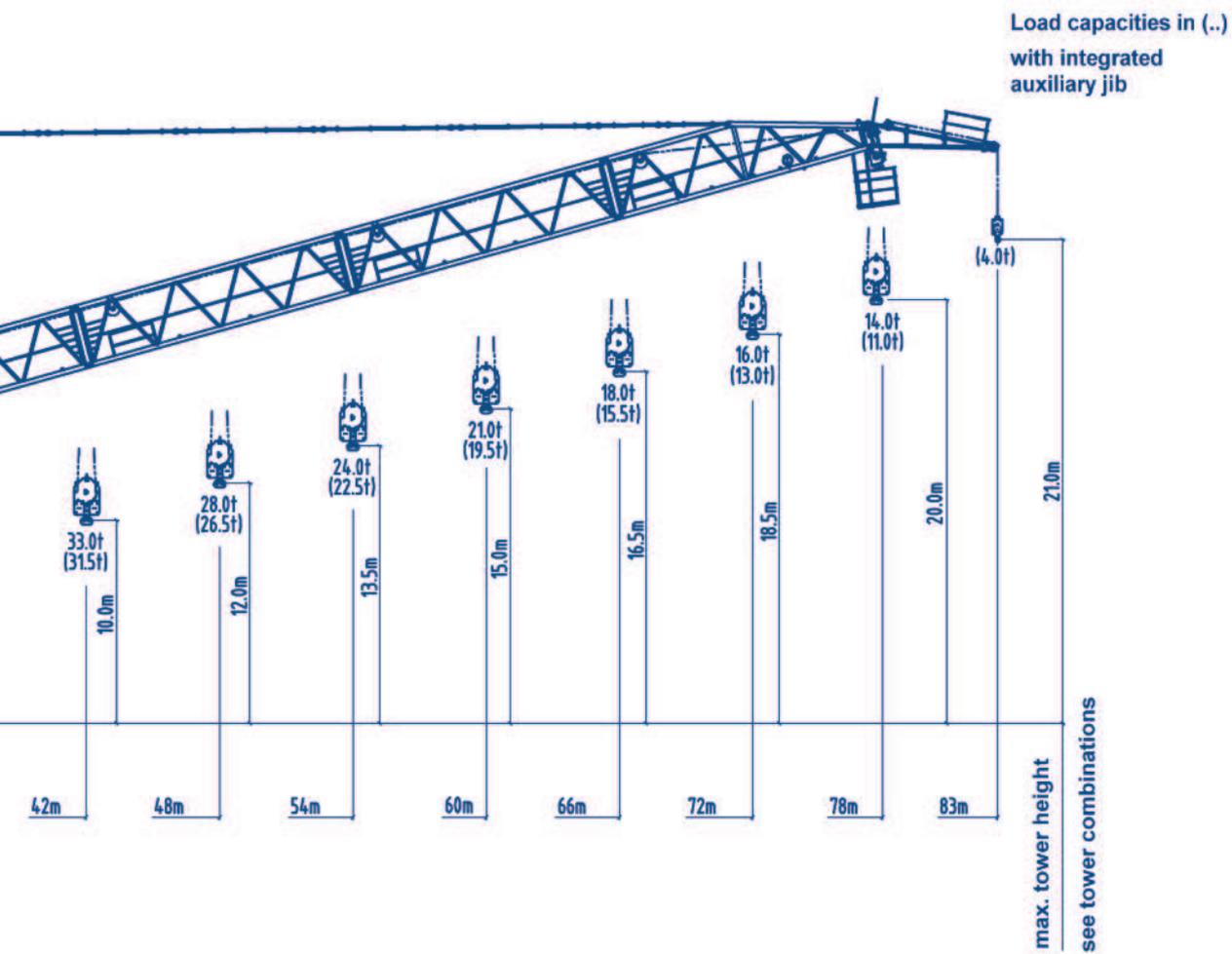
### Maintenance.

