

ZOOMLION

ZOOMLION ZCC13000 CRAWLER CRANE

TECHNICAL SPECIFICATIONS

ZCC13000/27Y

2021

Zoomlion Heavy Industry Science & Technology Co.,Ltd.

Zoomlion ZCC13000 Crawler Crane

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ZCC13000/27Y

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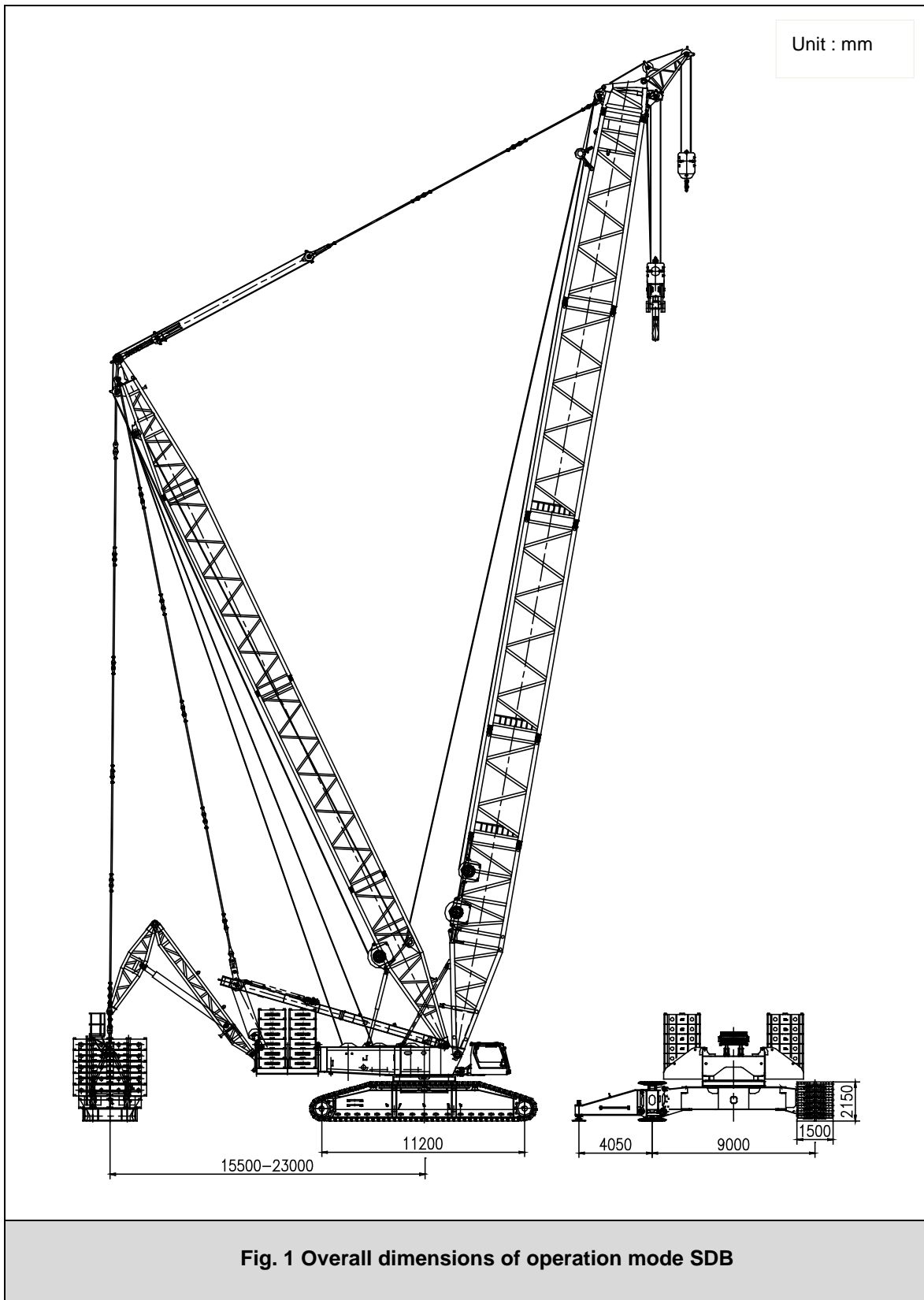
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1. Overall dimensions and main technical parameters

1.1 Overall dimensions of operation mode SDB



1.2 Main technical parameters

Item			Parameter
Max. lifting moment t×m			13000
S / SL	Max. lifting capacity × radius	t×m	734×7
	Length of heavy main boom	m	36~90
	Length of light main boom	m	60~108
SLDB-1 / 2 / 3	Max. lifting capacity × radius	t×m	900×10
	Length of heavy main boom	m	42~162
	Length of light main boom	m	48~171
SLHS-1	Max. lifting capacity × radius	t×m	220×18
	Length of jib for wind turbine	m	7
	Main boom length	m	90~117
SLHS-2	Max. lifting capacity × radius	t×m	140×17
	Length of jib for wind turbine	m	7
	Main boom length	m	108~126
SLHSDB-1	Max. lifting capacity × radius	t×m	220×34
	Length of jib for wind turbine	m	7
	Main boom length	m	96~168
SLHSDB-3	Max. lifting capacity × radius	t×m	270×32
	Length of jib for wind turbine	m	5
	Main boom length	m	96~168
SLHSDB-2	Max. lifting capacity × radius	t×m	220×28
	Length of jib for wind turbine	m	7
	Main boom length	m	108~171
SLHSDB-4	Max. lifting capacity × radius	t×m	270×26
	Length of jib for wind turbine	m	5
	Main boom length	m	108~165

Item		Parameter
Hoisting mechanism I & II	Speed of a single rope of the outermost layer on the winch m/min	128
	Wire rope diameter mm	28
	Single rope tension KN	180
Tip boom hoisting mechanism	Speed of a single rope of the outermost layer on the winch m/min	135
	Wire rope diameter mm	28
	Single rope tension KN	160
Main derricking winch	Speed of a single rope of the outermost layer on the winch m/min	44x2
	Wire rope diameter mm	32
	Single rope tension KN	226
Superlift derricking mechanism	Speed of a single rope of the outermost layer on the winch m/min	128
	Wire rope diameter mm	28
	Single rope tension KN	160
Luffing jib derricking mechanism	Speed of a single rope of the outermost layer on the winch m/min	120
	Wire rope diameter mm	28
	Single rope tension KN	160
Derrick boom	Derrick boom length m	42
Slewing speed		rpm 0~1.0
Traveling speed		km/h 0~0.8
Max. Gradeability		% 20
Total weight of the crane in basic operating mode		t 640
Max. transport weight of a single piece		t 47
Max. dimension of a single piece in transport mm x mm x mm		13950x3450x3800
Weight of suspended ballast t (Central slewing radius m)		400 (stepless derricking of 15.5~23)

Item		Parameter
Attached counterweight		t 35t
Rear counterweight		t 210 (250)
Central ballast		t 96
Engine	Model	QSX15
	Rated power/ rotational speed	kW/rpm 418/1800
	Max. output torque	Nm 2542
Track gauge x crawler contact length x track pad width		mm 9000x11200x1500

1.3 Description on boom combination

The crane has two types of operating modes: standard operating mode (without derrick boom and suspended ballast) and superlift operating mode (with derrick boom and suspended ballast). Boom sections are lattice structure made of high-strength steel tubes and anchoring rods are made of high-strength steel plates.

● Standard operating modes:

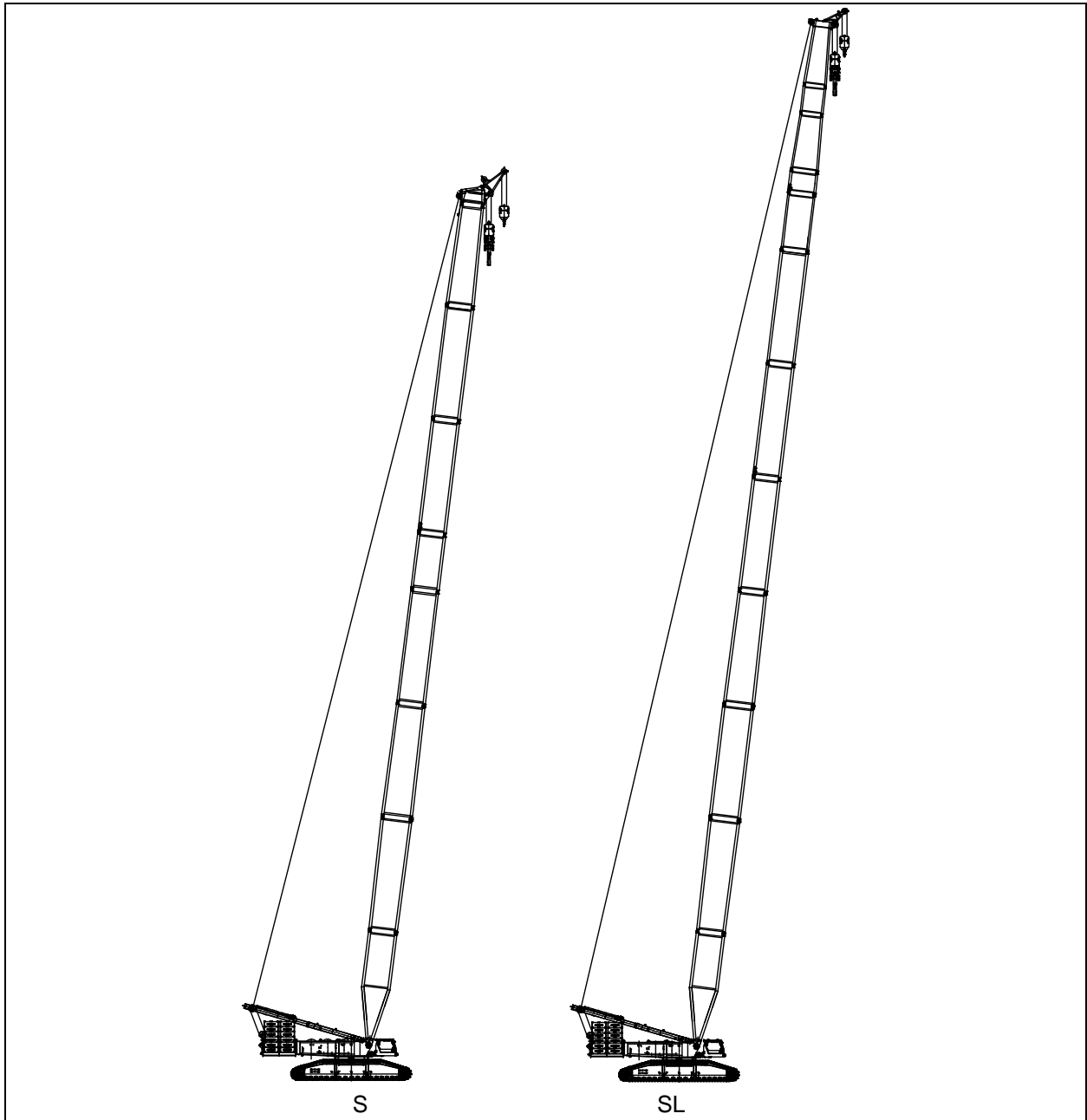


Fig.2 Boom combination

No.	Operating modes	Parameters
S	Heavy main boom	S=36~90m
SL	Light main boom	S=60~108m

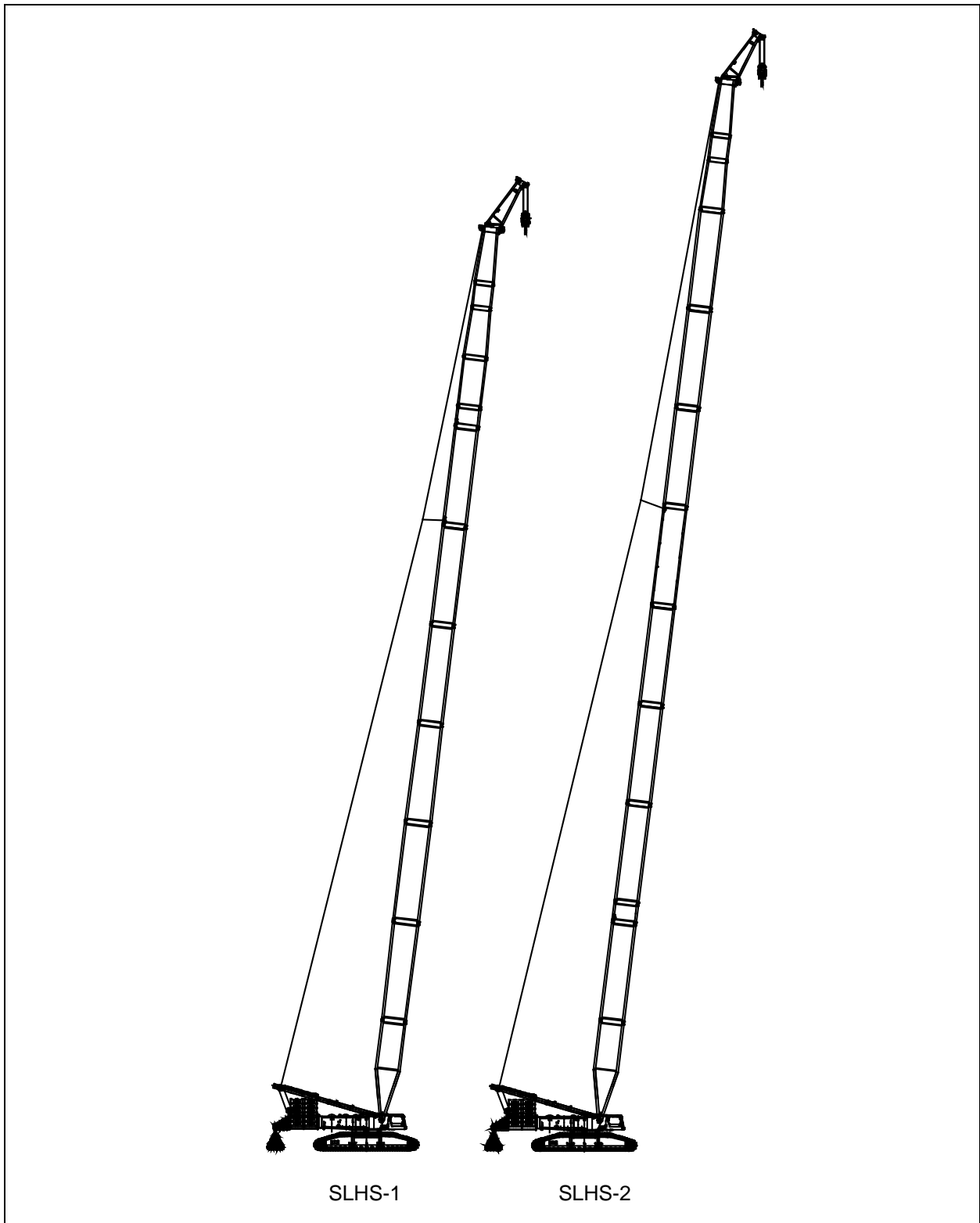


Fig. 3 Boom combination

No.	Operating modes	Parameters
SLHS-1	Light main boom for turbine (1)	S=90~117m HS=7m
SLHS-2	Light main boom for turbine (2)	S=108~126m HS=7m

● Superlift operating modes:

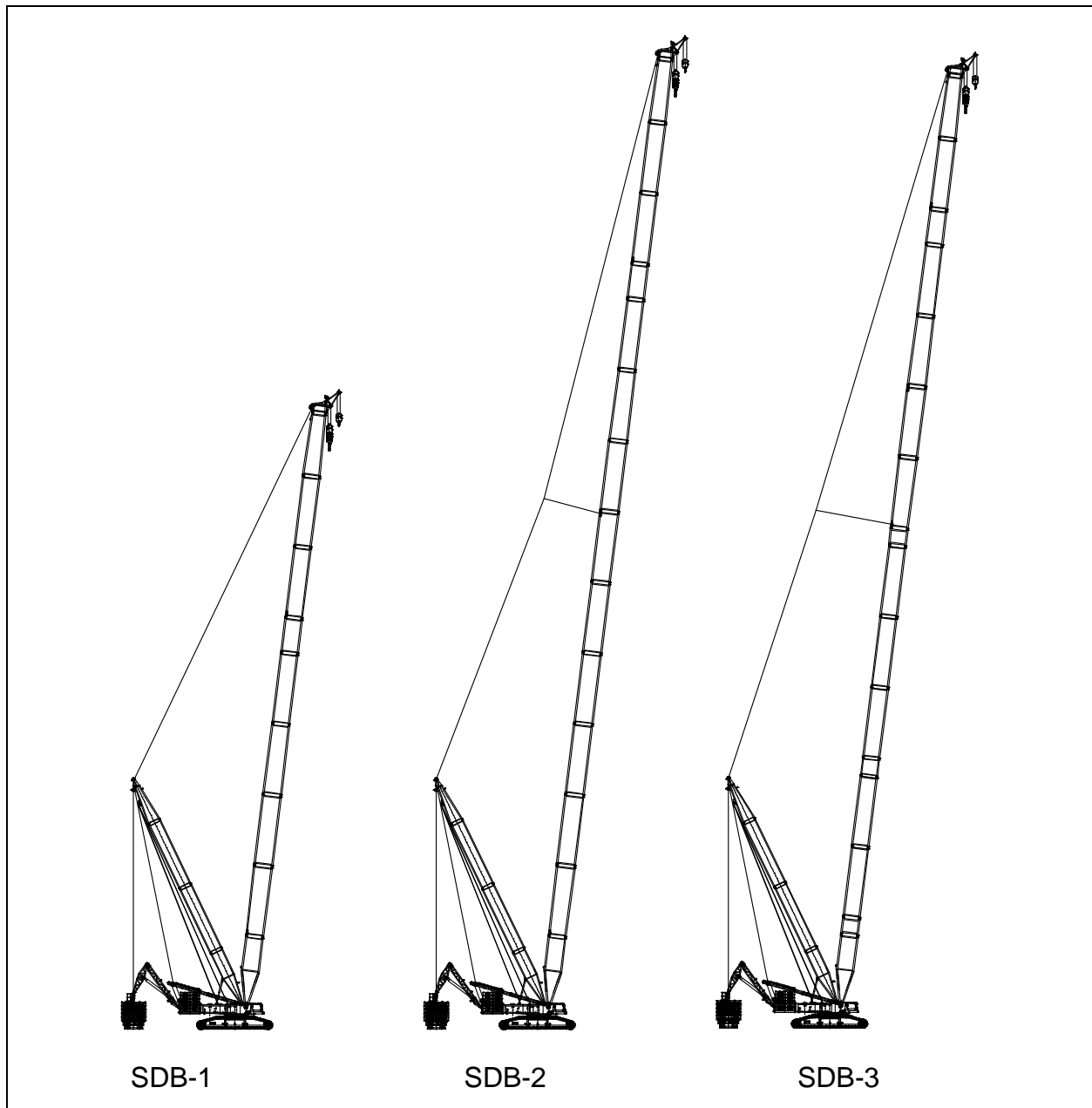


Fig. 4 Boom combination

No.	Operating modes	Parameters
SDB-1	Superlift heavy main boom	S=42~102m
SDB-2	Superlift heavy main boom (with strengthened boom sections)	S=60~162m
SDB-3	Superlift heavy main boom (with parallel boom)	S=93~159m

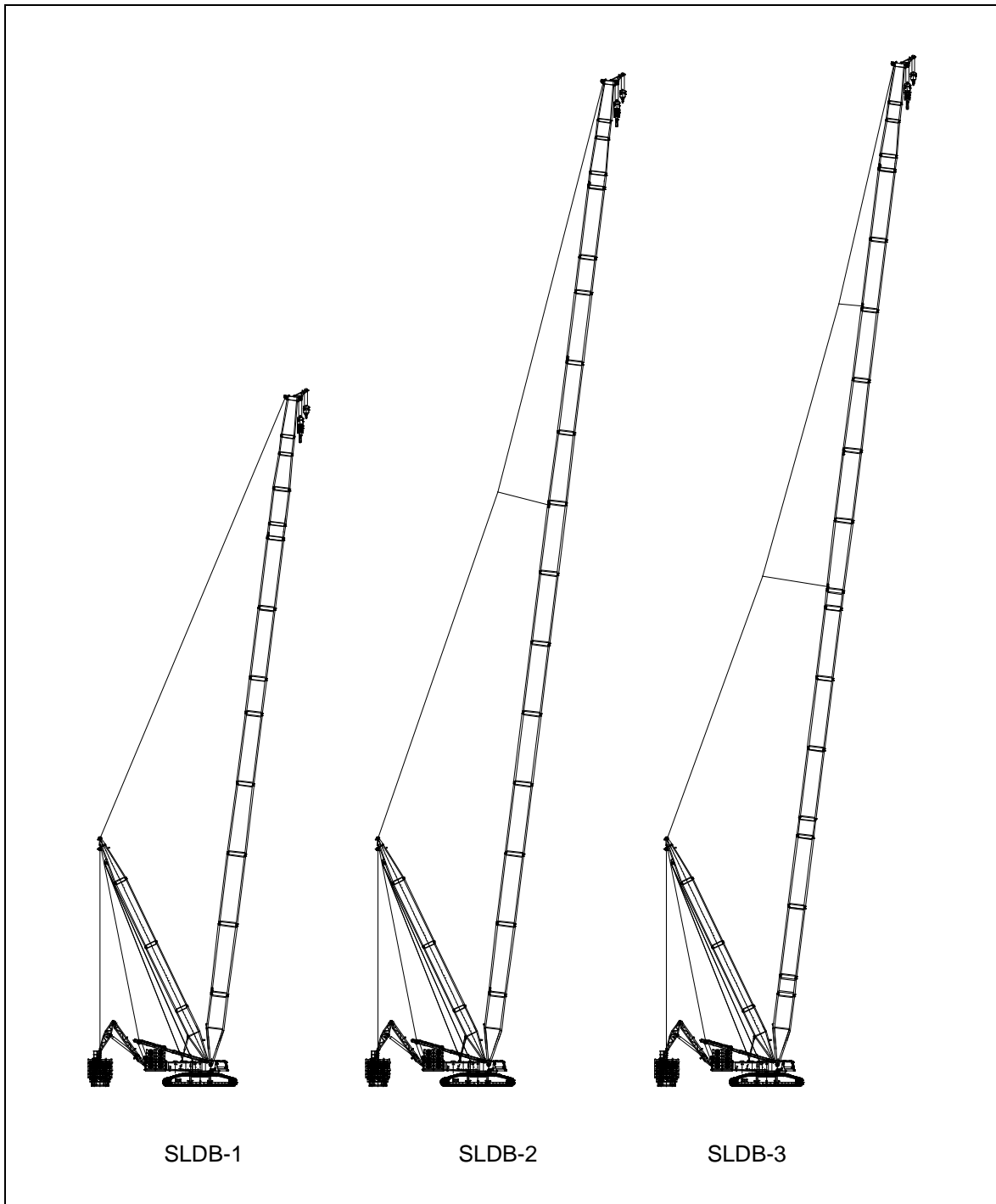


Fig. 5 Boom combination

No.	Operating modes	Parameters
SLDB-1	Superlift light main boom	S=48~114m
SLDB-2	Superlift light main boom (with strengthened boom sections)	S=66~168m
SLDB-3	Superlift light main boom (with ultra-wide parallel boom)	S=96~171m

