Static data en

Foundation loadings

LN 303

470 EC-B 16, Tower system 24HC630
Crane stationary, without climbing equipment, without crane driver elevator

LIEBHERR-WERK BIBERACH

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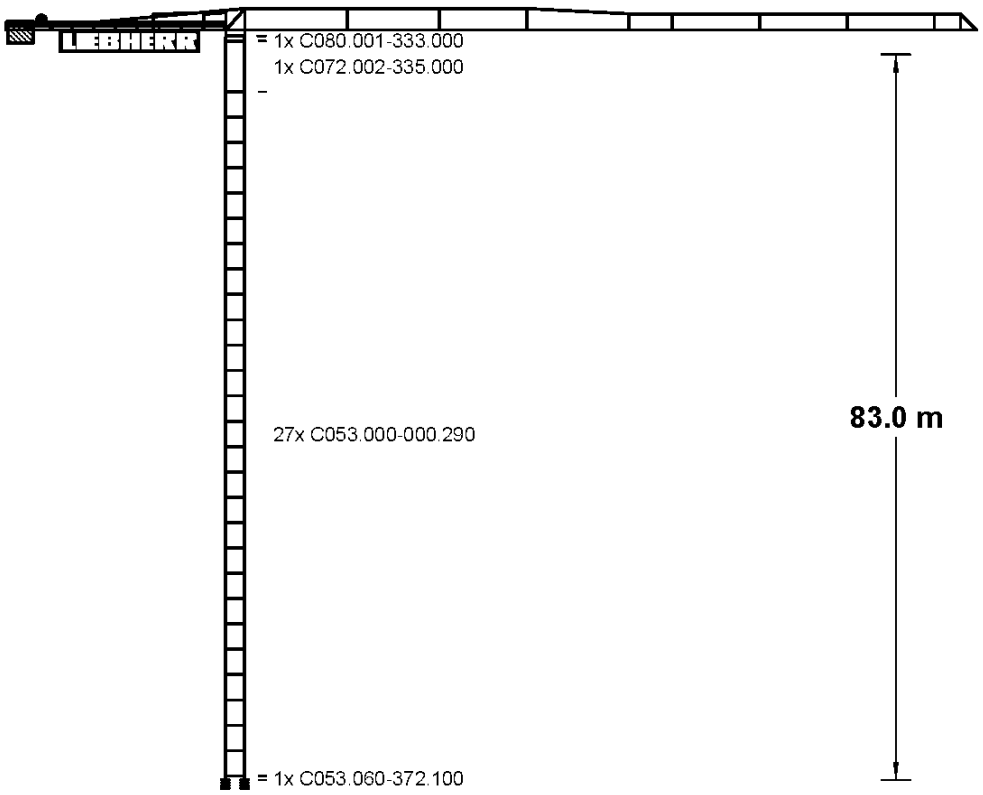

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1 General safety indications

1.1 Safety indications for corner pressure tables and foundation loading tables

WARNING

Danger of accident if the component compatibility list is ignored!

The static data may only be used if the crane erection corresponds with the configuration described, and if the components being used have been selected in observation of the component compatability list.

► For further information see “Component compatability list”.

WARNING

Risk of instability!

The foundation or central ballast must correspond with the erection height and the configuration of the crane (with or without climbing equipment). Subsequent installation or removal of the climbing equipment for erection or dismantling of the crane will alter the stability of the crane and the resulting corner pressures or foundation reaction forces.

► During applications engineering, observe both corner pressure tables “with climbing equipment” and “without climbing equipment” and take the most unfavourable values into account.

► Check central ballast.

WARNING

Risk of instability!

For certain jib lengths, the crane cannot turn freely in the wind without the installation of an additional wind sail.

► Mount wind sail as required. For more information, please see: Instruction manual, erection chapter.

WARNING

Risk of instability!

If tower sections with built-up guide rails for the crane driver elevator are integrated with the tower configuration, the deviating static data shall apply. Guide rails that are installed can result in a decrease to the maximum erection height and an increase in foundation reaction forces, corner forces and the central ballast required.

Crane configurations in which the guide rails remain in the tower section must be considered to be the same as crane configurations with a crane driver elevator installed!

► Request special static data from the Structural Analysis department at Liebherr-Werk Biberach GmbH.

► Use the special static data to check the reliability of the crane configuration.

► If in doubts, remove the guide rails and the interior fittings for entering and exiting from the entire tower configuration.

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The corner pressures are characteristic loads and do not include the dead load and hoist load factor.

In case of cranes with multiple rope types, observe the minimum and maximum radius.

In case of stationary configuration of the crane with an undercarriage or cruciform base, the hook heights specified in the corner pressure tables may decrease, depending on the crane configuration.

1.2 Notes on conformity

Based on the number of possible variants and influence parameters during erection of tower cranes, it's important to determine if the selected crane configuration and/or available documentation meet local safety requirements and if conformity is therefore ensured.

In European Economic Area (EEA) countries, corner pressure tables and foundation loading tables help to ensure adherence to the required level of safety as per EN 14439.

In countries outside of the EE, there are often no binding regulations. The Liebherr works standard LN 303 defines the minimum requirements for these countries. The data sheets and the static forces tables that this specification has been applied to are marked with the abbreviation LN 303.

In some cases, safety requirements and/or wind force assumptions based on other standards and guidelines may not represent a suitable protection level for crane attachments.

The applicability of the documents provided must be checked the operator. In this case, we recommend creating a site-related hazard analysis that takes special consideration of the wind exposure.

1.3 Notes for cranes with climbing tower section

On cranes which require a climbing tower section for the application of a climbing equipment, observe the following:

– The indicated hook height in the corner pressure tables and foundation loading tables always includes climbing tower section.
– When erecting the crane without climbing equipment, the climbing tower section can be replaced with a standard tower section.

1.4 Symbols used in the corner pressure tables and foundation loading tables

Symbol	Meaning
*	At this hook height, the climbing equipment must be lowered after assembly!
xx	At this hook height, switching to the LM2 load diagram is not permissible! For more information, please see: “Operating manual for the crane driver”, “control desk”.
&	For this hook height, raising and lowering the load and slewing and trolley travelling is not permissible while crane travelling!
+	At this hook height, the use of travelling undercarriages or a cruciform base is not permissible! Only stationary and without travel gears is possible.
°	At this hook height, attachment of a cabin is not permissible! Only possible “without cabin".

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Symbol	Meaning
@	At this hook height, use with a climbing tower section is not permissible! The climbing tower section must be replaced with a standard tower section.

Tab. 1: Symbols used in the corner pressure tables and foundation loading tables

1.5 Symbols used in the component compatibility list

Symbol	Meaning
*	not for climbing
+	only use once

Tab. 2: Symbols used in the component compatibility list

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2 Explanations concerning stability calculation in accordance with LN 303

2.1 Global calculation standards

The most essential requirements for tower cranes globally are for their structures to be as high and as safe as possible. The possible hook heights are not only specified based on the construction or configuration of the crane, but they depend, in particular, on legislation and rules. Considering the different calculation standards, this results in significantly different hook heights.

In crane manufacture, there is no calculation standard that is globally binding. In countries within the European Economic Area (EEA), the EN 14439 Product Standard is the binding framework for tower cranes. In this standard, the safety level which must be complied with, together with the out-of-operation wind load, is clearly defined.

In countries outside the EEA, there are often no binding stipulations so that the specifications of the "Fédération Européenne de la Manutention (FEM)" can often be used in form of the FEM 1.001 Guideline as a substitute.

In the FEM 1.001 Guideline, the out-of-operation wind velocity is presented as a basis for the calculation in such a way that the wind velocity increases in steps with increasing height - the "step profile". In order to obtain a more realistic representation that can be compared in the current standard environment, the Liebherr Company Standard LN 303 defines a minimum wind load for all countries outside the EEA for which no exact requirements have been specified.

2.2 Details regarding the Liebherr Company Standard LN 303

In the Liebherr Company Standard LN 303, an exponential depiction of the wind velocity is used, similar to the wind load according to EN 14439. This makes wind conditions more realistic and comparable with the current standards of construction. The parameters of this wind velocity graph as well as all other necessary safety requirements in LN 303 correspond to at least FEM 1.001 in all aspects.

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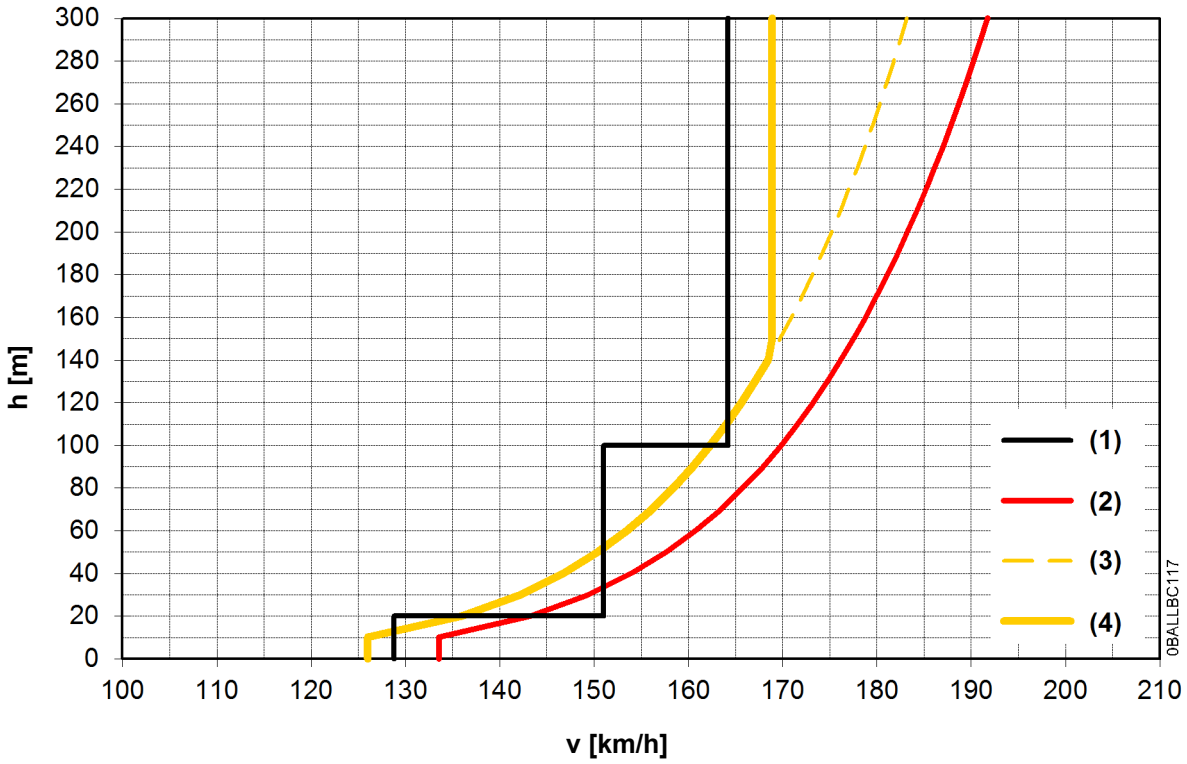

Tab. 3: Comparison of wind velocity graphs FEM 1.001, EN 14439 - C25 and LN 303

(1) FEM 1.001
(2) EN 14439 - C25
(3) LN 303 - free-standing
(4) LN 303 - climbing

The assumption of a constant wind velocity from a tower height of approx. 140 m has been derived from a risk assessment for climbing cranes. The risk assessment assumes a lower probability of occurrence in terms of wind load. The reason for this assumption is a shorter length of stay in the specific situation, combined with the option of safety measures.

