### **Telescopic Crawler Crane**

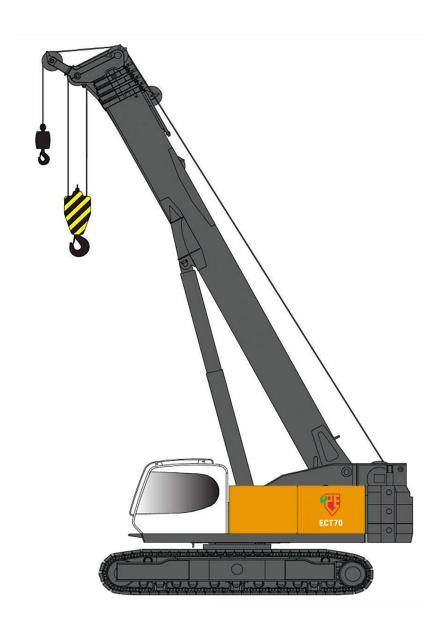
# **MODEL ECT70**













### **PV-E CRANE**

We, PV-E Crane B.V., are pleased to offer you our electric crawler crane EC Series. All models from PV-E Crane ECT series are equipped with an electric motor with a power of 150kW and exchangeable battery packs.

With the standard version, you can work for 8 hours without a plug. If extra working hours are required, this can easily be done by renting or buying an extra battery pack.

The two battery packs are based on lithium iron phosphate batteries (LiFePO4) and are built according to the latest developments in traction cell technology and have many advantages:

- Safe
- · Chemically stable
- Long lifespan
- Can be charged from any charge level without shortening lifespan
- Not subject to memory problems
- Efficient

Charging with 45kW per hour from a 63 Amp connection means less than 3 hours per battery of full charging from empty to full.

Moreover, (LiFePO4) batteries are 100% maintenance-free and do not need to be topped up with demineralized water like conventional lead-acid batteries, for example. They are 100% recyclable because they do not contain any acids or heavy metals.

An external diagnostic system gives you access to the crane's electronics to read the required data of the crane from your office.



**Battery pack**PV-E Crane Battery Powered



**Electric motor**PV-E Crane Battery Powered



**Electronic control system**PV-E Crane Battery Powered



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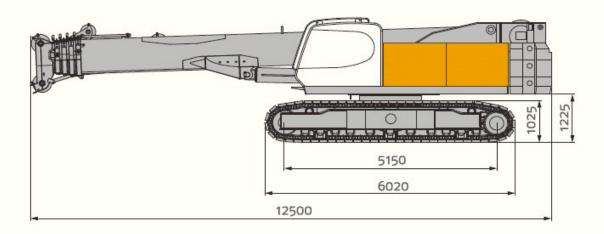


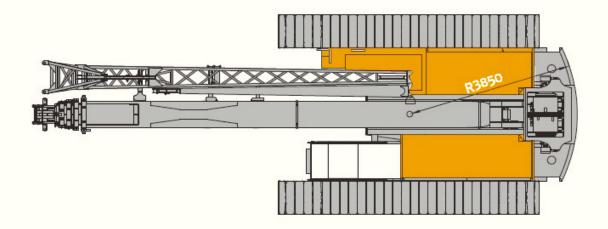
# **TECHNICAL DATA**

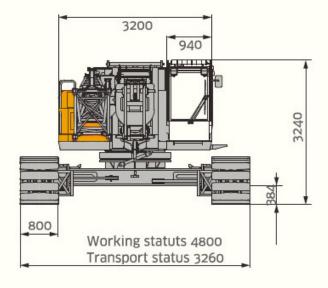
Items	Unit	Data
Max. rated lifting capacity	t	70
Boom length	m	10.8'38
Boom dericking angle	o	-2~83
Jib length	m	8/14(8+6)
Angle between jib and boom	o	0/20/40
Rope speed	m/min	116
Slewing speed	r/min	0~1.96
Travel speed	Km/h	0~1.26/0~2.26
Rope diameter	mm	22
Main/aux. winch rope length	m/m	200/130
Rated single line pull	T(kN)	7.5(73.5)
Gradeability (boom retract, cabin at rear)	%	30
Crane mass	t	70
Overall dimension	mm	12500x3260x3160
Ground bearing pressure	Мра	0.07