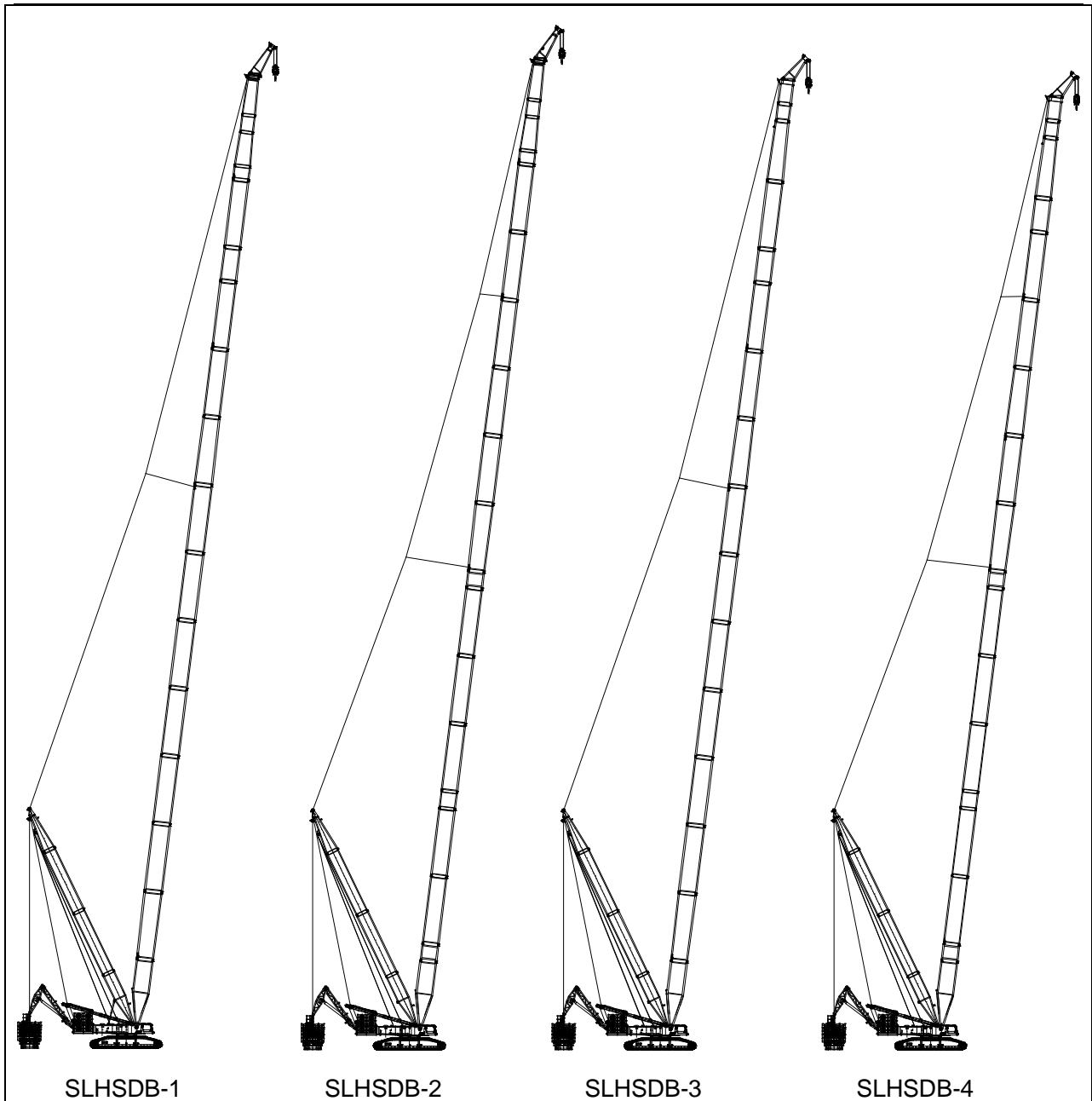
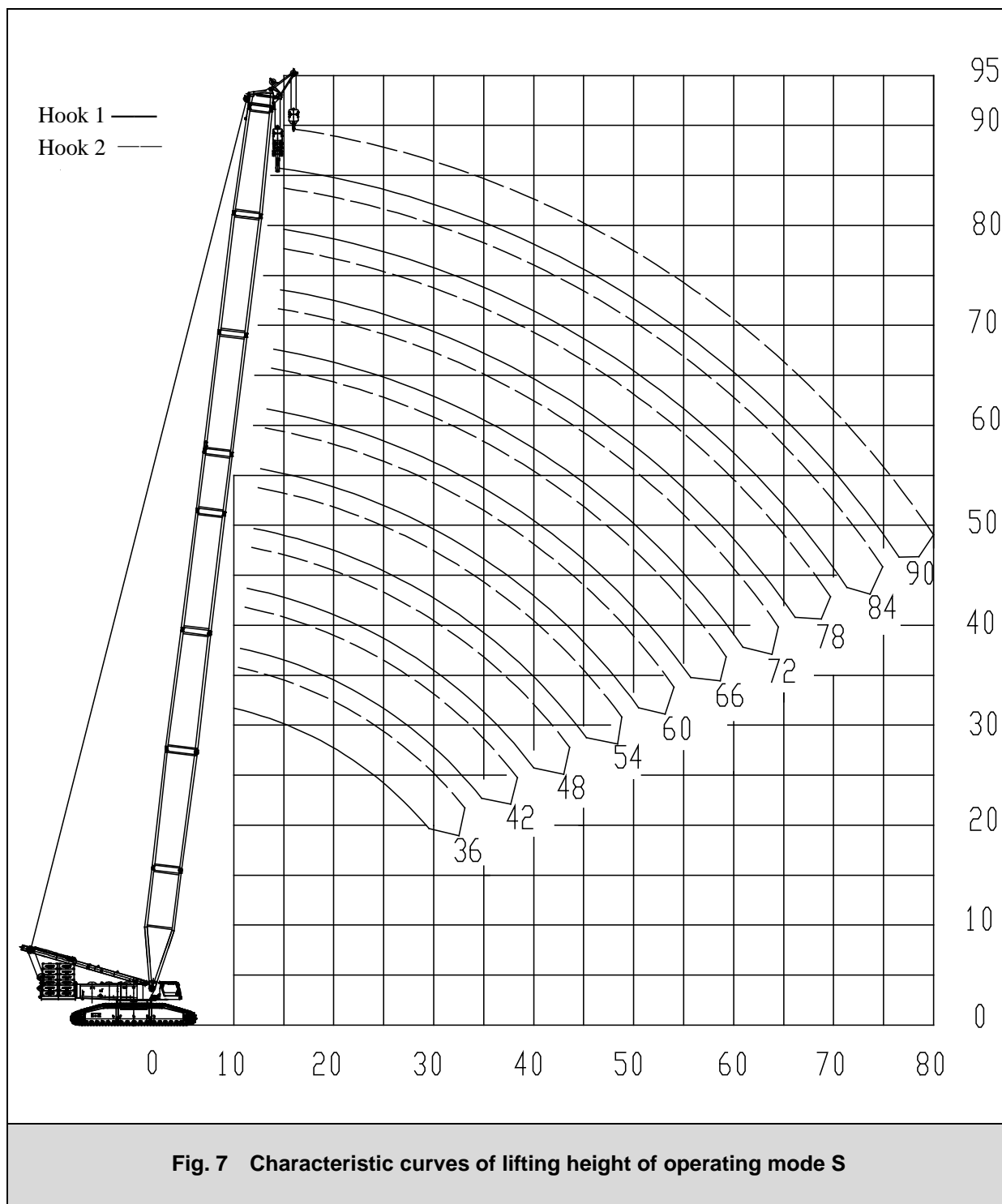


Fig. 5 Boom combination

No.	Operating modes	Parameters
SLHSDB-1	Superlift main boom for turbine (with strengthened boom sections and a jib for turbine, 220t)	S=96~168m HS=7m
SLHSDB-2	Superlift main boom for turbine (with parallel boom and a jib for turbine, 220t)	S=108~171m HS =7m
SLHSDB-3	Superlift main boom for turbine (with strengthened boom sections and a jib for turbine, 270t)	S=96~168m HS =5m
SLHSDB-4	Superlift main boom for turbine (with parallel boom and a jib for turbine, 270t)	S=108~165m HS =5m

2. Lifting performance

2.1 Lifting performance of operating mode S



Lifting capacity chart of operating mode S

Rear counterweight: 250t Central ballast: 96t											
Radius m	Main boom length (m)										Radius m
	36	42	48	54	60	66	72	78	84	90	
7	734										7
8	649	648	630								8
9	577	569	554	539	523						9
10	519	506	494	482	467	445	424				10
11	466	456	446	435	420	402	385	368	354		11
12	423	414	405	396	381	366	351	337	325	313	12
14	356	349	342	333	321	310	298	287	278	267	14
16	302	301	295	286	277	267	258	249	241	233	16
18	253	253	252	250	242	234	226	218	212	205	18
20	217	216	216	215	214	208	200	194	189	182	20
22	189	188	188	187	187	186	179	173	169	163	22
24	167	166	166	165	164	163	162	156	152	147	24
26	149	148	148	147	146	145	143	142	138	134	26
28	134	133	133	132	131	130	128	127	126	122	28
30	121	121	120	119	119	117	116	114	114	111	30
32	110	110	109	108	108	107	105	103	103	101	32
34		100	100	99.2	98.7	97.4	95.5	94.1	93.5	92	34
36		92.5	92.1	91	90.5	89.3	87.3	85.9	85.3	83.7	36
38		85.3	84.9	83.8	83.3	82.1	80.1	78.6	78	76.4	38
40			78.5	77.4	76.9	75.7	73.7	72.2	71.6	70	40
44			67.5	66.6	66.1	64.8	62.8	61.3	60.6	59	44
48				57.6	57.2	55.9	53.9	52.4	51.7	50.1	48
52					49.8	48.5	46.5	45	44.3	42.7	52
56						42.2	40.2	38.7	38	36.4	56
60							34.8	33.3	32.6	31	60
64							30.1	28.6	28	26.3	64
68								24.5	23.9	22.2	68
72									20.2	18.6	72

2.2 Lifting performance of operating mode SL

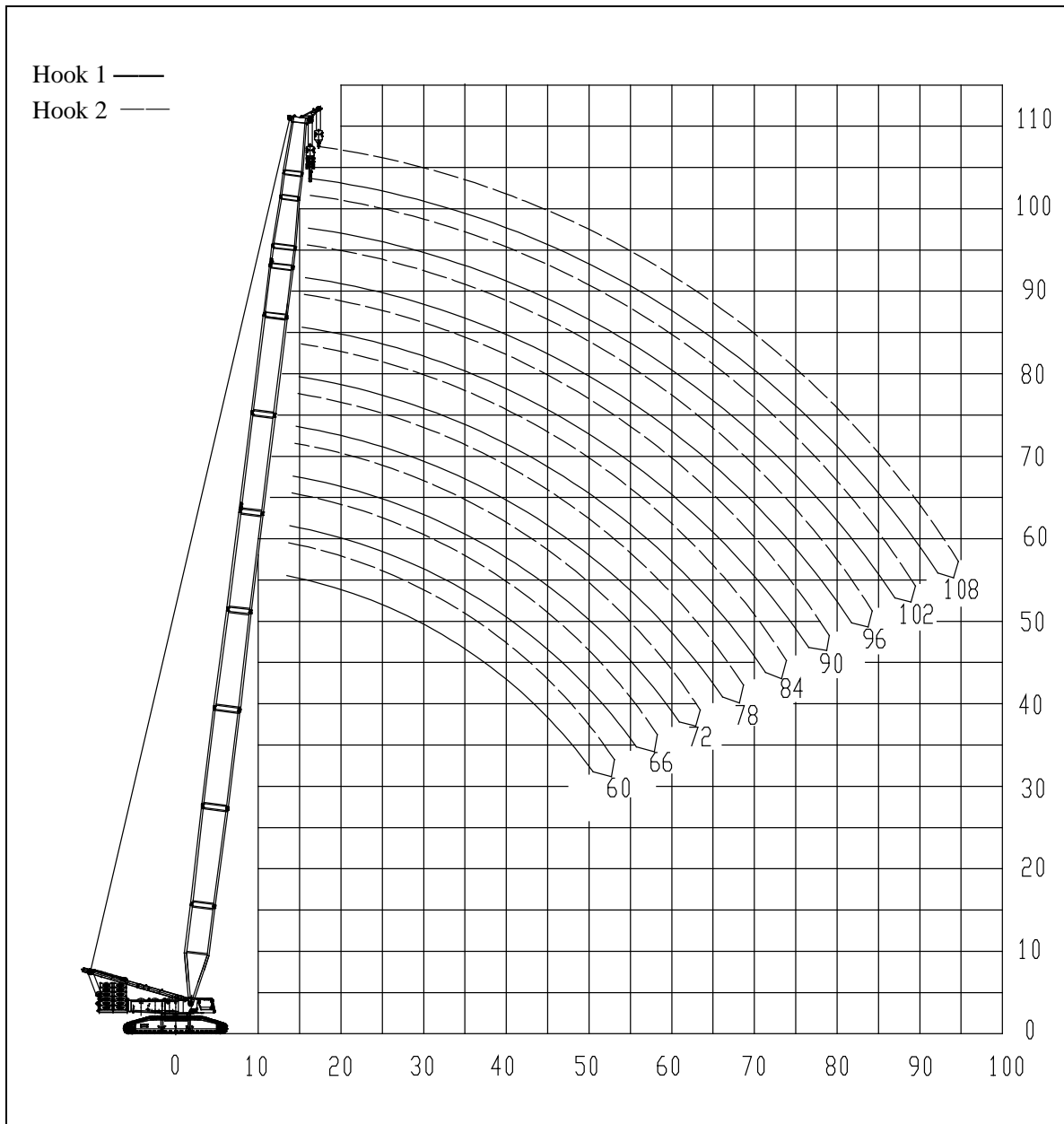


Fig. 8 Characteristic curves of lifting height of operating mode SL

Lifting capacity chart of operating mode SL

Rear counterweight: 250t Central ballast: 96t										
Radius m	Main boom length (m)									Radius m
	60	66	72	78	84	90	96	102	108	
10	400									10
11	400	400	390							11
12	386	370	356	341	328					12
14	319	313	304	292	281	271	263	253		14
16	267	262	258	253	245	237	230	221	216	16
18	229	225	222	217	213	209	203	196	191	18
20	197	196	193	189	186	182	180	176	171	20
22	171	170	170	167	164	161	158	155	153	22
24	151	150	150	147	146	143	141	138	136	24
26	135	133	133	131	129	128	127	124	122	26
28	121	120	119	117	115	114	114	112	110	28
30	110	108	108	105	104	102	102	100	100	30
32	100	98.7	98.3	95.6	94.1	92.6	92.3	90.5	90.1	32
34	91.7	90.3	89.8	87	85.6	84.1	83.7	81.8	81.5	34
36	84.3	82.9	82.3	79.6	78.1	76.6	76.1	74.4	73.7	36
38	77.8	76.3	75.8	73	71.5	70	69.5	67.8	67.1	38
40	72	70.5	70	67.2	65.7	64.1	63.6	61.9	61.3	40
44	62.2	60.7	60.2	57.3	55.8	54.3	53.7	51.9	51.3	44
48	54.2	52.6	52.2	49.3	47.6	46.2	45.6	43.7	43.2	48
52	47.4	46	45.5	42.5	40.9	39.4	38.9	37	36.3	52
56		40.3	39.7	36.8	35.2	33.7	33.1	31.3	30.6	56
60			34.9	31.9	30.4	28.8	28.2	26.4	25.7	60
64			30.6	27.7	26.1	24.5	24	22.1	21.4	64
68				24	22.4	20.8	20.3	18.4	17.7	68
72					19.1	17.5	17	15.1	14.4	72
76						14.6	14.1	12.1	11.5	76
80							11.9	11.4	9.5	80
84								9	7.1	84
88									5	88

2.3 Lifting performance of operating mode SDB-1

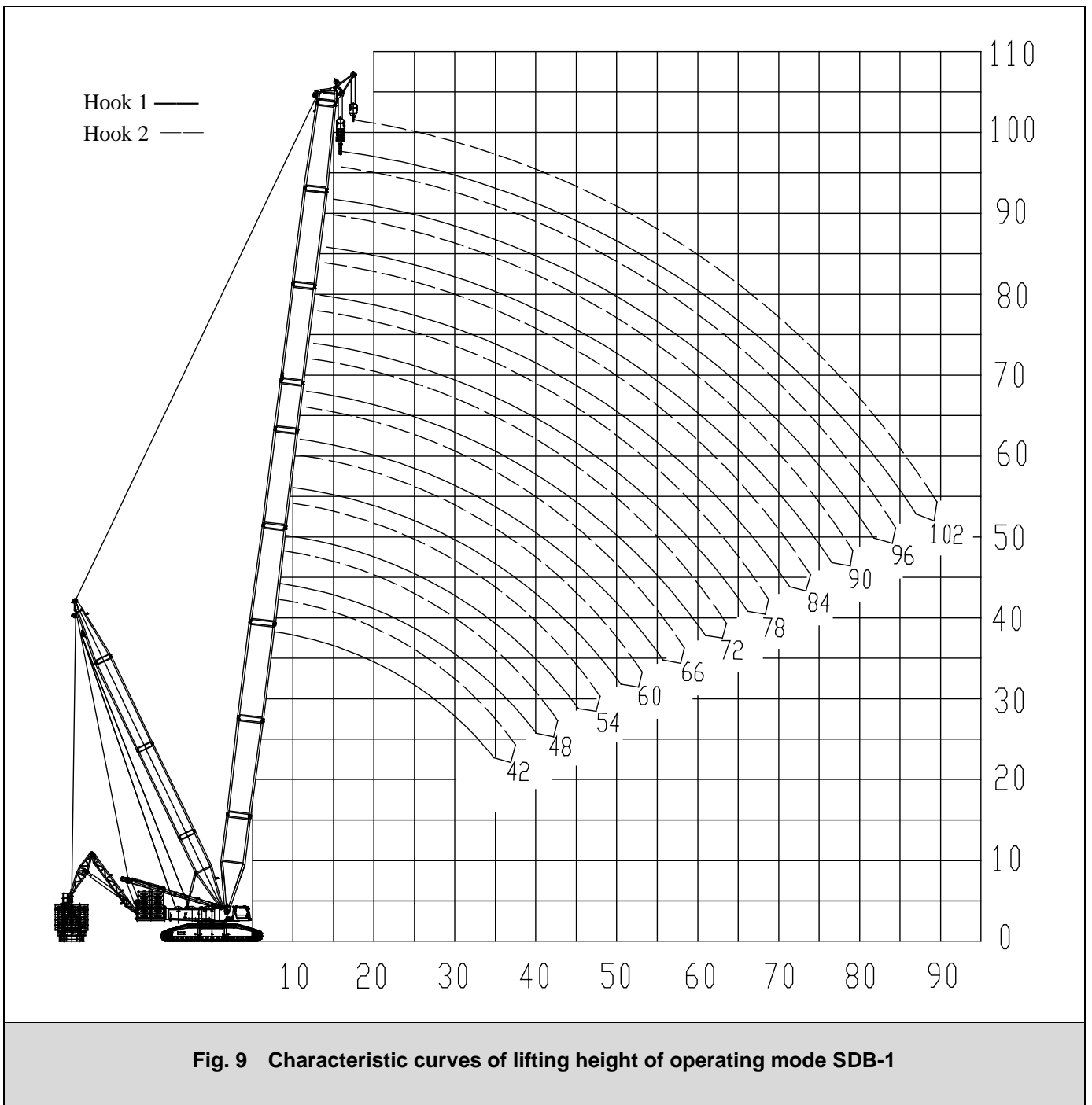


Fig. 9 Characteristic curves of lifting height of operating mode SDB-1

Lifting capacity chart of operating mode SDB-1

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m								
Radius m	Main boom length (m)							Radius m
	42	48	54	60	66	72	78	
9	900							9
10	900	810						10
11	850	810	765	685				11
12	850	810	765	685	610			12
14	850	810	765	685	610	596	504	14
16	779	760	757	685	610	596	504	16
18	694	676	673	673	610	596	504	18
20	650	606	606	606	604	596	504	20
22	566	552	552	549	549	547	504	22
24	518	506	504	504	502	499	498	24
26	477	466	463	463	463	460	459	26
28	442	432	429	429	428	425	425	28
30	401	401	400	398	398	397	394	30
32	377	375	375	373	372	370	367	32
34	353	351	351	351	348	347	344	34
36	332	332	329	329	327	326	325	36
38	312	313	312	312	310	307	305	38
40		296	295	294	294	291	289	40
44		267	265	265	264	262	260	44
48			241	241	240	237	236	48
52				218	217	214	213	52
56					197	195	194	56
60						178	177	60
64						164	163	64
68							150	68

