



ZOOMLION ZCC12500 CRAWLER CRANE

TECHNICAL SPECIFICATIONS

ZCC12500CR/27Y

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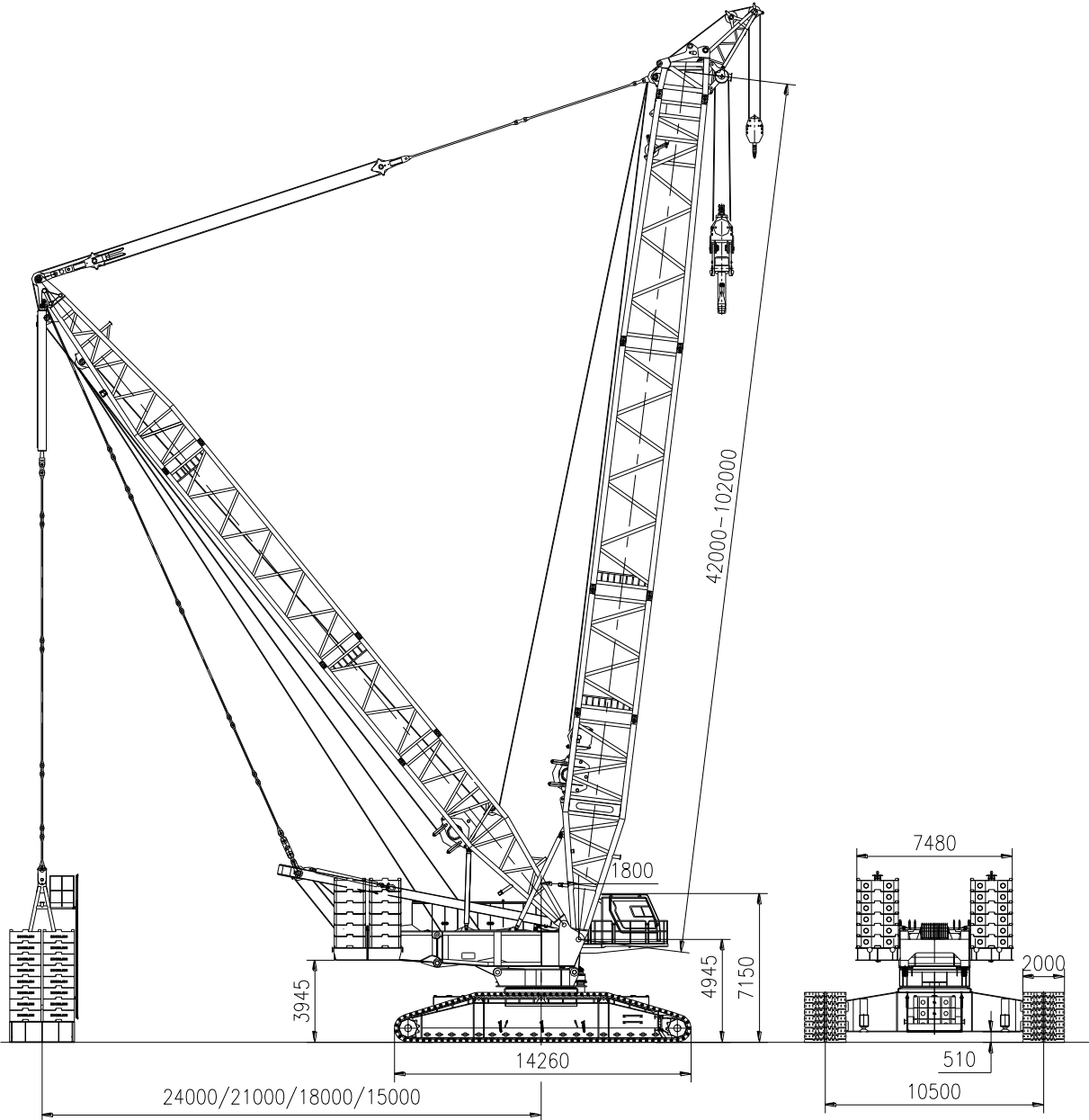
TECHNICAL SPECIFICATIONS

ZCC12500CR/27Y

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1. Overall dimensions and main parameters

1.1 Overall dimensions of SDB boom



1.2 Main technical parameters

	Item	Parameters
Max. lifting moment	t · m	16000
S/SL boom configuration	Max. lifting capacity × radius t×m	840×7
	S-boom length m	30-84
	SL-boom length m	60-102
SDB/SLDB boom configuration	Max. lifting capacity × radius t×m	1250×11
	S-boom length m	42-102
	SL-boom length m	90-150
D-derrick boom	Length of derrick boom m	40
SFvDB boom configuration (used for lifting container)	Max. lifting capacity × radius t×m	650/22
	FV-jib angle °	12, 20
	FV-jib length m	18
	S-boom length m	48-96
SW boom configuration	Max. lifting capacity × radius t×m	346×16
	W-jib length m	30-90
	S-boom length m	42-54
	S-boom angle °	85, 75, 65
Luffing jib strut	Length of luffing jib strut 1 m	21
	Length of luffing jib strut 2 m	20
SWDB boom configuration	Max. lifting capacity × radius t×m	550×20
	W-jib length m	30-102
	S-boom length m	48-96
	S-boom angle °	85, 75, 65
SLHS boom configuration	Max. lifting capacity × radius t×m	180×22
	HS-jib length m	7
	SL-boom length m	90-102
Hoisting winches 1 and 2 (H1, H2)	Single rope speed on outermost rope layer m/min	133
	Rope diameter mm	32
	Single rope force KN	230
Hoisting winch 3 (H3)	Single rope speed on outermost rope layer m/min	133
	Rope diameter mm	28
	Single rope force KN	160

Item		Parameters
Main boom derricking winch (E)	Single rope speed on outermost rope layer m/min	55x2
	Rope diameter mm	32
	Single rope force KN	226
Superlift derricking winch (W2)	Single rope speed on outermost rope layer m/min	127
	Rope diameter mm	32
	Single rope force KN	226
Luffing jib derricking winch (W1)	Single rope speed on outermost rope layer m/min	120
	Rope diameter mm	32
	Single rope force KN	226
Slewing speed rpm		1.0
Traveling speed km/h		1.0
Max. gradeability %		20
Ground pressure Mpa		0.153
Deadweight with basic boom t		790
Transport weights of basic machine t		47
Weight of suspended ballast t (radius: m)		500(15, 18, 21, 24)
Rear counterweight t		250
Central counterweight t		70
Engine	Type	QSK23-C860
	Rated power / Rotational speed kw/rpm	641/2100
	Max. output torque Nm	3776/1400
Distance between track center x crawler contact length x crawler width mm		10500x14260x2000

1.3 Description of boom configurations

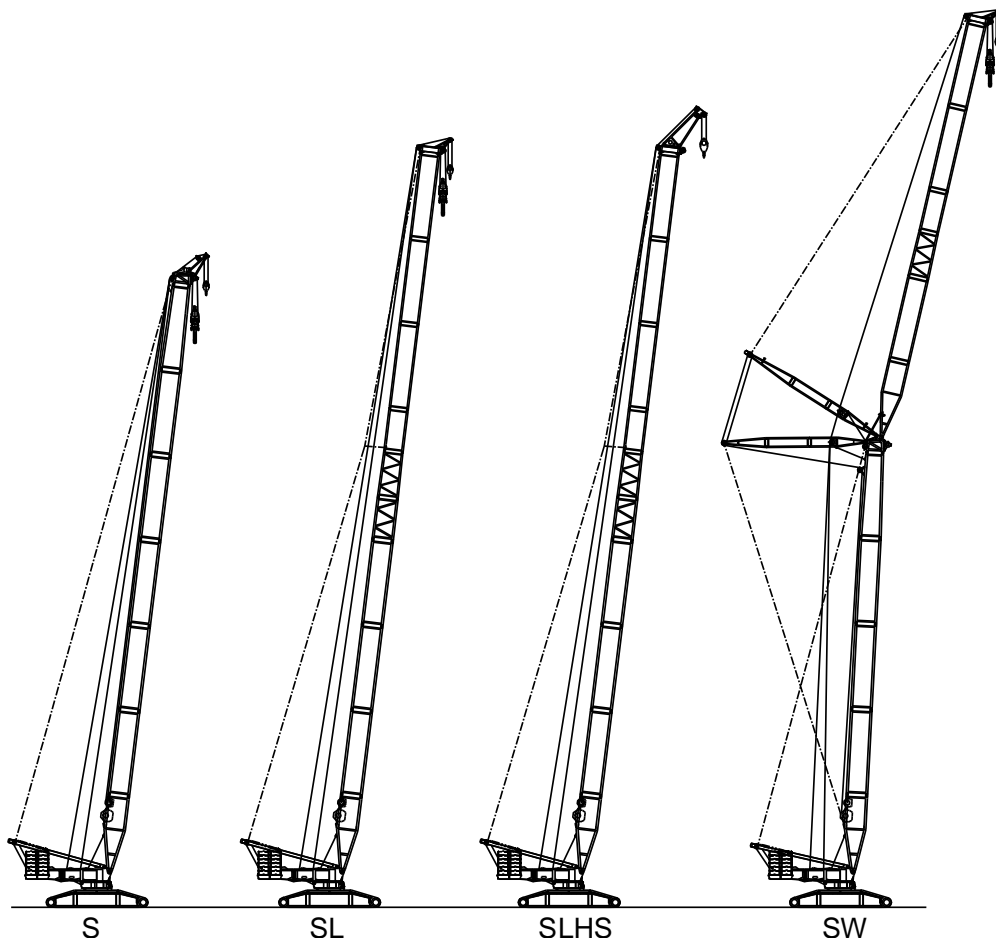
This crawler crane has two operating modes below:

- Crane operation without D-derrick boom and B-suspended ballast
- Crane operation with D-derrick boom and B-suspended ballast.