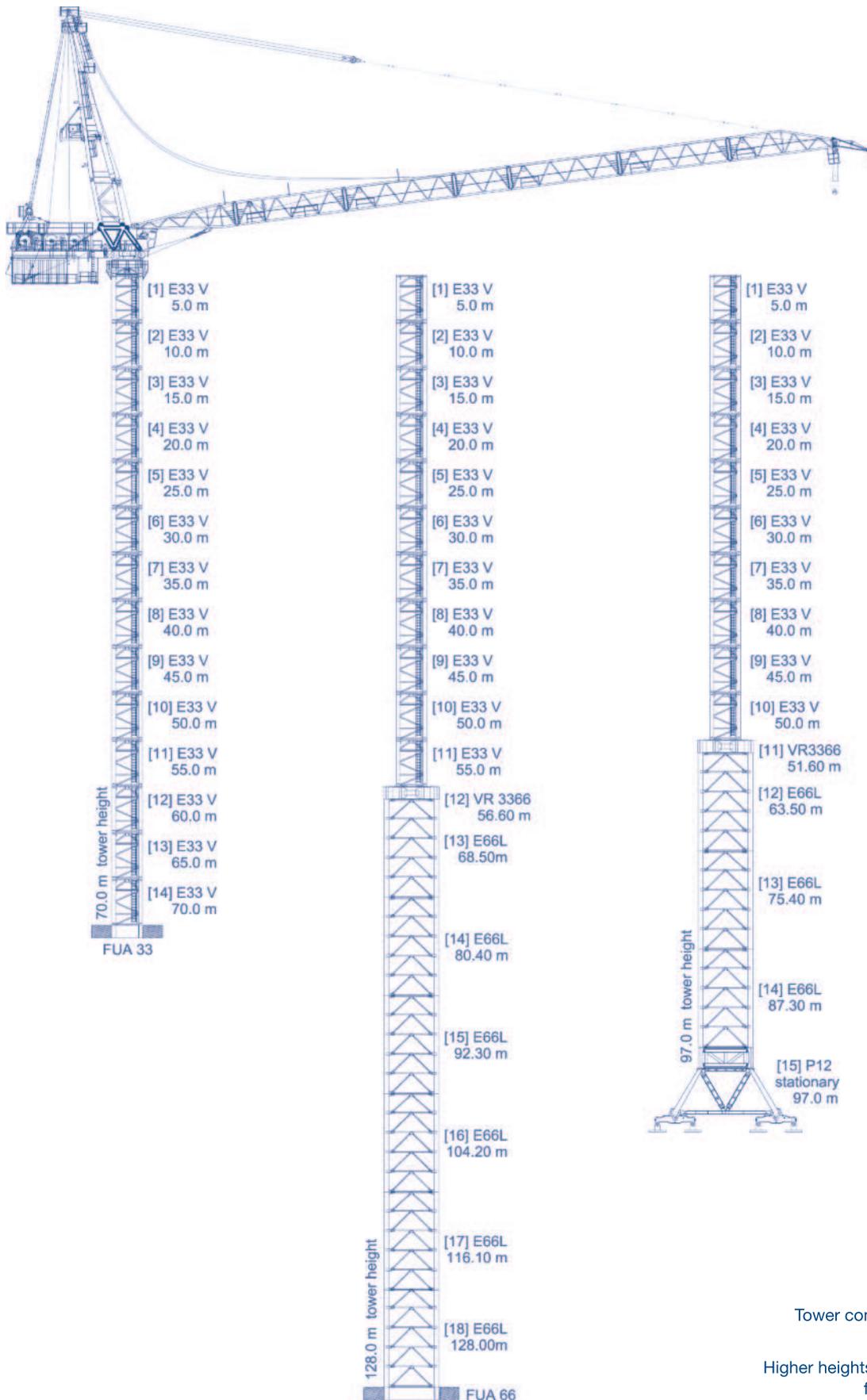
#### A success in itself.

Where's the catch? There isn't one! As the in- and outputs of the programmable logic control (PLC) are visible on the touch screen panel, identifying the source if there is a fault anywhere is quick and easy. Moreover, the components of the WT 1305L *e.tronic* are clearly set out in the electricity container. All cables are laid under a false floor – so there is no danger of tripping. The built-in telephone ensures a line of communication between container and cab.