In this process, the wind velocity is reduced to approx. 92 % at a maximum height of 300 m, to which the wind velocity profile is applicable. To simplify usage planning, it is assessed consistently above this height. The factor of 92 % stems from a reduction of the recurrence period from 25 years to 10 years, assuming that the length of stay in a climbing situation is less than 3 months. This assumption is valid only for cranes climbing inside or outside with the prerequisite that these cranes - if necessary - can climb down in a safe area if there is a risk of strong wind.

2.3 Using the LN 303 specification

The LN 303 specification will be introduced with the provision of the required data sheets and static forces tables in the first quarter of 2016.

The data sheets and the static forces tables that this specification has been applied to are marked with the abbreviation LN 303.

The LN 303 specification will only be used for top-slewing cranes from the EC B, EC H, HC L and HC series. This specification will not be used for bottom-slewing cranes and mobile construction cranes because the out-of-operation situation has a lesser impact on the possible hook height of these cranes. The global marketing of bottom-slewing cranes and mobile construction cranes will continue to take place using EN 14439:2009 - C25.

Additionally, the offer continues to remain in place to separately investigate increased wind load requirements in particularly windy regions, for example in Hong Kong, Macau or New Zealand.

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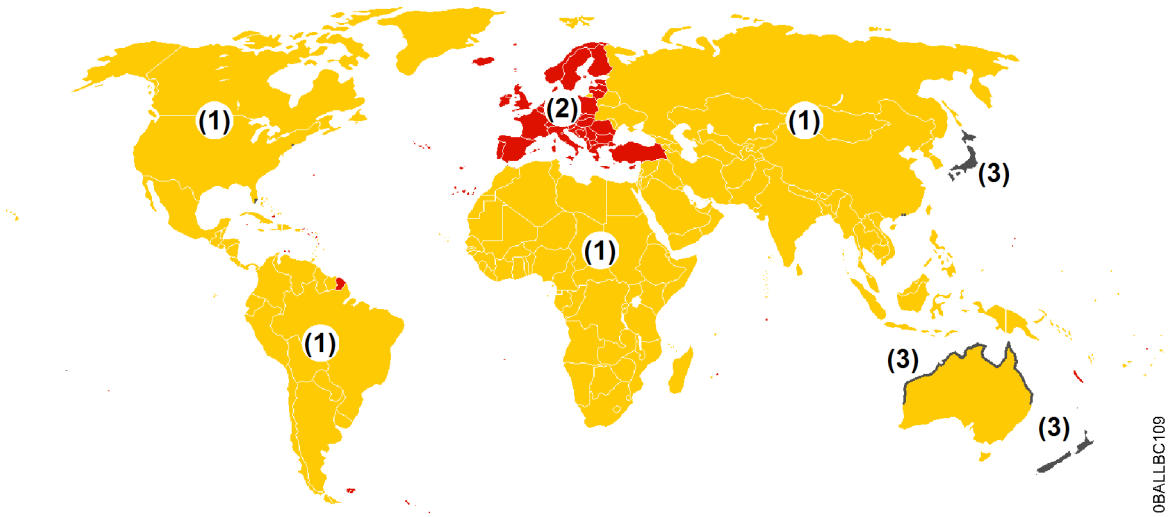

Fig. 2: Geographic overview of specifications to be used

(1) LN 303
(2) EN 14439
(3) LN 303 + special wind load zones

As in the past, the responsibility for the correct assessment and categorisation of the installation sites lies with the crane operator. During this process, it is possible that the necessary information suitable to the installation site cannot be found in the crane's instruction manual. In such cases, please consult Liebherr and request the required supplements to the instruction manual.

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3 Foundation loadings

The following hoist gears have been taken into consideration for the calculation:
– WIW280MZ423
– WIW280WZ401
– WIW300WZ402
– WIW300WZ407

Position of trolley out of operation:

Jib	**Radius**
83.00 m	3.00 m
80.00 m	3.00 m
77.50 m	3.00 m
75.00 m	3.00 m
72.50 m	3.00 m
70.00 m	3.00 m
67.50 m	3.00 m
65.00 m	3.00 m
62.50 m	3.00 m
60.00 m	3.00 m
57.50 m	3.00 m
55.00 m	3.00 m
52.50 m	3.00 m
50.00 m	3.00 m
47.50 m	3.00 m
45.00 m	3.00 m
42.50 m	3.00 m
40.00 m	3.00 m
37.50 m	3.00 m
35.00 m	3.00 m
31.90 m	3.00 m
29.40 m	3.00 m
26.90 m	3.00 m
24.40 m	3.00 m

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3.1 Component compatibility list

C080.001-333.000	**slewing ring support 470EC-B - 24HC630** – C080.001-333.000 13459158 l=0.55 m
C072.002-335.000	**climbing section 355/500HC 5.8m** – C053.002-332.000 931684901 l=5.80 m – C053.060-332.000 90047393 l=5.80 m – C053.061-332.000 90048547 l=5.80 m – C072.002-335.000 90029548 l=5.80 m
C053.000-000.290 totalling max. l=78.30 m	**substitute tower section 24HC630 2.9m** – C053.001-339.000 939797801 l=2.90 m+ – C053.002-339.000 90030368 l=2.90 m+ – C053.060-339.000 90049053 l=2.90 m+ – C032.004-332.000 953518501 l=5.80 m – C053.002-332.000 931684901 l=5.80 m – C053.005-332.000 932432801 l=5.80 m – C053.060-332.000 90047393 l=5.80 m – C053.061-332.000 90048547 l=5.80 m – C053.005-331.000 932434101 l=11.60 m – C053.061-331.000 90048546 l=11.60 m
C053.060-372.100	**foundation anchor 24HC630FA** – C053.060-372.100 90049254 l=0.42 m

+ may only be used 1 x

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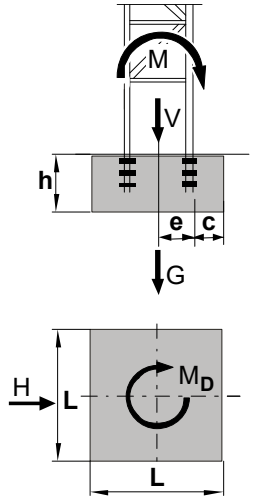
3.2 Jib 83.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**83.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 510 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	1634	48	842	1703	38	815	2210	40	815	3806	12	606
1	7.57	1678	50	871	1576	44	844	2337	46	844	3845	14	635
2	10.47	1724	52	900	1419	51	873	2480	51	873	3889	16	664
3	13.37	1773	54	929	1235	58	902	2638	57	902	3937	17	693
4	16.27	1824	56	958	1027	65	931	2813	62	931	3991	19	722
5	19.17	1877	58	982	794	72	960	3003	68	960	4049	21	751
6	22.07	1951	59	1011	536	79	989	3209	73	989	4112	22	780
7	24.97	2066	61	1040	253	86	1018	3431	79	1018	4180	24	809
8	27.87	2216	63	1069	56	94	1047	3669	84	1047	4253	26	838
9	30.77	2374	65	1098	392	101	1076	3923	89	1076	4331	27	867
10	33.67	2540	67	1127	753	109	1105	4193	95	1105	4414	29	896
11	36.57	2713	68	1156	1142	116	1134	4478	100	1134	4501	31	925
12	39.47	2893	70	1185	1557	124	1163	4779	106	1163	4594	32	954
13	42.37	3080	72	1214	2000	132	1192	5097	111	1192	4691	34	983
14	45.27	3274	74	1243	2471	139	1221	5430	117	1221	4793	36	1012
15	48.17	3473	75	1272	2969	147	1250	5779	122	1250	4900	37	1041

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Jib 83.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	3679	77	1301	3496	155	1279	6144	128	1279	5012	39	1070
17	53.97	3891	79	1330	4050	163	1308	6524	133	1308	5128	41	1099
18	56.87	4108	81	1359	4634	172	1337	6921	139	1337	5250	43	1128
19	59.77	4331	82	1388	5246	180	1366	7333	144	1366	5376	44	1157
20	62.67	4560	84	1417	5888	188	1395	7762	150	1395	5508	46	1186
21	65.57	4794	86	1446	6559	196	1424	8206	155	1424	5644	48	1215
22	68.47	5034	88	1475	7259	205	1453	8666	161	1453	5785	49	1244
23	71.37	5279	89	1504	7990	213	1482	9142	166	1482	5931	51	1273
24	74.27	5530	91	1533	8750	222	1511	9634	172	1511	6082	53	1302
25	77.17	5786	93	1562	9540	230	1540	10141	177	1540	6237	54	1331
26	80.07	6047	94	1591	10361	239	1569	10665	182	1569	6398	56	1360
27	82.97	6313	96	1620	11213	248	1598	11204	188	1598	6563	58	1389

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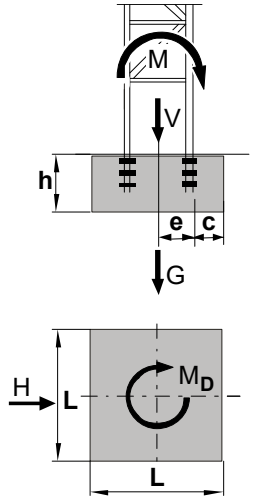
3.3 Jib 80.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**80.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 510 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2147	48	842	1764	38	806	2270	40	806	3577	12	603
1	7.57	2191	50	871	1637	44	835	2397	46	835	3616	14	632
2	10.47	2238	52	900	1480	51	864	2539	51	864	3659	16	661
3	13.37	2288	53	929	1297	58	893	2697	57	893	3708	17	690
4	16.27	2339	55	958	1089	65	922	2872	62	922	3761	19	719
5	19.17	2393	57	987	857	72	951	3062	67	951	3819	21	748
6	22.07	2450	59	1016	599	79	980	3268	73	980	3883	22	777
7	24.97	2506	61	1039	316	86	1009	3489	78	1009	3951	24	806
8	27.87	2625	63	1068	7	93	1038	3727	84	1038	4023	26	835
9	30.77	2750	65	1097	328	101	1067	3981	89	1067	4101	27	864
10	33.67	2879	66	1126	689	108	1096	4250	95	1096	4184	29	893
11	36.57	3013	68	1155	1077	116	1125	4535	100	1125	4271	31	922
12	39.47	3154	70	1184	1492	124	1154	4836	106	1154	4363	32	951
13	42.37	3330	72	1213	1935	131	1183	5153	111	1183	4461	34	980
14	45.27	3513	74	1242	2405	139	1212	5486	117	1212	4563	36	1009
15	48.17	3703	75	1271	2903	147	1241	5835	122	1241	4670	37	1038