### **OVERALL DIMENSIONS**



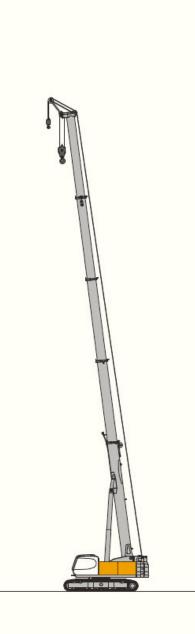






# MAIN BOOM & RUNNER CONFIGURATION







#### **Boom**

Max. lifting capacity 70t x 3m

Max. boom combination 38m

### Long runner

Max. lifting capacity 7.5t x 14m

Max. boom combination 38 + 2m

### **Fixed jib**

Max. lifting capacity 7.5t x 7m

Max. boom combination 38 + 8 + 6m



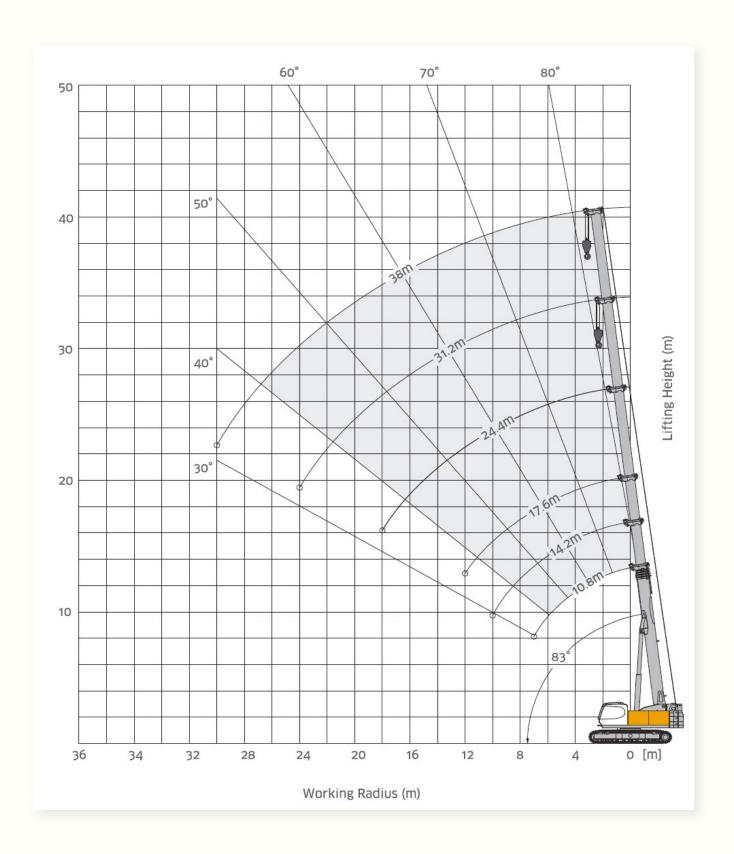
# **NOTES | LOAD CHART**

- 1 The load charts are calculated according to EN13000.
- The lifting capacities are for reference only. For actual lifting capacities please refer to the load chart in the cabin or operation manual. The lifting capacities as stated are only valid for lifting activities.
- 3 The rated loads shown are based on the machine on firm horizontal ground level.
- 4 The weights of the lifting accessoires (Hook Blocks, ropes, chains etc.) have to be deducted from the load capacities mentioned.

- The maximum windspeed allowed can be selected within the software of the momentlimiter.
- **6** The radius will be calculated from the center of the machine to the position under the load.
- 7 The lifting capacities apply to 360 degree working.
- **8** Weights mentioned can vary depending on the scope of supply of the specific machine delivered, the content of the tank and the general acceptable tolerances.
- **9** The images in this brochure can show options which are not standard.