Lifting capacity chart of operating mode SDB-1

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m					
Radius m	Main boom length (m)				Radius m
	84	90	96	102	
14	473				14
16	473	441	394	348	16
18	473	441	390	345	18
20	472	441	388	343	20
22	472	441	388	341	22
24	472	441	388	341	24
26	456	441	388	341	26
28	423	420	388	341	28
30	393	391	366	323	30
32	367	366	360	319	32
34	344	341	341	316	34
36	323	320	320	312	36
38	304	303	301	301	38
40	288	286	285	284	40
44	258	257	255	255	44
48	234	233	232	231	48
52	212	210	210	208	52
56	192	191	190	189	56
60	176	174	174	172	60
64	161	160	159	158	64
68	149	147	147	145	68
72	137	136	135	134	72
76		126	125	124	76
80		117	117	115	80
84			109	107	84
88				99.6	88

2.4 Lifting performance of operating mode SDB-2

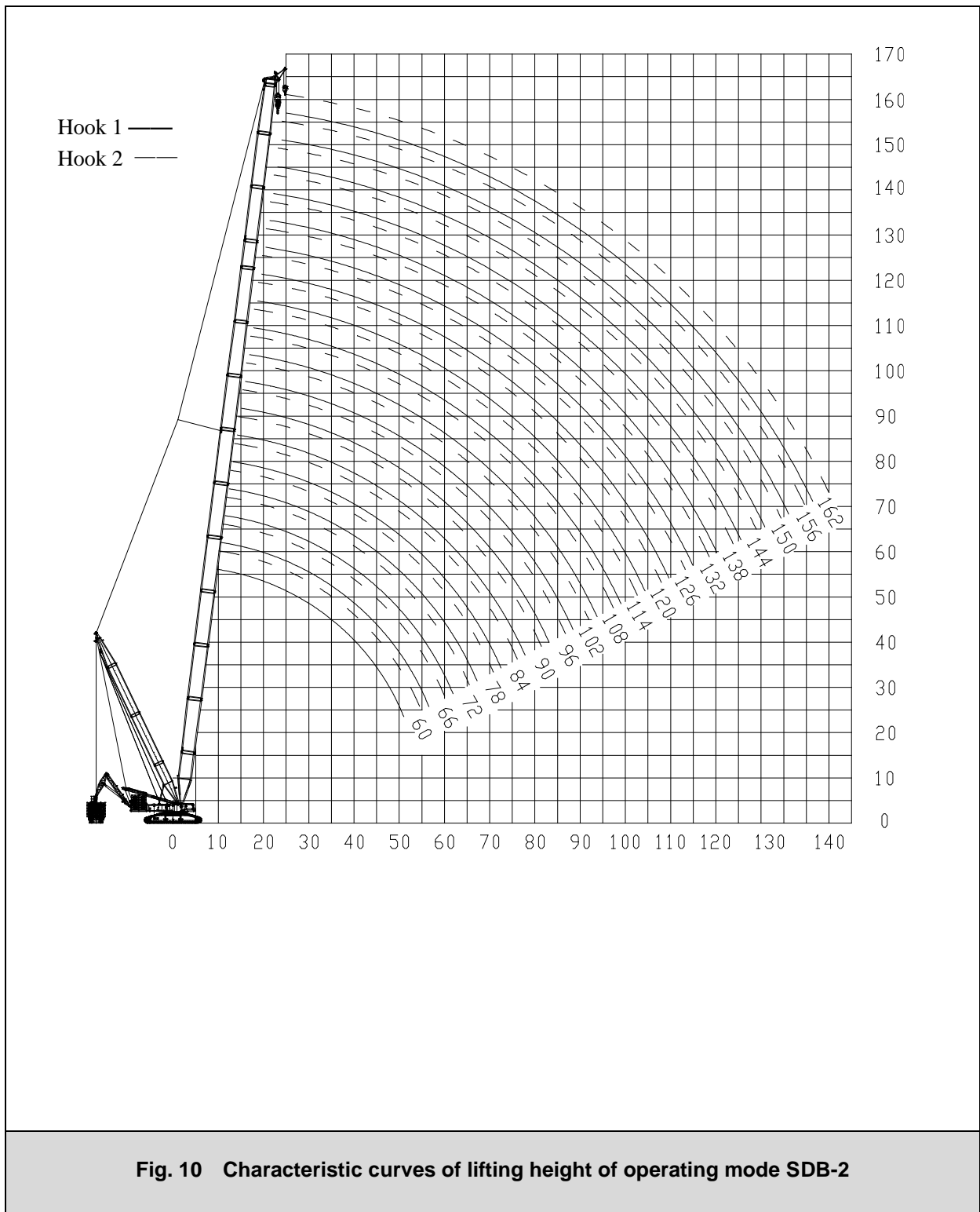


Fig. 10 Characteristic curves of lifting height of operating mode SDB-2

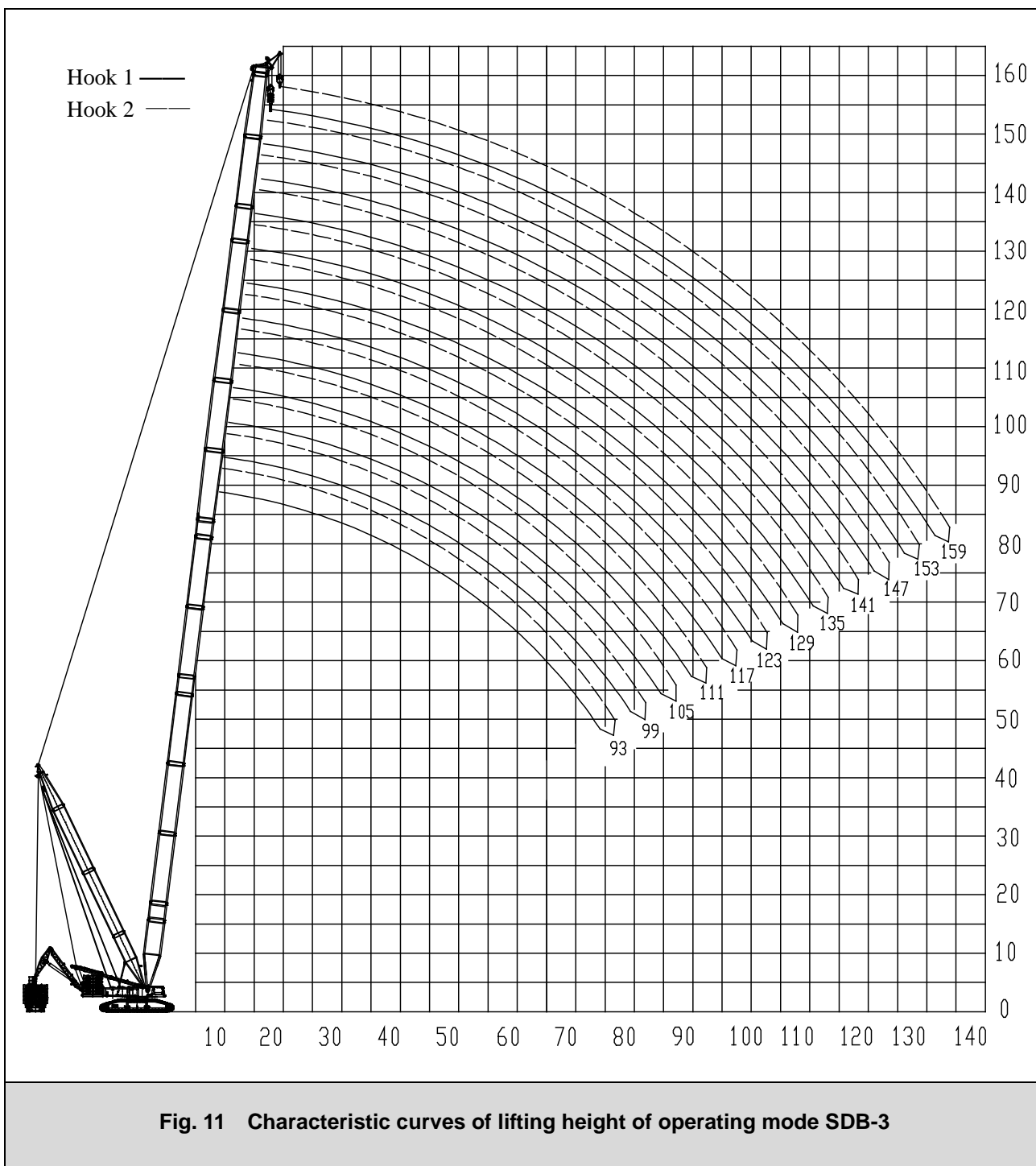
Lifting capacity chart of operating mode SDB-2

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m									
Radius m	Main boom length (m)								Radius m
	60	66	72	78	84	90	96	102	
11	772								11
12	772	685							12
14	772	685	596	504	473				14
16	757	685	596	504	473	441	409	377	16
18	673	671	596	504	473	441	409	377	18
20	604	604	596	504	473	441	409	377	20
22	549	547	544	504	473	441	405	377	22
24	502	502	499	497	473	439	403	374	24
26	463	460	459	459	456	435	399	371	26
28	428	428	425	423	420	420	396	368	28
30	398	397	394	394	391	389	387	365	30
32	373	370	369	367	366	363	362	360	32
34	348	348	347	344	343	341	339	336	34
36	329	327	325	323	322	320	317	316	36
38	310	308	307	305	304	301	300	298	38
40	294	292	289	289	286	285	282	281	40
44	264	263	262	260	258	255	254	253	44
48	240	238	236	234	233	232	229	227	48
52	217	215	214	212	211	209	207	206	52
56		196	194	193	191	190	188	186	56
60			178	176	174	173	171	170	60
64			163	162	160	159	157	155	64
68				149	147	146	144	142	68
72					136	135	133	131	72
76						125	123	121	76
80						116	114	112	80
84							106	104	84
88								97	88

Lifting capacity chart of operating mode SDB-2

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m											
Radius m	Main boom length (m)										Radius m
	108	114	120	126	132	138	144	150	156	162	
18	344	320									18
20	344	318	300	280	260						20
22	344	315	298	279	260	244	220	200			22
24	342	314	297	279	260	244	220	200	180	165	24
26	339	314	297	279	259	244	220	200	179	165	26
28	336	313	297	279	258	244	220	200	177	164	28
30	333	313	297	279	258	244	219	200	176	162	30
32	331	312	296	279	258	244	219	200	176	161	32
34	328	312	296	278	257	244	219	199	174	161	34
36	313	311	296	278	256	244	218	199	173	159	36
38	295	294	292	278	256	244	218	199	172	158	38
40	279	277	274	272	255	244	217	199	170	156	40
44	250	248	246	243	240	237	215	199	167	155	44
48	226	224	222	219	216	213	211	197	164	153	48
52	204	202	201	198	195	192	191	188	162	152	52
56	184	183	181	180	177	175	173	170	158	149	56
60	167	166	164	163	161	159	158	155	150	148	60
64	153	151	150	148	147	145	144	141	139	137	64
68	140	139	137	135	134	132	132	129	127	125	68
72	129	128	126	124	123	121	120	119	117	114	72
76	119	118	116	114	113	111	110	109	107	105	76
80	110	109	107	105	104	102	102	99.8	98.4	96	80
84	102	101	99	97.3	95.6	94	93.5	91.7	90.4	88.1	84
88	94.9	93.3	91.7	90	88.4	86.7	86.2	84.5	83.1	81	88
92	88.3	86.7	85.1	83.4	81.7	80.1	79.6	77.8	76.5	74.5	92
96	82.2	80.7	79.1	77.4	75.7	74.1	73.5	71.8	70.5	68.4	96
100		75.1	73.5	71.8	70.2	68.5	68	66.2	64.9	62.9	100
104			68.4	66.7	65.1	63.4	62.9	61.1	59.8	57.7	104
108				62	60.3	58.7	58.2	56.4	55.1	52.9	108
112					55.9	54.3	53.8	52.1	50.7	48.4	112
116					51.9	50.2	49.7	48	46.5	44.2	116
120						46.4	45.9	44.2	42.6	40.3	120
124							42.4	40.6	38.9	36.6	124
128								37.2	35.4	33.2	128
132								33.9	32.1	29.9	132

2.5 Lifting performance of operating mode SDB-3



Lifting capacity chart of operating mode SDB-3

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m							
Radius m	Main boom length (m)						Radius m
	93	99	105	111	117	123	
16	441	409					16
18	441	409	377	344	344		18
20	441	409	377	344	344	311	20
22	441	409	377	344	344	311	22
24	441	409	377	344	344	311	24
26	441	409	377	344	344	311	26
28	423	409	377	344	344	311	28
30	393	391	377	344	344	311	30
32	366	366	363	344	343	301	32
34	344	341	341	339	329	288	34
36	323	320	320	319	316	277	36
38	304	303	301	300	296	266	38
40	288	286	285	284	281	256	40
44	258	257	255	255	251	235	44
48	234	233	232	231	227	219	48
52	213	212	211	210	207	203	52
56	193	192	191	190	187	186	56
60	176	175	175	173	170	169	60
64	162	161	160	159	156	155	64
68	149	148	147	146	143	142	68
72	138	137	136	135	132	131	72
76	128	127	126	125	122	121	76
80	119	118	117	116	113	112	80
84		110	109	108	105	104	84
88		103	102	101	97.8	96.4	88
92			95.4	94	91.2	89.8	92
96				87.9	85.2	83.7	96
100					79.6	78.2	100
104					74.5	73.1	104
108						68.3	108

Lifting capacity chart of operating mode SDB-3

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m							
Radius m	Main boom length (m)						Radius m
	129	135	141	147	153	159	
20	311	278					20
22	311	278	278	245			22
24	311	278	278	245	245	233	24
26	311	278	278	245	245	231	26
28	311	278	278	245	245	227	28
30	311	278	278	245	243	224	30
32	311	274	278	245	239	222	32
34	300	263	277	245	236	218	34
36	289	253	273	242	232	215	36
38	278	243	263	232	229	210	38
40	268	235	254	224	225	202	40
44	247	219	236	208	210	188	44
48	222	204	216	194	196	175	48
52	202	192	196	182	184	163	52
56	184	181	179	171	172	153	56
60	167	165	163	160	158	144	60
64	152	151	149	147	145	135	64
68	140	138	136	135	133	128	68
72	128	127	125	124	123	120	72
76	118	117	115	114	113	111	76
80	109	108	106	105	104	102	80
84	101	99.8	98.2	96.5	95.6	94.1	84
88	94.1	92.5	90.9	89.3	88.3	86.8	88
92	87.4	85.9	84.3	82.6	81.7	80.1	92
96	81.4	79.9	78.3	76.6	75.7	74.1	96
100	75.9	74.3	72.7	71.1	70.1	68.5	100
104	70.7	69.2	67.6	65.9	65	63.4	104
108	66	64.5	62.9	61.2	60.3	58.7	108
112	61.6	60.1	58.5	56.9	55.9	54.3	112
116		56	54.5	52.8	51.9	50.3	116
120			50.7	49	48.1	46.5	120
124			47.1	45.4	44.5	42.8	124
128				42.1	41.2	39.3	128
132					38.1	36.1	132
136						33	136

2.6 Lifting performance of operating mode SLDB-1

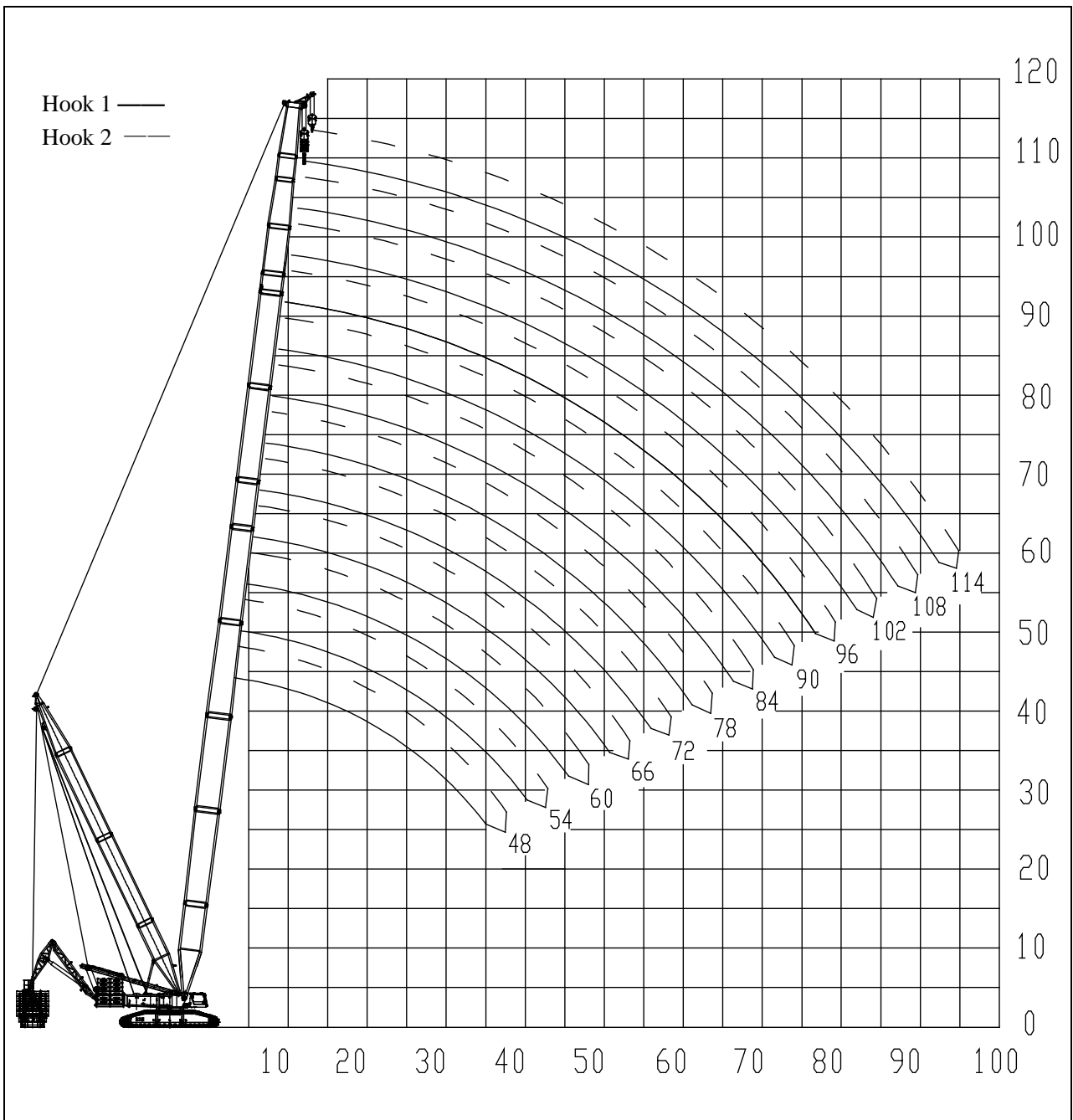


Fig. 12 Characteristic curves of lifting height of operating mode SLDB-1

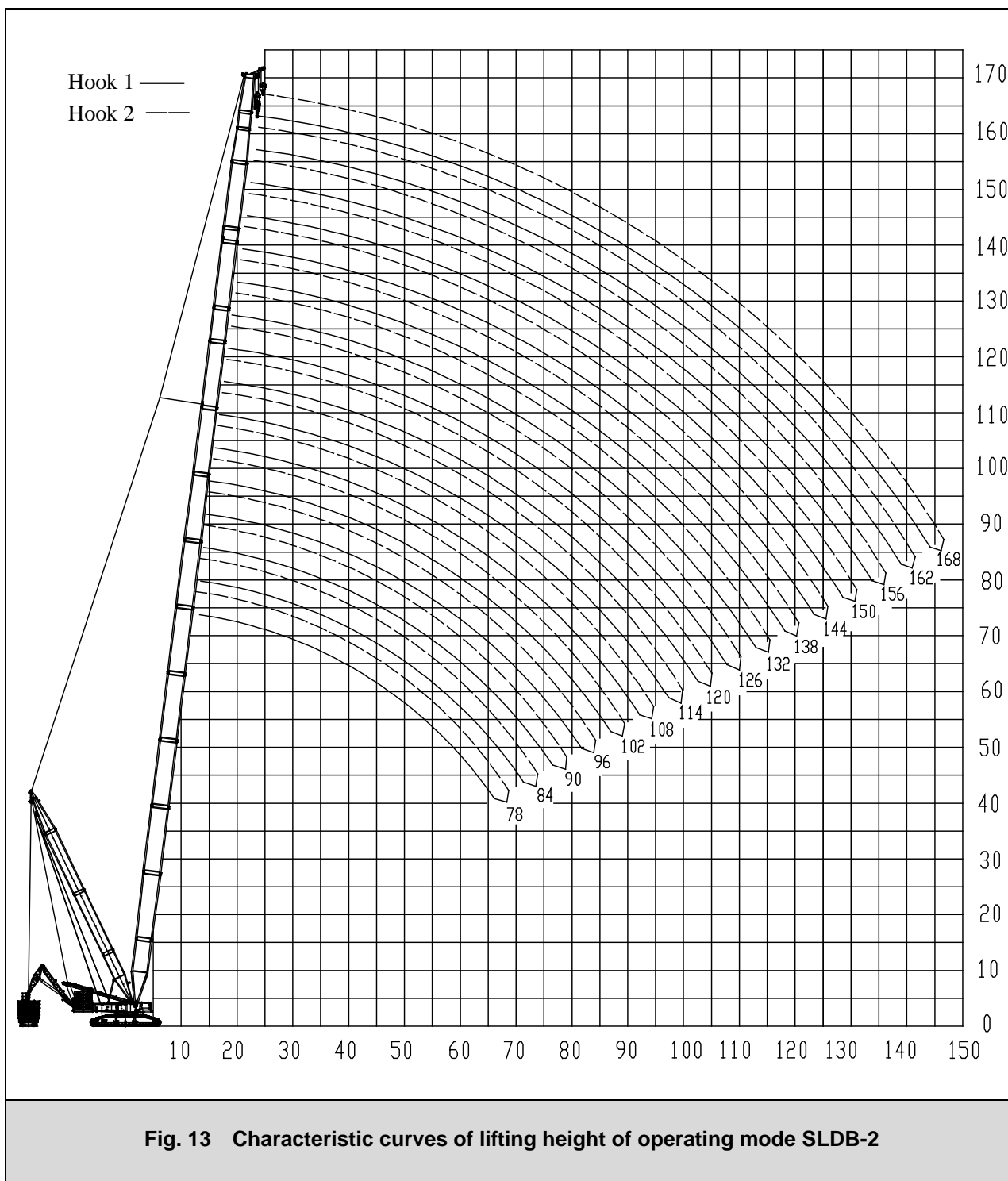
Lifting capacity chart of operating mode SLDB-1