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Jib 80.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	3900	77	1300	3429	155	1270	6200	128	1270	4781	39	1067
17	53.97	4103	79	1329	3984	163	1299	6580	133	1299	4898	41	1096
18	56.87	4313	81	1358	4567	171	1328	6977	139	1328	5020	42	1125
19	59.77	4528	82	1387	5179	180	1357	7389	144	1357	5146	44	1154
20	62.67	4750	84	1416	5820	188	1386	7817	150	1386	5277	46	1183
21	65.57	4978	86	1445	6490	196	1415	8261	155	1415	5413	48	1212
22	68.47	5211	88	1474	7190	205	1444	8721	161	1444	5554	49	1241
23	71.37	5451	89	1503	7920	213	1473	9196	166	1473	5700	51	1270
24	74.27	5696	91	1532	8680	222	1502	9688	171	1502	5851	53	1299
25	77.17	5946	93	1561	9470	230	1531	10195	177	1531	6006	54	1328
26	80.07	6202	94	1590	10291	239	1560	10719	182	1560	6167	56	1357
27	82.97	6464	96	1619	11142	247	1589	11258	188	1589	6332	58	1386

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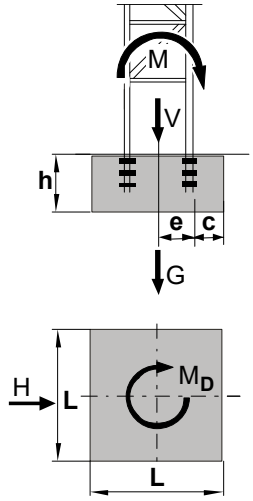
3.4 Jib 77.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**77.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 510 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2340	47	835	1857	38	794	2363	40	794	3276	12	599
1	7.57	2385	49	864	1731	44	823	2489	46	823	3315	14	628
2	10.47	2432	51	893	1574	51	852	2631	51	852	3359	16	657
3	13.37	2481	53	922	1392	58	881	2789	56	881	3407	17	686
4	16.27	2533	55	951	1184	65	910	2963	62	910	3460	19	715
5	19.17	2588	57	980	952	72	939	3153	67	939	3519	21	744
6	22.07	2645	58	1009	695	79	968	3359	73	968	3582	22	773
7	24.97	2704	60	1038	412	86	997	3580	78	997	3650	24	802
8	27.87	2762	62	1067	104	93	1026	3818	84	1026	3722	26	831
9	30.77	2886	64	1089	231	101	1055	4071	89	1055	3800	27	860
10	33.67	3016	66	1118	592	108	1084	4340	95	1084	3883	29	889
11	36.57	3150	68	1147	980	116	1113	4625	100	1113	3970	31	918
12	39.47	3289	69	1176	1395	124	1142	4926	106	1142	4062	32	947
13	42.37	3433	71	1205	1837	131	1171	5243	111	1171	4159	34	976
14	45.27	3582	73	1234	2306	139	1200	5576	117	1200	4261	36	1005
15	48.17	3764	75	1263	2804	147	1229	5924	122	1229	4368	37	1034

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Jib 77.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	3957	77	1292	3330	155	1258	6289	128	1258	4480	39	1063
17	53.97	4156	78	1321	3884	163	1287	6669	133	1287	4596	41	1092
18	56.87	4361	80	1350	4467	171	1316	7065	139	1316	4718	42	1121
19	59.77	4573	82	1379	5078	179	1345	7477	144	1345	4844	44	1150
20	62.67	4791	84	1408	5719	188	1374	7905	149	1374	4975	46	1179
21	65.57	5015	85	1437	6389	196	1403	8349	155	1403	5111	48	1208
22	68.47	5245	87	1466	7089	204	1432	8808	160	1432	5252	49	1237
23	71.37	5481	89	1495	7818	213	1461	9284	166	1461	5398	51	1266
24	74.27	5723	91	1524	8577	221	1490	9775	171	1490	5549	53	1295
25	77.17	5970	92	1553	9367	230	1519	10282	177	1519	5704	54	1324
26	80.07	6223	94	1582	10187	239	1548	10805	182	1548	5864	56	1353
27	82.97	6482	96	1611	11038	247	1577	11344	188	1577	6030	58	1382

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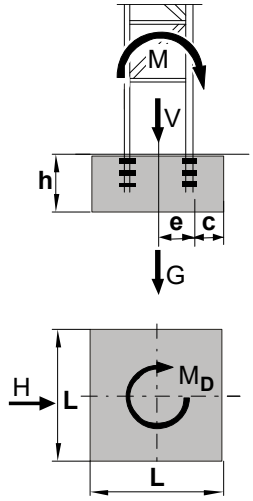
3.5 Jib 75.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**75.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 500 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2479	47	827	1986	38	780	2489	40	780	2749	11	384
1	7.57	2524	49	856	1860	44	809	2615	45	809	2783	13	413
2	10.47	2571	50	885	1704	51	838	2757	51	838	2823	14	442
3	13.37	2621	52	914	1522	57	867	2915	56	867	2868	16	471
4	16.27	2673	54	943	1316	64	896	3088	62	896	2917	18	500
5	19.17	2727	56	972	1084	71	925	3277	67	925	2972	19	529
6	22.07	2784	58	1001	827	79	954	3483	73	954	3031	21	558
7	24.97	2844	60	1030	545	86	983	3704	78	983	3095	23	587
8	27.87	2906	61	1059	238	93	1012	3941	84	1012	3164	24	616
9	30.77	2948	63	1088	96	101	1041	4194	89	1041	3238	26	645
10	33.67	3078	65	1110	457	108	1070	4462	95	1070	3316	28	674
11	36.57	3212	67	1139	844	116	1099	4747	100	1099	3400	29	703
12	39.47	3351	69	1168	1258	123	1128	5047	106	1128	3488	31	732
13	42.37	3495	71	1197	1699	131	1157	5363	111	1157	3582	33	761
14	45.27	3644	72	1226	2168	139	1186	5696	116	1186	3680	34	790
15	48.17	3798	74	1255	2665	147	1215	6044	122	1215	3783	36	819

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Jib 75.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	3967	76	1284	3190	155	1244	6408	127	1244	3891	38	848
17	53.97	4162	78	1313	3743	163	1273	6787	133	1273	4003	39	877
18	56.87	4365	79	1342	4325	171	1302	7183	138	1302	4121	41	906
19	59.77	4573	81	1371	4936	179	1331	7595	144	1331	4243	43	935
20	62.67	4788	83	1400	5576	187	1360	8022	149	1360	4371	44	964
21	65.57	5010	85	1429	6245	196	1389	8465	155	1389	4503	46	993
22	68.47	5237	86	1458	6944	204	1418	8924	160	1418	4640	48	1022
23	71.37	5470	88	1487	7672	213	1447	9399	166	1447	4782	50	1051
24	74.27	5709	90	1516	8431	221	1476	9890	171	1476	4929	51	1080
25	77.17	5953	92	1545	9219	230	1505	10397	177	1505	5080	53	1109
26	80.07	6204	93	1574	10039	238	1534	10919	182	1534	5237	55	1138
27	82.97	6459	95	1603	10888	247	1563	11458	188	1563	5398	56	1167

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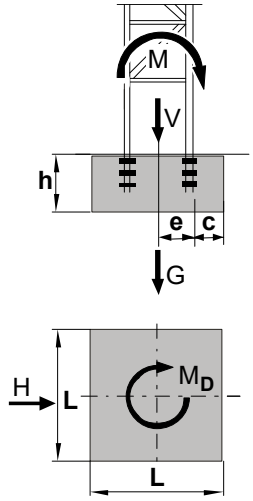
3.6 Jib 72.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**72.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 500 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2694	47	856	1944	38	804	2447	40	804	3347	12	602
1	7.57	2739	49	885	1818	44	833	2572	45	833	3385	14	631
2	10.47	2787	51	914	1662	51	862	2714	51	862	3429	16	660
3	13.37	2837	52	943	1479	57	891	2872	56	891	3477	17	689
4	16.27	2889	54	972	1273	64	920	3045	62	920	3530	19	718
5	19.17	2944	56	1001	1041	71	949	3235	67	949	3588	21	747
6	22.07	3001	58	1030	785	79	978	3440	73	978	3651	22	776
7	24.97	3061	60	1059	503	86	1007	3661	78	1007	3719	24	805
8	27.87	3123	62	1088	195	93	1036	3898	84	1036	3791	26	834
9	30.77	3185	64	1117	139	101	1065	4151	89	1065	3869	27	863
10	33.67	3315	65	1138	499	108	1094	4419	95	1094	3951	29	892
11	36.57	3450	67	1167	887	116	1123	4704	100	1123	4039	31	921
12	39.47	3589	69	1196	1301	123	1152	5004	106	1152	4131	32	950
13	42.37	3734	71	1225	1742	131	1181	5321	111	1181	4228	34	979
14	45.27	3883	73	1254	2211	139	1210	5653	116	1210	4329	36	1008
15	48.17	4037	75	1283	2708	147	1239	6001	122	1239	4436	37	1037

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No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4196	76	1312	3233	155	1268	6365	127	1268	4548	39	1066
17	53.97	4360	78	1341	3786	163	1297	6745	133	1297	4664	41	1095
18	56.87	4528	80	1370	4368	171	1326	7140	138	1326	4785	42	1124
19	59.77	4728	82	1399	4979	179	1355	7552	144	1355	4912	44	1153
20	62.67	4940	83	1428	5618	187	1384	7979	149	1384	5043	46	1182
21	65.57	5159	85	1457	6288	196	1413	8422	155	1413	5179	47	1211
22	68.47	5384	87	1486	6986	204	1442	8881	160	1442	5319	49	1240
23	71.37	5614	89	1515	7715	213	1471	9356	166	1471	5465	51	1269
24	74.27	5851	90	1544	8473	221	1500	9847	171	1500	5615	52	1298
25	77.17	6094	92	1573	9262	230	1529	10354	177	1529	5771	54	1327
26	80.07	6343	94	1602	10081	238	1558	10877	182	1558	5931	56	1356
27	82.97	6597	96	1631	10931	247	1587	11415	188	1587	6096	58	1385

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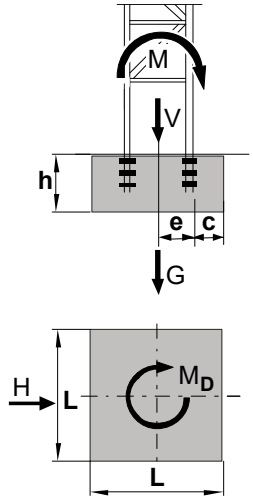
3.7 Jib 70.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**70.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 475 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2881	46	839	1891	38	783	2393	40	783	2749	11	384
1	7.57	2926	48	868	1766	44	812	2519	45	812	2783	13	413
2	10.47	2974	50	897	1610	50	841	2660	51	841	2823	14	442
3	13.37	3024	52	926	1428	57	870	2818	56	870	2868	16	471
4	16.27	3077	53	955	1222	64	899	2991	62	899	2917	18	500
5	19.17	3132	55	984	991	71	928	3180	67	928	2972	19	529
6	22.07	3189	57	1013	734	79	957	3385	73	957	3031	21	558
7	24.97	3249	59	1042	453	86	986	3606	78	986	3095	23	587
8	27.87	3312	61	1071	145	93	1015	3843	84	1015	3164	24	616
9	30.77	3355	63	1100	188	100	1044	4095	89	1044	3238	26	645
10	33.67	3484	65	1121	548	108	1073	4364	95	1073	3316	28	674
11	36.57	3619	66	1150	935	116	1102	4648	100	1102	3400	29	703
12	39.47	3759	68	1179	1349	123	1131	4948	105	1131	3488	31	732
13	42.37	3903	70	1208	1790	131	1160	5264	111	1160	3582	33	761
14	45.27	4053	72	1237	2258	139	1189	5596	116	1189	3680	34	790
15	48.17	4207	74	1266	2755	147	1218	5944	122	1218	3783	36	819