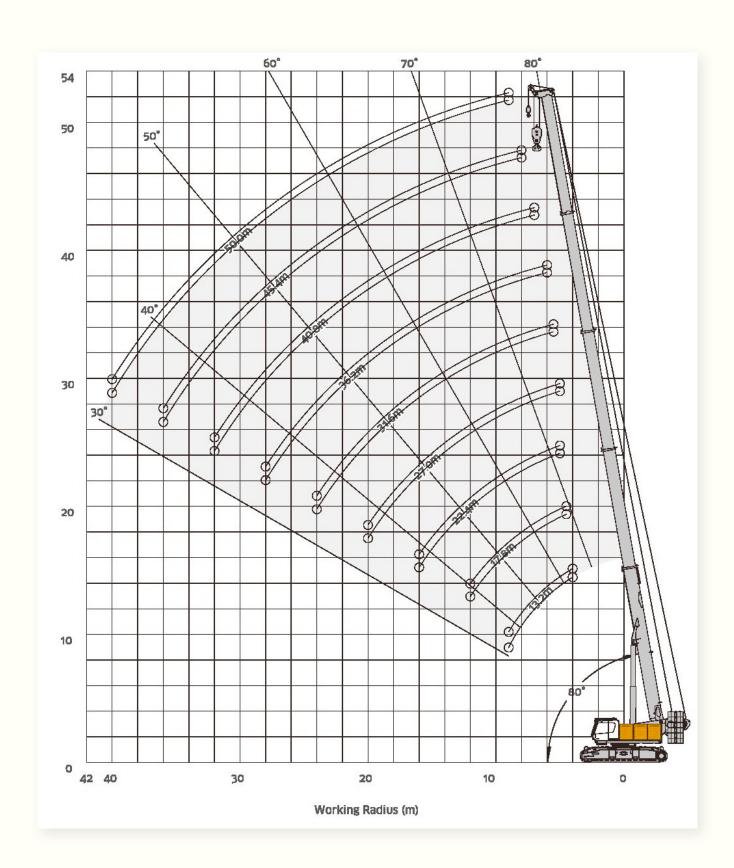
Load	No of sheaves	No. lines	Weight
70t	5	10	660kg
9t	0	1	250kg

## **WORKING RANGE-BOOM**





# **WORKING RANGE-BOOM**







10.8m - 38m

Mainboom	Counter	weights	Carbody	weights		
Load chart	16,2	2 ton	10	ton		
Lengte/radius	10,8 m	14,2 m	17,6 m	24,4 m	31,2 m	38 m
2,5 m	70*					
3 m	65,0	60,0	42,0	21,9		
3,5 m	58,0	57,5	42,0	21,9	20,8	
4 m	55,9	55,6	41,3	21,9	20,8	
4,5 m	49,5	49,2	39,8	21,9	20,4	14,7
5 m	46,7	42,8	37,7	21,9	20,1	14,7
6 m	35,4	30,7	30,6	21,9	18,6	14,7
7 m	27,5	27,0	23,3	19,9	17,0	14,5
8 m		21,7	18,5	18,1	15,5	13,8
9 m		17,9	17,6	16,5	14,2	12,5
10 m		15,1	14,8	15,3	13,1	11,6
11 m			12,6	13,7	11,9	10,5
12 m			10,8	11,9	11,0	9,5
14 m				9,2	9,1	8,0
16 m				7,3	7,7	6,8
18 m				5,9	6,4	6,3
20 m					5,3	5,4
22 m					4,4	4,7
24 m					3,6	4,0
26 m						3,3
28 m						2,8
30 m						2,4
32 m						



<sup>\*</sup> Special equipment required.

<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments



10.8m - 38m



 $360^{\circ}$ 



12,5t

Length Radius	10.8m	14.2m	17.6m	24.4m	31.2m	38m
3.om	60	60	42	19.3		
3.5m	56.9	56.7	42	19.5	18.8	
4.0m	53.8	53.5	41.3	19.7	18	
4.5M	47.2	46.8	39.8	19.9	17.2	11.6
5.om	38.4	38.1	37.7	20.2	16.5	11.2
6.om	27.5	27.2	27	20.7	15.2	10.5
7.0m	20.9	20.7	20.5	19.8	14	9.8
8.om		16.3	16.1	17.6	13	9.2
9.0m		13.2	13	14.4	12.1	8.6
10.0m		10.8	10.7	12	11.3	8.1
11.0m			8.9	10.1	10.6	7.6
12.0m			7.4	8.7	9.3	7.2
14.0m				6.4	7.1	6.4
16.0m				4.8	5.5	5.7
18.0m				3.6	4.3	4.7
20.0m					3.3	3.7
22.0m					2.6	3
24.0m					2	2.3
26.0m						1.8
28.0m						1.4
30.0m						1