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m								
Radius m	Main boom length (m)							Radius m
	48	54	60	66	72	78	84	
10	400	400						10
11	400	400	400					11
12	400	400	400	400	400			12
14	400	400	400	400	400	400	400	14
16	400	400	400	400	400	400	400	16
18	400	400	400	400	400	400	400	18
20	400	400	400	400	400	400	400	20
22	400	400	400	400	400	400	400	22
24	400	400	400	400	400	400	400	24
26	400	400	400	400	400	400	400	26
28	400	400	400	400	400	400	400	28
30	400	400	400	400	400	399	399	30
32	379	377	377	377	376	374	372	32
34	355	355	353	353	352	349	347	34
36	335	335	333	333	331	328	327	36
38	317	316	314	314	313	309	309	38
40	300	299	297	297	295	293	292	40
44	272	269	269	268	266	264	263	44
48		245	244	244	242	240	239	48
52			221	221	220	217	216	52
56				202	200	198	197	56
60					184	181	180	60
64					169	167	165	64
68						154	153	68
72							142	72

Lifting capacity chart of operating mode SLDB-1

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m						
Radius m	Main boom length (m)					Radius m
	90	96	102	108	114	
16	400	400	377			16
18	400	399	377	330	300	18
20	400	397	377	329	300	20
22	400	394	377	327	299	22
24	400	390	377	324	297	24
26	400	386	377	322	296	26
28	400	383	377	320	294	28
30	395	380	377	317	293	30
32	369	367	367	316	290	32
34	347	345	344	313	287	34
36	325	325	323	310	287	36
38	308	306	304	302	285	38
40	291	289	289	287	282	40
44	261	259	259	258	256	44
48	237	235	235	233	232	48
52	215	214	213	211	211	52
56	196	194	193	192	191	56
60	179	177	177	175	175	60
64	164	163	162	161	160	64
68	152	150	150	148	148	68
72	141	139	139	137	136	72
76	131	129	129	127	127	76
80	122	120	120	118	118	80
84		112	112	110	110	84
88			105	103	102	88
92				96.3	95.8	92
96				90.2	89.7	96
100					84.2	100

2.7 Lifting performance of operating mode SLDB-2



Lifting capacity chart of operating mode SLDB-2

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m									
Radius m	Main boom length (m)								Radius m
	66	72	78	84	90	96	102	108	
12	400	400							12
14	400	400	400	400					14
16	400	400	400	400	400	400	377		16
18	400	400	400	400	400	400	377	377	18
20	400	400	400	400	400	400	377	377	20
22	400	400	400	400	400	400	377	377	22
24	400	400	400	400	400	400	377	377	24
26	400	400	400	400	400	400	377	377	26
28	400	400	400	400	400	400	377	377	28
30	400	400	397	397	395	392	377	376	30
32	394	384	372	369	369	367	364	363	32
34	369	371	349	347	345	344	342	340	34
36	350	350	328	327	325	323	321	319	36
38	331	331	309	309	306	304	302	300	38
40	314	314	293	292	289	288	285	283	40
44	287	287	264	263	261	259	256	255	44
48	262	262	240	239	237	235	232	230	48
52	225	242	217	216	214	213	211	209	52
56	193	214	198	197	195	193	191	190	56
60		186	181	180	178	177	175	173	60
64		168	167	165	164	162	160	159	64
68			154	153	151	150	147	146	68
72				142	140	138	136	135	72
76					130	128	126	125	76
80					121	120	118	116	80
84						112	110	108	84
88							102	101	88
92								94.1	92
96								88.1	96

Lifting capacity chart of operating mode SLDB-2

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m											
Radius m	Main boom length (m)										Radius m
	114	120	126	132	138	144	150	156	162	168	
18	344	336									18
20	344	335	311	278	245						20
22	344	332	309	278	245	235	212				22
24	344	331	308	278	245	233	211	192	174	157	24
26	344	326	306	278	245	233	209	191	173	156	26
28	344	323	303	276	245	231	208	189	171	154	28
30	344	321	301	275	245	230	206	188	170	153	30
32	342	318	298	271	245	228	205	186	168	151	32
34	336	315	297	270	245	227	203	186	167	150	34
36	317	313	295	267	245	225	202	183	165	148	36
38	298	297	292	263	244	224	200	183	164	148	38
40	281	280	278	263	242	222	199	180	162	146	40
44	253	251	249	245	239	219	196	177	159	143	44
48	228	227	225	221	218	215	193	174	156	140	48
52	207	206	204	201	198	195	189	171	153	137	52
56	188	186	185	183	180	177	175	168	150	134	56
60	171	170	168	166	165	162	160	157	148	131	60
64	157	155	153	152	150	148	147	144	142	127	64
68	144	142	141	139	137	136	135	132	131	121	68
72	133	131	130	128	126	125	123	122	120	116	72
76	123	121	120	118	116	115	114	112	111	108	76
80	114	112	111	109	107	106	105	103	102	99.6	80
84	106	104	103	101	99.3	97.6	96.5	94.8	94.2	91.9	84
88	98.6	97	95.4	93.7	92.1	90.4	89.3	87.5	86.9	84.8	88
92	92	90.4	88.8	87.1	85.5	83.8	82.7	80.9	80.3	78.3	92
96	86	84.4	82.8	81.1	79.5	77.7	76.6	74.9	74.3	72.3	96
100	80.5	78.9	77.2	75.6	73.9	72.2	71.1	69.4	68.8	66.8	100
104		73.8	72.2	70.5	68.8	67.1	66	64.3	63.7	61.7	104
108			67.4	65.8	64.1	62.4	61.3	59.6	59	57	108
112				61.4	59.8	58.1	57	55.2	54.6	52.5	112
116				57.4	55.7	54	52.9	51.2	50.6	48.4	116
120					51.9	50.2	49.1	47.4	46.8	44.5	120
124						46.7	45.6	43.8	43.2	40.9	124
128							42.3	40.5	39.7	37.4	128
132							39.1	37.4	36.5	34.2	132
136								34.3	33.4	31.1	136
140									30.5	28.2	140
144										25.5	144
148										22.9	148

2.8 Lifting performance of operating mode SLDB-3

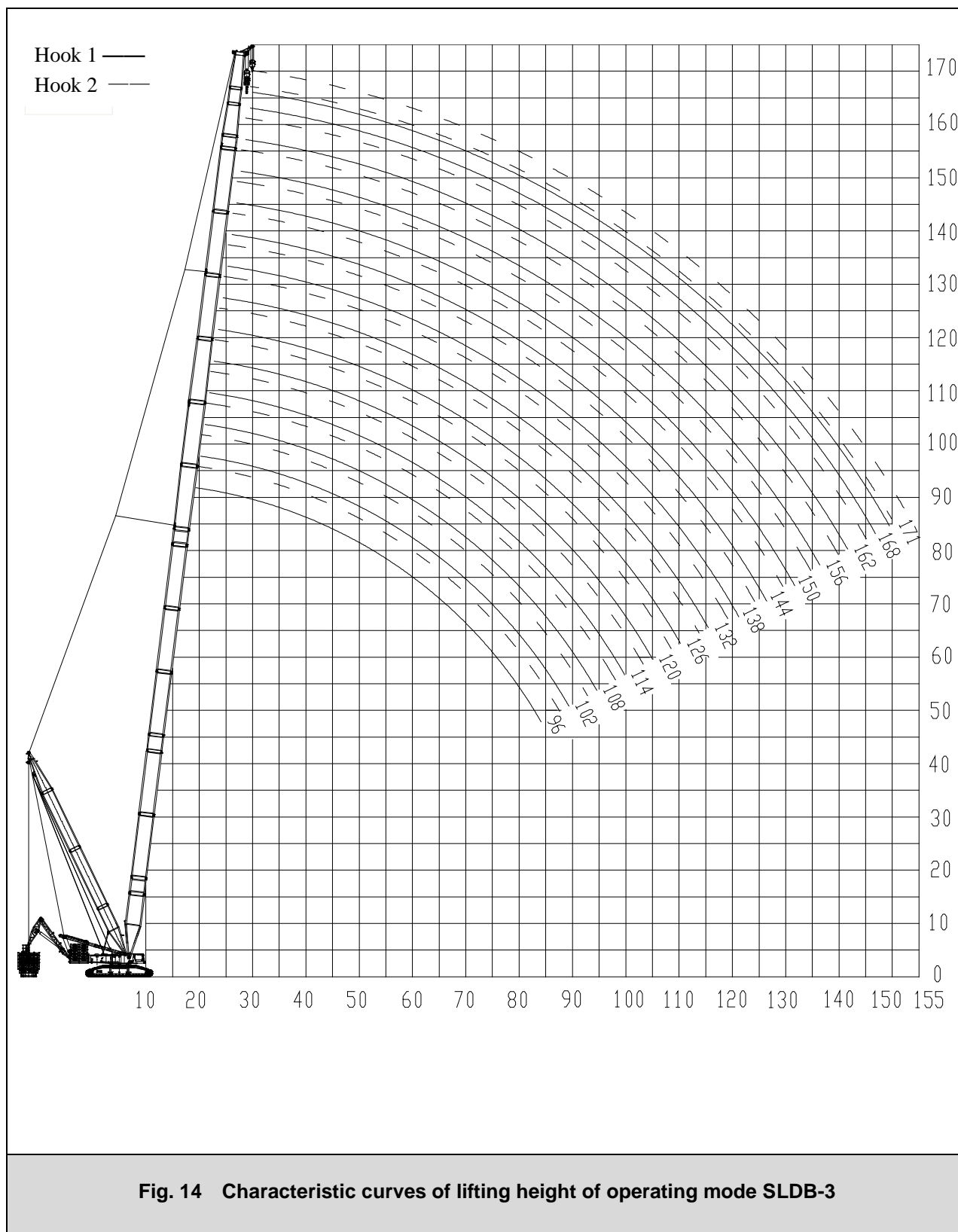


Fig. 14 Characteristic curves of lifting height of operating mode SLDB-3

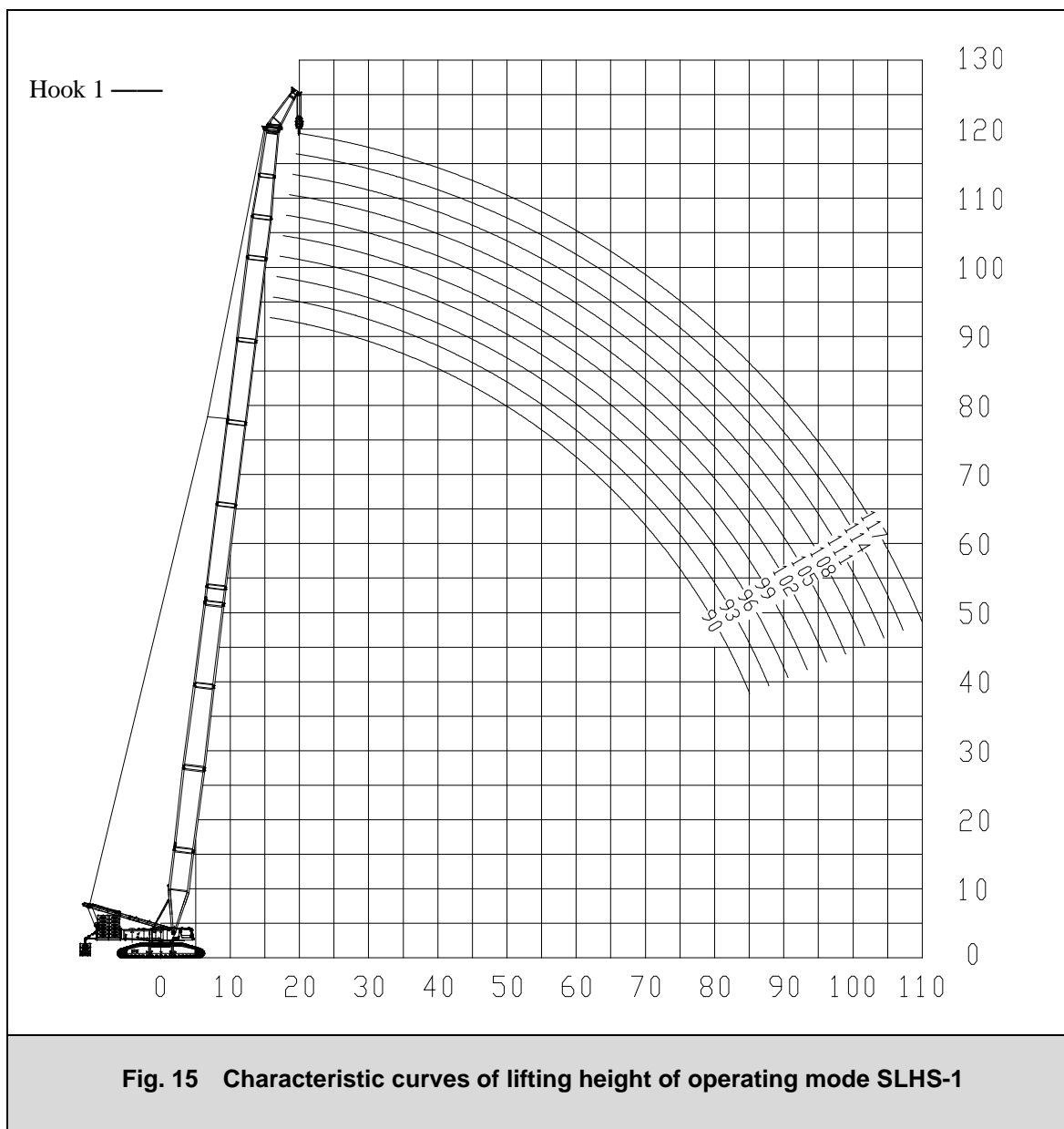
Lifting capacity chart of operating mode SLDB-3

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m								
Radius m	Main boom length (m)							Radius m
	96	102	108	114	120	126	132	
16	400	377						16
18	400	377	377	344	344			18
20	400	377	377	344	344	311	278	20
22	400	377	377	344	344	311	278	22
24	400	377	377	344	344	311	278	24
26	400	377	377	344	344	311	278	26
28	400	377	377	344	344	311	278	28
30	390	377	377	344	344	302	278	30
32	363	361	361	344	341	296	278	32
34	340	338	336	335	331	283	278	34
36	319	317	316	314	313	273	278	36
38	300	299	297	295	294	256	278	38
40	283	281	281	280	277	247	270	40
44	255	253	253	251	247	228	241	44
48	230	228	228	227	223	211	217	48
52	209	208	207	206	203	197	197	52
56	189	188	187	186	183	182	179	56
60	173	171	171	169	167	165	163	60
64	158	157	156	155	152	150	148	64
68	146	144	144	142	139	138	135	68
72	134	133	132	131	128	127	124	72
76	124	123	122	121	118	117	114	76
80	116	114	113	112	109	108	105	80
84	108	106	105	104	101	99.6	97.3	84
88		98.9	98.2	96.7	93.9	92.4	90	88
92			91.6	90.1	87.3	85.8	83.4	92
96			85.5	84	81.3	79.7	77.4	96
100				78.5	75.8	74.2	71.9	100
104					70.6	69.1	66.7	104
108						64.4	62	108
112							57.7	112
116							53.6	116

Lifting capacity chart of operating mode SLDB-3

Rear counterweight: 210t Suspended ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m								
Radius m	Main boom length (m)							Radius m
	138	144	150	156	162	168	171	
20	245							20
22	245	245	245					22
24	245	245	245	239	211	201		24
26	245	245	245	237	211	198	192	26
28	245	245	245	232	211	194	188	28
30	245	245	239	231	211	191	180	30
32	245	245	228	229	205	182	173	32
34	245	245	220	220	196	175	166	34
36	245	237	210	211	189	169	158	36
38	245	228	201	203	180	161	153	38
40	245	220	194	196	174	155	146	40
44	230	203	180	180	161	142	135	44
48	214	189	167	169	150	133	125	48
52	194	177	156	156	139	122	116	52
56	176	167	146	146	130	115	107	56
60	161	156	138	138	121	106	99.7	60
64	147	145	129	129	113	99.7	93.6	64
68	134	132	122	122	107	93.6	87.9	68
72	123	121	116	116	101	87.9	82.6	72
76	113	111	110	108	95.7	82.6	77.4	76
80	104	102	101	99.5	90.4	78.6	73.4	80
84	95.8	94.1	92.5	91.5	85.9	74.1	68.9	84
88	88.5	86.9	85.2	84.3	81.9	70.1	65.6	88
92	81.9	80.2	78.6	77.6	75.6	66.9	61.6	92
96	75.9	74.2	72.6	71.6	69.5	63.6	59.1	96
100	70.3	68.7	67	66.1	64	61.1	56.3	100
104	65.2	63.6	61.9	61	58.9	58	53.1	104
108	60.5	58.9	57.2	56.2	54.1	53.3	51.1	108
112	56.2	54.5	52.8	51.9	49.6	48.8	48.2	112
116	52.1	50.4	48.8	47.7	45.4	44.7	44	116
120	48.3	46.6	45	43.8	41.5	40.8	40.2	120
124		43.1	41.4	40.1	37.9	37.1	36.5	124
128			38	36.6	34.4	33.7	33.1	128
132			34.7	33.4	31.2	30.4	29.8	132
136				30.2	28.1	27.4	26.8	136
140					25.2	24.5	23.9	140
144						21.7	21.1	144
148						19.1	18.5	148

2.9 Lifting performance of operating mode SLHS-1



Lifting capacity chart of operating mode SLHS-1

Rear counterweight: 250t Attached counterweight: 35t Central ballast: 96t Jib for wind turbine: 7m											
Radius m	Main boom length (m)										Radius m
	90	93	96	99	102	105	108	111	114	117	
16	220	220	220								16
17	220	220	220	220	220	220	220				17
18	220	220	220	220	220	217	216	200	176	167	18
19	219	217	216	213	211	210	208	196	172	165	19
20	207	206	204	201	199	198	197	192	170	162	20
22	186	185	183	181	179	179	177	176	164	156	22
24	168	168	166	164	162	162	160	161	156	150	24
26	154	153	152	149	148	148	146	147	145	141	26
28	141	140	139	137	135	135	134	135	135	132	28
30	130	129	128	126	125	124	123	124	125	124	30
32	120	119	118	116	115	115	113	115	115	115	32
34	111	110	110	108	106	106	105	106	107	106	34
36	103	102	102	100	99.1	98.6	97.5	98.8	99.8	98.9	36
38	94.7	94.6	94.2	93	92.3	91.8	90.9	92	93.1	92.3	38
40	87.5	87.4	87	85.8	85.4	85.2	84.7	85.9	86.9	86.3	40
44	74.4	74.4	73.7	74	70.6	70	70.6	70	70.9	70.1	44
48	64.5	64.4	63.9	64	61.5	61	61.7	61.2	62.2	61.4	48
52	56.2	56.1	55.7	55.7	53.9	53.3	54.5	53.6	54.7	54	52
56	49.3	49.2	48.7	48.8	46.8	46.7	47.5	47.1	48.1	47.5	56
60	43.3	43.2	42.7	42.8	40.8	40.7	41.6	41.5	42.5	41.9	60
64	38.1	38	37.5	37.7	35.6	35.4	36.3	36.3	37.4	37	64
68	33.6	33.5	32.9	33.1	31	30.9	31.7	31.8	32.8	32.6	68
72	29.6	29.5	29	29.1	27	26.8	27.7	27.7	28.8	28.5	72
76	26	25.9	25.4	25.5	23.4	23.3	24.2	24.1	25.2	25	76
80	22.8	22.7	22.2	22.3	20.2	20.1	21	20.9	22	21.8	80
84	19.8	19.8	19.3	19.4	17.3	17.2	18.1	18	19.1	18.9	84
88		17.1	16.6	16.7	14.7	14.6	15.5	15.4	16.5	16.3	88
92				14.3	12.3	12.2	13.1	13	14.1	13.9	92
96					10.1	9.9	10.8	10.9	12	11.7	96
100							8.8	8.9	9.9	9.7	100
104								7	8.1	7.9	104
108										6.1	108