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Jib 70.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4366	76	1295	3279	155	1247	6308	127	1247	3891	38	848
17	53.97	4530	77	1324	3832	163	1276	6687	133	1276	4003	39	877
18	56.87	4699	79	1353	4414	171	1305	7083	138	1305	4121	41	906
19	59.77	4873	81	1382	5024	179	1334	7494	144	1334	4243	43	935
20	62.67	5051	83	1411	5663	187	1363	7921	149	1363	4371	44	964
21	65.57	5235	84	1440	6332	196	1392	8364	155	1392	4503	46	993
22	68.47	5435	86	1469	7030	204	1421	8823	160	1421	4640	48	1022
23	71.37	5662	88	1498	7759	213	1450	9298	166	1450	4782	50	1051
24	74.27	5894	90	1527	8517	221	1479	9788	171	1479	4929	51	1080
25	77.17	6133	91	1556	9305	230	1508	10295	177	1508	5080	53	1109
26	80.07	6377	93	1585	10124	238	1537	10817	182	1537	5237	55	1138
27	82.97	6627	95	1614	10973	247	1566	11355	188	1566	5398	56	1167

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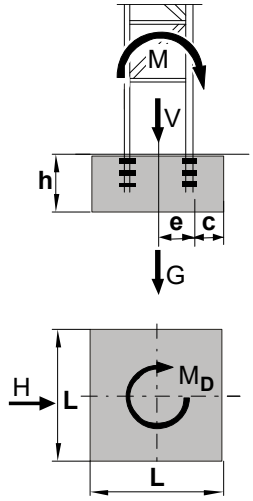
3.8 Jib 67.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**67.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 445 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2955	46	834	2010	38	773	2509	40	773	2749	11	384
1	7.57	3000	48	863	1884	44	802	2634	45	802	2783	13	413
2	10.47	3048	49	892	1729	50	831	2775	51	831	2823	14	442
3	13.37	3098	51	921	1548	57	860	2932	56	860	2868	16	471
4	16.27	3151	53	950	1342	64	889	3105	62	889	2917	18	500
5	19.17	3206	55	979	1112	71	918	3293	67	918	2972	19	529
6	22.07	3263	57	1008	856	78	947	3498	72	947	3031	21	558
7	24.97	3323	59	1037	575	86	976	3718	78	976	3095	23	587
8	27.87	3386	60	1066	268	93	1005	3955	83	1005	3164	24	616
9	30.77	3428	62	1095	65	100	1034	4207	89	1034	3238	26	645
10	33.67	3557	64	1116	424	108	1063	4475	94	1063	3316	28	674
11	36.57	3692	66	1145	810	115	1092	4759	100	1092	3400	29	703
12	39.47	3832	68	1174	1223	123	1121	5058	105	1121	3488	31	732
13	42.37	3976	70	1203	1663	131	1150	5374	111	1150	3582	33	761
14	45.27	4125	71	1232	2131	139	1179	5705	116	1179	3680	34	790
15	48.17	4280	73	1261	2626	147	1208	6053	122	1208	3783	36	819

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Jib 67.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4439	75	1290	3150	155	1237	6416	127	1237	3891	38	848
17	53.97	4603	77	1319	3702	163	1266	6795	133	1266	4003	39	877
18	56.87	4771	79	1348	4283	171	1295	7190	138	1295	4121	41	906
19	59.77	4945	81	1377	4892	179	1324	7601	144	1324	4243	43	935
20	62.67	5124	82	1406	5531	187	1353	8027	149	1353	4371	44	964
21	65.57	5307	84	1435	6199	195	1382	8470	155	1382	4503	46	993
22	68.47	5495	86	1464	6896	204	1411	8928	160	1411	4640	48	1022
23	71.37	5688	88	1493	7624	212	1440	9403	165	1440	4782	50	1051
24	74.27	5906	89	1522	8381	221	1469	9893	171	1469	4929	51	1080
25	77.17	6142	91	1551	9168	229	1498	10399	176	1498	5080	53	1109
26	80.07	6384	93	1580	9986	238	1527	10921	182	1527	5237	55	1138
27	82.97	6632	95	1609	10835	247	1556	11458	187	1556	5398	56	1167

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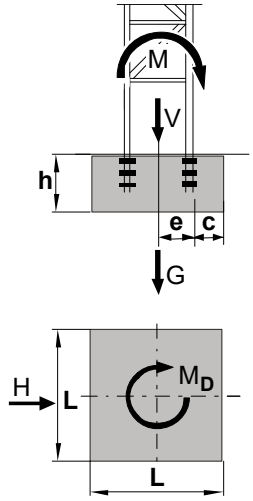
3.9 Jib 65.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**65.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 435 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3132	29	818	1928	38	752	2426	40	752	2749	11	384
1	7.57	3178	30	847	1803	44	781	2551	45	781	2783	13	413
2	10.47	3226	32	876	1648	50	810	2692	50	810	2823	14	442
3	13.37	3277	34	905	1467	57	839	2849	56	839	2868	16	471
4	16.27	3329	35	934	1262	64	868	3021	61	868	2917	18	500
5	19.17	3385	37	963	1032	71	897	3210	67	897	2972	19	529
6	22.07	3442	39	992	776	78	926	3414	72	926	3031	21	558
7	24.97	3503	40	1021	496	85	955	3634	78	955	3095	23	587
8	27.87	3579	42	1050	189	93	984	3870	83	984	3164	24	616
9	30.77	3704	44	1079	143	100	1013	4122	89	1013	3238	26	645
10	33.67	3834	45	1101	502	108	1042	4390	94	1042	3316	28	674
11	36.57	3969	47	1130	888	115	1071	4673	100	1071	3400	29	703
12	39.47	4109	49	1159	1300	123	1100	4973	105	1100	3488	31	732
13	42.37	4254	51	1188	1740	131	1129	5288	111	1129	3582	33	761
14	45.27	4403	52	1217	2207	139	1158	5619	116	1158	3680	34	790
15	48.17	4558	54	1246	2703	146	1187	5967	122	1187	3783	36	819

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Jib 65.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4717	56	1275	3226	154	1216	6330	127	1216	3891	38	848
17	53.97	4882	57	1304	3778	162	1245	6708	133	1245	4003	39	877
18	56.87	5051	59	1333	4358	171	1274	7103	138	1274	4121	41	906
19	59.77	5225	61	1362	4967	179	1303	7514	144	1303	4243	43	935
20	62.67	5404	62	1391	5605	187	1332	7940	149	1332	4371	44	964
21	65.57	5587	64	1420	6273	195	1361	8382	154	1361	4503	46	993
22	68.47	5776	66	1449	6970	204	1390	8841	160	1390	4640	48	1022
23	71.37	5969	67	1478	7697	212	1419	9315	165	1419	4782	50	1051
24	74.27	6168	69	1507	8453	221	1448	9804	171	1448	4929	51	1080
25	77.17	6371	71	1536	9241	229	1477	10310	176	1477	5080	53	1109
26	80.07	6579	72	1565	10058	238	1506	10832	182	1506	5237	55	1138
27	82.97	6792	74	1594	10906	247	1535	11369	187	1535	5398	56	1167

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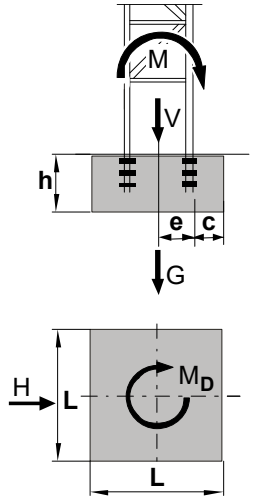
3.10 Jib 62.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**62.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 435 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3103	28	868	2156	37	795	2633	38	795	3033	12	570
1	7.57	3148	30	897	2035	42	824	2755	44	824	3070	13	599
2	10.47	3196	32	926	1885	49	853	2892	49	853	3112	15	628
3	13.37	3246	33	955	1709	56	882	3044	55	882	3159	17	657
4	16.27	3298	35	984	1509	63	911	3213	60	911	3211	18	686
5	19.17	3352	37	1013	1284	70	940	3398	66	940	3268	20	715
6	22.07	3410	38	1042	1034	77	969	3598	71	969	3329	22	744
7	24.97	3469	40	1071	759	84	998	3815	77	998	3395	23	773
8	27.87	3538	42	1100	458	91	1027	4047	82	1027	3467	25	802
9	30.77	3662	43	1129	131	99	1056	4295	87	1056	3543	27	831
10	33.67	3791	45	1158	222	106	1085	4559	93	1085	3624	28	860
11	36.57	3925	47	1178	602	114	1114	4839	98	1114	3709	30	889
12	39.47	4064	48	1207	1008	121	1143	5135	104	1143	3800	32	918
13	42.37	4207	50	1236	1442	129	1172	5446	109	1172	3896	34	947
14	45.27	4356	52	1265	1903	137	1201	5774	115	1201	3996	35	976
15	48.17	4509	53	1294	2392	145	1230	6117	120	1230	4101	37	1005

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Jib 62.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4667	55	1323	2909	153	1259	6476	126	1259	4211	39	1034
17	53.97	4830	57	1352	3454	161	1288	6851	131	1288	4326	40	1063
18	56.87	4998	58	1381	4028	169	1317	7242	137	1317	4446	42	1092
19	59.77	5171	60	1410	4630	177	1346	7649	142	1346	4571	44	1121
20	62.67	5348	62	1439	5262	185	1375	8071	148	1375	4700	45	1150
21	65.57	5531	64	1468	5923	193	1404	8510	153	1404	4835	47	1179
22	68.47	5718	65	1497	6613	202	1433	8964	159	1433	4974	49	1208
23	71.37	5910	67	1526	7333	210	1462	9435	164	1462	5118	50	1237
24	74.27	6107	69	1555	8083	219	1491	9921	170	1491	5267	52	1266
25	77.17	6309	70	1584	8863	227	1520	10423	175	1520	5421	54	1295
26	80.07	6516	72	1613	9673	236	1549	10941	181	1549	5580	55	1324
27	82.97	6728	74	1642	10514	245	1578	11474	186	1578	5744	57	1353