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments



10 8m - 38m



 $360^{\circ}$ 



7,8t

Length Radius	10.8m	14.2m	17.6m	24.4m	31.2m	38m
3.om	57.5	57.5	42	19.3		
3.5m	55	55	42	19.5	18.8	
4.0m	51.1	50.7	41.3	19.7	18	
4.5m	39.8	39.4	39.2	19.9	17.2	11.6
5.0m	32.3	31.9	31.8	20.2	16.5	11.2
6.om	22.8	22.6	22.4	20.7	15.2	10.5
7.0m	17.2	17	16.8	18.3	14	9.8
8.0m		13.2	13.1	14.5	13	9.2
9.om		10.5	10.4	11.7	12.1	8.6
10.0m		8.5	8.4	9.7	10.4	8.1
11.0m			6.8	8.1	8.8	7.6
12.0m			5.6	6.8	7.5	7.2
14.0m				4.9	5.5	6
16.0m				3.5	4.2	4.6
18.0m				2.5	3.1	3.5
20.0m					2.3	2.7
22.0m					1.7	2
24.0m					1.1	1.5
26.0m						1.1
28.0m						0.7
30.0m						



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments



10 8m - 38m



360°



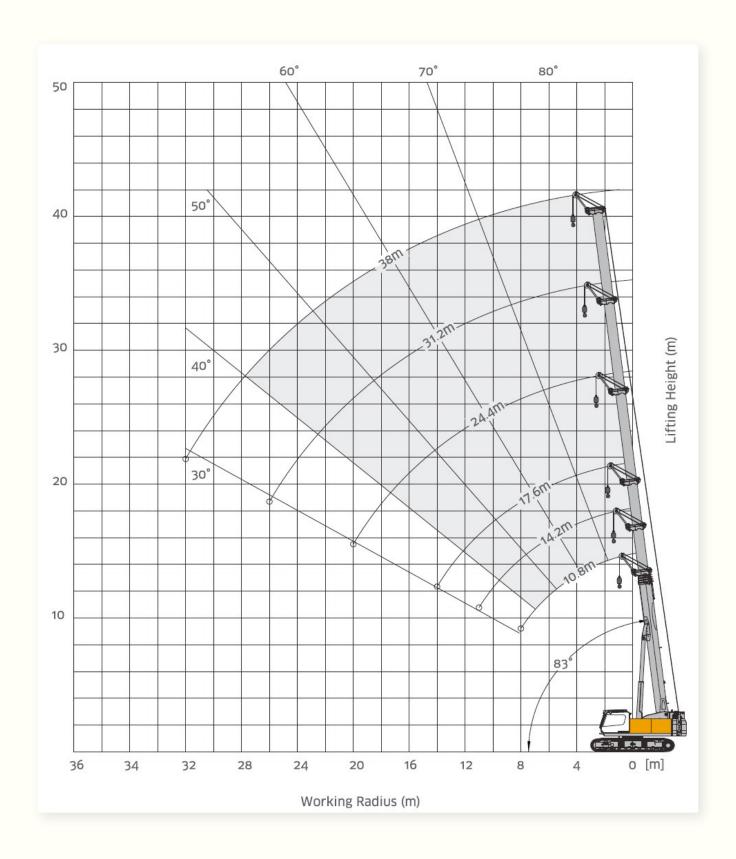
Ωt

Length Radius	10.8m	14.2m	17.6m	24.4m	31.2m	38m
3.om	55	55	42	19.3		
3.5m	49.7	49.3	42	19.5	18.8	
4.0m	36	35.6	35.3	19.7	18	
4.5m	27.7	27.4	27.1	19.9	17.2	11.6
5.0m	22.2	21.9	21.7	20.2	16.5	11.2
6.om	15.3	15	14.9	16.5	15.2	10.5
7.0m	11.1	10.9	10.8	12.3	13.2	9.8
8.0m		8.2	8	9.4	10.3	9.2
9.0m		6.2	6.1	7.4	8.3	8.6
10.0m		4.7	4.6	5.9	6.7	7.2
11.0m			3.5	4.7	5.5	5.9
12.0m			2.5	3.8	4.5	5
14.0m				2.4	3.1	3.5
16.0m				1.4	2	2.5
18.0m				0.6	1.3	1.7
20.0m					0.7	1.1
22.0m						0.6
24.0m						
26.0m						
28.0m						
30.0m						