2.10 Lifting performance of operating mode SLHS-2

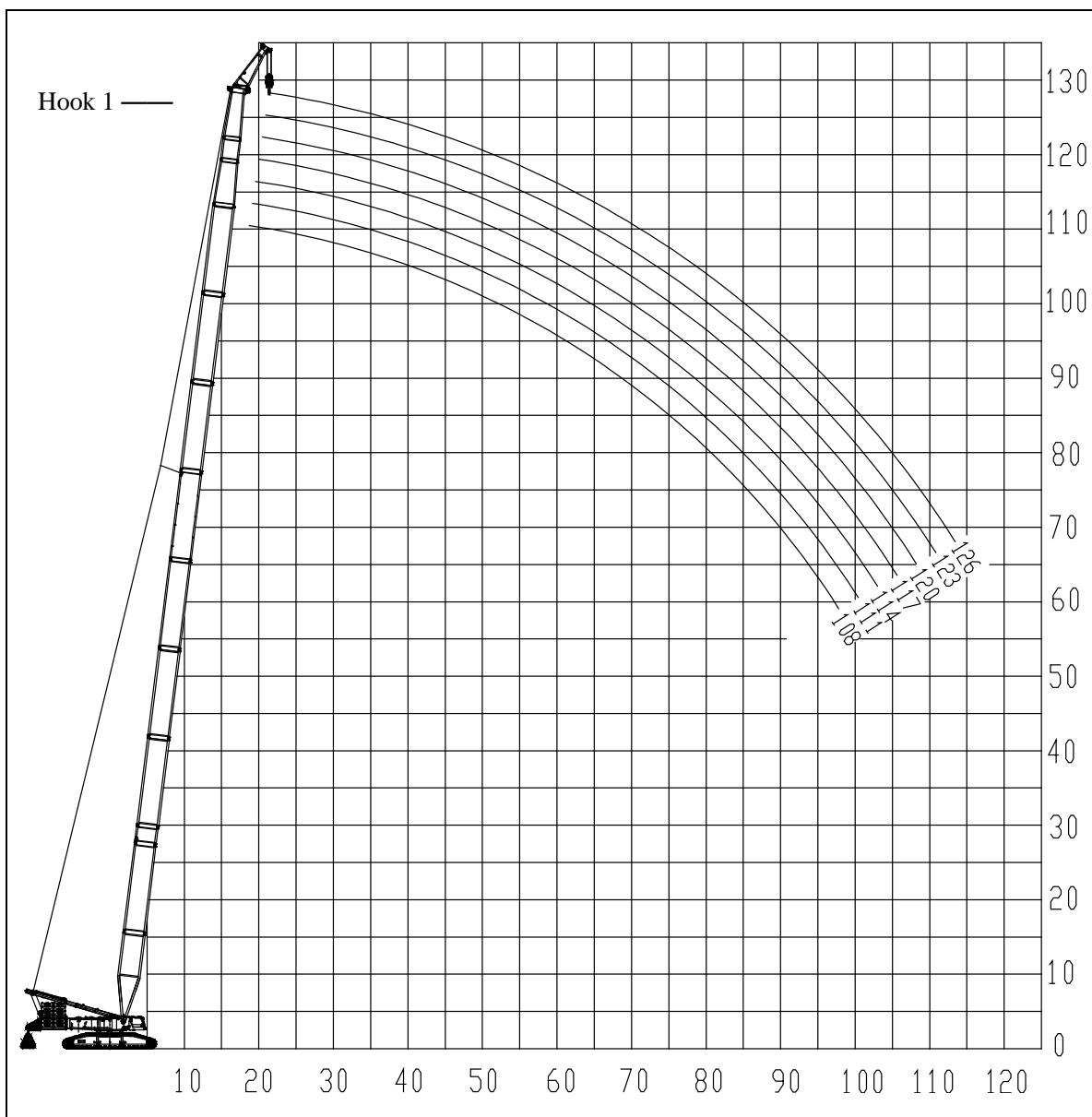


Fig. 16 Characteristic curves of lifting height of operating mode SLHS-2

Lifting capacity chart of operating mode SLHS-2

Rear counterweight: 250t Attached counterweight: 35t Central ballast: 96t Jib for wind turbine: 7m								
Radius m	Main boom length (m)							Radius m
	108	111	114	117	120	123	126	
17	140							17
18	138	129	122	117				18
19	136	127	120	115	110	105	100	19
20	132	125	118	113	108	103	98	20
22	129	120	113	109	104	99.1	94.3	22
24	124	117	110	106	101	95.5	90.9	24
26	120	112	106	102	96.9	92	87.4	26
28	117	109	102	98.3	93.2	88.7	84.1	28
30	112	105	98.6	94.9	90.1	85.5	81	30
32	109	102	95.3	92.1	87.1	82.5	78	32
34	106	98.7	92.3	88.9	83.9	79.8	75.3	34
36	102	95.5	89.5	86	81.3	76.7	72.6	36
38	97.7	92.5	86.6	83.2	78.5	74	70	38
40	90.5	89.7	83.8	80.6	76	71.7	67.5	40
44	78.4	78.2	77.5	75.6	71.1	66.9	62.7	44
48	68.5	68.3	67.7	67.3	66.6	62.5	58.3	48
52	60.2	60	59.4	59.1	58.4	58.2	54.5	52
56	53.3	53	52.3	52.1	51.4	51.2	50.5	56
60	47.4	47.1	46.4	46.1	45.4	45.3	44.6	60
64	42.2	41.9	41.3	41	40.2	40.1	39.3	64
68	37.6	37.4	36.7	36.4	35.7	35.5	34.8	68
72	33.6	33.4	32.8	32.4	31.7	31.5	30.8	72
76	30.1	29.8	29.2	28.9	28.2	28	27.2	76
80	26.9	26.7	26	25.7	25	24.8	24.1	80
84	24.1	23.8	23.1	22.8	22.2	21.9	21.2	84
88	21.5	21.2	20.5	20.2	19.5	19.3	18.6	88
92	19.1	18.8	18.2	17.8	17.2	17	16.2	92
96	16.9	16.7	16	15.7	15	14.8	14.1	96
100	14.9	14.7	14	13.7	13	12.8	12.1	100
104		12.8	12.1	11.9	11.1	10.9	10.2	104
108				10.1	9.5	9.3	8.5	108
112					7.8	7.7	7	112
116							5.5	116

2.11 Lifting performance of operating mode SLHSDB-1

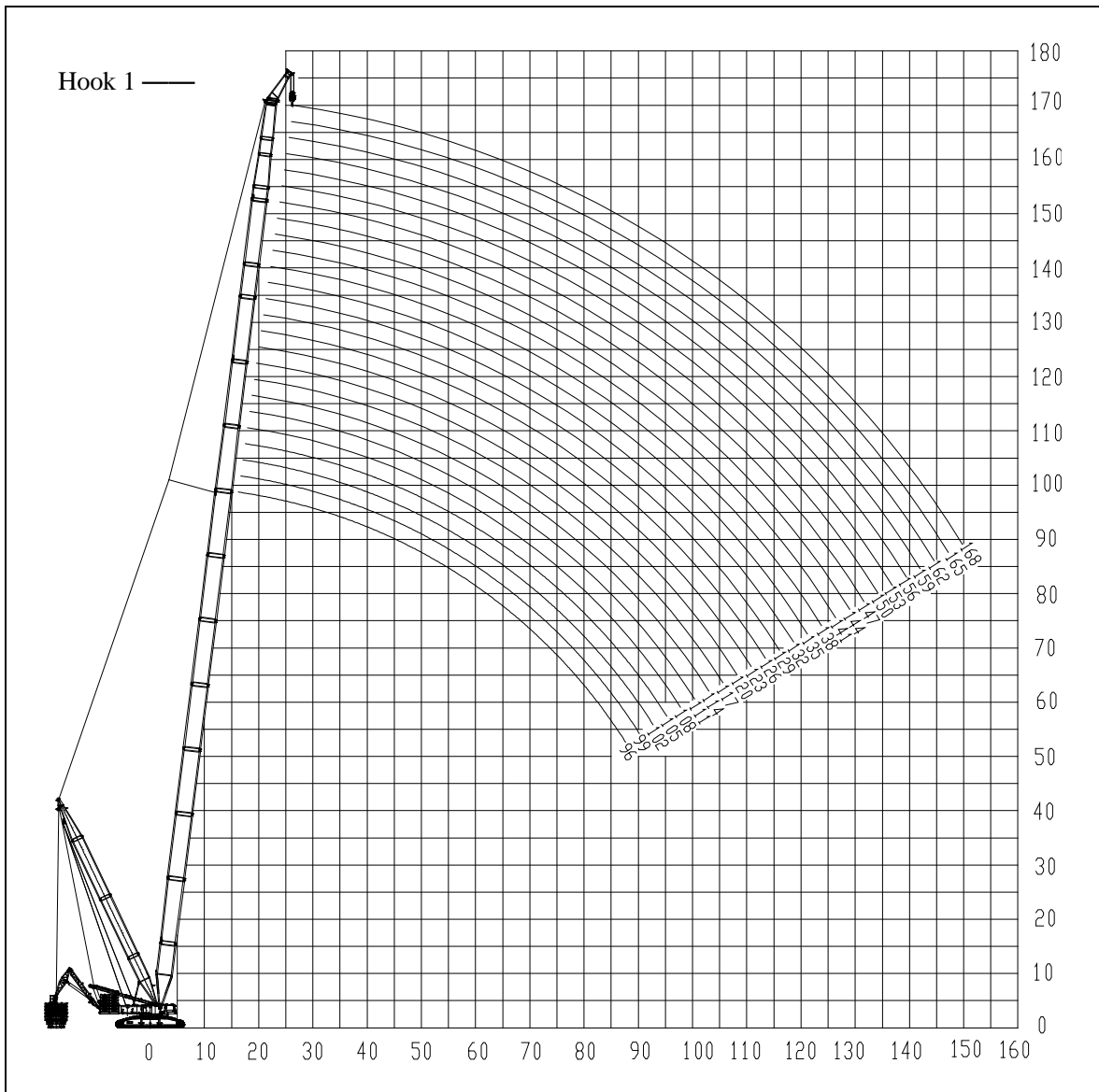


Fig. 17 Characteristic curves of lifting height of operating mode SLHSDB-1

Lifting capacity chart of operating mode SLHSDB-1

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 7m													
Radius m	Main boom length (m)												Radius m
	96	99	102	105	108	111	114	117	120	123	126	129	
16	220												16
17	220	220	220	220	220								17
18	220	220	220	220	220	220	220	220					18
19	220	220	220	220	220	220	220	220	220	220	220		19
20	220	220	220	220	220	220	220	220	220	220	220	220	20
22	220	220	220	220	219	220	220	220	220	220	220	220	22
24	220	220	220	220	215	216	217	218	218	219	219	220	24
26	220	220	220	219	212	213	213	214	215	216	216	217	26
28	220	220	220	215	209	209	210	211	212	212	213	214	28
30	220	220	218	210	205	206	207	208	209	210	210	211	30
32	220	220	214	206	203	203	204	205	206	207	208	208	32
34	220	215	209	202	200	200	201	202	203	204	205	206	34
36	217	210	205	198	197	198	199	200	201	201	202	203	36
38	212	206	201	194	194	195	196	197	198	199	200	201	38
40	207	202	197	191	192	193	194	195	196	197	197	198	40
44	198	193	189	183	187	188	189	190	191	192	193	194	44
48	191	186	182	176	183	184	185	186	187	188	189	190	48
52	183	178	174	170	179	180	181	182	183	184	185	186	52
56	175	171	168	163	176	177	178	179	180	181	182	183	56
60	168	164	162	157	173	173	175	176	177	177	178	179	60
64	161	157	156	151	170	171	172	173	174	173	173	172	64
68	153	151	150	145	164	162	162	161	161	159	159	158	68
72	142	140	140	139	152	150	150	149	148	147	147	146	72
76	132	130	130	129	141	139	139	138	138	136	136	135	76
80	123	121	121	120	131	130	129	128	128	127	126	125	80
84	114	113	113	112	123	121	121	119	119	118	117	116	84
88	107	106	105	104	115	113	113	111	111	110	109	108	88
92		99.2	99	97.9	108	106	105	104	104	103	102	101	92
96			92.9	91.8	101	99.4	99.1	97.9	97.6	96.3	95.9	94.7	96
100					95.1	93.4	93.1	91.8	91.5	90.3	89.9	88.6	100
104						87.8	87.5	86.2	85.9	84.7	84.3	83	104
108								81.1	80.8	79.5	79.2	77.9	108
112									76	74.8	74.4	73.1	112
116											69.9	68.6	116
120												64.5	120

Lifting capacity chart of operating mode SLHSDB-1

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 7m														
Radius m	Main boom length (m)													Radius m
	132	135	138	141	144	147	150	153	156	159	162	165	168	
20	220	220												20
22	220	220	213	208	200	190	182	174	167					22
24	220	219	213	208	200	190	182	174	167	160	152	146	140	24
26	218	218	213	208	200	190	182	174	168	160	152	146	139	26
28	215	215	213	208	200	190	182	174	168	160	151	145	139	28
30	212	213	213	208	200	190	182	174	168	160	151	145	138	30
32	209	210	210	208	200	190	182	173	167	159	150	144	138	32
34	207	207	208	208	200	189	181	173	167	159	149	144	136	34
36	204	205	206	206	200	189	181	173	166	158	149	142	136	36
38	202	202	203	204	199	188	180	172	166	158	147	141	135	38
40	199	200	201	202	198	188	180	172	165	157	147	141	134	40
44	195	196	197	197	197	187	179	170	163	155	145	139	133	44
48	191	192	193	193	194	187	177	169	161	153	144	138	132	48
52	187	188	189	190	190	186	176	167	160	152	142	135	129	52
56	183	184	185	186	187	186	173	165	158	150	140	134	127	56
60	180	181	182	183	183	182	171	164	156	147	138	132	126	60
64	171	170	170	169	168	168	167	162	154	146	137	131	124	64
68	157	156	156	155	154	154	154	152	151	144	135	128	122	68
72	145	144	144	143	142	142	142	140	140	139	133	127	120	72
76	134	133	133	132	131	131	131	129	129	128	127	125	118	76
80	125	123	123	122	122	121	121	120	119	119	118	116	116	80
84	116	114	114	113	113	113	112	111	110	110	109	108	107	84
88	108	107	107	105	105	105	104	103	103	102	101	100	99.4	88
92	101	99.6	99.3	97.9	97.5	97.4	96.9	95.6	95.2	94.5	94	92.7	92.2	92
96	94.3	93	92.7	91.3	90.9	90.8	90.3	89	88.6	87.9	87.4	86.1	85.6	96
100	88.3	86.9	86.6	85.3	84.9	84.7	84.2	83	82.6	81.9	81.3	80.1	79.6	100
104	82.7	81.4	81	79.7	79.3	79.2	78.7	77.4	77	76.3	75.8	74.5	74	104
108	77.6	76.2	75.9	74.6	74.1	74	73.5	72.3	71.8	71.1	70.6	69.3	68.8	108
112	72.8	71.4	71.1	69.8	69.4	69.2	68.7	67.5	67.1	66.3	65.8	64.6	64	112
116	68.3	67	66.7	65.3	64.9	64.8	64.3	63	62.6	61.9	61.4	60.1	59.6	116
120	64.2	62.8	62.5	61.2	60.8	60.6	60.1	58.9	58.5	57.8	57.3	56	55.5	120
124		58.9	58.6	57.3	56.9	56.8	56.3	55	54.6	53.9	53.4	52.1	51.6	124
128				53.7	53.3	53.1	52.6	51.4	51	50.3	49.8	48.5	47.9	128
132					49.8	49.7	49.2	48	47.6	46.9	46.4	45.1	44.3	132
136							46	44.8	44.4	43.7	43.2	41.7	41	136
140								41.7	41.3	40.6	40.1	38.6	37.9	140
144										37.8	37.1	35.6	34.9	144
148											34.3	32.7	32	148
152													29.3	152

2.12 Lifting performance of operating mode SLHSDB-2

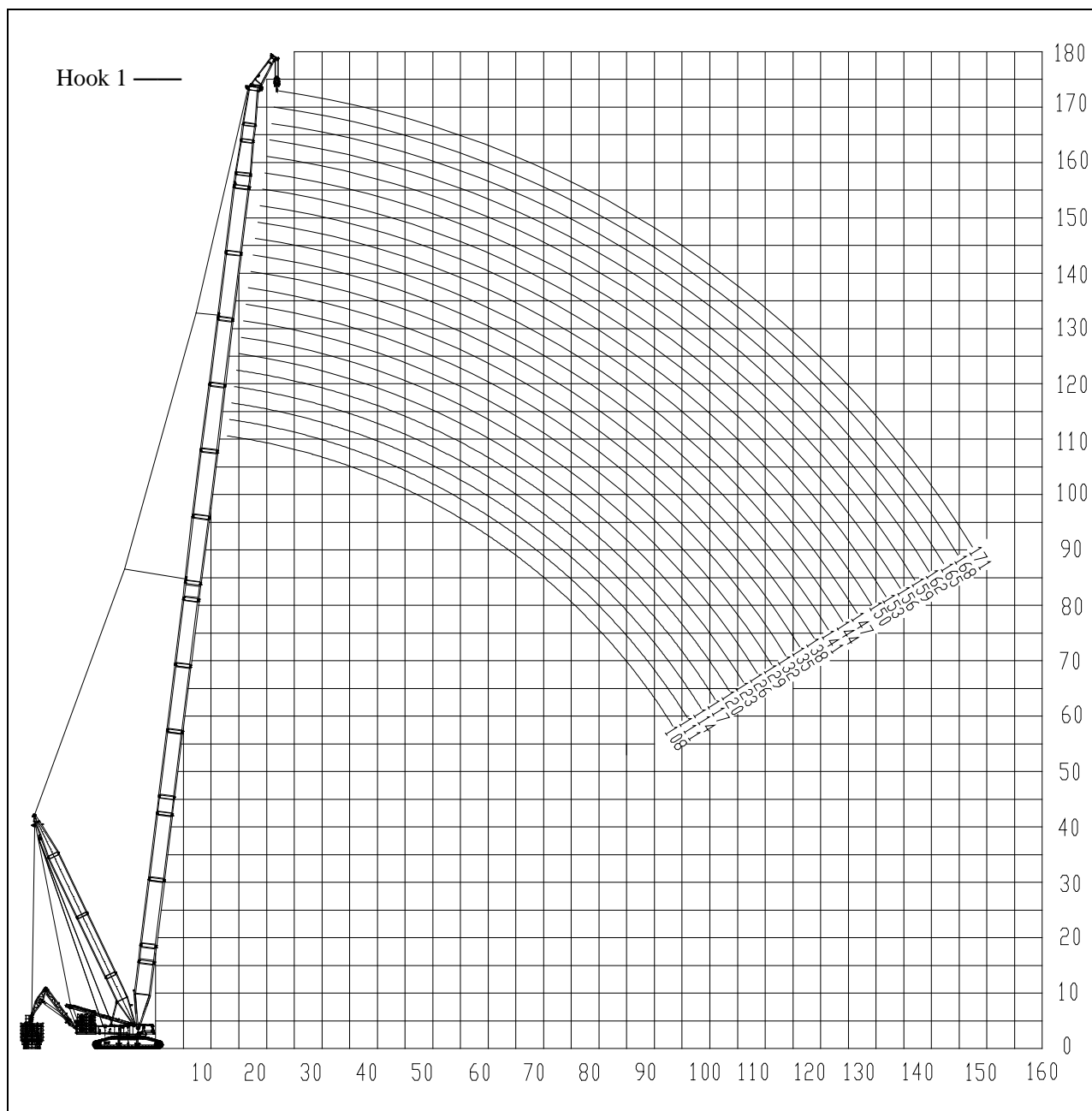


Fig. 18 Characteristic curves of lifting height of operating mode SLHSDB-2

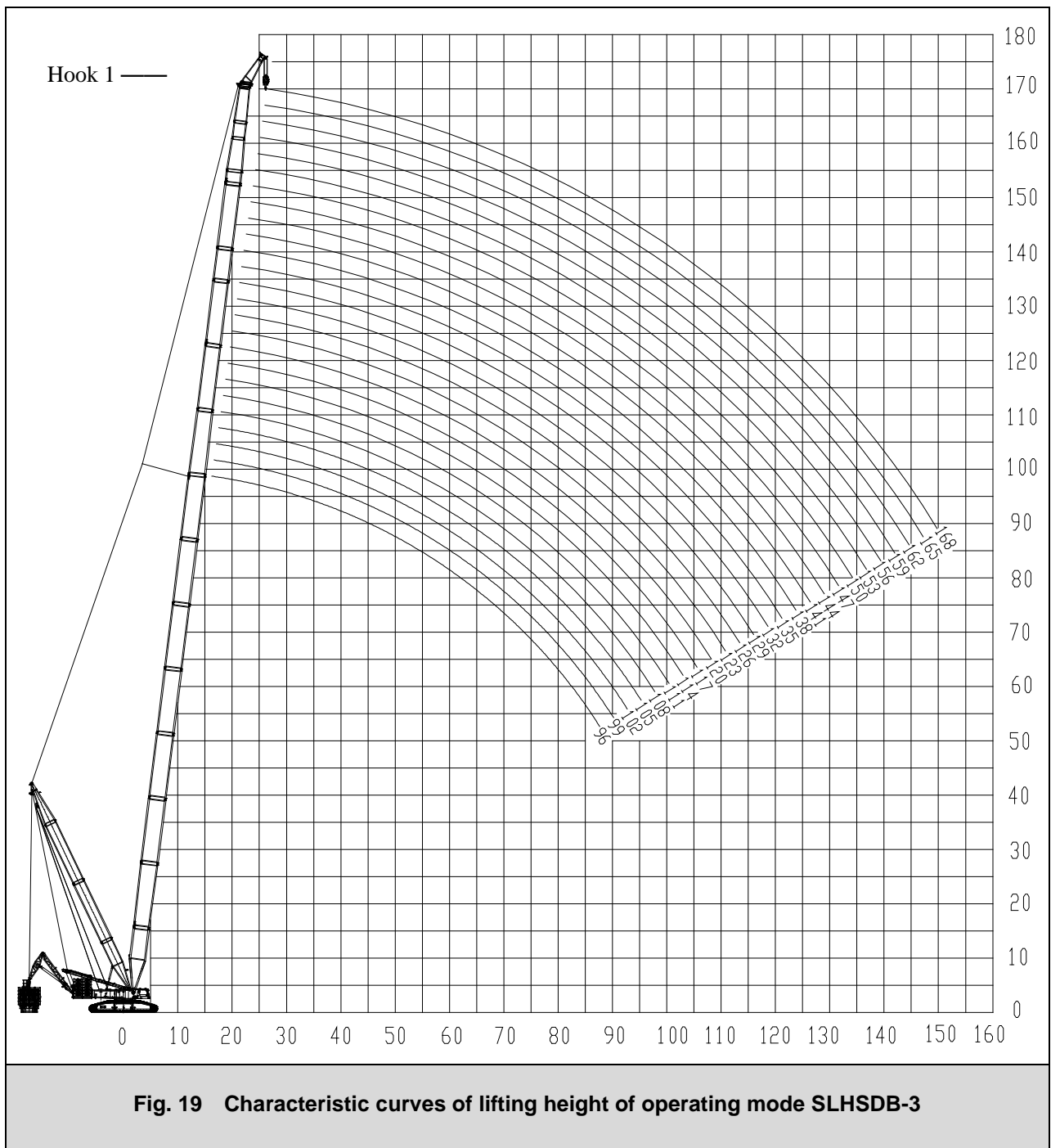
Lifting capacity chart of operating mode SLHSDB-2