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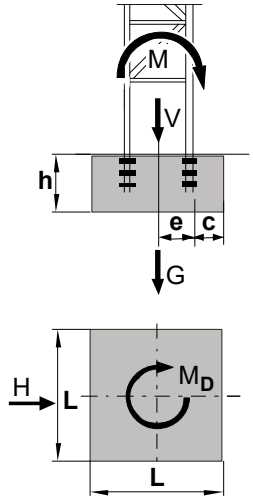
3.11 Jib 60.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**60.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 410 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3326	28	852	2126	37	774	2602	38	774	2713	12	564
1	7.57	3371	30	881	2005	42	802	2723	44	802	2750	13	594
2	10.47	3418	32	910	1855	49	832	2860	49	832	2792	15	622
3	13.37	3469	33	939	1680	56	860	3012	55	860	2839	17	652
4	16.27	3521	35	968	1480	63	890	3181	60	890	2890	18	680
5	19.17	3576	37	997	1255	70	918	3365	66	918	2947	20	710
6	22.07	3633	38	1026	1005	77	948	3565	71	948	3008	22	738
7	24.97	3693	40	1055	731	84	976	3782	76	976	3074	23	768
8	27.87	3755	42	1084	430	91	1006	4014	82	1006	3146	25	796
9	30.77	3790	43	1113	104	98	1034	4261	87	1034	3222	27	826
10	33.67	3919	45	1142	249	106	1064	4525	93	1064	3302	28	854
11	36.57	4053	47	1163	628	113	1092	4805	98	1092	3388	30	884
12	39.47	4191	48	1192	1034	121	1122	5100	104	1122	3479	32	912
13	42.37	4335	50	1221	1468	129	1150	5412	109	1150	3574	34	942
14	45.27	4484	52	1250	1928	137	1180	5739	115	1180	3674	35	970
15	48.17	4637	53	1279	2417	145	1208	6082	120	1208	3780	37	1000

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No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4795	55	1308	2933	152	1238	6441	126	1238	3890	39	1028
17	53.97	4958	57	1337	3478	161	1266	6816	131	1266	4005	40	1058
18	56.87	5126	59	1366	4052	169	1296	7206	137	1296	4124	42	1086
19	59.77	5299	60	1395	4654	177	1324	7613	142	1324	4249	44	1116
20	62.67	5477	62	1424	5285	185	1354	8035	148	1354	4378	45	1144
21	65.57	5660	64	1453	5945	193	1382	8474	153	1382	4513	47	1174
22	68.47	5847	65	1482	6635	202	1412	8928	159	1412	4652	49	1202
23	71.37	6039	67	1511	7355	210	1440	9398	164	1440	4796	50	1232
24	74.27	6236	69	1540	8104	219	1470	9884	169	1470	4945	52	1260
25	77.17	6439	70	1569	8884	227	1498	10385	175	1498	5099	54	1290
26	80.07	6645	72	1598	9694	236	1528	10903	180	1528	5258	55	1318
27	82.97	6857	74	1627	10534	244	1556	11436	186	1556	5421	57	1348

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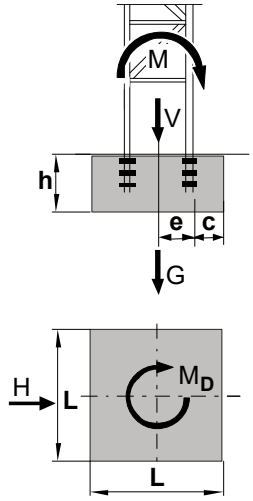
3.12 Jib 57.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**57.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 385 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3310	28	848	2238	36	763	2712	38	763	2296	11	361
1	7.57	3355	30	877	2117	42	792	2833	44	792	2330	12	390
2	10.47	3402	32	906	1967	49	821	2969	49	821	2368	14	419
3	13.37	3452	33	935	1792	56	850	3122	54	850	2412	16	448
4	16.27	3505	35	964	1592	62	879	3290	60	879	2460	17	477
5	19.17	3560	37	993	1368	69	908	3474	65	908	2513	19	506
6	22.07	3617	38	1022	1119	76	937	3674	71	937	2572	21	535
7	24.97	3677	40	1051	844	84	966	3890	76	966	2635	22	564
8	27.87	3745	42	1080	544	91	995	4122	82	995	2702	24	593
9	30.77	3869	43	1109	218	98	1024	4370	87	1024	2775	26	622
10	33.67	3999	45	1138	134	106	1053	4633	93	1053	2853	27	651
11	36.57	4133	47	1159	513	113	1082	4912	98	1082	2935	29	680
12	39.47	4271	48	1188	919	121	1111	5208	104	1111	3023	31	709
13	42.37	4415	50	1217	1352	129	1140	5519	109	1140	3115	32	738
14	45.27	4564	52	1246	1812	137	1169	5846	115	1169	3212	34	767
15	48.17	4717	54	1275	2300	144	1198	6189	120	1198	3314	36	796

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Jib 57.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4875	55	1304	2817	152	1227	6547	126	1227	3420	37	825
17	53.97	5039	57	1333	3361	160	1256	6922	131	1256	3532	39	854
18	56.87	5207	59	1362	3934	168	1285	7312	137	1285	3649	41	883
19	59.77	5379	60	1391	4536	177	1314	7719	142	1314	3770	42	912
20	62.67	5557	62	1420	5166	185	1343	8141	148	1343	3896	44	941
21	65.57	5740	64	1449	5826	193	1372	8579	153	1372	4027	46	970
22	68.47	5927	65	1478	6516	202	1401	9033	158	1401	4163	47	999
23	71.37	6120	67	1507	7235	210	1430	9503	164	1430	4304	49	1028
24	74.27	6317	69	1536	7984	218	1459	9988	169	1459	4450	51	1057
25	77.17	6519	70	1565	8763	227	1488	10490	175	1488	4600	53	1086
26	80.07	6726	72	1594	9573	236	1517	11007	180	1517	4756	54	1115
27	82.97	6938	74	1623	10413	244	1546	11540	186	1546	4916	56	1144

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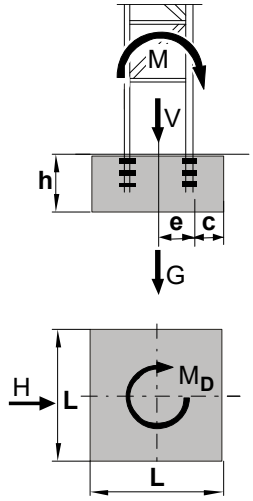
3.13 Jib 55.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**55.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 360 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3563	28	835	2176	36	742	2649	38	742	2296	11	361
1	7.57	3609	30	864	2056	42	771	2769	43	771	2330	12	390
2	10.47	3657	32	893	1907	48	800	2905	49	800	2368	14	419
3	13.37	3707	33	922	1732	55	829	3057	54	829	2412	16	448
4	16.27	3760	35	951	1533	62	858	3225	60	858	2460	17	477
5	19.17	3815	37	980	1310	69	887	3408	65	887	2513	19	506
6	22.07	3873	38	1009	1061	76	916	3608	71	916	2572	21	535
7	24.97	3933	40	1038	787	83	945	3823	76	945	2635	22	564
8	27.87	3995	42	1067	488	91	974	4055	82	974	2702	24	593
9	30.77	4060	43	1096	162	98	1003	4302	87	1003	2775	26	622
10	33.67	4157	45	1125	189	106	1032	4565	93	1032	2853	27	651
11	36.57	4291	47	1154	567	113	1061	4844	98	1061	2935	29	680
12	39.47	4430	49	1173	972	121	1090	5138	104	1090	3023	31	709
13	42.37	4574	50	1202	1404	129	1119	5449	109	1119	3115	32	738
14	45.27	4723	52	1231	1864	136	1148	5775	115	1148	3212	34	767
15	48.17	4876	54	1260	2351	144	1177	6118	120	1177	3314	36	796

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Jib 55.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5035	55	1289	2867	152	1206	6476	125	1206	3420	37	825
17	53.97	5198	57	1318	3410	160	1235	6850	131	1235	3532	39	854
18	56.87	5366	59	1347	3982	168	1264	7240	136	1264	3649	41	883
19	59.77	5539	60	1376	4583	176	1293	7646	142	1293	3770	42	912
20	62.67	5717	62	1405	5213	185	1322	8068	147	1322	3896	44	941
21	65.57	5900	64	1434	5872	193	1351	8505	153	1351	4027	46	970
22	68.47	6087	65	1463	6561	201	1380	8959	158	1380	4163	47	999
23	71.37	6280	67	1492	7279	210	1409	9428	164	1409	4304	49	1028
24	74.27	6477	69	1521	8027	218	1438	9913	169	1438	4450	51	1057
25	77.17	6679	70	1550	8806	227	1467	10414	175	1467	4600	53	1086
26	80.07	6886	72	1579	9614	235	1496	10931	180	1496	4756	54	1115
27	82.97	7098	74	1608	10454	244	1525	11464	186	1525	4916	56	1144

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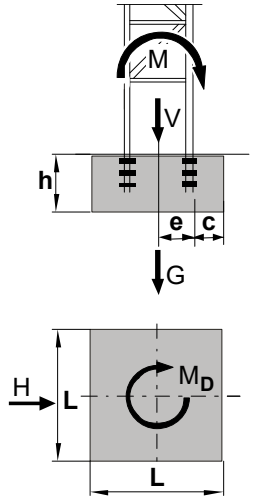
3.14 Jib 52.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**52.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 340 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3610	28	842	2225	36	741	2696	38	741	2296	11	361
1	7.57	3656	30	871	2106	42	770	2816	43	770	2330	12	390
2	10.47	3704	32	900	1957	48	799	2952	49	799	2368	14	419
3	13.37	3754	33	929	1782	55	828	3104	54	828	2412	16	448
4	16.27	3807	35	958	1583	62	857	3271	60	857	2460	17	477
5	19.17	3862	37	987	1360	69	886	3455	65	886	2513	19	506
6	22.07	3920	38	1016	1112	76	915	3654	71	915	2572	21	535
7	24.97	3980	40	1045	838	83	944	3869	76	944	2635	22	564
8	27.87	4042	42	1074	539	91	973	4100	82	973	2702	24	593
9	30.77	4107	43	1103	214	98	1002	4347	87	1002	2775	26	622
10	33.67	4204	45	1132	137	106	1031	4610	93	1031	2853	27	651
11	36.57	4338	47	1161	515	113	1060	4889	98	1060	2935	29	680
12	39.47	4477	48	1179	919	121	1089	5183	104	1089	3023	31	709
13	42.37	4621	50	1208	1351	128	1118	5494	109	1118	3115	32	738
14	45.27	4769	52	1237	1810	136	1147	5820	114	1147	3212	34	767
15	48.17	4923	54	1266	2297	144	1176	6162	120	1176	3314	36	796

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No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5081	55	1295	2812	152	1205	6520	125	1205	3420	37	825
17	53.97	5245	57	1324	3355	160	1234	6894	131	1234	3532	39	854
18	56.87	5413	59	1353	3927	168	1263	7284	136	1263	3649	41	883
19	59.77	5586	60	1382	4528	176	1292	7689	142	1292	3770	42	912
20	62.67	5764	62	1411	5157	185	1321	8111	147	1321	3896	44	941
21	65.57	5946	64	1440	5816	193	1350	8548	153	1350	4027	46	970
22	68.47	6134	65	1469	6504	201	1379	9001	158	1379	4163	47	999
23	71.37	6326	67	1498	7222	210	1408	9470	164	1408	4304	49	1028
24	74.27	6524	69	1527	7970	218	1437	9955	169	1437	4450	51	1057
25	77.17	6726	70	1556	8747	227	1466	10456	175	1466	4600	53	1086
26	80.07	6933	72	1585	9556	235	1495	10973	180	1495	4756	54	1115
27	82.97	7145	74	1614	10394	244	1524	11505	186	1524	4916	56	1144