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments

# **WORKING RANGE-LONG RUNNER**





### **LONG RUNNER LOAD CHART**



10 8m - 38m



360°



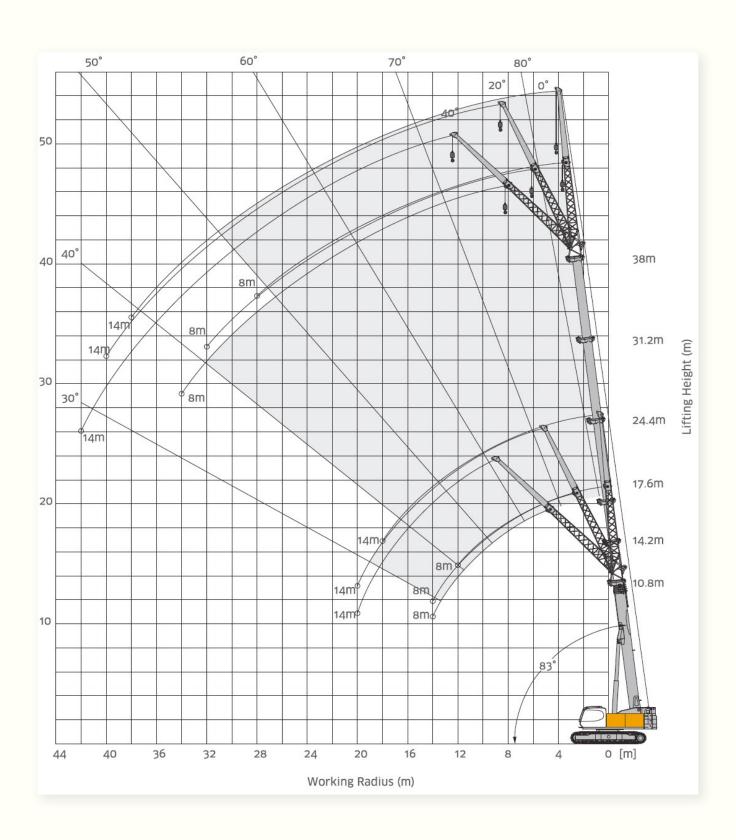
6.1t

Length Radius	10.8m	14.2m	17.6m	24.4m	31.2m	38m
3.om	7.5	7.5	7.5			
3.5M	7.5	7.5	7.5	7.5		
4.0m	7.5	7.5	7.5	7.5		
4.5M	7.5	7.5	7.5	7.5		
5.0m	7.5	7.5	7.5	7.5	7.5	
6.0m	7.5	7.5	7.5	7.5	7.5	7.5
7.0m	7.5	7.5	7.5	7.5	7.5	7.5
8.0m	7.5	7.5	7.5	7.5	7.5	7.2
9.0m		7.5	7.5	7.5	7.5	6.7
10.0m		7.5	7.5	7.5	7.5	6.3
11.0m		7.5	7.5	7.5	7.5	5.9
12.0m			7.5	7.5	7.5	5.5
14.0m			7	7.5	6.9	4.9
16.0m				6.1	6.2	4.4
18.0m				4.8	5.3	3.9
20.0m				3.7	4.2	3.4
22.0m					3.4	2.89
24.0m					2.6	2.47
26.0m					2.1	2.1
28.0m						1.77
30.0m						1.49
32.om						1.1