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 7m											
Radius m	Main boom length (m)										Radius m
	108	111	114	117	120	123	126	129	132	135	
17	220										17
18	220	220	220	220							18
19	220	220	220	220	220	220	220				19
20	220	220	220	220	220	220	220	220	220	220	20
22	220	220	220	220	220	220	220	220	220	220	22
24	220	220	220	220	220	220	220	220	220	220	24
26	220	220	220	220	220	220	220	220	220	220	26
28	220	220	218	220	220	220	218	218	218	218	28
30	218	218	216	218	218	218	216	216	216	216	30
32	216	216	212	216	216	216	214	214	214	214	32
34	212	212	208	213	214	212	212	212	212	212	34
36	208	207	205	209	210	211	211	211	211	211	36
38	204	204	201	205	202	210	210	210	210	210	38
40	200	200	198	201	196	209	203	205	209	207	40
44	193	193	190	195	184	200	188	193	204	204	44
48	185	186	184	189	172	188	176	180	200	201	48
52	178	180	178	183	164	176	166	170	195	188	52
56	172	173	171	178	154	166	156	160	182	178	56
60	167	168	167	171	147	158	148	151	166	169	60
64	158	158	157	157	140	150	141	144	151	154	64
68	146	145	144	144	135	142	133	136	138	142	68
72	134	134	133	132	129	131	128	129	127	130	72
76	124	124	120	122	121	120	119	119	117	120	76
80	115	115	109	111	112	111	110	110	108	111	80
84	105	103	98	99.3	104	103	102	102	99.8	103	84
88	93.7	92.9	87.7	89.4	96.3	96	94.8	94.5	92.5	95.3	88
92	82.7	83	77.1	80	89.7	89.4	88.1	87.8	85.8	88.6	92
96	73	72.9	68.1	70.1	83.6	83.3	82	81.7	79.7	82.4	96
100	64	63.6	58.6	60.6	78	77.7	76.4	76.1	74.1	76.8	100
104		54.3	49.6	52	72.8	72.5	71.3	71	69	71.6	104
108				43.3	68.1	67.8	66.5	66.2	64.2	66.8	108
112					63.6	63.4	62.1	61.8	59.8	62.3	112
116							58	57.7	55.7	58.1	116
120								53.8	51.8	54.2	120
124										50.6	124

Lifting capacity chart of operating mode SLHSDB-2

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 7m													
Radius m	Main boom length (m)												Radius m
	138	141	144	147	150	153	156	159	162	165	168	171	
22	220	220	220	220	220	211	211						22
24	220	220	220	220	219	211	211	195	190	185	180	170	24
26	220	220	220	219	219	210	205	195	190	185	180	170	26
28	217	219	219	218	218	208	198	195	190	185	180	170	28
30	216	216	217	215	212	200	191	195	190	185	180	170	30
32	214	215	215	214	205	193	183	195	190	185	180	170	32
34	212	212	213	208	198	185	177	195	190	185	180	170	34
36	210	212	212	200	191	179	171	195	190	184	178	166	36
38	208	209	205	193	185	173	163	190	183	177	173	161	38
40	206	208	198	187	179	166	159	184	177	172	166	155	40
44	202	194	187	176	166	156	148	171	166	161	155	145	44
48	192	183	176	163	156	145	138	161	155	150	145	136	48
52	185	173	165	155	146	136	128	152	146	140	136	128	52
56	176	163	156	145	138	128	121	143	138	133	129	120	56
60	163	155	146	138	130	121	114	135	129	125	120	113	60
64	150	146	139	130	123	114	108	127	122	118	114	106	64
68	137	136	133	124	116	109	101	120	116	111	107	100	68
72	126	125	124	118	110	103	96.3	114	109	105	101	94	72
76	115	115	114	111	106	98.1	91.6	109	104	99.5	95.8	88.5	76
80	106	106	105	105	101	93.4	86.9	102	98.5	95.3	91.3	84.1	80
84	98.3	97.9	96.6	96.4	95.1	88.7	83.3	93.7	92.5	90	86.9	79.6	84
88	91	90.6	89.3	89	87.8	85.1	79.3	86.4	85.4	84.2	82.4	75.3	88
92	84.3	83.9	82.6	82.4	81.1	80.7	75.8	79.7	78.8	77.6	77.2	71.9	92
96	78.2	77.8	76.5	76.3	75	74.6	72.9	73.6	72.7	71.6	71.1	68	96
100	72.6	72.2	70.9	70.7	69.4	69	68.4	68	67.1	66	65.6	65	100
104	67.5	67.1	65.8	65.5	64.3	63.9	63.3	62.9	62	60.8	60.4	59.8	104
108	62.7	62.3	61	60.8	59.5	59.1	58.5	58.1	57.1	56	55.6	55	108
112	58.3	57.9	56.6	56.3	55.1	54.7	54.1	53.7	52.6	51.5	51.1	50.5	112
116	54.2	53.8	52.5	52.2	51	50.6	49.9	49.5	48.4	47.3	46.9	46.4	116
120	50.3	50	48.7	48.4	47.1	46.8	46	45.5	44.5	43.4	43	42.4	120
124	46.7	46.4	45.1	44.8	43.6	43.1	42.3	41.8	40.8	39.7	39.3	38.8	124
128		43	41.7	41.5	40.2	39.6	38.8	38.3	37.3	36.2	35.8	35.3	128
132			38.5	38.3	36.9	36.3	35.5	35	34	32.9	32.6	32	132
136					33.8	33.2	32.4	31.9	30.9	29.8	29.5	28.9	136
142						30.2	29.4	29	28	26.9	26.5	26	142
146								26.1	25.1	24.1	23.7	23.2	146
152									22.5	21.4	21.1	20.6	152
156											18.5	18.1	156

2.13 Lifting performance of operating mode SLHSDB-3



Lifting capacity chart of operating mode SLHSDB-3

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 5m													
Radius m	Main boom length (m)												Radius m
	96	99	102	105	108	111	114	117	120	123	126	129	
16	270	270											16
17	270	270	270	270	270								17
18	270	270	270	270	270	270	270	270					18
19	270	270	270	270	270	270	270	270	270	270	270	255	19
20	270	270	270	270	270	270	270	270	270	270	270	255	20
22	270	270	270	266	270	270	269	270	270	270	270	255	22
24	270	270	270	263	270	270	267	270	270	270	270	255	24
26	270	270	268	260	270	270	264	270	270	270	270	255	26
28	270	270	264	256	270	270	262	269	270	270	270	255	28
30	270	269	260	253	270	268	260	267	267	270	270	255	30
32	270	265	257	249	270	265	257	265	267	262	270	255	32
34	268	262	253	245	267	262	254	264	266	262	270	256	34
36	263	257	249	242	267	258	252	260	264	262	270	257	36
38	258	253	245	238	264	256	249	259	263	261	270	257	38
40	255	250	242	236	261	253	246	257	261	259	270	257	40
44	248	242	235	229	253	246	241	251	249	248	247	245	44
48	240	235	229	223	229	227	227	226	225	224	223	221	48
52	233	229	222	217	208	206	206	205	204	203	202	200	52
56	221	221	217	212	188	187	186	185	185	184	183	182	56
60	204	204	204	204	171	170	169	168	168	167	166	165	60
64	190	190	190	190	157	155	155	154	153	152	152	151	64
68	178	178	178	178	144	142	142	141	140	139	139	138	68
72	167	167	167	167	133	131	131	130	129	128	128	127	72
76	158	158	158	158	123	121	121	120	119	118	118	116	76
80	149	149	149	149	114	112	112	111	110	109	109	107	80
84	141	141	141	141	106	104	104	103	102	101	101	99.4	84
88	134	134	134	134	98.5	96.8	96.4	95.3	94.7	93.7	93.1	92	88
92		128	128	128	91.8	90.2	89.7	88.6	88.1	87	86.5	85.4	92
96				122	85.7	84.1	83.6	82.5	82	80.9	80.4	79.3	96
100					80.1	78.5	78	76.9	76.4	75.3	74.8	73.7	100
104							72.8	71.8	71.2	70.2	69.6	68.5	104
108								67	66.4	65.4	64.9	63.7	108
112										61	60.4	59.3	112
116												55.2	116

Lifting capacity chart of operating mode SLHSDB-3

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 5m														
Radius m	Main boom length (m)													Radius m
	132	135	138	141	144	147	150	153	156	159	162	165	168	
20	242	235	220											20
22	242	230	220	212	205	195	185	178	170					22
24	242	230	220	212	205	195	185	178	170	162	155	148	141	24
26	242	229	220	212	205	195	184	178	170	162	155	148	140	26
28	242	229	220	212	205	195	184	178	170	161	155	147	139	28
30	242	229	220	212	205	194	184	177	169	161	154	146	139	30
32	242	229	220	212	205	194	182	177	169	161	154	145	138	32
34	242	229	220	212	205	192	182	175	167	159	152	145	137	34
36	242	229	220	212	205	192	181	175	167	158	152	143	136	36
38	242	229	220	211	205	191	181	173	166	158	151	143	135	38
40	242	229	220	211	204	191	179	173	164	156	150	142	134	40
44	242	229	217	209	204	190	178	172	163	155	148	140	133	44
48	219	218	216	206	204	187	177	169	163	153	146	138	131	48
52	199	197	196	194	193	185	175	167	163	153	144	139	132	52
56	181	179	178	176	175	175	173	166	162	150	146	139	130	56
60	165	164	163	161	160	160	159	157	156	151	144	137	128	60
64	150	149	149	147	146	146	145	143	142	142	140	138	130	64
68	137	136	136	135	134	134	133	131	130	130	129	127	126	68
72	126	125	124	123	123	123	122	121	120	119	118	116	115	72
76	116	115	114	113	113	113	112	111	110	109	108	107	106	76
80	107	106	105	104	104	104	103	102	101	101	99.7	98.2	97.2	80
84	98.8	97.7	97.2	96	95.5	95.5	94.8	93.8	93.1	92.8	91.8	90.4	89.4	84
88	91.5	90.4	89.8	88.7	88.1	88.1	87.5	86.4	85.8	85.5	84.6	83.2	82.2	88
92	84.8	83.7	83.2	82	81.5	81.5	80.8	79.8	79.1	78.8	78.1	76.6	75.7	92
96	78.7	77.6	77.1	75.9	75.4	75.4	74.7	73.7	73	72.7	72	70.6	69.6	96
100	73.1	72	71.5	70.3	69.8	69.8	69.1	68.1	67.4	67.1	66.4	65	64.1	100
104	68	66.9	66.3	65.2	64.6	64.6	64	62.9	62.3	62	61.2	59.8	58.9	104
108	63.2	62.1	61.6	60.4	59.9	59.9	59.2	58.1	57.5	57.2	56.4	55	54.1	108
112	58.8	57.7	57.1	56	55.4	55.5	54.8	53.7	53.1	52.8	51.9	50.5	49.6	112
116	54.7	53.6	53	51.9	51.3	51.3	50.7	49.6	49	48.5	47.6	46.3	45.4	116
120	50.8	49.7	49.2	48	47.5	47.5	46.9	45.8	45.1	44.6	43.7	42.3	41.4	120
124			45.6	44.5	43.9	43.9	43.3	42.2	41.4	40.9	40	38.6	37.7	124
128				41.1	40.5	40.6	39.9	38.7	37.9	37.4	36.5	35.1	34.3	128
132						37.4	36.7	35.4	34.5	34.1	33.2	31.8	31	132
136							33.6	32.3	31.4	30.9	30.1	28.7	27.9	136
140									28.4	28	27.1	25.8	24.9	140
144										25.1	24.3	23	22.1	144
148												20.3	19.5	148
152													16.9	152

2.14 Lifting performance of operating mode SLHSDB-4

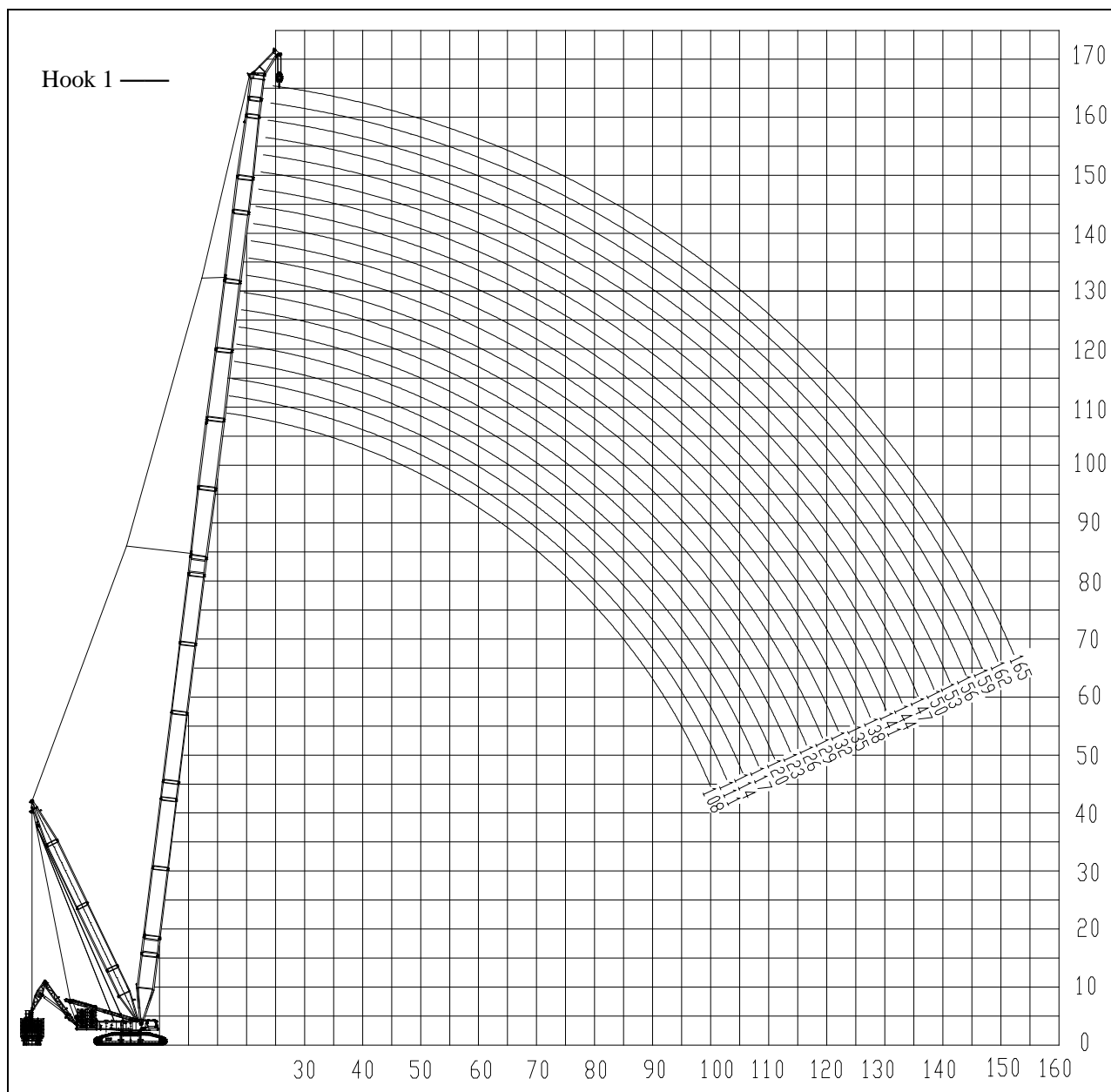


Fig. 20 Characteristic curves of lifting height of operating mode SLHSDB-4

Lifting capacity chart of operating mode SLHSDB-4

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m											
Jib for wind turbine: 5m											
Radius m	Main boom length (m)										Radius m
	108	111	114	117	120	123	126	129	132	135	
17	270										17
18	270	270	270	270							18
19	270	270	270	270	270	270	270	270			19
20	270	270	270	270	270	270	270	270	270	270	20
22	270	270	270	270	270	270	270	270	270	269	22
24	270	270	270	270	270	270	270	270	270	268	24
26	270	270	270	270	270	270	270	270	269	267	26
28	268	268	268	268	268	268	268	268	267	265	28
30	266	266	266	266	266	266	266	266	266	264	30
32	264	264	264	264	264	264	264	264	264	262	32
34	262	262	262	262	262	262	262	262	262	261	34
36	260	260	260	260	260	260	260	260	260	259	36
38	259	259	259	259	259	259	259	259	259	257	38
40	258	258	258	258	258	258	258	258	258	247	40
44	241	241	241	241	241	241	241	241	241	240	44
48	227	226	225	225	223	222	220	219	217	216	48
52	206	205	204	204	202	201	199	198	196	195	52
56	186	186	185	184	183	182	181	180	178	177	56
60	169	169	168	167	166	165	164	164	163	162	60
64	154	154	153	153	151	151	150	149	148	147	64
68	142	141	140	140	138	138	137	136	135	135	68
72	130	130	129	128	127	126	125	125	124	123	72
76	120	120	119	118	117	116	115	115	114	113	76
80	111	111	110	109	108	107	106	106	105	104	80
84	103	103	102	101	99.8	99.3	98.3	97.7	96.5	96	84
88	95.9	95.1	89.2	86.4	92.4	91.9	90.9	90.4	89.2	88.7	88
92	82.6	81.3	75.5	72.3	85.8	85.2	84.2	83.7	82.5	82	92
96	69	68	61.1	59.4	79.6	79.1	78.1	77.6	76.4	75.9	96
100	54.4	54.2	48.5	46.5	74	73.5	72.5	72	70.8	70.3	100
104			35.9	35.6	68.9	68.4	67.4	66.9	65.6	65.1	104
108				23.8	64.1	63.6	62.6	62.1	60.9	60.3	108
112						59.1	58.1	57.6	56.4	55.9	112
116								53.5	52.3	51.8	116
120									48.4	47.9	120

Lifting capacity chart of operating mode SLHSDB-4

Rear counterweight: 210t Central ballast: 400t Central ballast: 96t Radius of suspended ballast: 23m Jib for wind turbine: 5m											
Radius m	Main boom length (m)										Radius m
	138	141	144	147	150	153	156	159	162	165	
20	245										20
22	245	245	245	245	230	211	210				22
24	245	245	245	245	229	211	210	205	200	198	24
26	245	245	245	244	228	211	210	205	200	198	26
28	245	245	245	243	227	211	209	205	200	198	28
30	245	245	245	243	227	211	207	205	200	198	30
32	245	245	245	239	221	205	205	205	200	198	32
34	245	245	242	235	220	203	204	205	200	198	34
36	245	244	236	235	219	201	203	203	198	198	36
38	245	236	232	234	219	200	201	199	198	198	38
40	241	235	231	233	218	199	199	198	198	198	40
44	238	230	230	232	218	199	198	198	198	198	44
48	214	213	211	210	208	198	197	194	194	190	48
52	193	192	190	189	188	186	185	183	180	177	52
56	176	174	173	172	170	169	168	167	166	164	56
60	160	159	157	156	155	154	153	152	150	149	60
64	146	145	144	143	141	140	139	138	137	136	64
68	134	133	132	131	129	128	127	127	125	124	68
72	122	122	121	120	119	117	117	116	114	113	72
76	112	112	110	110	109	108	107	106	105	104	76
80	103	103	101	101	99.9	99	98.3	97.6	96.1	95.1	80
84	95	94.4	93.3	92.8	91.7	91.1	90.4	89.6	88.2	87.3	84
88	87.6	87	85.9	85.4	84.4	83.8	83.2	82.4	81	80.1	88
92	81	80.3	79.3	78.7	77.7	77.1	76.5	75.8	74.4	73.5	92
96	74.9	74.2	73.1	72.6	71.6	70.9	70.5	69.7	68.3	67.4	96
100	69.3	68.6	67.5	67	66	65.3	64.8	64.1	62.7	61.8	100
104	64.1	63.5	62.4	61.9	60.8	60.2	59.6	58.9	57.5	56.6	104
108	59.3	58.7	57.6	57.1	56	55.3	54.7	54	52.6	51.7	108
112	54.9	54.3	53.2	52.7	51.6	50.8	50.2	49.5	48.1	47.2	112
116	50.8	50.1	49.1	48.5	47.5	46.5	46	45.2	43.9	43	116
120	46.9	46.3	45.2	44.7	43.5	42.6	42	41.3	39.9	39	120
124	43.3	42.7	41.6	41.1	39.7	38.8	38.3	37.5	36.2	35.3	124
128		39.3	38.2	37.5	36.2	35.3	34.7	34	32.7	31.8	128
132				34.2	32.8	32	31.4	30.7	29.4	28.5	132
136					29.7	28.8	28.3	27.6	26.2	25.4	136
140							25.3	24.6	23.2	22.4	140
144								21.7	20.4	19.6	144
148										16.9	148

3. Technical instruction

3.1 Boom system

The boom system is composed of a main boom, a luffing jib, an A-frame, an FA-frame, WA-frames, a fixed jib, a jib for wind turbine, a derrick boom, anchoring rods, etc. Lattice boom is made of high-strength steel tubes; A-frame structures and anchoring rods are made of high-strength steel plates.