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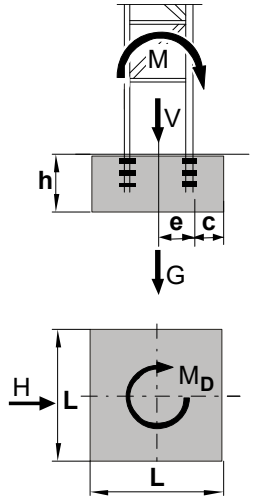
3.15 Jib 50.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**50.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 310 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3573	28	837	2359	36	730	2828	38	730	2296	11	361
1	7.57	3618	30	866	2240	42	759	2947	43	759	2330	12	390
2	10.47	3666	32	895	2091	48	788	3083	49	788	2368	14	419
3	13.37	3716	33	924	1917	55	817	3234	54	817	2412	16	448
4	16.27	3769	35	953	1719	62	846	3401	60	846	2460	17	477
5	19.17	3824	37	982	1497	69	875	3584	65	875	2513	19	506
6	22.07	3881	38	1011	1249	76	904	3783	71	904	2572	21	535
7	24.97	3941	40	1040	976	83	933	3997	76	933	2635	22	564
8	27.87	4004	42	1069	678	90	962	4228	81	962	2702	24	593
9	30.77	4068	43	1098	354	98	991	4474	87	991	2775	26	622
10	33.67	4164	45	1127	3	105	1020	4737	92	1020	2853	27	651
11	36.57	4298	47	1145	374	113	1049	5015	98	1049	2935	29	680
12	39.47	4437	48	1174	778	120	1078	5309	103	1078	3023	31	709
13	42.37	4580	50	1203	1209	128	1107	5619	109	1107	3115	32	738
14	45.27	4729	52	1232	1667	136	1136	5945	114	1136	3212	34	767
15	48.17	4882	53	1261	2153	144	1165	6286	120	1165	3314	36	796

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Jib 50.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5040	55	1290	2668	152	1194	6644	125	1194	3420	37	825
17	53.97	5203	57	1319	3210	160	1223	7017	131	1223	3532	39	854
18	56.87	5371	58	1348	3781	168	1252	7406	136	1252	3649	41	883
19	59.77	5544	60	1377	4381	176	1281	7812	142	1281	3770	42	912
20	62.67	5721	62	1406	5009	184	1310	8233	147	1310	3896	44	941
21	65.57	5904	64	1435	5667	193	1339	8669	153	1339	4027	46	970
22	68.47	6091	65	1464	6354	201	1368	9122	158	1368	4163	47	999
23	71.37	6283	67	1493	7071	209	1397	9591	164	1397	4304	49	1028
24	74.27	6481	69	1522	7818	218	1426	10075	169	1426	4450	51	1057
25	77.17	6682	70	1551	8595	226	1455	10576	174	1455	4600	53	1086
26	80.07	6889	72	1580	9403	235	1484	11092	180	1484	4756	54	1115
27	82.97	7101	74	1609	10240	244	1513	11624	185	1513	4916	56	1144

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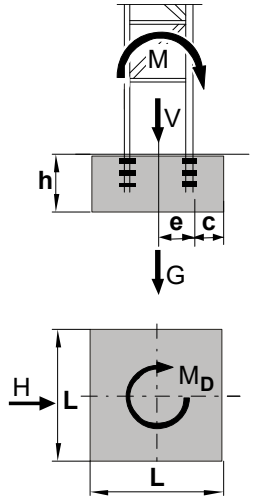
3.16 Jib 47.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**47.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 295 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3545	28	833	2396	36	718	2863	38	718	2296	11	361
1	7.57	3583	30	862	2276	42	747	2982	43	747	2330	12	390
2	10.47	3630	32	891	2128	48	776	3117	49	776	2368	14	419
3	13.37	3680	33	920	1955	55	805	3268	54	805	2412	16	448
4	16.27	3732	35	949	1757	62	834	3435	59	834	2460	17	477
5	19.17	3787	37	978	1534	69	863	3618	65	863	2513	19	506
6	22.07	3845	38	1007	1287	76	892	3817	70	892	2572	21	535
7	24.97	3904	40	1036	1015	83	921	4031	76	921	2635	22	564
8	27.87	3967	42	1065	717	90	950	4261	81	950	2702	24	593
9	30.77	4031	43	1094	393	98	979	4508	87	979	2775	26	622
10	33.67	4127	45	1123	43	105	1008	4770	92	1008	2853	27	651
11	36.57	4260	47	1152	334	113	1037	5048	98	1037	2935	29	680
12	39.47	4399	48	1169	737	120	1066	5341	103	1066	3023	31	709
13	42.37	4542	50	1198	1168	128	1095	5651	109	1095	3115	32	738
14	45.27	4691	52	1227	1626	136	1124	5977	114	1124	3212	34	767
15	48.17	4844	53	1256	2112	144	1153	6318	120	1153	3314	36	796

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Jib 47.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5002	55	1285	2626	152	1182	6675	125	1182	3420	37	825
17	53.97	5165	57	1314	3168	160	1211	7048	131	1211	3532	39	854
18	56.87	5332	58	1343	3738	168	1240	7437	136	1240	3649	41	883
19	59.77	5505	60	1372	4337	176	1269	7842	142	1269	3770	42	912
20	62.67	5683	62	1401	4966	184	1298	8263	147	1298	3896	44	941
21	65.57	5865	63	1430	5623	192	1327	8700	153	1327	4027	46	970
22	68.47	6052	65	1459	6310	201	1356	9152	158	1356	4163	47	999
23	71.37	6244	67	1488	7026	209	1385	9621	163	1385	4304	49	1028
24	74.27	6441	69	1517	7773	218	1414	10105	169	1414	4450	51	1057
25	77.17	6643	70	1546	8549	226	1443	10605	174	1443	4600	53	1086
26	80.07	6850	72	1575	9356	235	1472	11121	180	1472	4756	54	1115
27	82.97	7061	74	1604	10194	244	1501	11653	185	1501	4916	56	1144

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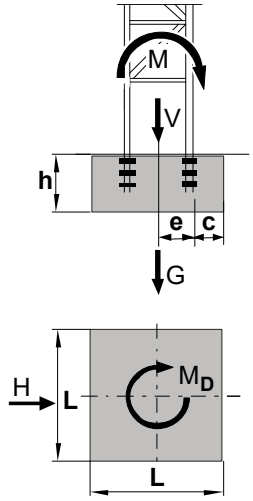
3.17 Jib 45.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**45.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 295 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3602	28	868	2366	36	745	2831	37	745	1795	11	349
1	7.57	3641	30	897	2247	42	774	2950	43	774	1829	12	378
2	10.47	3682	32	926	2100	48	803	3085	48	803	1868	14	407
3	13.37	3726	33	955	1927	55	832	3235	54	832	1911	16	436
4	16.27	3772	35	984	1729	62	861	3402	59	861	1960	17	465
5	19.17	3821	37	1013	1508	69	890	3584	65	890	2013	19	494
6	22.07	3875	38	1042	1261	76	919	3782	70	919	2071	21	523
7	24.97	3935	40	1071	989	83	948	3996	76	948	2134	22	552
8	27.87	3997	42	1100	692	90	977	4226	81	977	2202	24	581
9	30.77	4062	43	1129	369	98	1006	4472	87	1006	2275	26	610
10	33.67	4156	45	1158	19	105	1035	4733	92	1035	2352	27	639
11	36.57	4290	47	1187	356	113	1064	5011	98	1064	2435	29	668
12	39.47	4428	48	1203	759	120	1093	5304	103	1093	2522	31	697
13	42.37	4572	50	1232	1189	128	1122	5613	109	1122	2614	32	726
14	45.27	4720	52	1261	1646	136	1151	5938	114	1151	2711	34	755
15	48.17	4873	53	1290	2131	144	1180	6279	120	1180	2813	36	784

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No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5031	55	1319	2644	151	1209	6636	125	1209	2920	37	813
17	53.97	5194	57	1348	3186	159	1238	7009	130	1238	3032	39	842
18	56.87	5361	58	1377	3755	168	1267	7397	136	1267	3148	41	871
19	59.77	5534	60	1406	4354	176	1296	7802	141	1296	3270	42	900
20	62.67	5711	62	1435	4981	184	1325	8222	147	1325	3396	44	929
21	65.57	5894	63	1464	5638	192	1354	8658	152	1354	3527	46	958
22	68.47	6081	65	1493	6324	201	1383	9110	158	1383	3663	47	987
23	71.37	6273	67	1522	7039	209	1412	9578	163	1412	3804	49	1016
24	74.27	6469	68	1551	7785	217	1441	10062	169	1441	3949	51	1045
25	77.17	6671	70	1580	8561	226	1470	10561	174	1470	4100	53	1074
26	80.07	6878	72	1609	9367	235	1499	11077	180	1499	4255	54	1103
27	82.97	7089	74	1638	10203	243	1528	11608	185	1528	4416	56	1132

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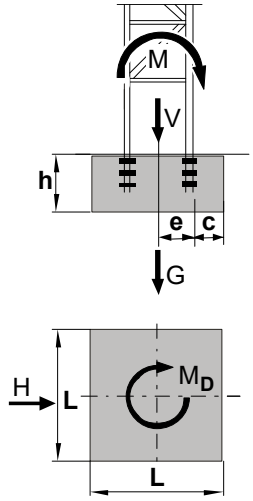
3.18 Jib 42.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**42.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 265 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3736	28	826	2244	36	695	2709	37	695	1795	11	349
1	7.57	3776	30	855	2125	42	724	2828	43	724	1829	12	378
2	10.47	3819	32	884	1978	48	753	2963	48	753	1868	14	407
3	13.37	3864	33	913	1805	55	782	3113	54	782	1911	16	436
4	16.27	3911	35	942	1607	62	811	3280	59	811	1960	17	465
5	19.17	3961	37	971	1386	69	840	3462	65	840	2013	19	494
6	22.07	4013	38	1000	1139	76	869	3660	70	869	2071	21	523
7	24.97	4068	40	1029	867	83	898	3874	76	898	2134	22	552
8	27.87	4125	42	1058	570	90	927	4104	81	927	2202	24	581
9	30.77	4186	43	1087	247	98	956	4349	87	956	2275	26	610
10	33.67	4281	45	1116	103	105	985	4611	92	985	2352	27	639
11	36.57	4415	47	1131	479	113	1014	4889	98	1014	2435	29	668
12	39.47	4553	48	1160	881	120	1043	5182	103	1043	2522	31	697
13	42.37	4697	50	1189	1311	128	1072	5491	109	1072	2614	32	726
14	45.27	4845	52	1218	1769	136	1101	5816	114	1101	2711	34	755
15	48.17	4999	53	1247	2253	144	1130	6157	120	1130	2813	36	784