The lattice boom is made of imported high-strength steel pipes, and the anchoring rod is made of imported high-strength steel plate.

S – Heavy duty boom; L – Light duty boom; W – Luffing jib; D – Derrick boom;

B – Suspended ballast; Fv – Heavy fixed jib; HS – Wind plant jib



Crane operation without D and B

① S/SL/SLHS boom configurations

S-boom length: 30m-84m

SL-boom length: 60m-102m

HS-jib length: 7m

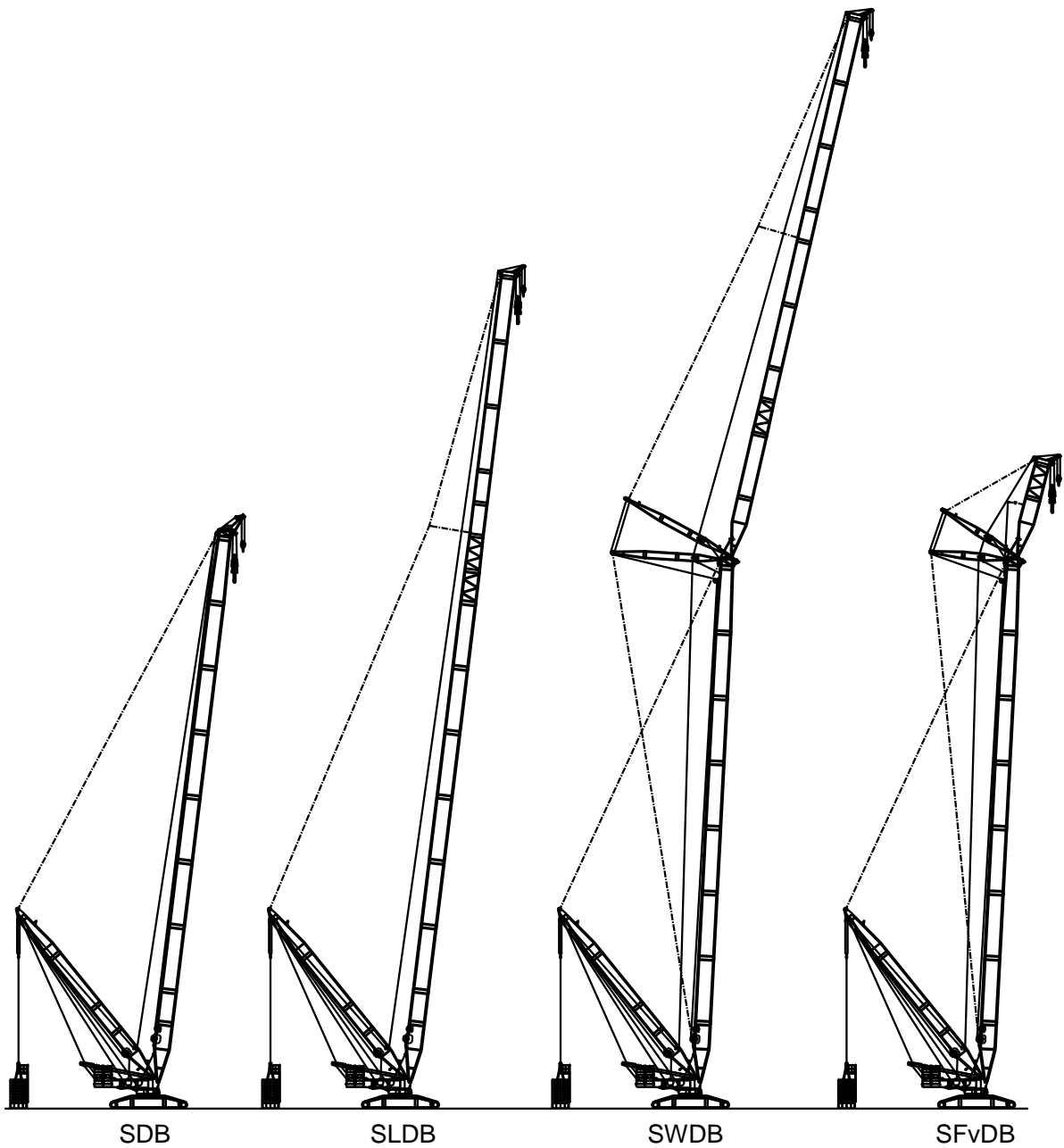
Length of main boom intermediate section: 6m, 12m

② SW boom configuration

S-boom length: 42m-54m

W-jib length: 30m-90m

Length of luffing jib intermediate section: 6m, 12m

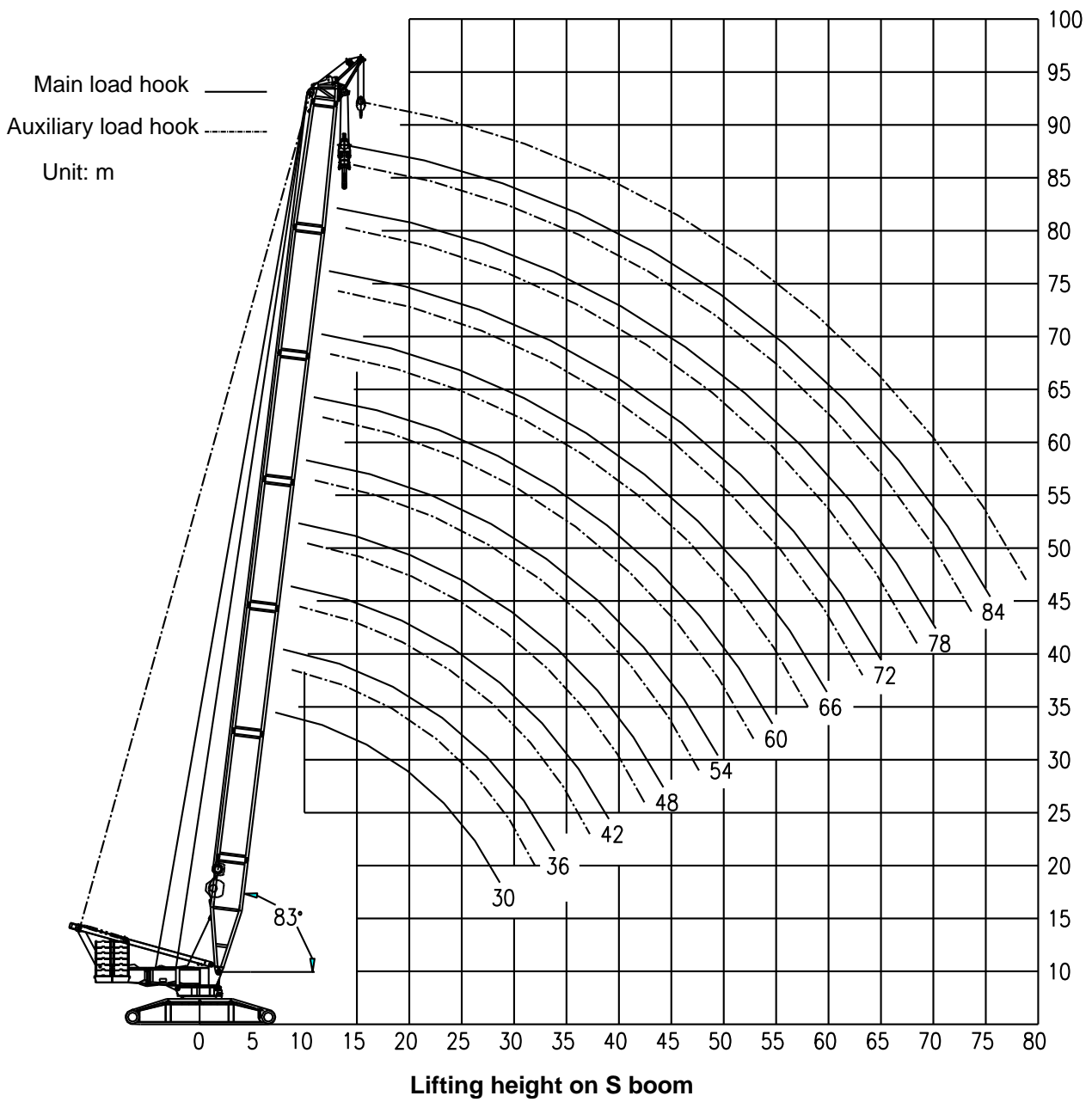


Crane operation with D and B

- ① SDB/SLDB boom configurations
 - S-boom length: 42m-102m
 - SL-boom length: 90m-150m
- ② SFvDB boom configuration
 - S-boom length: 48m-96m
 - Fv-jib length: 18m
- ③ SWDB boom configuration
 - S-boom length: 48m-96m
 - W-jib length: 30m-102m