Main boom

Main boom is a lattice structure of high-strength steel tubes with uniform section in the center and variable sections on both ends.

Main boom length for operating mode S: 36~90m

Main boom length for operating mode SDB: 42~162m

Luffing jib

Luffing jib is a lattice structure of high-strength steel tubes with uniform section in the center and variable sections on both ends.

Luffing jib length: 30~96m

Light main boom

Light main boom is the combination of main boom and luffing jib that are connected through reducing sections. Reducing section is a lattice structure welded by high-strength steel tubes with variable sections.

Main boom length for operating mode SL: 60~108m

Main boom length for operating mode SLDB: 48~171m

Heavy fixed jib

Heavy fixed jib is a lattice structure of high-strength steel tubes with uniform section in the center and variable sections on both ends.

Heavy fixed jib length: 18m

Derrick boom

Derrick boom is a lattice structure of high-strength steel tubes with uniform section in the center and variable sections on both ends.

Derrick boom length: 42m

A-frame

A-frame is a door-shaped structure welded by high-strength steel plates. The length of A-frame is 12m.

WA-frame 1 and 2

WA-frame 1/2 is a lattice structure of high-strength steel tubes with uniform section in the center and variable sections on both ends.

Length of WA-frame 1: 19m

Length of WA-frame 2: 18m

Jib for wind turbine

Jib for wind turbine is a lattice structure welded by high-strength steel tubes.

Length of jib for wind turbine: 7m, 5m

3.2 Mechanisms**Hoisting mechanism**

The hoisting mechanism, consisting of a variable displacement axial piston hydraulic motor, a reducer, a normally-closed brake and wire rope, can be controlled independently.

The wire rope is a special type of anti-twist wire rope.

A synchronous controller is used when hoisting winch I and II are working together. The maximum single rope speed of the outermost layer is 128m/min.

Tip boom hoisting winch is optional, and the maximum single rope speed of the outermost layer is 135m/min.

Derricking mechanism

Derricking mechanisms (including main boom derricking mechanism, luffing jib derricking mechanism and derrick boom derricking mechanism) consist of a variable displacement axial piston hydraulic motor, a reducer, a normally-closed brake and wire rope.

The wire rope is a new type of wire rope specialized for derricking.

The speed of a single rope of the outermost layer on the main boom derricking winch is 44x2m/min.

The speed of a single rope of the outermost layer on the luffing jib derricking winch is 120m/min.

The speed of a single rope of the outermost layer on the derrick boom derricking winch is 128m/min.

Slewing mechanism

The slewing mechanism is a double-driven slewing mechanism, consisting of a constant displacement hydraulic motor, a gear reducer, a brake, a small gear and a slewing bearing.

The operation of controllable slewing helps to reduce impact and makes starting and braking more stable.

The top-bottom split-type slewing ring guarantees the strong load bearing capacity, high precision, and stable and precise slewing movement.

The slewing mechanism is able to make movements through the stepless speed regulation from 0 to 1.0r/min.

Traveling mechanism

The traveling mechanism is a quadruple-driven mechanism. Traveling of the two tracks are controlled by joysticks and foot pedals. It is able to make such movements as traveling in straight line, steering with one track, differentiate steering, pivot steering and traveling with load with high maneuverability and flexibility.

Traveling speed: 0~0.8 km/h.

Max. gradeability: 20%

Crawler tensioning: Tensioning cylinder is controlled by an independent pump station, which is convenient and reliable.

A-frame erecting mechanism

The A-frame erecting mechanism is composed of three parts, A-frame, A-frame erecting cylinder, and auxiliary hydraulic system. This mechanism is used for self-assembly and dismantling (or during transferring). Erect A-frame from the horizontal position to over 105° for the convenience of connecting anchoring rods and assembling boom sections and tracks.

Cab pitching mechanism

To reduce the width of the crane in transport, the cab can be swiveled for 90° from the lateral side to the front of the slewing table through the swiveling cylinder.

The cab can be pitched up for 20° through the pitching cylinder to broad the vision of the operator when the load is to be hoisted high.

Outrigger erecting and track self-assembling and dismantling mechanism

The mechanism consists of such parts as undercarriage outrigger, outrigger cylinder, outrigger valve, track bolting pin, etc. The cylinder erecting mechanism is the main bearing part for track

self-assembling and dismantling. The crawler self-assembling and dismantling mechanism lifts track assy. through A-frame and A-frame erecting mechanism and connects the chassis with the track assy. through bolting pins. The track assy. can be assembled or disassembled automatically through this mechanism without the help of other auxiliary lifting equipment so as to improve working efficiency, reduce labor intensity and avoid risk of manual operation.

3.3 System

Hydraulic system

The hydraulic system is composed of such parts as main pump, hydraulic motor, auxiliary valve, hydraulic oil tank, cooler, etc. It includes a hoisting hydraulic system, a derricking hydraulic system, a slewing hydraulic system, a traveling hydraulic system, a servo hydraulic system, a hydraulic system for tilting-back support, a hydraulic system for the pushing mechanism, a cooling hydraulic system, an auxiliary hydraulic system, etc.

The major hydraulic system is a closed pump-controlled system, which is efficient, energy-saving, reliable and maneuverable. It also features stable starting, braking and reversing with no impact, quick response, low calorific value and long service life. Electric proportional control elements help to realize accurate and intelligent control. Various kinds of alarms for pressure and filter element clogging largely improve the security and reliability of the hydraulic system.

Volume of hydraulic oil tank: 1000L;

Oil filter: filter for oil return; a fine filter for control oil circuit;

Oil cooler: an aluminum radiator; a fan driven by hydraulic motor.

Electrical system

Direct current of 24V, negative ground; two storage batteries.

Electrical devices of the whole machine mainly includes power supply, starting and shutoff device of the engine, indicator light, alarm, illuminating device, fan, windscreen wiper, horn, hoisting high limiter, hydraulic oil cooling fan, digital display, PLC controller, load moment limiter, preheating device of the engine, safety devices, etc. These devices guarantee the safe operation and the good working environment for the crane. Engine, PLC controller, load moment limiter, and digital display are effectively connected together through the CAN bussing technology. It has the function of fault

detecting and self-diagnosis. It is also equipped with a GPS/GPRS and a remote fault diagnosis system.

Power system

The engine is a Cummins electronic fuel injection diesel engine with CAN bus interface.

Rated output power: 418kw, 1800r/min

Max. output torque: 2542Nm, 1400r/min

Emission standard: China III for non-road mobile machinery

The large volume of the fuel oil tank (900L) provides long enough working hours of the engine.

Centralized display system

The large touch LCD of 10.4 inches displays in multiple languages. It displays all kinds of signals collected by the PLC controller, including engine speed, water temperature, fuel oil pressure, hydraulic pump pressure, pressure of each hydraulic circuit, working condition of winch, working condition of the basic machine, etc. It carries out real-time monitoring on working condition and sends out a yellow or a red alarm when the working condition of the crane is abnormal.

Centralized lubrication system

Three sets of centralized lubrication systems (one set for superstructure and two for undercarriage) are convenient for maintenance and reduce abrasion between components.

3.3 Safety devices

The crane is equipped with mechanical, electronic and hydraulic safety devices and alarming devices, which guarantee the safe operation of the crane.

Load moment limiter

The composite error of the load moment limiter is smaller than 5%. There will be a sound-light alarm if the crane is 90% loaded and the operation toward dangerous direction can be cut off precisely if the load is over 100%. To satisfy the need of load test, the cab is equipped with a switch that can be used to bypass the cut of the dangerous operation.

The following data are presented on the digital LCD:

Load moment ratio

Main boom angle

Main boom length

Working radius

Actual load capacity

Permitted load capacity

Max. permitted hoisting height

Tension and percentage value

Overflow valves of the hydraulic system

Overflow valves fitted in the hydraulic system can restrain abnormal high pressure in the oil circuit, thus protecting such hydraulic elements as hydraulic oil pump and hydraulic motor against damage and preventing the hydraulic system from being overloaded.

Hoisting limiter

Devices like limit switch and limit weight installed on boom head are used to prevent over-hoisting of load hook. Limit switch sends out a signal if the load hook is hoisted to a certain height, and the electrical system will cut off the hoisting automatically. A sound-light alarm will be sent out through the buzzer and the display in operator's cab to avoid over-hoisting of the hook.

Angle indicator

It is fitted at the lower rear end of the boom pivot section (i.e. on the right side of the operator's cab). The operator can clearly see the boom angle from the cab.

Derricking limiter

The derricking limiter, controlled by a load moment limiter and a limit switch, is able to detect the limit elevation angle of the boom, cut off derricking automatically, and send out a sound-light alarm.

Gravity center detector

It guarantees the safety of the crane by detecting its gravity center in traveling and working condition with a ground pressure displayed on the screen.

Mousing

It closes off the hook to prevent a load from slipping off.

Anemometer

An electronic device used to indicate the actual wind speed at boom head to the crane operator.

Lowering limit

If there are only three windings of wire rope left on the drum, the protecting device will sent out a signal and the lowering of hook will be cut off automatically by the electrical system. A sound-light alarm will be sent out from the buzzer and the screen.

Boom tilting-back support device

The tilting-back support cylinder with a national patent guarantees smooth and reliable support for backward tilting boom, ensuring the safe and stable operation of the crane.

Emergency stop button

It shuts down the engine and cuts off the whole power supply in emergent conditions.

Tricolor warning light

The warning light, by showing red, yellow and green colors, can indicate loading status. The green color means the load ratio is less than 90%, the yellow color means the load ratio is between 90% and 100%, and the red color means that the load ratio has exceeded 100% and the crane is overloaded.

Safety monitoring system

Video cameras: monitor winches on the slewing table and the rear end of the crane;

Displayer: Monitored images can be switched over through a button.

Optional remote GPS monitoring system

GPS satellite positioning; GPRS data transmission; functions of status inquiry, statistics, remote fault diagnosis, etc.

3.5 Operator's cab

It is an all-steel structured cab with tempered glass around. The top and front windows are laminated glasses. The cab is equipped with sun visors, an adjustable seat, a wiper, electronic joysticks, a load moment limiter, a digital display, a warm/cold air conditioner, an electric fan, a head lamp, a fire extinguisher, etc. The operator's cab has a broad vision and a capacious and comfortable inner space. The floor in the cab is padded with anti-flaming, non-conductive and non-slippery rubber plates. The noise level in the cab is lower than 85db.

The outside of the cab is equipped with indicating lights for wiper and load moment limiter as well as lights for operation at night time.

3.6 Counterweight

Counterweight on the crane includes central ballast, rear counterweight, and suspended ballast (for superlift operating modes). The standard counterweight plates of 10t are interchangeable.

Central ballast (96t in total): counterweight plate of 10t (x8); central ballast plate of 8t (x2);

Rear counterweight: superlift operating mode, 210t; standard operating mode, 250t (counterweight plate of 10t x24; left and right counterweight frame of 5t for each, x2);

Suspended ballast (400t): counterweight plate of 10t (x24), counterweight of 5t (x29);

Attached counterweight (35t): counterweight plate of 10t (x3), counterweight frame of 5t.

3.7 Load hook

All rotatable load hooks are equipped with a mousing. Optional load hooks are as follows:

Load hook for 650t

Load hook for 400t

Load hook for 250t

Load hook for 65t

Load hook for 16t

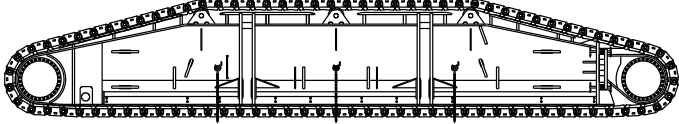
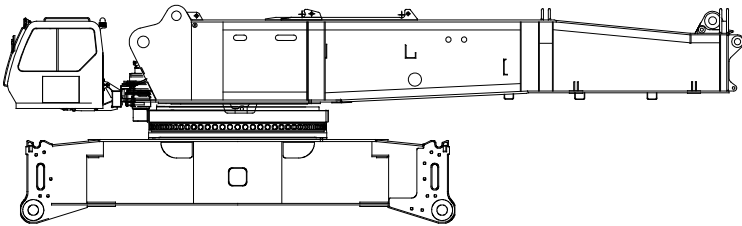
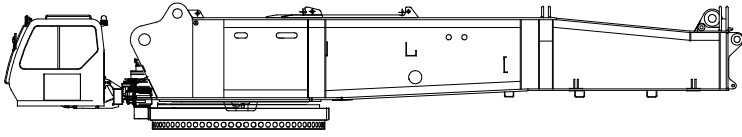
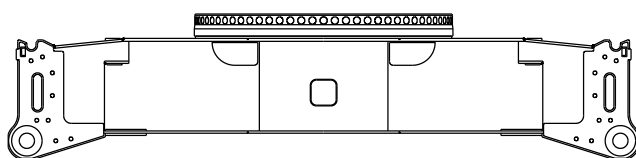
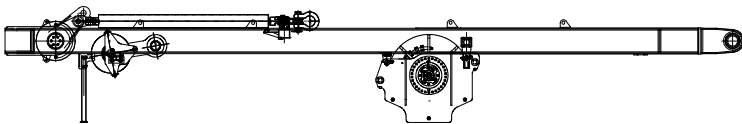
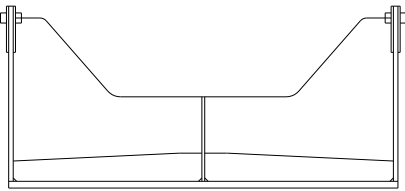
All load hooks are optional, which can be configured according to user's need.

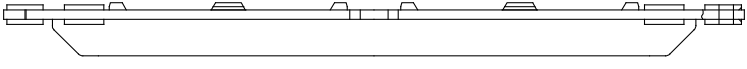
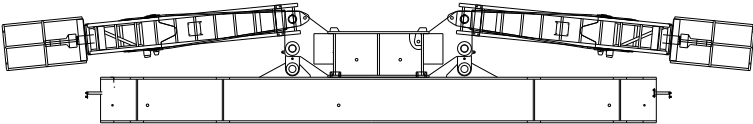
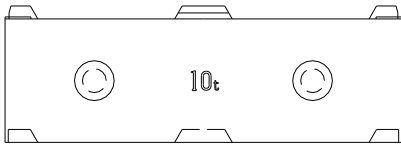
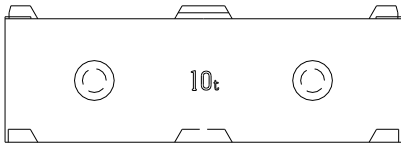
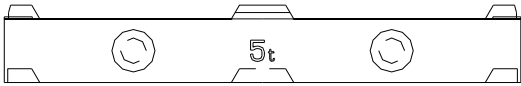
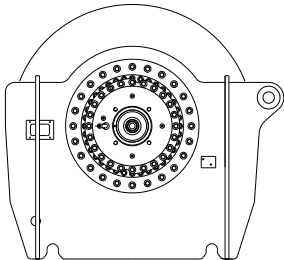
3.8 Optional devices

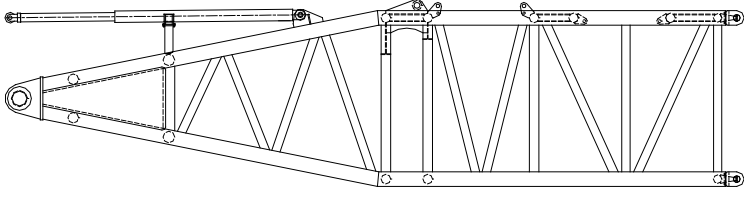
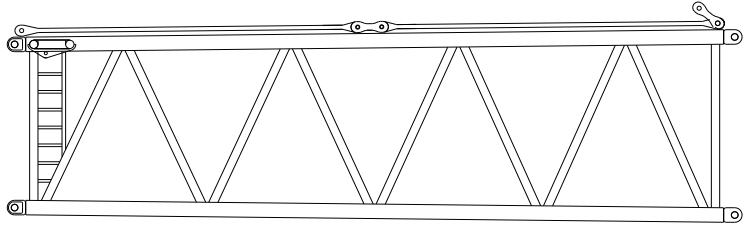
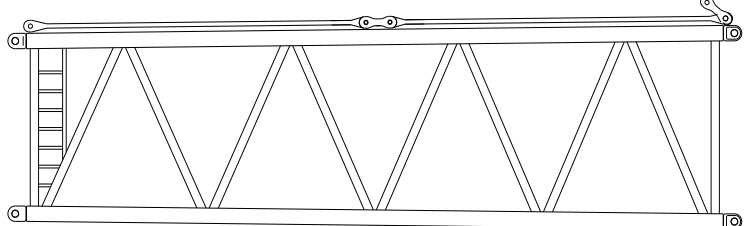
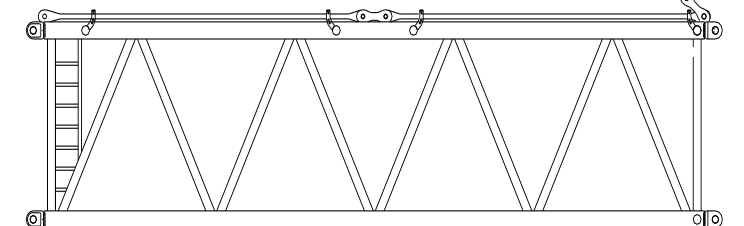
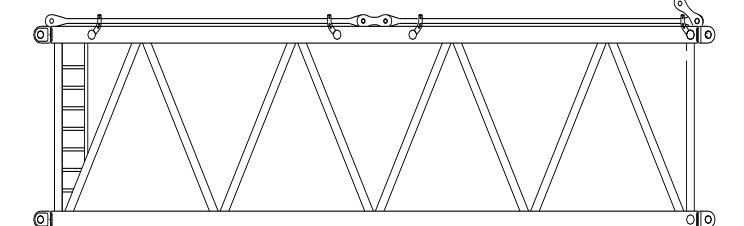
Tip boom hoisting winch, wire rope, tip boom