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments

# **WORKING RANGE | FIXED JIB**



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments



# **FIXED JIB LOAD CHART**



۵m



ว ผูกง



6.1t

Parline.		10.8m			14.2m			17.6m		
Radius	8m			8m			8m			
	o°	20°	40°	0°	20°	40°	0°	20°	40°	
3.0m	7.5	6.7		7.5	6.8		7.5			
3.5m	7.5	6.4		7.5	6.5		7.5	6.5		
4.0m	7.5	6.1		7.5	6.3		7.5	6.3		
4.5m	7.5	5.9	4.7	7.5	6.1		7.5	6.1		
5.0m	7.4	5.6	4.6	7.5	5.9	4.6	7.5	5.9		
6.0m	6.6	5.2	4.3	7.5	5.5	4.4	7.5	5.6	4.4	
7.0m	6	4.9	4.1	6.8	5.2	4.2	7.4	5.3	4.2	
8.0m	5.5	4.6	3.9	6.3	4.9	4.1	6.9	5.1	4.1	
9.0m	5.1	4.3	3.8	5.8	4.6	3.9	6.4	4.8	4	
10.0m	4.8	4.1	3.6	5.5	4.4	3.8	6	4.6	3.9	
11.0m	4.4	3.9	3.5	5.1	4.2	3.7	5.6	4.4	3.8	
12.0m	4.2	3.7	3.4	4.8	4.1	3.6	5.3	4.3	3.7	
14.0m		3.4	3.3	4.3	3.8	3.4	4.8	4	3.5	
16.0m				3.9	3.5	3.3	4.4	3.8	3.4	
18.0m							3.9	3.6	3.3	
20.0m								3.4	3.3	



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments

## **LONG RUNNER LOAD CHART**



۸m



360°



6 1t

		24.4m			31.2m			38m			
Radius		8m			8m			8m			
	o°	20°	40°	o°	20°	40°	o°	20°	40		
3.0m	7.5			7.5							
3.5m	7.5			7.5							
4.0m	7.5			7.5							
4.5m	7.5	5.8		7.5			6.3				
5.0m	7.5	5.7		7.5			6.2				
6.0m	7.5	5.5		7.5	4.9		5.9				
7.0m	7.5	5.2	4	7.3	4.8		5.7	4.2			
8.0m	7.3	5	3.9	6.9	4.7	3.6	5.5	4.1			
9.0m	6.9	4.9	3.8	6.6	4.5	3.5	5.3	4	3.		
10.0m	6.5	4.7	3.8	6.3	4.4	3.5	5.1	3.9	3.		
11.0m	6.2	4.6	3.7	6.1	4.3	3.4	4.9	3.9	3.1		
12.0m	5.9	4.4	3.6	5.9	4.2	3.4	4.8	3.8	3		
14.0m	5.4	4.2	3.5	5.5	4.1	3.3	4.5	3.7	3		
16.0m	5	4	3.4	4.7	3.9	3.3	4.2	3.6	3		
18.0m	3.7	3.8	3.3	3.5	3.8	3.2	3.1	3.5	2.9		
20.0m	2.8	3.6	3.3	2.5	3.7	3.2	2.2	3.4	2.9		
22.0m	2	2.7	3.1	1.7	2.8	3.1	1.4	2.8	2.9		
24.0m	1.4	1.9	2.2	1.1	2	2.5	0.8	2.1	2.7		
26.0m		1.3	1.4	0.6	1.4	1.8		1.4	2		
28.0m					0.8	1.1		0.9	1.3		
30.0m						0.6			0.8		



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments

# **FIXED JIB LOAD CHART**



1/m



360°



6.1t

	10.8m			14.2m			17.6m			
Radius		14m			14m			14m		
	o°	20°	40°	o°	20°	40°	o°	20°	40	
3.0m	4			4.2			4.2			
3.5m	3.8			4.2			4.2			
4.0m	3.6			4			4.2			
4.5M	3.4			3.8			4.1			
5.0m	3.3			3.6			3.9			
6.0m	3	2.3		3.3	2.3		3.6			
7.0m	2.8	2.1		3	2.2		3.3	2.3		
8.0m	2.6	2		2.8	2.1		3.1	2.2		
9.0m	2.4	1.9	1.6	2.6	2		2.9	2.1		
10.0m	2.2	1.8	1.6	2.5	1.9	1.6	2.7	2	1.6	
11.0m	2.1	1.7	1.5	2.3	1.8	1.5	2.6	1.9	1.6	
12.0m	2	1.7	1.5	2.2	1.8	1.5	2.4	1.9	1.5	
14.0m	1.8	1.5	1.4	2	1.6	1.4	2.2	1.7	1.5	
16.0m	1.6	1.4	1.3	1.8	1.5	1.4	2	1.6	1.4	
18.0m	1.5	1.4	1.3	1.7	1.4	1.3	1.8	1.5	1.4	
20.0m		1.3	1.3	1.5	1.4	1.3	1.7	1.5	1.3	
22.0M					1.3	1.3	1.6	1.4	1.3	
24.0m							1.5	1.3	1.3	
26.0m								1.3	1.3	