2 Lifting performance

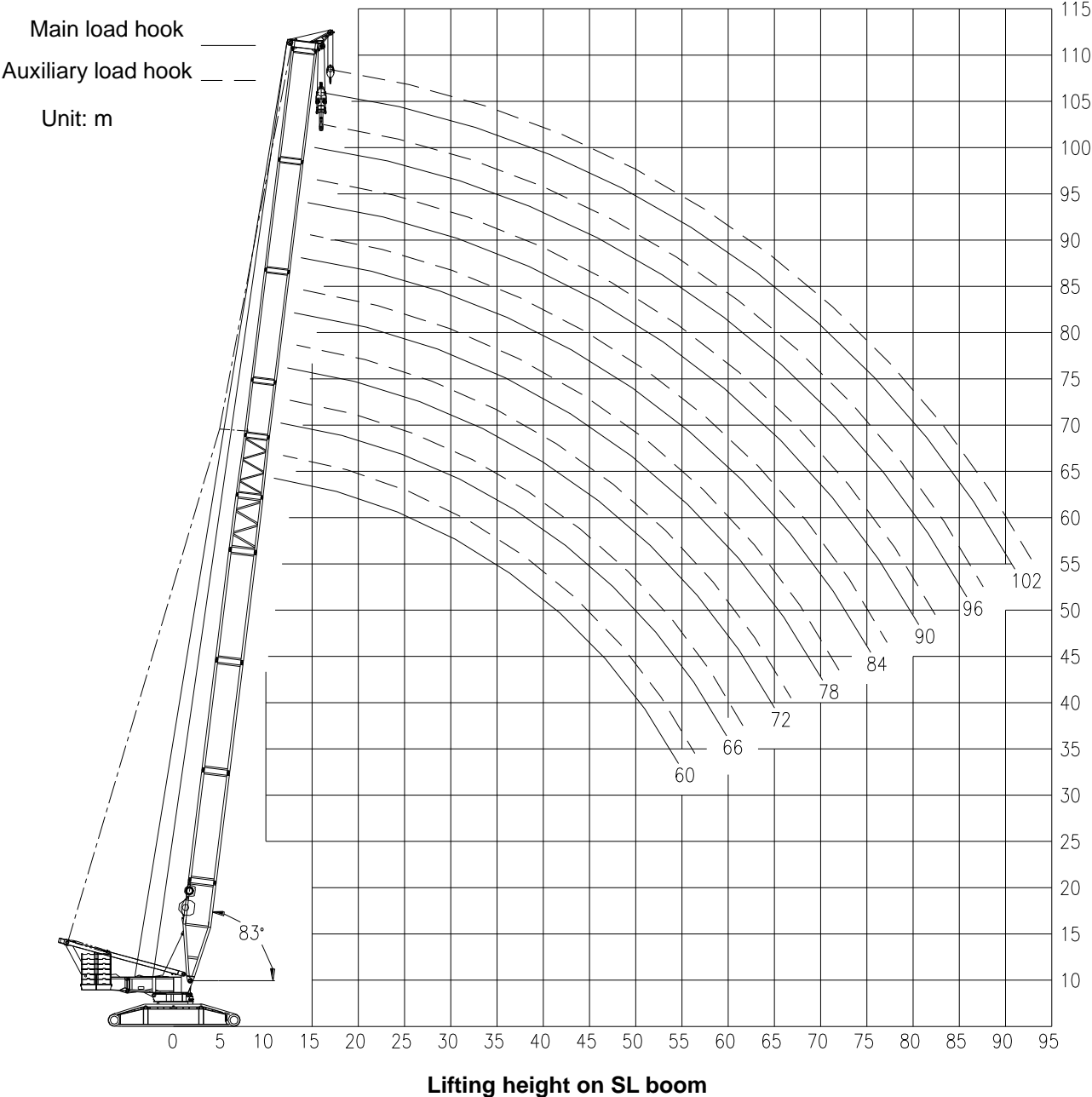
2.1 Lifting performance on S boom



Lifting capacity on S boom

Rear counterweight : 250t		Central counterweight: 70t									Unit: t
S-boom length (m)	30	36	42	48	54	60	66	72	78	84	S-boom length (m)
Radius (m)											Radius (m)
7	840										7
8	748	735									8
9	669	666	662	658							9
10	603	602	601	596	568						10
12	489	487	486	485	479	459	440	421			12
14	409	408	407	406	404	397	382	366	351	337	14
16	351	350	349	348	346	344	336	322	310	299	16
18	306	305	304	303	301	300	297	287	276	266	18
20	271	270	269	268	266	264	262	258	248	239	20
22	242	241	240	239	237	236	233	229	224	217	22
24	216	217	216	215	213	211	207	203	199	194	24
26	188	194	193	192	191	189	185	181	178	174	26
28	162	174	173	172	171	170	167	163	160	156	28
30		157	156	155	154	153	151	148	145	141	30
32		141	142	141	140	138	137	135	132	128	32
34			129	128	127	126	124	122	120	117	34
36			118	117	116	115	113	111	109	107	36
38			106	108	107	105	104	102	100	98	38
40				99	98	97	95	93	91	89	40
42				90	91	89	88	86	84	82	42
44					83	83	81	79	77	75	44
46					76	77	75	73	71	69	46
48					69	71	69	67	65	63	48
50						65	64	62	60	58	50
52						59	59	57	55	53	52
54						52	53	53	51	49	54
56							48	49	47	45	56
58							43	44	43	41	58
60								40	39	38	60
62								34	35	34	62
64								30	31	30	64
66									26	26	66
68									22	23	68
70										20	70
72										17	72
74										14	74