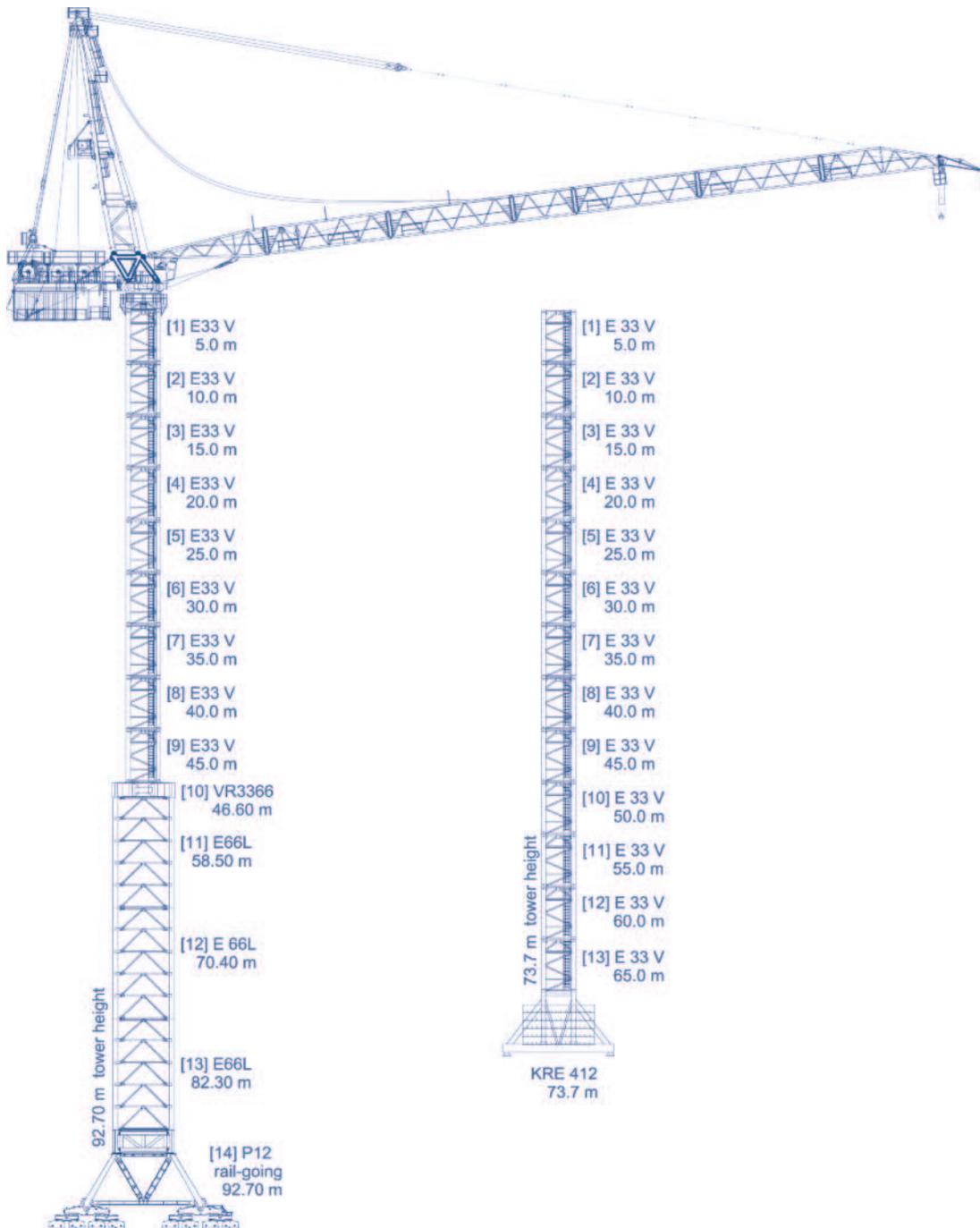
# WILBERT Tower Cranes Layout drawing





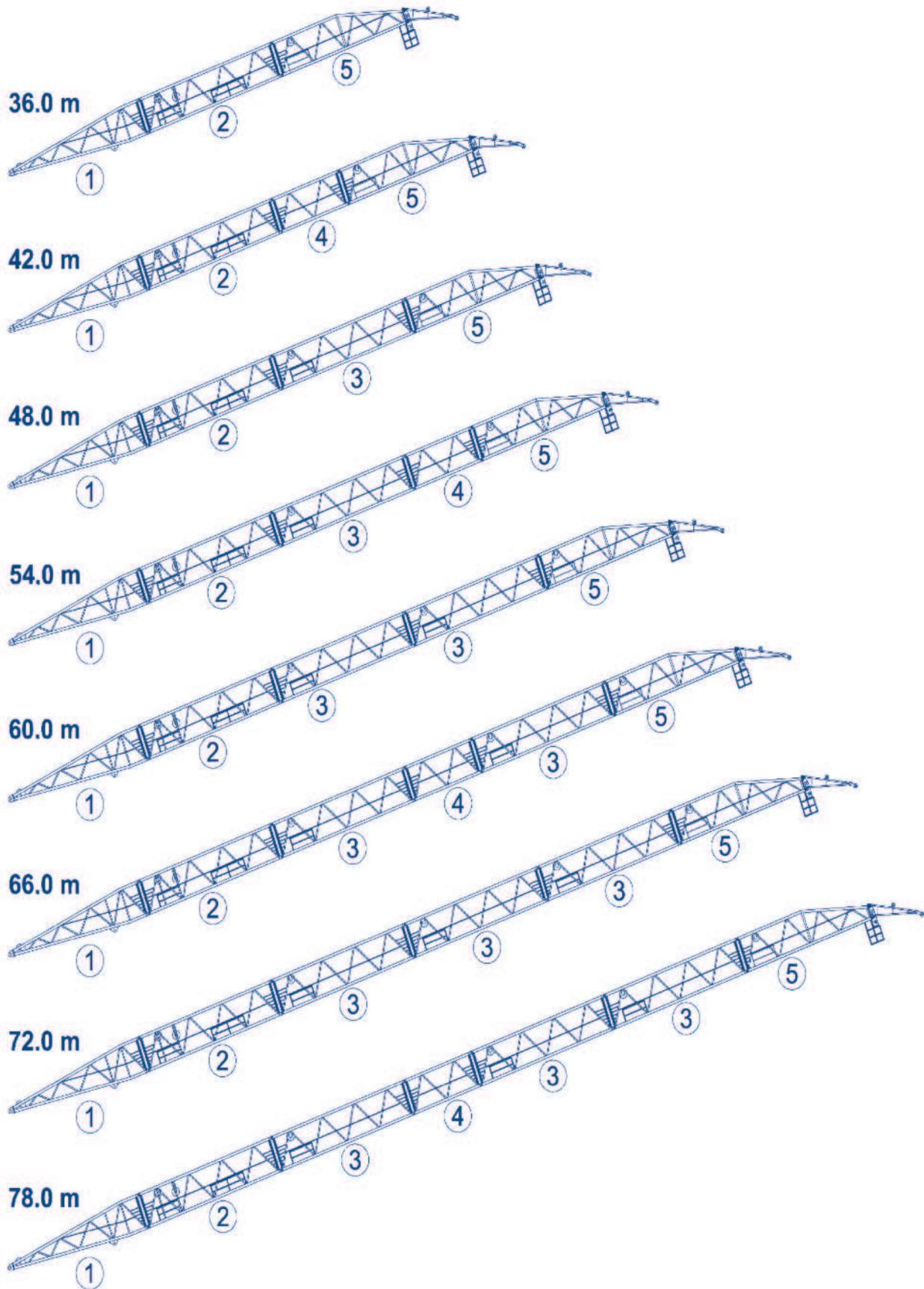


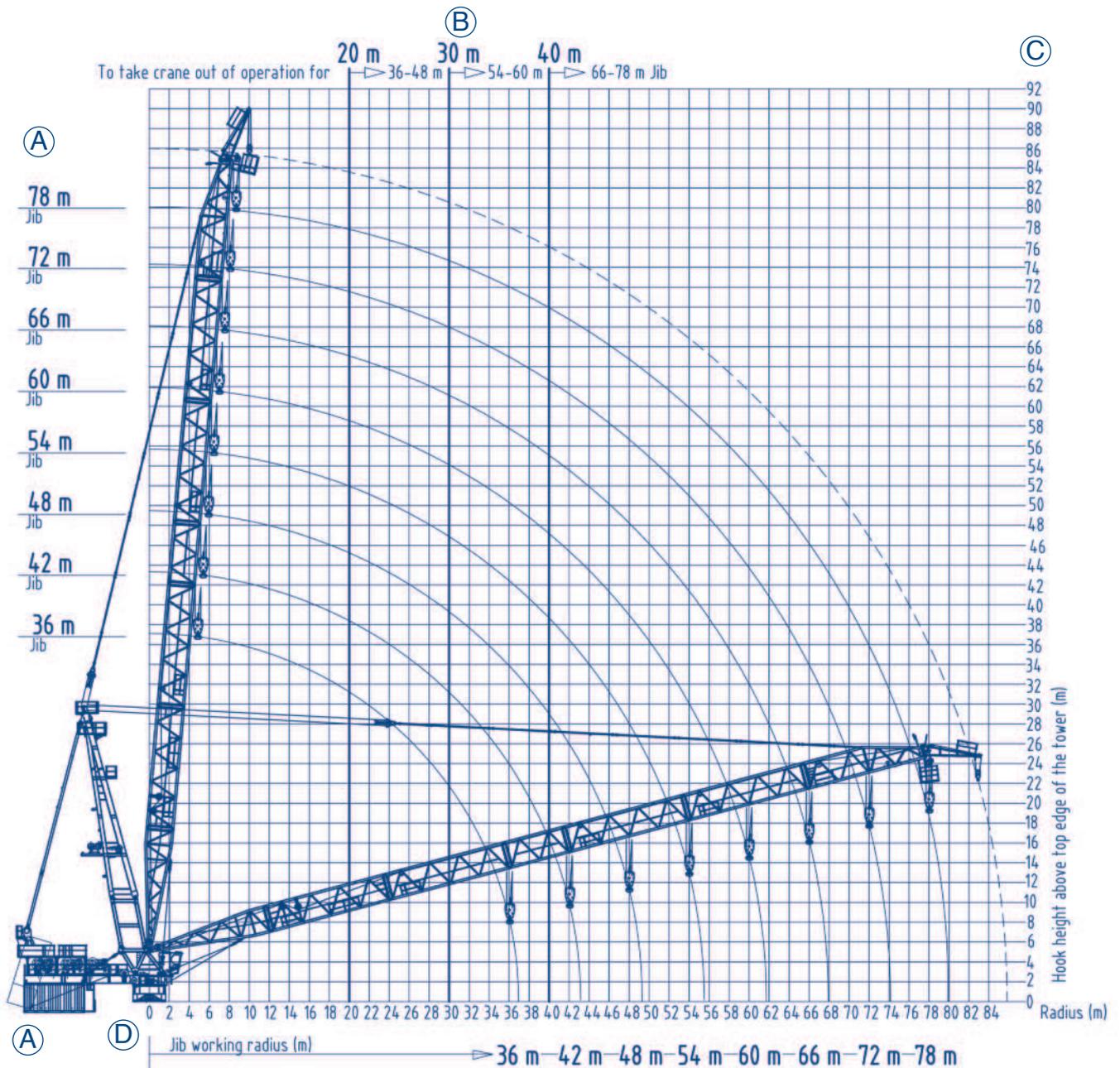
Tower combinations according to C 25 wind region.  
Higher heights under hook allowed for certain jib lengths.



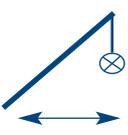
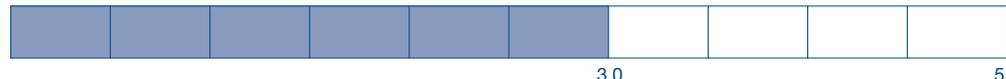
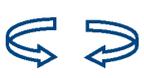
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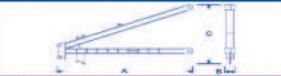
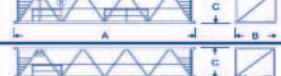
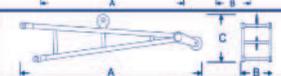




- A - Jib length
- B - Min. radius to take crane out of operation
- C - Under hook height above top edge of the tower
- D - Radius