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Jib 42.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5157	55	1276	2766	151	1159	6514	125	1159	2920	37	813
17	53.97	5320	57	1305	3308	159	1188	6887	130	1188	3032	39	842
18	56.87	5487	58	1334	3877	168	1217	7275	136	1217	3148	41	871
19	59.77	5660	60	1363	4476	176	1246	7680	141	1246	3270	42	900
20	62.67	5838	62	1392	5103	184	1275	8100	147	1275	3396	44	929
21	65.57	6020	64	1421	5760	192	1304	8536	152	1304	3527	46	958
22	68.47	6208	65	1450	6446	201	1333	8988	158	1333	3663	47	987
23	71.37	6400	67	1479	7162	209	1362	9456	163	1362	3804	49	1016
24	74.27	6597	69	1508	7907	217	1391	9940	169	1391	3949	51	1045
25	77.17	6799	70	1537	8683	226	1420	10439	174	1420	4100	53	1074
26	80.07	7005	72	1566	9489	235	1449	10955	180	1449	4255	54	1103
27	82.97	7217	74	1595	10325	243	1478	11486	185	1478	4416	56	1132

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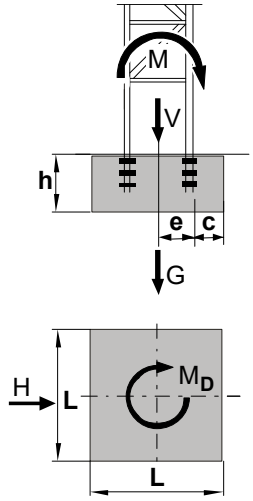
3.19 Jib 40.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**40.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 265 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3695	28	822	2300	36	682	2765	37	682	1795	11	349
1	7.57	3736	30	851	2181	42	711	2884	43	711	1829	12	378
2	10.47	3780	32	880	2033	48	740	3018	48	740	1868	14	407
3	13.37	3826	33	909	1860	55	769	3169	54	769	1911	16	436
4	16.27	3874	35	938	1663	62	798	3335	59	798	1960	17	465
5	19.17	3925	37	967	1441	69	827	3518	65	827	2013	19	494
6	22.07	3978	38	996	1195	76	856	3716	70	856	2071	21	523
7	24.97	4034	40	1025	923	83	885	3930	76	885	2134	22	552
8	27.87	4092	42	1054	626	90	914	4159	81	914	2202	24	581
9	30.77	4152	43	1083	302	98	943	4405	87	943	2275	26	610
10	33.67	4224	45	1112	47	105	972	4667	92	972	2352	27	639
11	36.57	4358	47	1141	423	113	1001	4944	98	1001	2435	29	668
12	39.47	4496	48	1155	826	120	1030	5238	103	1030	2522	31	697
13	42.37	4640	50	1184	1255	128	1059	5547	109	1059	2614	32	726
14	45.27	4788	52	1213	1713	136	1088	5872	114	1088	2711	34	755
15	48.17	4941	53	1242	2198	144	1117	6213	120	1117	2813	36	784

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Jib 40.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5099	55	1271	2711	151	1146	6570	125	1146	2920	37	813
17	53.97	5262	57	1300	3252	159	1175	6942	130	1175	3032	39	842
18	56.87	5430	58	1329	3822	168	1204	7331	136	1204	3148	41	871
19	59.77	5603	60	1358	4420	176	1233	7735	141	1233	3270	42	900
20	62.67	5780	62	1387	5047	184	1262	8156	147	1262	3396	44	929
21	65.57	5962	63	1416	5704	192	1291	8592	152	1291	3527	46	958
22	68.47	6150	65	1445	6390	201	1320	9044	158	1320	3663	47	987
23	71.37	6342	67	1474	7106	209	1349	9512	163	1349	3804	49	1016
24	74.27	6539	69	1503	7851	217	1378	9995	169	1378	3949	51	1045
25	77.17	6740	70	1532	8627	226	1407	10495	174	1407	4100	53	1074
26	80.07	6947	72	1561	9433	235	1436	11011	180	1436	4255	54	1103
27	82.97	7159	74	1590	10270	243	1465	11542	185	1465	4416	56	1132

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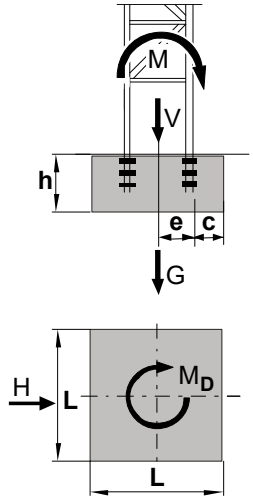
3.20 Jib 37.50 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**37.50 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 265 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3707	28	821	2318	36	670	2784	37	670	1795	11	349
1	7.57	3749	30	850	2199	42	699	2902	43	699	1829	12	378
2	10.47	3794	32	879	2052	48	728	3037	48	728	1868	14	407
3	13.37	3842	33	908	1879	55	757	3187	54	757	1911	16	436
4	16.27	3891	35	937	1682	62	786	3354	59	786	1960	17	465
5	19.17	3943	37	966	1460	69	815	3536	65	815	2013	19	494
6	22.07	3998	38	995	1213	76	844	3734	70	844	2071	21	523
7	24.97	4055	40	1024	942	83	873	3948	76	873	2134	22	552
8	27.87	4114	42	1053	644	90	902	4178	81	902	2202	24	581
9	30.77	4176	43	1082	321	98	931	4424	87	931	2275	26	610
10	33.67	4240	45	1111	28	105	960	4685	92	960	2352	27	639
11	36.57	4339	47	1124	404	113	989	4963	98	989	2435	29	668
12	39.47	4477	48	1153	807	120	1018	5256	103	1018	2522	31	697
13	42.37	4621	50	1182	1237	128	1047	5565	109	1047	2614	32	726
14	45.27	4769	52	1211	1694	136	1076	5891	114	1076	2711	34	755
15	48.17	4922	53	1240	2179	144	1105	6231	120	1105	2813	36	784

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Jib 37.50 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5080	55	1269	2692	151	1134	6588	125	1134	2920	37	813
17	53.97	5243	57	1298	3233	159	1163	6961	130	1163	3032	39	842
18	56.87	5411	58	1327	3803	168	1192	7350	136	1192	3148	41	871
19	59.77	5583	60	1356	4401	176	1221	7754	141	1221	3270	42	900
20	62.67	5761	62	1385	5029	184	1250	8174	147	1250	3396	44	929
21	65.57	5943	63	1414	5685	192	1279	8610	152	1279	3527	46	958
22	68.47	6130	65	1443	6371	201	1308	9062	158	1308	3663	47	987
23	71.37	6322	67	1472	7087	209	1337	9530	163	1337	3804	49	1016
24	74.27	6519	69	1501	7833	217	1366	10014	169	1366	3949	51	1045
25	77.17	6721	70	1530	8608	226	1395	10514	174	1395	4100	53	1074
26	80.07	6928	72	1559	9414	235	1424	11029	180	1424	4255	54	1103
27	82.97	7139	74	1588	10251	243	1453	11561	185	1453	4416	56	1132

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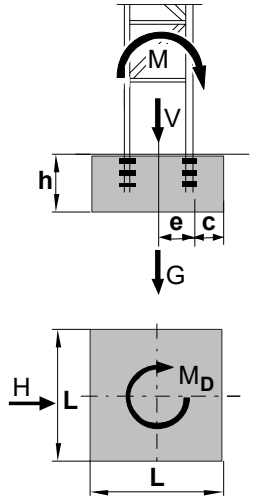
3.21 Jib 35.00 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**35.00 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 265 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3704	28	845	2346	34	681	2785	36	681	1429	10	326
1	7.57	3748	29	874	2232	40	710	2899	41	710	1461	12	355
2	10.47	3793	31	903	2091	46	739	3029	47	739	1498	13	384
3	13.37	3841	33	932	1924	53	768	3174	52	768	1540	15	413
4	16.27	3891	34	961	1733	60	797	3336	58	797	1587	17	442
5	19.17	3944	36	990	1518	67	826	3514	63	826	1639	18	471
6	22.07	4000	38	1019	1278	74	855	3707	69	855	1696	20	500
7	24.97	4057	39	1048	1013	81	884	3916	74	884	1757	22	529
8	27.87	4117	41	1077	723	88	913	4141	80	913	1824	23	558
9	30.77	4180	43	1106	407	95	942	4382	85	942	1895	25	587
10	33.67	4245	45	1135	64	103	971	4639	91	971	1971	27	616
11	36.57	4304	46	1146	304	110	1000	4912	96	1000	2052	29	645
12	39.47	4441	48	1175	699	118	1029	5201	101	1029	2138	30	674
13	42.37	4583	50	1204	1121	126	1058	5505	107	1058	2229	32	703
14	45.27	4729	51	1233	1571	133	1087	5825	112	1087	2324	34	732
15	48.17	4881	53	1262	2048	141	1116	6162	118	1116	2425	35	761

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Jib 35.00 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5038	55	1291	2553	149	1145	6514	123	1145	2530	37	790
17	53.97	5199	56	1320	3086	157	1174	6882	129	1174	2640	39	819
18	56.87	5365	58	1349	3648	165	1203	7266	134	1203	2755	40	848
19	59.77	5536	60	1378	4238	173	1232	7665	140	1232	2875	42	877
20	62.67	5712	61	1407	4857	182	1261	8081	145	1261	3000	44	906
21	65.57	5893	63	1436	5505	190	1290	8512	151	1290	3130	45	935
22	68.47	6079	65	1465	6183	198	1319	8960	156	1319	3264	47	964
23	71.37	6270	66	1494	6890	207	1348	9423	162	1348	3404	49	993
24	74.27	6465	68	1523	7627	215	1377	9902	167	1377	3548	50	1022
25	77.17	6665	70	1552	8394	224	1406	10397	173	1406	3697	52	1051
26	80.07	6870	71	1581	9191	232	1435	10907	178	1435	3851	54	1080
27	82.97	7081	73	1610	10019	241	1464	11434	184	1464	4010	55	1109

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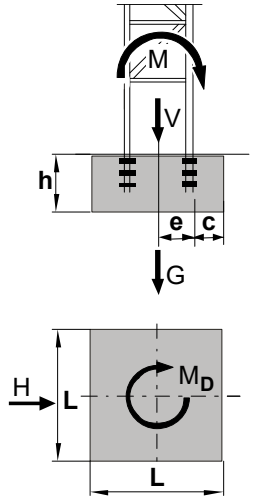
3.22 Jib 31.90 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**31.90 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 265 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3604	28	796	2322	34	620	2760	36	620	1429	10	326
1	7.57	3648	29	825	2208	40	649	2874	41	649	1461	12	355
2	10.47	3695	31	854	2066	46	678	3004	47	678	1498	13	384
3	13.37	3745	33	883	1899	53	707	3150	52	707	1540	15	413
4	16.27	3797	34	912	1708	60	736	3312	58	736	1587	17	442
5	19.17	3851	36	941	1493	67	765	3489	63	765	1639	18	471
6	22.07	3908	38	970	1253	74	794	3683	69	794	1696	20	500
7	24.97	3967	39	999	988	81	823	3892	74	823	1757	22	529
8	27.87	4028	41	1028	698	88	852	4117	80	852	1824	23	558
9	30.77	4088	43	1042	382	95	881	4358	85	881	1895	25	587
10	33.67	4212	45	1071	40	103	910	4615	91	910	1971	27	616
11	36.57	4341	46	1100	328	110	939	4888	96	939	2052	29	645
12	39.47	4474	48	1129	724	118	968	5176	101	968	2138	30	674
13	42.37	4613	50	1158	1146	126	997	5481	107	997	2229	32	703
14	45.27	4756	51	1187	1595	133	1026	5801	112	1026	2324	34	732
15	48.17	4906	53	1216	2072	141	1055	6137	118	1055	2425	35	761