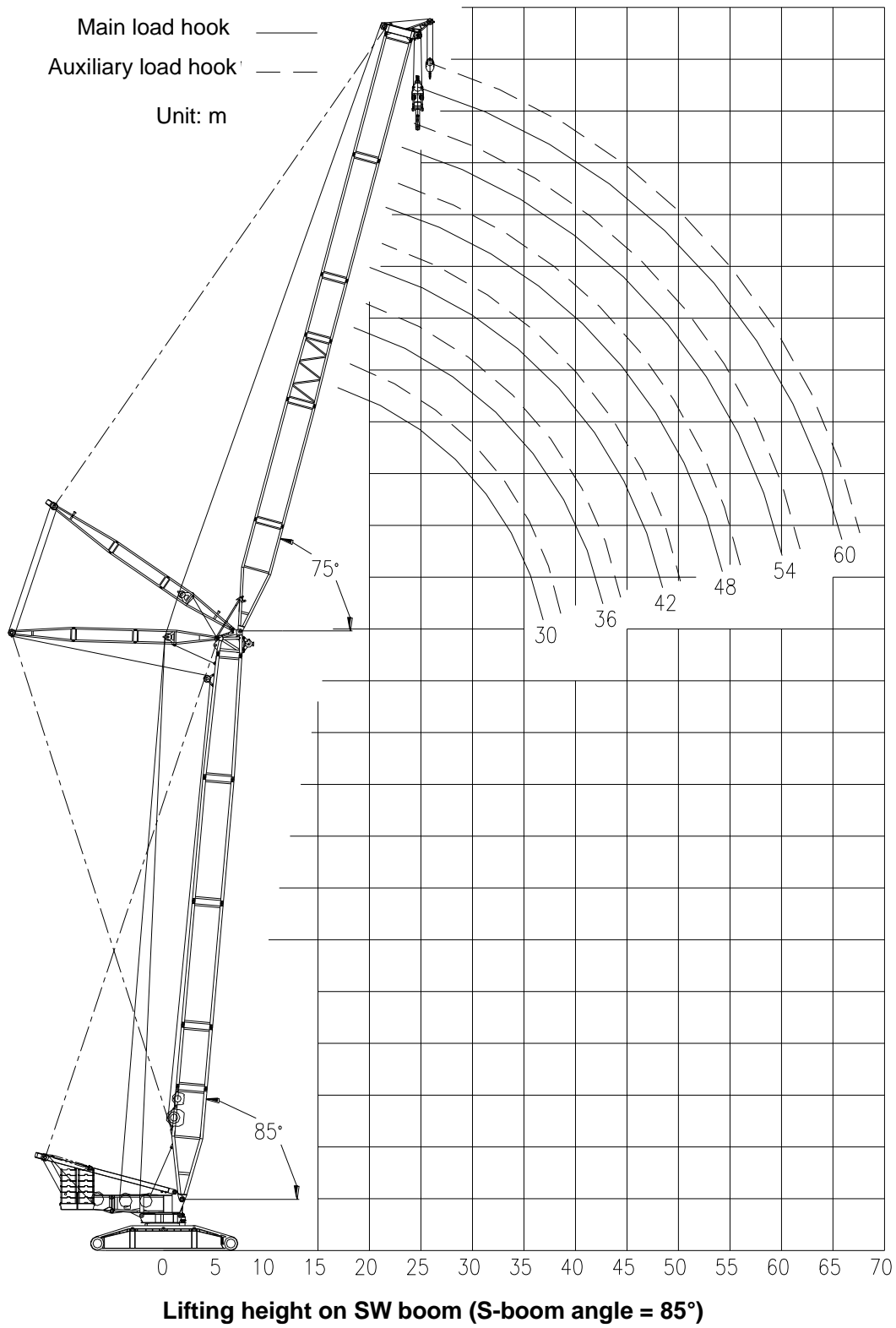
2.2 Lifting performance on SL boom



Lifting capacity on SL boom

Rear counterweight : 250t		Central counterweight: 70t							Unit: t	
SL-boom length (m)	60	66	72	78	84	90	96	102	SL-boom length (m)	
Radius (m)									Radius (m)	
11	500								11	
12	470	451	434						12	
14	407	393	380	365	353				14	
16	353	348	336	325	315	305	294	250	16	
18	308	307	302	292	283	273	265	246	18	
20	273	272	271	263	257	248	240	231	20	
22	244	243	240	236	233	226	220	213	22	
24	220	217	214	211	208	205	201	194	24	
26	198	195	193	190	188	185	182	179	26	
28	179	177	175	172	171	168	165	162	28	
30	162	161	160	157	156	153	151	148	30	
32	147	147	147	144	143	140	138	135	32	
34	135	134	134	133	132	129	127	125	34	
36	124	123	123	122	122	119	117	115	36	
38	115	114	114	113	112	111	109	106	38	
40	106	105	105	104	104	103	101	99	40	
42	99	98	98	97	96	95	94	92	42	
44	92	91	91	90	90	88	87	86	44	
46	86	85	85	84	83	82	81	79	46	
48	80	80	79	78	78	77	76	74	48	
50	75	75	74	73	73	72	71	69	50	
52	71	70	70	69	68	67	66	64	52	
54	64	66	66	64	64	63	62	60	54	
56		62	62	61	60	59	58	56	56	
58		56	58	57	56	55	54	52	58	
60			55	53	53	52	51	49	60	
62			50	50	50	49	47	46	62	
64			44	47	47	46	45	43	64	
66				43	44	43	42	40	66	
68				39	41	40	39	37	68	
70					38	38	37	35	70	
72					34	35	35	32	72	
74					30	31	32	29	74	
76						28	29	25	76	
78						25	26	23	78	
80						22	23	21	80	
82							21	18	82	

2.3 Lifting performance on SW boom



Lifting capacity on SW boom

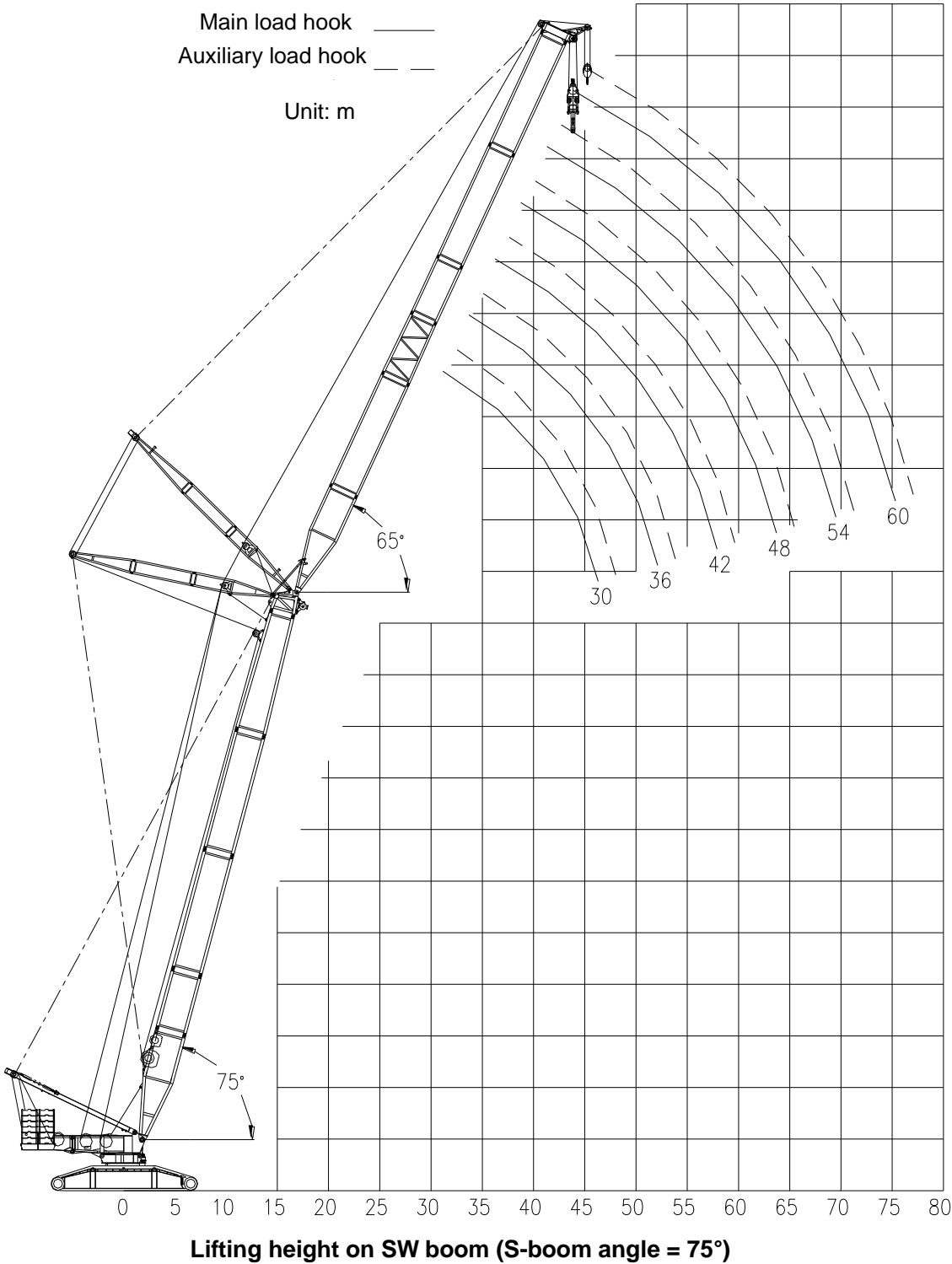
S-boom length: 42m S-boom angle: 85° Rear counterweight : 250t Central counterweight: 70t Unit: t												
W-jib length(m)	30	36	42	48	54	60	66	72	78	84	90	W-jib length(m)
Radius (m)												Radius (m)
16	346											16
18	306	301										18
20	273	268	264									20
22	247	242	238	234	231							22
24	225	220	217	214	210	206						24
26	206	202	199	195	192	188	184					26
28	189	185	183	179	176	173	170	167	163			28
30	174	172	169	166	164	160	157	153	149	147		30
32	162	159	157	154	151	148	145	142	138	135	132	32
34	150	148	146	143	141	137	134	131	129	127	123	34
36		137	136	133	131	128	126	123	120	117	114	36
38		129	128	125	124	120	117	114	111	109	106	38
40		121	120	117	115	112	110	107	104	102	98	40
42			112	110	108	105	103	100	97	95	91	42
44			105	103	102	99	96	94	90	88	85	44
46			99	97	96	92	90	88	85	83	81	46
48				91	90	87	85	83	81	79	76	48
50				86	85	83	81	79	76	74	71	50
52				82	81	78	77	74	71	69	66	52
54					77	74	72	70	67	65	63	54
56					72	70	68	65	63	61	59	56
58					68	66	64	62	60	57	55	58
60						62	61	58	56	54	52	60
62						59	57	55	53	51	49	62
64						55	54	52	50	48	46	64
66							51	49	47	45	43	66
68							48	47	45	43	41	68
70							45	44	42	41	40	70
72								42	41	39	37	72
74								41	39	37	35	74
76									37	35	33	76
78									35	33	31	78
80									32	31	29	80
82										29	27	82
84										27	25	84
86										25	23	86
88											22	88
90											20	90
92											19	92