Drive [Type]	Operating speeds Load capacity	Power rating																				
HFU 140-160	Hoisting	1 x 140 kW																				
	<p><b>Operating speeds [m/min]*</b> * (referring to the 4th layer on the hoist rope drum) continuous acceleration</p> <p style="text-align: center;"><b>1 hoist gear</b></p> <table border="1"> <tr> <td rowspan="2"><b>1-rope</b></td> <td>0 - 1t:</td> <td>0 ... 200</td> </tr> <tr> <td>0 - 16t:</td> <td>0 ... 42</td> </tr> <tr> <td rowspan="2"><b>2-rope</b></td> <td>0 - 2t:</td> <td>0 ... 171</td> </tr> <tr> <td>0 - 32t:</td> <td>0 ... 24</td> </tr> <tr> <td rowspan="2"><b>3-rope</b></td> <td>0 - 4t:</td> <td>0 ... 114</td> </tr> <tr> <td>0 - 48t:</td> <td>0 ... 15</td> </tr> <tr> <td rowspan="2"><b>4-rope</b></td> <td>0 - 6t:</td> <td>0 ... 85</td> </tr> <tr> <td>0 - 64t:</td> <td>0 ... 8</td> </tr> </table>	<b>1-rope</b>	0 - 1t:	0 ... 200	0 - 16t:	0 ... 42	<b>2-rope</b>	0 - 2t:	0 ... 171	0 - 32t:	0 ... 24	<b>3-rope</b>	0 - 4t:	0 ... 114	0 - 48t:	0 ... 15	<b>4-rope</b>	0 - 6t:	0 ... 85	0 - 64t:	0 ... 8	<p><b>Hook travel</b> max. [m]</p> <p>900</p> <p>450</p> <p>300</p> <p>225</p>
	<b>1-rope</b>		0 - 1t:	0 ... 200																		
		0 - 16t:	0 ... 42																			
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	0 - 64t:	0 ... 8																				
<b>Angle</b>	<b>Luffing</b>	<b>140 kW</b>																				
	<p>Continuous acceleration</p>  <p style="text-align: center;"><b>Luffing period [min] from maximum to minimum radius</b></p>																					
<b>Angle</b>	<b>Slewing</b>	<b>2 x 15 kW</b>																				
	<p>Continuous acceleration</p>  <p style="text-align: center;"><b>Operating speeds [m/min<sup>-1</sup>]</b></p>	<p>optional 3 x 15 kW</p>																				
<b>Total connected load</b>																						

**310 (325\*) kVA**  
Total connected load at utilisation factor 0.7. (\* 3 slewing gears)

Pos.	Qty.	Description	Colli	A [m]	B [m]	C [m]	Weight [kg]
1	1	Upper part of tower head section, complete with 1.1 (ladders, platforms, tensioning and mounting winch)		20.00	3.10	3.00	25,000
1.1	1	Accessories of upper part of tower head section, consisting of ladders, platforms, tensioning and mounting winch					2,000
2	1	Short head section		4.70	3.00	3.00	6,400
3	1	Lower part of tower head section with slewing gear		3.95	3.00	3.60	25,000
4	1	Cab with platform		3.80	1.70	3.10	1,300
5	1	Counterjib complete in three pieces, consisting of: 5.1, 5.2, 5.3		11.62	3.00	2.73	49,000
5.1	1	Counterjib, steel body, consisting of counterjibs 1 and 3		8.75	3.00	1.20	12,400
5.2	1	Luffing gear with base section, roller block and 350 m luffing rope		2.70	2.91	2.35	12,000
5.3	1	Hoisting gear with base section and 800 m hoist rope		2.26	2.91	1.73	11,600
6	1	Crossbar		5.35	0.80	1.15	1,650
7	1	V-shaped supports 1 and 2		4.10	0.40	2.30	1,200
8	1	Electricity container		6.10	2.50	3.20	7,600
9	0 – 2	Counterweight 1		7.95	0.34	3.00	9,150
10	4 – 10	Counterweight 2 + 3		7.95	0.34	3.00	13,500
11	2	Counterweight 4 + 5		7.95	0.26	3.00	14,800
12	1	Jib section 1 with roller cross beam of counterjibs		12.70	3.10	2.75	6,820
13	1	Jib section 2		12.60	2.85	2.75	7,200
14	0 – 3	Jib section 3		12.60	2.85	2.75	6,000
15	0 – 1	Jib section 4		6.50	2.85	2.75	3,300
16	0 – 1	Jib section 5 with jib head cross beam		12.60	2.85	3.75	9,300
17	0 – 1	Auxiliary jib (optional)		6.50	1.40	1.10	850
18	0 – 1	Load hook 80 t		1.15	0.54	2.15	2,600
19	0 – 1	Auxiliary hoisting with platform (optional)		3.10	1.90	1.50	2,450

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