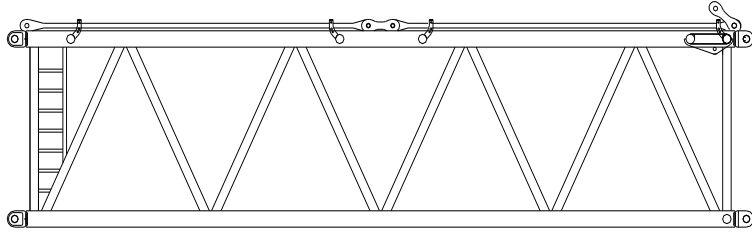
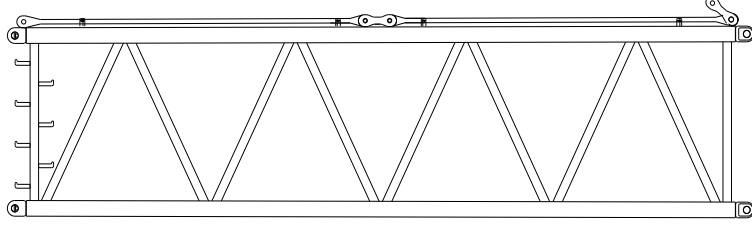
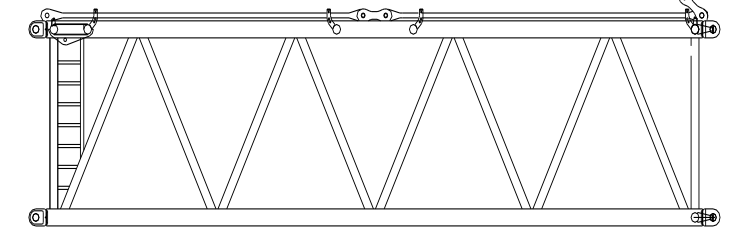
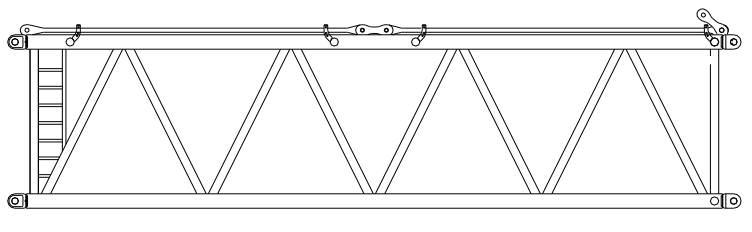
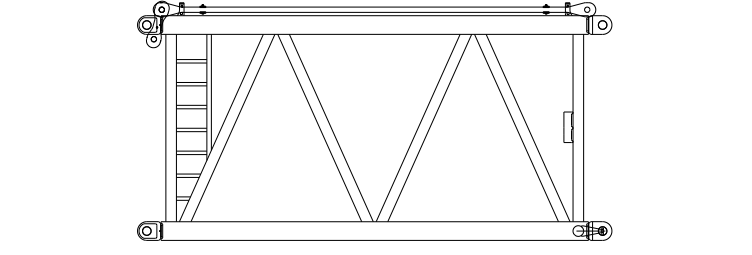
Lightning protection device

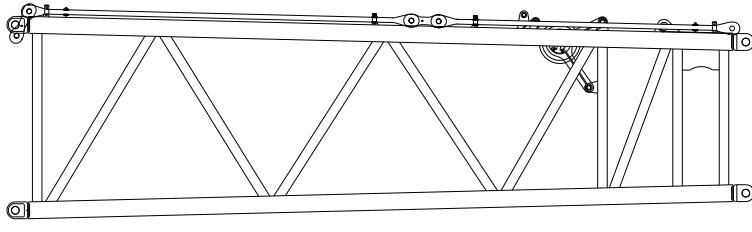
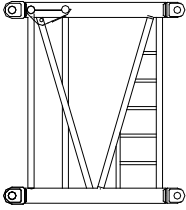
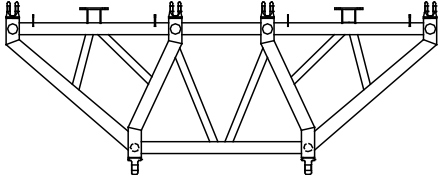
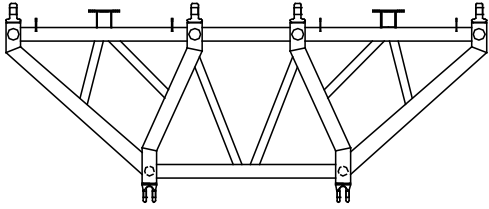
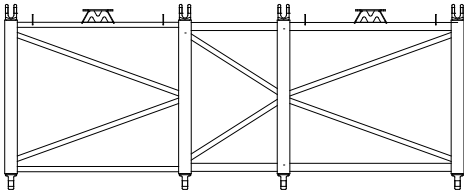
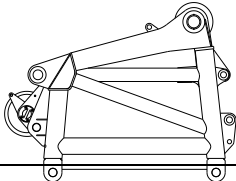
4. Transport dimensions and weights of major components

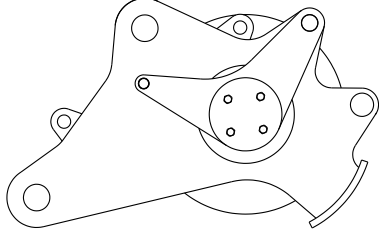
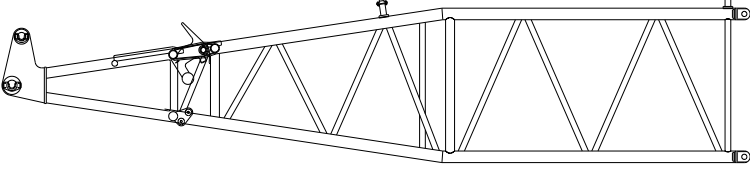
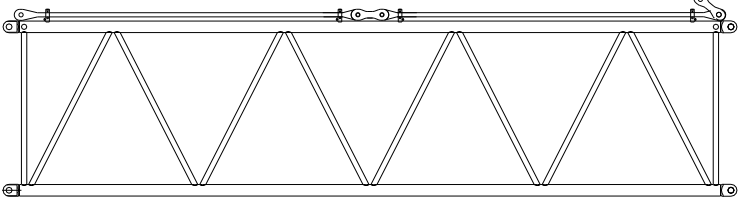
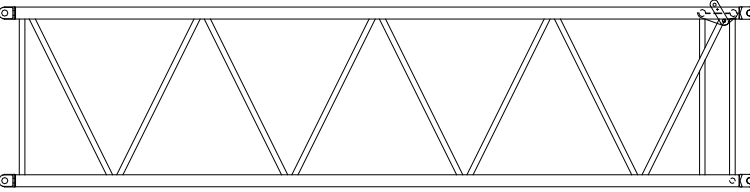
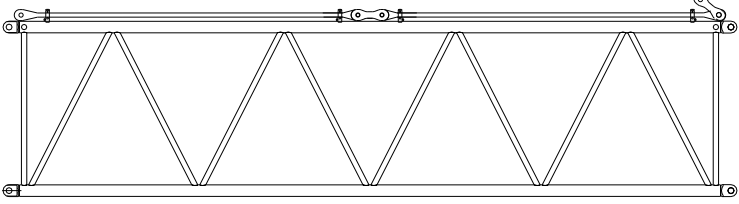
Components in transport	Items	
	Track carrier assy.	
	Length	12510 mm
	Width	1500mm
	Height	2165 mm
	Weight	60t
	Basic machine	Combined
	Length	13950 mm
	Width	3450 mm
	Height	3800 mm
	Weight	82 t
	Slewing table	Detachable
	Length	13950 mm
	Width	3450 mm
	Height	2365 mm
	Weight	49t
	Chassis frame	Detachable
	Length	8290 mm
	Width	3450 mm
	Height	1600 mm
	Weight	35 t
	A-frame assy.	Detachable
	Length	13190 mm
	Width	2500 mm
	Height	1700 mm
	Weight	19.5 t
	Counterweight base	
	Length	3585 mm
	Width	2365 mm
	Height	1740 mm
	Weight	5 t

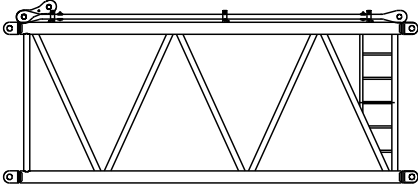
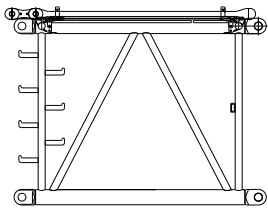
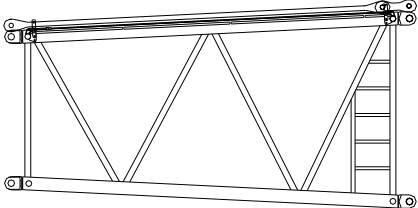
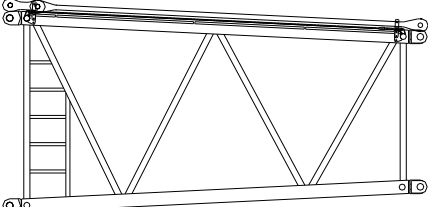
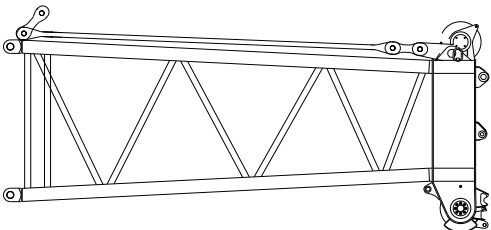
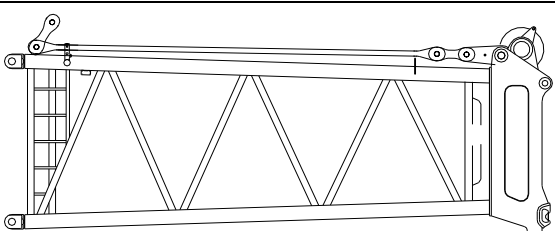
Components in transport	Items	
	Central ballast base	
	Length	6100
	Width	2270
	Height	440
	Weight	8.2t
	Suspended ballast base	
	Length	10400 mm
	Width	3120 mm
	Height	1810 mm
	Weight	20 t
	Counterweight plate	
	Length	2400 mm
	Width	1700 mm
	Height	695 mm
	Weight	10 t
	Counterweight plate	
	Length	2000 mm
	Width	1500 mm
	Height	695 mm
	Weight	10 t
	Counterweight plate	
	Length	2400 mm
	Width	1700 mm
	Height	365 mm
	Weight	5t
	Hoisting winch	
	Length	1470 mm
	Width	2000 mm
	Height	1340 mm
	Weight	8 t

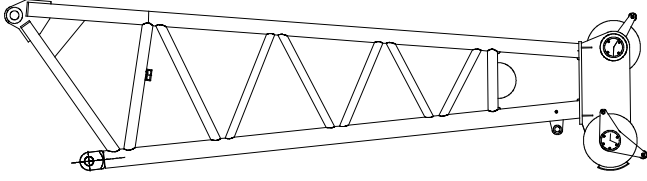
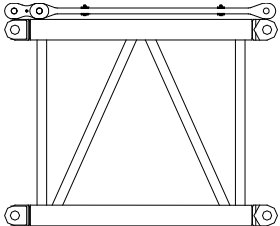
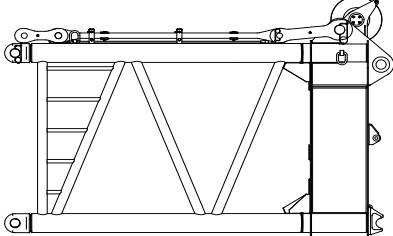
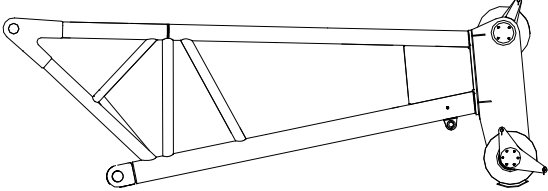
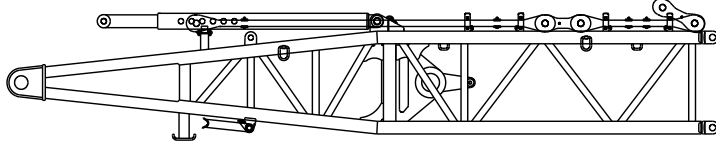
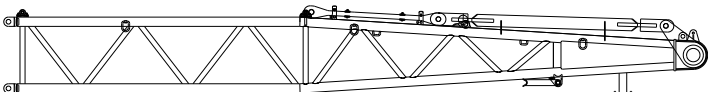
Components in transport	Items	
	Main boom pivot section	G11
	Length	12365 mm
	Width	3450 mm
	Height	3250 mm
	Weight	18 t
	Strengthened reducing section A (with intermediate tensioner)	G68C
	Length	12245 mm
	Width	3750 mm
	Height	3450 mm
	Weight	10.5t
	Strengthened reducing section B	G67
	Length	12245 mm
	Width	3750 mm
	Height	3450 mm
	Weight	10 t
	Strengthened 12m main boom intermediate section	G69
	Length	12245 mm
	Width	3750 mm
	Height	3450 mm
	Weight	10 t
	Strengthened 12m main boom intermediate section C	G69C
	Length	12245 mm
	Width	3750 mm
	Height	3450 mm
	Weight	11 t

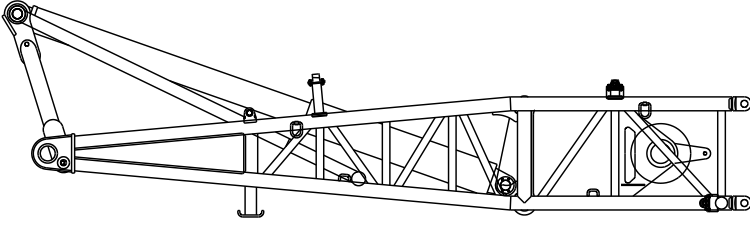
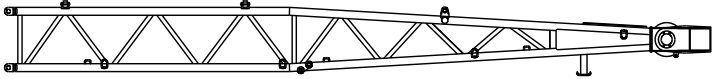
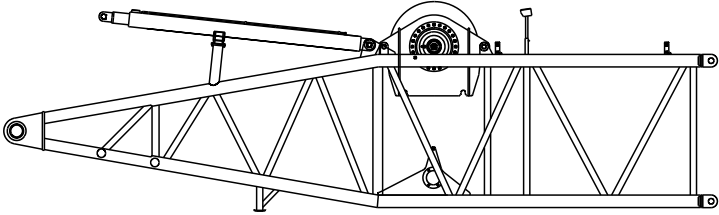
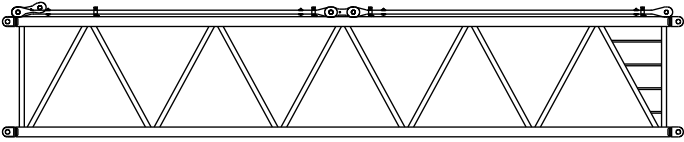
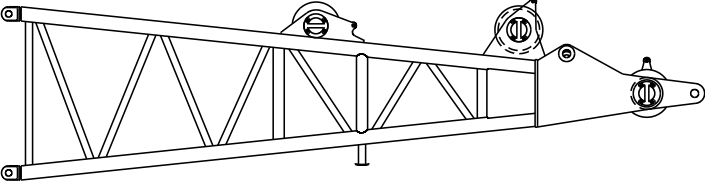
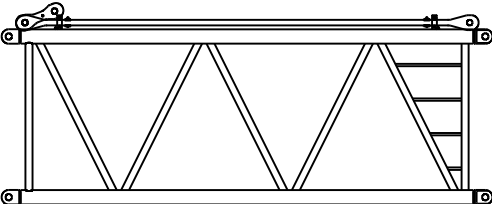
Components in transport	Items	
	Strengthened 12m main boom intermediate section (with intermediate tensioner)	G69S
	Length	12245 mm
	Width	3750 mm
	Height	3450 mm
	Weight	10.5t
	Main boom reducing section C	G16
	Length	12245 mm
	Width	3450 mm
	Height	3200 mm
	Weight	8.7 t
	12m main boom intermediate section (1)	G15AS
	Length	12240 mm
	Width	3245 mm
	Height	3135 mm
	Weight	8.7 t
	12m main boom intermediate section	G15
	Length	12240 mm
	Width	3245 mm
	Height	3135 mm
	Weight	9.6 t
	6m main boom intermediate section	G14
	Length	6245 mm
	Width	3245 mm
	Height	3135 mm
	Weight	6 t

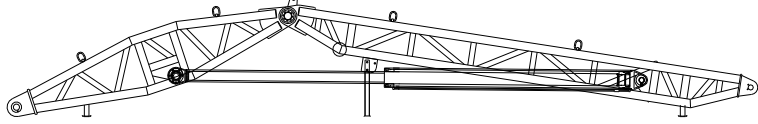
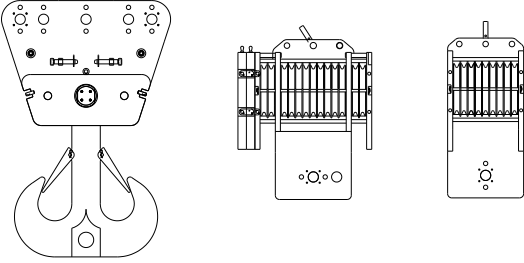
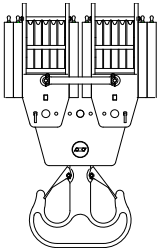
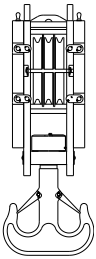
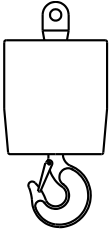
Components in transport	Items	
	Main boom head	G12
	Length	10950 mm
	Width	3245 mm
	Height	3135 mm
	Weight	11 t
	Light main boom reducing section	G19A
	Length	2635 mm
	Width	3245 mm
	Height	2945 mm
	Weight	2.11 t
	Parallel boom reducing section A	G67A
	Length	7945mm
	Width	3245mm
	Height	2995mm
	Weight	7.5 t
	Parallel boom reducing section B	G68A
	Length	7945mm
	Width	3245mm
	Height	2995mm
	Weight	7.5 t
	Connecting section for parallel boom	G13A
	Length	7919mm
	Width	3200mm
	Height	2894mm
	Weight	5 t
	Main boom head adaptor	
	Length	3120 mm
	Width	2905 mm

Components in transport	Items	
	Height	2385 mm
	Weight	7 t
	Pulley block	
	Length	1120 mm
	Width	1400 mm
	Height	700 mm
	Weight	1.6 t
	Luffing jib pivot section	G11
	Length	11650 mm
	Width	2920 mm
	Height	2730 mm
	Weight	6.85 t
	12m luffing jib intermediate section	G25B
	Length	12180 mm
	Width	3194 mm
	Height	2900 mm
	Weight	5.7 t
	12m luffing jib intermediate section (for intermediate tensioner)	G25AS
	Length	12180 mm
	Width	3194 mm
	Height	2900 mm
	Weight	6.3 t
	12m heavy luffing jib intermediate section	G25A
	Length	12180 mm
	Width	3194 mm
	Height	2900 mm
	Weight	6 t

Components in transport	Items	
	6m luffing jib intermediate section	G24
	Length	6180 mm
	Width	3194 mm
	Height	2900 mm
	Weight	3.25t
	3m luffing jib intermediate section	G23
	Length	3200 mm
	Width	2800 mm
	Height	2730 mm
	Weight	1.9 t
	Luffing jib reducing section A	G29A
	Length	6200 mm
	Width	3194mm
	Height	2900mm
	Weight	3.2 t
	Luffing jib reducing section B	G29B
	Length	6200 mm
	Width	3194mm
	Height	2900mm
	Weight	3.2 t
	Luffing jib head	G21
	Length	7265 mm
	Width	2800 mm
	Height	3120 mm
	Weight	8 t
	Jib for wind turbine	G20B
	Length	7400 mm
	Width	2800 mm
	Height	2950 mm
	Weight	5.6 t

Components in transport	Items	
	Jib for wind turbine, 220t	G20A
	Length	7175 mm
	Width	1840 mm
	Height	1910 mm
	Weight	3.6 t
	3m intermediate section for wind turbine	G23A
	Length	3245 mm
	Width	2845 mm
	Height	2640mm
	Weight	2.9 t
	Adaptor for jib for wind turbine	G20C
	Length	4575 mm
	Width	3090 mm
	Height	2945 mm
	Weight	5.0 t
	Jib for wind turbine, 270t	G20D
	Length	6115 mm
	Width	1945 mm
	Height	2130 mm
	Weight	3.4 t
	Pivot section of WA-frame 2	
	Length	8000 mm
	Width	2740 mm
	Height	1510 mm
	Weight	4 t
	Head section of WA-frame 2	
	Length	10515 mm
	Width	2740 mm
	Height	1140 mm
	Weight	5 t

Components in transport	Items	
	Pivot section of WA-frame 1	
	Length	7535 mm
	Width	2740 mm
	Height	2180 mm
	Weight	5.5 t
	Head section of WA-frame 1	
	Length	12875 mm
	Width	2740 mm
	Height	1140 mm
	Weight	4.5 t
	Derrick boom pivot section	
	Length	10275 mm
	Width	2780 mm
	Height	2980 mm
	Weight	15.5 t
	12m intermediate section of derrick boom	
	Length	12180 mm
	Width	2780 mm
	Height	2440 mm
	Weight	7.5 t
	Derrick boom head	
	Length	8815 mm
	Width	2780 mm
	Height	2290 mm
	Weight	8 t
	6m intermediate section of derrick boom	
	Length	6180 mm
	Width	2780 mm
	Height	2510 mm

Components in transport	Items			
	Weight	4 t		
	Suspended ballast pushing mechanism			
	Length	11450 mm		
	Width	2900 mm		
	Height	2350 mm		
	Weight	9 t		
	Main hook	Hook body	Pulley block for 400t	Pulley block for 275t
	Length	1990 mm	1575 mm	895mm
	Width	1010 mm	975mm	975mm
	Height	3015 mm	2045 mm	2075 mm
	Weight	28 t		
	Load hook for 250t			
	Length	1715 mm		
	Width	993 mm		
	Height	2833 mm		
	Weight	6.7t		
	Load hook for 65t			
	Length	805 mm		
	Width	935 mm		
	Height	2250 mm		
	Weight	3.5 t		
	Load hook for 16t			
	Length	530 mm		
	Width	530 mm		
	Height	1160 mm		
	Weight	0.9 t		

Notes:

1. Weight of package is not included. Actual weight may vary due to manufacturing error.
2. Data provided in the technical specifications vary with the upgrade of the product. An actual product shall prevail.