Lifting capacity on SW boom

S-boom length:48m S-boom angle: 85° Rear counterweight : 250t Central counterweight: 70t Unit: t											
W-jib length(m)	30	36	42	48	54	60	66	72	78	84	W-jib length(m)
Radius (m)											Radius (m)
16	332										16
18	294	288									18
20	263	258	254								20
22	237	232	229	225							22
24	217	212	209	205	202	197					24
26	198	193	190	187	184	180	176				26
28	182	178	175	173	170	166	163	159			28
30	169	165	163	159	157	153	150	147	143		30
32	156	152	150	148	145	141	139	135	132	129	32
34	145	142	140	137	135	131	129	127	123	121	34
36		132	130	128	127	123	121	117	114	112	36
38		124	123	120	118	115	112	109	106	104	38
40		116	115	112	110	107	105	102	99	97	40
42			107	106	104	100	98	95	92	90	42
44			101	99	97	94	92	89	86	84	44
46			95	93	91	88	86	84	82	80	46
48				87	86	83	82	80	77	75	48
50				83	83	79	77	75	72	70	50
52				79	78	75	73	70	68	65	52
54					73	70	69	66	64	62	54
56					69	66	65	62	60	58	56
58					65	63	61	59	56	54	58
60						59	57	56	53	51	60
62						56	54	52	50	48	62
64						53	51	49	47	45	64
66							48	47	45	43	66
68							46	44	42	41	68
70							43	42	41	39	70
72								41	39	37	72
74								38	36	34	74
76								36	34	32	76
78									32	30	78
80									30	28	80
82									28	27	82
84										25	84
86										23	86
88										22	88

Lifting capacity on SW boom

S-boom length:54m S-boom angle: 85° Rear counterweight: 250t Central counterweight: 70t Unit: t									
W-jib length(m)	30	36	42	48	54	60	66	72	W-jib length(m)
Radius (m)									Radius (m)
18	281	275							18
20	253	247	243						20
22	228	223	219	216					22
24	208	203	200	196	193				24
26	190	186	183	179	176	173	170		26
28	174	172	169	166	163	159	155	152	28
30	162	158	156	152	150	146	143	140	30
32	149	147	144	141	139	135	132	129	32
34	139	136	134	131	129	127	124	121	34
36	129	127	126	123	121	118	115	112	36
38		119	118	115	113	109	107	104	38
40		111	110	107	106	102	100	97	40
42		104	103	101	99	96	93	91	42
44			96	94	93	90	87	85	44
46			90	89	87	85	83	81	46
48				84	83	80	78	76	48
50				80	79	75	74	71	50
52				75	74	71	69	66	52
54					70	67	65	63	54
56					66	63	61	59	56
58					62	60	58	56	58
60						57	55	52	60
62						54	52	49	62
64						50	49	47	64
66							46	44	66
68							43	41	68
70							41	40	70
72								38	72
74								36	74
76								34	76



Lifting capacity on SW boom

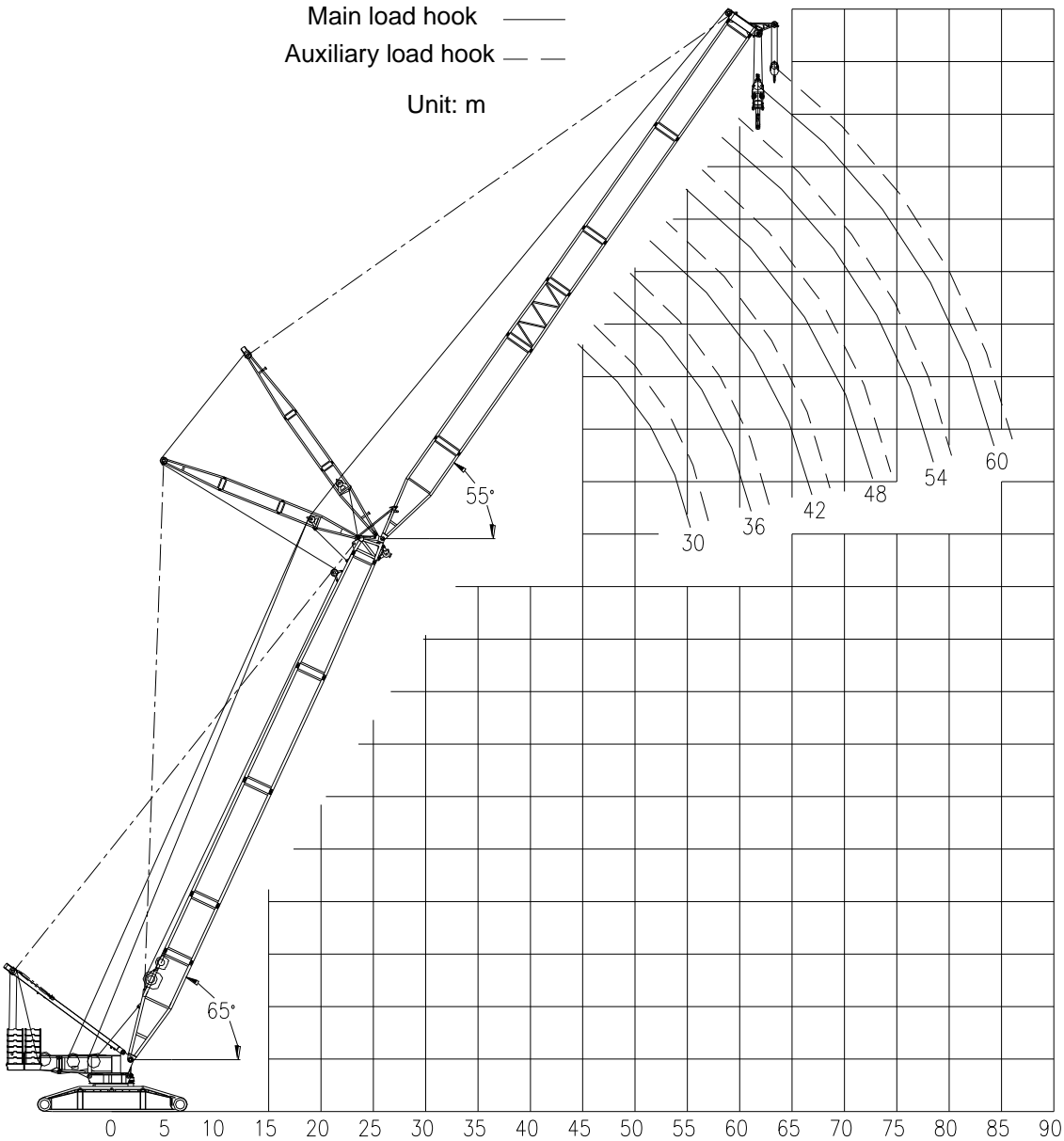
S-boom length: 42m S-boom angle: 75° Rear counterweight: 250t Central counterweight: 70t Unit: t												
W-jib length(m)	30	36	42	48	54	60	66	72	78	84	90	W-jib length(m)
Radius (m)												Radius (m)
28	179											28
30	165											30
32	152	149										32
34	141	138	136									34
36	131	129	127	124								36
38	122	120	118	116	114							38
40	113	112	111	108	106							40
42	105	105	104	102	100	97						42
44		98	98	96	94	91	89					44
46		92	92	90	89	86	84	81				46
48		86	86	85	84	81	79	76	74			48
50			81	80	79	77	75	72	69			50
52			76	76	75	73	71	68	66	64		52
54			72	71	71	69	67	65	62	60	57	54
56				67	67	65	64	61	58	56	53	56
58				64	64	62	60	57	54	52	49	58
60				60	60	58	57	54	51	49	46	60
62					57	55	54	51	48	46	43	62
64					54	52	50	48	45	43	40	64
66						49	48	45	43	41	38	66
68						46	45	43	40	38	36	68
70						44	42	40	37	37	34	70
72							40	38	36	34	32	72
74							38	36	34	32	29	74
76							36	34	32	30	27	76
78								32	30	28	26	78
80								30	28	26	24	80
82								28	26	25	23	82
84									25	24	22	84
86									23	23	21	86
88									22	21	19	88
90										20	18	90
92										19	17	92
94										18	16	94
96											15	96
98											14	98
100											13	100

Lifting capacity on SW boom

S-boom length: 48m S-boom angle: 75° Rear counterweight: 250t Central counterweight: 70t Unit: t											
W-jib length(m)	30	36	42	48	54	60	66	72	78	84	W-jib length(m)
Radius (m)											Radius (m)
30	159										30
32	147	143									32
34	136	133									34
36	127	124	122								36
38	119	116	114	111							38
40	110	109	107	104	102						40
42	103	102	100	98	96	93					42
44	96	95	95	92	90	87					44
46		89	89	87	85	82	80				46
48		84	84	82	81	78	75	73			48
50		78	79	78	76	73	71	69	65		50
52			74	73	72	69	67	65	62	59	52
54			70	69	69	65	64	61	58	55	54
56				65	65	62	60	57	54	52	56
58				62	61	58	56	54	50	48	58
60				58	58	55	53	50	47	45	60
62					55	52	50	47	44	43	62
64					52	49	47	44	42	40	64
66					49	46	44	42	39	37	66
68						44	42	39	37	36	68
70						41	39	37	35	33	70
72						38	37	36	33	31	72
74							36	33	32	29	74
76							33	31	30	27	76
78							31	29	28	26	78
80								27	27	24	80
82								26	25	23	82
84								25	24	22	84
86									22	21	86
88									21	19	88
90									19	18	90
92										17	92
94										16	94
96										15	96