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No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5063	55	1245	2577	149	1084	6489	123	1084	2530	37	790
17	53.97	5224	56	1274	3111	157	1113	6857	129	1113	2640	39	819
18	56.87	5390	58	1303	3672	165	1142	7241	134	1142	2755	40	848
19	59.77	5562	60	1332	4262	173	1171	7641	140	1171	2875	42	877
20	62.67	5738	61	1361	4881	182	1200	8056	145	1200	3000	44	906
21	65.57	5919	63	1390	5529	190	1229	8488	151	1229	3130	45	935
22	68.47	6104	65	1419	6207	198	1258	8935	156	1258	3264	47	964
23	71.37	6295	66	1448	6914	207	1287	9398	162	1287	3404	49	993
24	74.27	6490	68	1477	7651	215	1316	9877	167	1316	3548	50	1022
25	77.17	6691	70	1506	8418	224	1345	10372	173	1345	3697	52	1051
26	80.07	6896	71	1535	9215	232	1374	10883	178	1374	3851	54	1080
27	82.97	7106	73	1564	10043	241	1403	11410	184	1403	4010	55	1109

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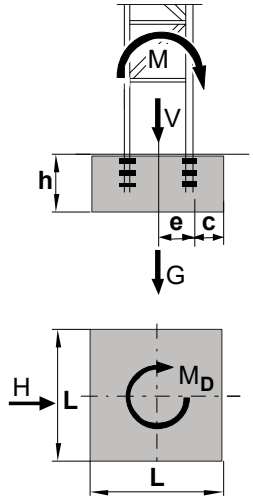
3.23 Jib 29.40 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**29.40 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 265 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	3110	28	784	2379	34	608	2818	36	608	1429	10	326
1	7.57	3193	29	813	2266	40	637	2932	41	637	1461	12	355
2	10.47	3281	31	842	2124	46	666	3062	47	666	1498	13	384
3	13.37	3374	33	871	1957	53	695	3208	52	695	1540	15	413
4	16.27	3472	34	900	1766	60	724	3369	58	724	1587	17	442
5	19.17	3575	36	929	1551	67	753	3547	63	753	1639	18	471
6	22.07	3682	38	958	1311	74	782	3740	69	782	1696	20	500
7	24.97	3794	39	987	1046	81	811	3950	74	811	1757	22	529
8	27.87	3912	41	1016	756	88	840	4175	80	840	1824	23	558
9	30.77	4034	43	1045	440	95	869	4416	85	869	1895	25	587
10	33.67	4161	44	1074	98	103	898	4673	91	898	1971	27	616
11	36.57	4292	46	1103	271	110	927	4945	96	927	2052	29	645
12	39.47	4429	48	1132	666	118	956	5234	101	956	2138	30	674
13	42.37	4571	50	1161	1088	126	985	5538	107	985	2229	32	703
14	45.27	4717	51	1190	1538	133	1014	5859	112	1014	2324	34	732
15	48.17	4868	53	1219	2015	141	1043	6195	118	1043	2425	35	761

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No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	5024	55	1248	2520	149	1072	6547	123	1072	2530	37	790
17	53.97	5185	56	1277	3053	157	1101	6915	129	1101	2640	39	819
18	56.87	5351	58	1306	3614	165	1130	7299	134	1130	2755	40	848
19	59.77	5522	60	1335	4204	173	1159	7699	140	1159	2875	42	877
20	62.67	5698	61	1364	4824	182	1188	8114	145	1188	3000	44	906
21	65.57	5878	63	1393	5472	190	1217	8546	151	1217	3130	45	935
22	68.47	6063	65	1422	6149	198	1246	8993	156	1246	3264	47	964
23	71.37	6253	66	1451	6856	207	1275	9456	162	1275	3404	49	993
24	74.27	6449	68	1480	7593	215	1304	9935	167	1304	3548	50	1022
25	77.17	6648	70	1509	8360	224	1333	10430	173	1333	3697	52	1051
26	80.07	6853	71	1538	9158	232	1362	10941	178	1362	3851	54	1080
27	82.97	7063	73	1567	9985	241	1391	11467	184	1391	4010	55	1109

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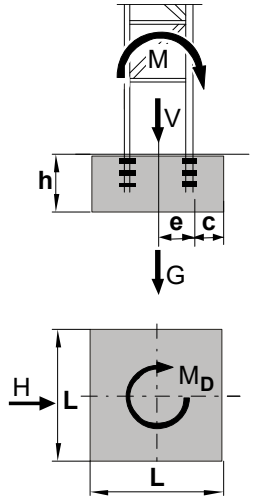
3.24 Jib 26.90 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**26.90 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 245 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2811	28	765	2250	34	588	2689	36	588	1429	10	326
1	7.57	2894	29	794	2137	40	617	2803	41	617	1461	12	355
2	10.47	2982	31	823	1995	46	646	2933	47	646	1498	13	384
3	13.37	3075	33	852	1828	53	675	3079	52	675	1540	15	413
4	16.27	3173	34	881	1637	60	704	3240	58	704	1587	17	442
5	19.17	3276	36	910	1422	67	733	3418	63	733	1639	18	471
6	22.07	3383	38	939	1182	74	762	3611	69	762	1696	20	500
7	24.97	3495	39	968	917	81	791	3821	74	791	1757	22	529
8	27.87	3613	41	997	627	88	820	4046	80	820	1824	23	558
9	30.77	3735	43	1026	311	95	849	4287	85	849	1895	25	587
10	33.67	3862	44	1055	31	103	878	4544	91	878	1971	27	616
11	36.57	3993	46	1084	400	110	907	4816	96	907	2052	29	645
12	39.47	4130	48	1113	795	118	936	5105	101	936	2138	30	674
13	42.37	4272	49	1142	1217	126	965	5409	107	965	2229	32	703
14	45.27	4418	51	1171	1667	133	994	5730	112	994	2324	34	732
15	48.17	4569	53	1200	2144	141	1023	6066	118	1023	2425	35	761

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Jib 26.90 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4725	54	1229	2649	149	1052	6418	123	1052	2530	37	790
17	53.97	4886	56	1258	3182	157	1081	6786	129	1081	2640	39	819
18	56.87	5052	58	1287	3743	165	1110	7170	134	1110	2755	40	848
19	59.77	5223	59	1316	4333	173	1139	7570	140	1139	2875	42	877
20	62.67	5398	61	1345	4953	182	1168	7985	145	1168	3000	44	906
21	65.57	5579	63	1374	5601	190	1197	8417	151	1197	3130	45	935
22	68.47	5764	64	1403	6278	198	1226	8864	156	1226	3264	47	964
23	71.37	5954	66	1432	6985	207	1255	9327	162	1255	3404	49	993
24	74.27	6149	68	1461	7722	215	1284	9806	167	1284	3548	50	1022
25	77.17	6349	70	1490	8489	224	1313	10301	173	1313	3697	52	1051
26	80.07	6554	71	1519	9287	232	1342	10812	178	1342	3851	54	1080
27	82.97	6763	73	1548	10114	241	1371	11338	184	1371	4010	55	1109

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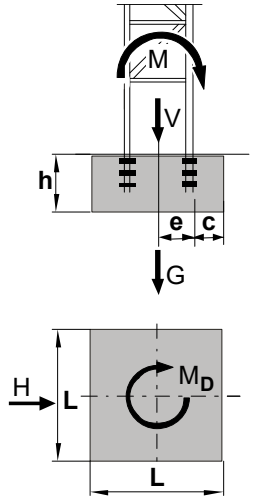
3.25 Jib 24.40 m

WARNING
Refer to the “General notes on safety for foundation loading tables”, as well as the instruction manual for the crane, before applying this static data.

Crane type:	470 EC-B 16 Crane stationary, without climbing equipment, without crane driver elevator	**Jib:**	**24.40 m**
Tower system:	24HC630	**Tower section length:**	2.90 m
Base tower:			
Crane base:	foundation anchor 24HC630FA (C053.060-372.100)		



Conditions for crane stability are:
Jib must be free to weathervane when out of operation!

$$Eccentricity:\ e = \frac{M + (H \cdot h)}{V + G} \leq \frac{L}{3}$$

Ground pressure must not exceed maximum allowable soil pressure!

$$\sigma_B = \frac{2 \cdot (V + G)}{3 \cdot L \cdot c} \leq \sigma_{B\,permissible}$$

$$c = \frac{L}{2} - e$$

G = Weight of foundation

Position of trolley out of operation: 3.00 m

Slewing moment in operation MD = 245 kNm

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
0	4.67	2331	27	753	2253	34	576	2691	36	576	1429	10	326
1	7.57	2413	29	782	2139	40	605	2805	41	605	1461	12	355
2	10.47	2501	31	811	1997	46	634	2935	47	634	1498	13	384
3	13.37	2593	32	840	1830	53	663	3081	52	663	1540	15	413
4	16.27	2690	34	869	1639	60	692	3243	58	692	1587	17	442
5	19.17	2792	36	898	1424	67	721	3420	63	721	1639	18	471
6	22.07	2898	37	927	1184	74	750	3614	69	750	1696	20	500
7	24.97	3010	39	956	919	81	779	3823	74	779	1757	22	529
8	27.87	3127	41	985	629	88	808	4048	80	808	1824	23	558
9	30.77	3248	42	1014	313	95	837	4289	85	837	1895	25	587
10	33.67	3374	44	1043	29	103	866	4546	91	866	1971	27	616
11	36.57	3505	46	1072	397	110	895	4819	96	895	2052	29	645
12	39.47	3641	47	1101	793	118	924	5107	101	924	2138	30	674
13	42.37	3782	49	1130	1215	126	953	5412	107	953	2229	32	703
14	45.27	3928	51	1159	1664	133	982	5732	112	982	2324	34	732
15	48.17	4078	53	1188	2141	141	1011	6068	118	1011	2425	35	761

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Jib 24.40 m

No. of tower sections	Hook height	Crane in operation			Crane out of operation						Crane during erection		
					Storm from rear			Storm from front					
	[m]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]	M [kNm]	H [kN]	V [kN]
16	51.07	4234	54	1217	2646	149	1040	6420	123	1040	2530	37	790
17	53.97	4394	56	1246	3179	157	1069	6788	129	1069	2640	39	819
18	56.87	4559	58	1275	3741	165	1098	7172	134	1098	2755	40	848
19	59.77	4729	59	1304	4331	173	1127	7572	140	1127	2875	42	877
20	62.67	4904	61	1333	4950	182	1156	7987	145	1156	3000	44	906
21	65.57	5084	63	1362	5598	190	1185	8419	151	1185	3130	45	935
22	68.47	5268	64	1391	6276	198	1214	8866	156	1214	3264	47	964
23	71.37	5458	66	1420	6983	207	1243	9329	162	1243	3404	49	993
24	74.27	5652	68	1449	7720	215	1272	9808	167	1272	3548	50	1022
25	77.17	5851	69	1478	8487	224	1301	10303	173	1301	3697	52	1051
26	80.07	6055	71	1507	9284	232	1330	10814	178	1330	3851	54	1080
27	82.97	6264	73	1536	10112	241	1359	11341	184	1359	4010	55	1109

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