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments

# **FIXED JIB LOAD CHART**



۸m



360°



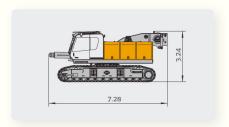
6.1t

		24.4m			31.2m			38m	
Radius	14m			14m			14m		
	o°	20°	40°	o°	20°	40°	o°	20°	40
3.0m	4.2								
3.5m	4.2								
4.0m	4.2			4.2					
4.5M	4.2			4.2					
5.0m	4.2			4.2			4		
6.om	4.1			4.2			4		
7.0m	3.8			4.2			4		
8.0m	3.6	2.3		4			4		
9.0m	3.4	2.2		3.8	2.3		4		
10.0m	3.2	2.1		3.6	2.3		4	2.3	
11.0m	3	2.1	1.6	3.4	2.2		3.8	2.3	
12.0M	2.8	2	1.6	3.2	2.1		3.6	2.2	
14.0m	2.6	1.9	1.5	2.9	2	1.6	3.3	2.1	1.0
16.0m	2.3	1.8	1.5	2.7	1.9	1.5	3	2	1.0
18.0M	2.1	1.7	1.4	2.5	1.8	1.5	2.8	1.9	1.5
20.0m	2	1.6	1.4	2.3	1.7	1.4	2.6	1.8	1.5
22.0m	1.9	1.5	1.3	2.1	1.6	1.4	2.4	1.7	1.4
24.0m	1.7	1.5	1.3	2	1.6	1.4	2.2	1.7	1.4
26.0m	1.6	1.4	1.3	1.8	1.5	1.3	1.6	1.6	1.4
28.0m	1.5	1.4	1.3	1.4	1.5	1.3	1.2	1.6	1.4
30.0m	1.2	1.3	1.3	1	1.4	1.3	0.8	1.5	1.
32.0m		1.1	1.2	0.6	1.2	1.3		1.2	1.
34.0m					0.8	1		0.8	1.3
36.0m					0.5	0.6		0.5	0.8



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments

# TRANSPORT | DIMENSIONS & WEIGHTS



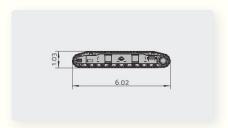
### Carbody with crawler x1

Length: 7.28m Width: 3.28m Height: 3.24m Weight: 36000 kg



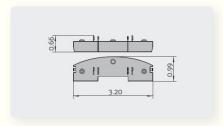
### Carbody x1

Length: 7.28m Width: 3.28m Height: 2.86m Weight: 17800 kg



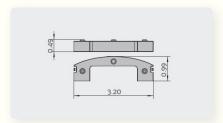
#### Crawler x2

Length: 16.02m Width: 1.02m Height: 1.03m Weight: 8500 kg



### Counterweight x1

Length: 3.20m Width: 0.99m Height: 0.66m Weight: 7800 kg

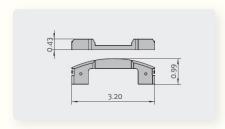


### **Counterweight x1**

Length: 3.20m Width: 0.99m Height: 0.49m Weight: 4720 kg

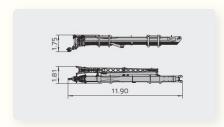


# LOAD CHART | LUFFING JIB



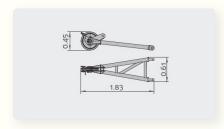
### Counterweight

Length: 3.20m Width: 0.99m Height: 0.43m Weight: 37000 kg



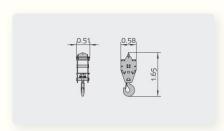
#### **Boom**

Length: 11.90m Width: 1.75m Height: 1.81m Weight: 11100 kg



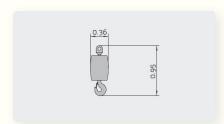
#### Runner

Length: 1.83m Width: 0.61m Height: 0.45m Weight: 80 kg



#### 65t Hook block

Length: 1.65m Width: 0.58m Height: 0.51m Weight: 660 kg



#### 9t Hook block

Length: 0.95m Width: 0.36m Height: 0.36m Weight: 250 kg



<sup>\*</sup> Preliminary lifting table, may deviate after calculations / adjustments



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# THE NEW STANDARD IN ELECTRIC CRAWLER CRANES