Lifting capacity on SW boom

S-boom length: 54m S-boom angle: 75° Rear counterweight: 250t Central counterweight: 70t Unit: t									
W-jib length(m)	30	36	42	48	54	60	66	72	W-jib length(m)
Radius (m)									Radius (m)
32	142								32
34	132	129							34
36	123	120	118						36
38	115	112	110						38
40	107	105	103	100					40
42	100	99	97	94	92				42
44	93	92	91	88	86	83			44
46		87	85	83	82	79	76		46
48		81	81	79	77	74	71		48
50		76	76	74	73	69	67	64	50
52			72	70	68	65	63	60	52
54			68	66	65	61	59	56	54
56			64	62	61	57	55	52	56
58				59	57	54	52	49	58
60				55	54	51	49	46	60
62				52	51	48	46	44	62
64					48	45	43	42	64
66					45	43	41	39	66
68					43	40	38	37	68
70						37	37	35	70
72						36	35	33	72
74						34	33	31	74
76							30	30	76
78							28	28	78
80							27	27	80
82								25	82
84								23	84
86								22	86



Lifting height on SW boom (S-boom angle = 65°)

Lifting capacity on SW boom

S-boom length: 42m S-boom angle: 65° Rear counterweight: 250t Central counterweight: 70t Unit: t												
W-jib length(m)	30	36	42	48	54	60	66	72	78	84	90	W-jib length(m)
Radius (m)												Radius (m)
40	100											40
42	93											42
44	87	86										44
46	82	80	79									46
48	77	75	75									48
50		71	70	68								50
52		67	66	65								52
54		63	62	61	60							54
56			59	58	57							56
58			56	54	54	51						58
60			52	52	51	48	46					60
62				49	48	45	43					62
64				46	45	43	40	38				64
66				43	43	40	38	36				66
68					40	37	37	34	31			68
70					38	36	34	32	29			70
72					36	34	32	29	27	26		72
74						32	30	27	26	24	22	74
76						29	28	26	24	23	20	76
78						27	26	25	23	21	19	78
80							25	23	21	20	18	80
82							24	22	20	19	16	82
84							22	21	19	17	15	84
86								20	18	16	14	86
88								18	16	15	13	88
90								17	15	14	12	90
92									14	13	11	92
94									13	12	10	94
96									12	11		96
98										10		98

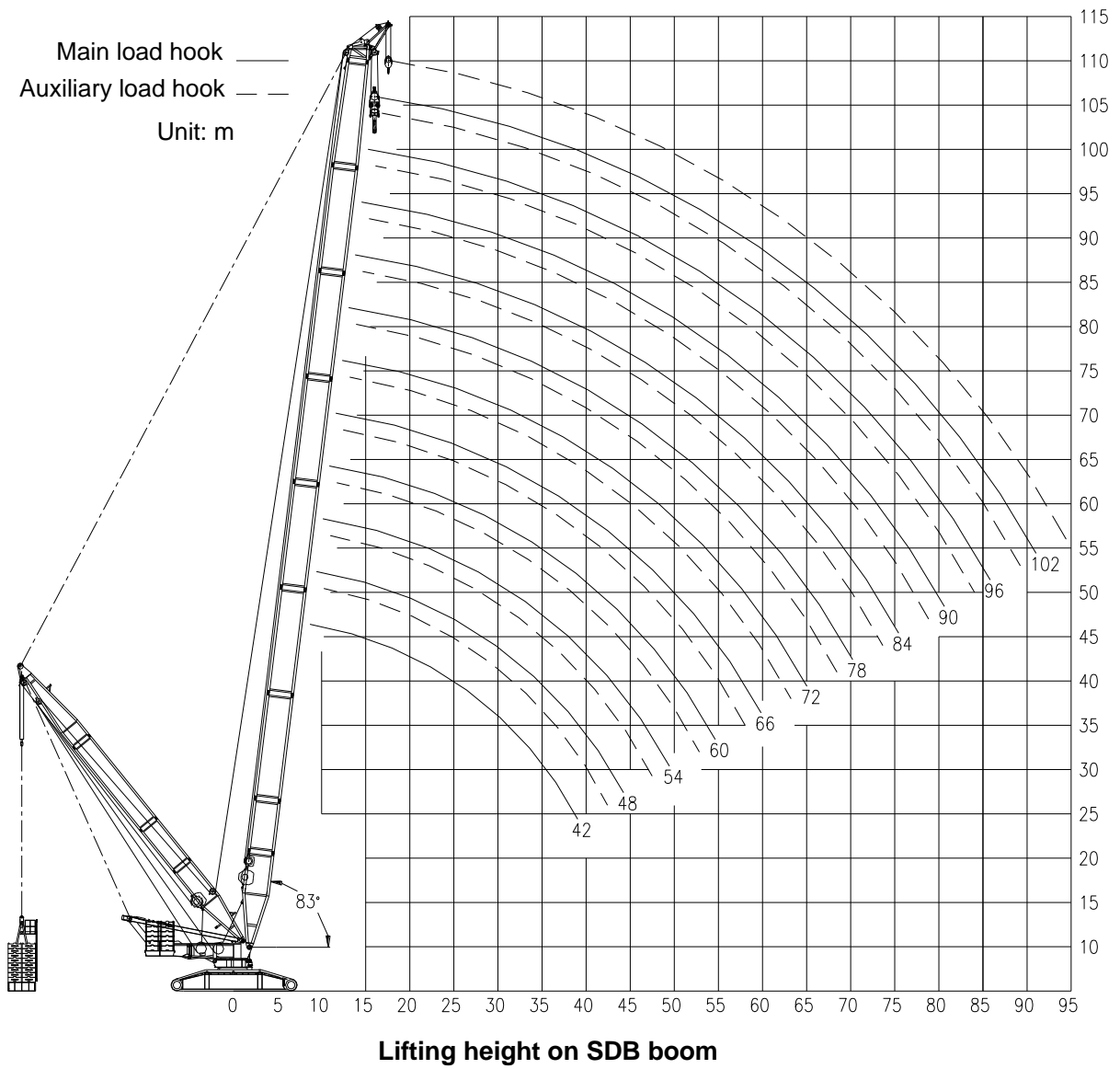
Lifting capacity on SW boom

S-boom length: 48m S-boom angle: 65° Rear counterweight: 250t Central counterweight: 70t Unit: t											
W-jib length(m)	30	36	42	48	54	60	66	72	78	84	W-jib length(m)
Radius (m)											Radius (m)
42	89										42
44	83										44
46	78	76									46
48	73	71									48
50	68	67	66								50
52	64	63	62	60							52
54		59	59	57							54
56		56	55	54	53						56
58		52	52	51	49						58
60			49	48	46	43					60
62			46	45	44	41					62
64				43	41	38	37				64
66				40	39	37	34	32			66
68				37	37	34	32	29			68
70					35	32	30	27	26		70
72					33	30	28	26	24		72
74					30	28	26	24	23	21	74
76						26	25	23	21	19	76
78						25	24	22	20	18	78
80						23	22	21	19	16	80
82							21	19	17	15	82
84							20	18	16	14	84
86							19	17	15	13	86
88								16	14	12	88
90								15	13	11	90
92								14	12	10	92
94									11		94
96									10		96

Lifting capacity on SW boom

S-boom length: 54m S-boom angle: 65° Rear counterweight: 250t Central counterweight: 70t Unit: t									
W-jib length(m)	30	36	42	48	54	60	66	72	W-jib length(m)
Radius (m)									Radius (m)
46	73								46
48	68	66							48
50	64	62							50
52	60	59	58						52
54	56	55	54						54
56		52	51	49					56
58		49	48	45	44				58
60		46	45	43	41				60
62			42	40	38	36			62
64			40	37	37	34			64
66			37	36	35	32	30		66
68				34	33	30	28		68
70				31	30	28	26	25	70
72				29	28	26	25	23	72
74					27	25	23	22	74
76					25	23	22	21	76
78					24	22	21	19	78
80						21	19	17	80
82						19	18	16	82
84							17	15	84
86							15	14	86
88							14	13	88
90								12	90
92								11	92
94								10	94

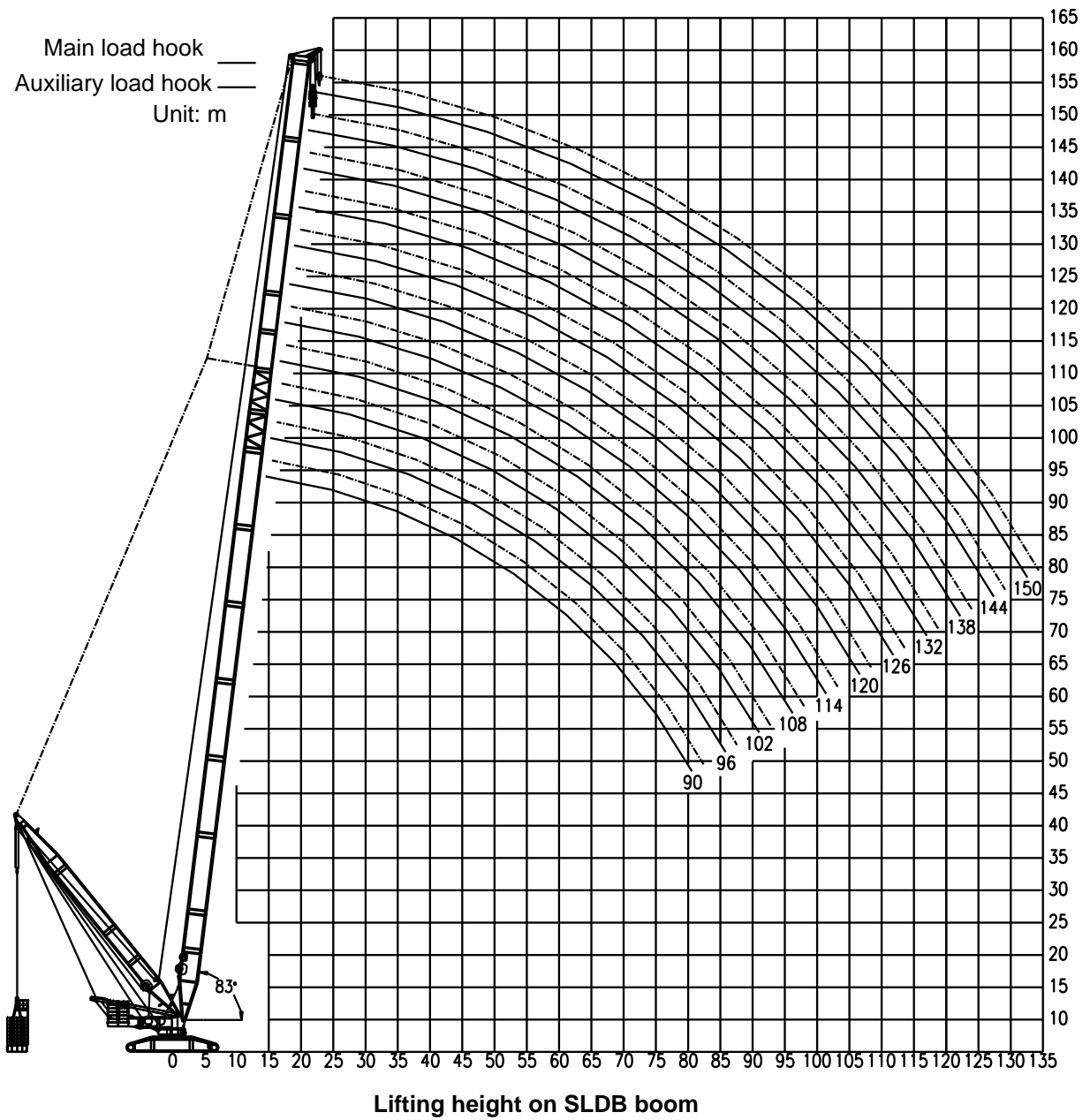
2.4 Lifting performance on SDB boom



Lifting capacity on SDB boom

Suspended ballast:500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t												
S-boom length (m)	42	48	54	60	66	72	78	84	90	96	102	S-boom length (m)
Radius (m)												Radius (m)
9	1250	1200										9
10	1250	1200	1080									10
12	1200	1165	1080	1000	885							12
14	1110	1090	1050	990	883	815	738	663				14
16	993	980	955	940	873	812	737	662	602	515	455	16
18	888	872	850	845	830	800	735	660	600	514	454	18
20	800	782	764	762	758	750	720	653	597	512	453	20
22	720	702	692	690	686	685	675	636	590	509	452	22
24	645	634	633	628	624	622	620	603	576	503	450	24
26	590	583	582	575	573	572	571	565	548	498	448	26
28	533	536	540	531	529	528	526	525	510	484	444	28
30	488	497	500	495	492	489	487	485	476	462	436	30
32	445	460	466	465	458	456	452	449	445	440	420	32
34	402	422	432	435	428	424	422	420	415	412	400	34
36	365	393	402	408	402	399	396	394	388	386	377	36
38	325	365	375	385	379	375	373	368	365	362	354	38
40		336	348	362	357	355	354	347	345	341	333	40
42		308	325	338	337	336	335	328	326	320	315	42
44		280	306	318	319	320	317	311	310	303	298	44
46			286	295	303	304	303	297	295	288	283	46
48			266	276	287	290	289	283	282	274	268	48
50				258	272	276	275	271	268	260	255	50
52				243	256	261	263	258	256	248	244	52
54				228	242	248	251	247	245	237	234	54
56					228	235	240	235	234	226	223	56
58					214	222	228	224	223	216	213	58
60						210	217	214	213	206	203	60
62						198	207	205	204	197	194	62
64						188	196	196	196	189	186	64
66							186	187	189	181	178	66
68							176	176	181	174	170	68
70							165	168	173	167	163	70
72								158	165	160	157	72
74								150	157	154	151	74
76									149	147	144	76
78									141	140	138	78
80									134	134	132	80
82										128	127	82
84										122	122	84
86											117	86
88											112	88
90											108	90

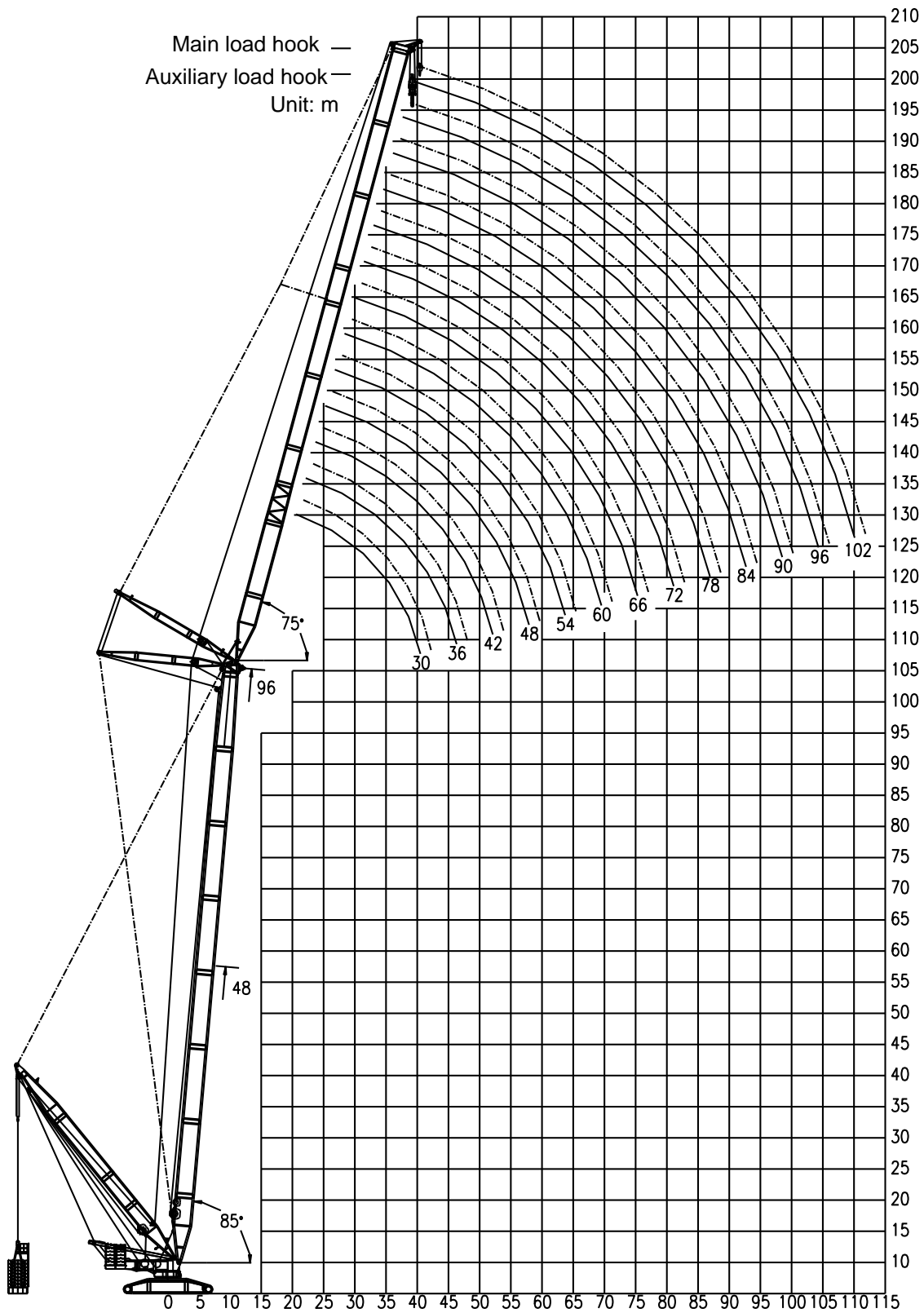
2.5 Lifting performance on SLDB boom



Lifting capacity on SLDB boom

		Suspended ballast:500t					Suspended ballast radius: 24m						
		Rear counterweight: 250t					Central counterweight: 70t					Unit: t	
SL-boom length (m)	90	96	102	108	114	120	126	132	138	144	150	SL-boom length (m)	
Radius (m)												Radius (m)	
15	540											15	
16	536	482	426									16	
18	533	479	425	371	322							18	
20	529	475	422	369	320	276	242					20	
22	524	470	418	367	318	274	240	218	200			22	
24	518	463	413	364	316	272	238	216	198	175	150	24	
26	508	453	406	360	313	270	236	214	196	173	148	26	
28	488	436	396	356	310	267	234	212	194	171	146	28	
30	457	415	384	349	306	264	231	210	192	169	144	30	
32	425	395	371	341	302	261	227	208	190	167	142	32	
34	396	373	356	331	297	258	224	205	188	165	140	34	
36	370	353	343	321	291	254	220	202	185	163	138	36	
38	348	335	328	309	284	249	216	198	182	161	136	38	
40	328	319	313	298	277	244	212	194	179	158	134	40	
44	296	290	285	275	260	232	203	186	173	152	129	44	
48	270	264	260	253	241	217	193	176	166	146	125	48	
52	247	242	237	232	224	203	183	168	158	140	120	52	
56	226	222	218	214	208	191	175	159	151	134	115	56	
60	207	204	202	198	193	180	166	151	144	129	110	60	
64	189	187	186	184	180	169	158	144	137	123	106	64	
68	172	173	172	171	168	159	150	137	131	118	102	68	
72	158	160	160	158	156	150	142	130	124	113	98	72	
76	144	148	148	147	146	141	134	124	118	108	94	76	
80	130	136	137	137	136	132	126	118	112	103	90	80	
84		124	125	127	126	123	118	112	107	99	86	84	
88			114	117	118	115	110	105	101	94	82	88	
92				107	110	108	103	99	95	90	79	92	
96					102	101	97	93	89	85	75	96	
100					95	95	90	87	85	80	72	100	
104						88	83	81	79	75	68	104	
108							77	75	74	71	65	108	
112								69	68	66	61	112	
116								63	62	61	57	116	
120									56	57	53	120	
124										53	49	124	
128											45	128	
132											41	132	

2.6 Lifting performance on SWDB boom



Lifting height on SWDB boom (S-boom angle = 85°)

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:48m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
16	550													16
18	550	526												18
20	550	520	482											20
22	528	512	478	412										22
24	500	500	468	410	352									24
26	457	470	450	404	350	310	270							26
28	414	428	431	392	345	307	268	236						28
30	370	380	400	380	340	304	266	234	205					30
32	326	342	363	362	334	298	262	232	203	180	159			32
34	283	306	330	336	322	290	257	230	201	178	157	136		34
36		274	298	308	308	282	252	226	199	177	155	135	120	36
38		243	271	282	288	273	246	223	197	175	153	134	119	38
40		215	247	260	267	259	239	220	194	173	151	132	118	40
42			222	238	246	243	231	216	191	171	149	130	117	42
44			200	216	228	224	221	212	188	169	147	128	115	44
46			175	198	210	210	212	205	183	165	144	126	113	46
48				182	195	195	199	197	179	163	141	123	111	48
50				163	180	181	186	185	172	160	138	121	109	50
52				145	166	168	173	174	165	157	135	119	107	52
54					152	156	163	163	157	153	132	117	105	54
56					138	144	151	155	150	149	128	115	102	56
58					125	132	141	145	143	142	123	112	99	58
60						122	131	136	136	136	119	109	96	60
62						110	122	128	129	130	115	106	93	62
64						98	113	120	120	122	111	102	90	64
66							103	112	113	115	107	98	87	66
68							93	104	107	109	102	94	84	68
70							83	96	99	102	98	90	80	70
72								89	93	96	94	86	77	72
74								80	88	90	90	81	74	74
76								70	80	85	86	77	71	76
78									74	79	81	73	68	78
80									68	74	76	70	65	80
82									58	68	71	66	61	82
84										62	67	63	58	84
86										56	61	58	56	86
88										49	56	54	52	88
90											52	50	48	90
92											46	46	44	92
94												42	40	94
96												37	37	96
98												33	34	98
100													31	100
102													29	102

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:54m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
18	532	500												18
20	521	490	441											20
22	510	478	437	373										22
24	496	465	430	370	322									24
26	472	452	420	367	320	286								26
28	432	436	405	362	316	284	251	220						28
30	392	403	388	353	312	280	249	218	194					30
32	348	360	368	342	305	275	245	216	193	170				32
34	304	323	340	328	299	268	241	214	191	169	151			34
36	256	289	310	309	291	262	236	212	189	168	149	134		36
38		257	283	289	281	256	231	208	186	165	147	132	117	38
40		225	257	267	268	249	225	205	183	163	144	130	115	40
42		192	234	246	252	240	219	201	180	161	142	128	113	42
44			211	225	234	229	213	197	177	159	140	126	111	44
46			187	208	215	216	206	192	174	157	138	123	109	46
48				189	197	200	198	186	171	155	136	121	107	48
50				172	186	189	189	181	168	152	133	118	103	50
52				154	173	176	178	175	163	149	130	115	100	52
54					159	162	166	168	158	144	127	112	96	54
56					144	150	155	159	153	140	123	109	92	56
58					129	138	145	150	148	136	120	106	88	58
60						128	135	140	139	132	117	102	84	60
62						116	127	130	132	127	113	98	79	62
64						105	117	123	124	121	109	95	76	64
66							107	115	116	116	105	92	73	66
68							97	106	110	111	100	89	72	68
70							87	98	102	106	96	86	70	70
72								90	96	99	92	82	68	72
74								82	89	93	88	79	66	74
76								75	84	88	84	76	64	76
78									77	82	78	72	60	78
80									70	76	73	68	57	80
82									64	71	68	64	55	82
84										66	63	59	52	84
86										59	57	54	49	86
88										53	53	50	45	88
90											48	46	42	90
92											43	43	38	92
94												39	36	94
96												36	34	96
98												33	31	98
100													29	100
102													27	102

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:60m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
18	515													18
20	508	477												20
22	500	470	418	368										22
24	485	455	414	364	322									24
26	463	438	402	357	320	281								26
28	434	417	386	347	315	278	245							28
30	400	388	369	336	306	273	242	216						30
32	359	359	346	323	297	266	239	214	191	170				32
34	320	330	323	309	285	260	234	211	189	168	147			34
36	275	300	304	293	274	253	228	206	185	165	145	127		36
38		266	281	275	262	245	222	202	182	163	143	126	110	38
40		236	260	253	248	237	215	197	179	160	141	123	108	40
42		205	239	232	234	224	208	192	176	157	139	121	106	42
44			216	213	220	212	200	186	172	154	137	119	103	44
46			193	197	205	199	191	181	168	151	135	117	101	46
48			169	180	192	186	182	175	163	148	132	114	99	48
50				164	178	175	173	168	158	144	129	111	97	50
52				150	165	163	163	160	153	141	126	108	95	52
54				135	152	153	153	153	148	138	122	105	92	54
56					140	142	143	145	142	134	118	101	89	56
58					129	132	134	138	137	130	114	98	86	58
60					117	121	126	131	132	126	110	96	82	60
62						111	117	123	126	120	107	94	79	62
64						100	109	116	119	115	103	92	77	64
66							101	109	113	110	100	90	75	66
68							93	101	107	105	97	88	73	68
70							85	94	100	99	95	86	71	70
72								87	94	94	93	84	69	72
74								79	88	89	89	81	68	74
76								73	81	82	84	78	67	76
78									75	76	78	75	65	78
80									69	71	73	71	64	80
82									61	66	69	67	61	82
84										60	61	63	60	84
86										55	57	58	58	86
88										51	53	54	55	88
90											48	51	52	90
92											45	47	48	92
94											40	43	45	94
96												40	42	96
98												35	39	98
100												31	35	100
102													32	102
104													28	104
106													25	106

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:66m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
18	483													18
20	476	425												20
22	463	418	375											22
24	448	411	370	326	291									24
26	430	396	360	321	288	260								26
28	409	380	346	314	285	257	226							28
30	382	360	330	305	277	253	224	201						30
32	354	339	315	294	268	246	221	199	178	159				32
34	325	317	299	281	259	238	218	196	176	157	141			34
36	290	294	282	267	249	231	213	193	174	155	140	124		36
38		270	265	255	240	223	206	189	172	153	139	122	104	38
40		246	248	242	231	216	200	184	169	151	137	121	103	40
42		215	232	228	220	208	193	179	165	149	135	120	102	42
44			217	216	210	201	186	174	161	145	133	119	100	44
46			201	203	200	193	179	168	157	142	131	118	99	46
48			176	191	190	184	172	161	153	139	128	116	97	48
50				179	180	173	164	155	149	136	124	114	94	50
52				165	170	163	157	150	143	133	121	111	92	52
54				149	159	156	150	144	138	129	118	108	89	54
56					149	147	143	138	133	124	115	105	87	56
58					138	137	136	132	128	120	111	101	84	58
60					126	128	129	126	122	116	108	98	81	60
62						119	121	119	117	112	105	95	78	62
64						110	114	113	112	108	100	92	76	64
66						100	107	108	107	103	96	89	74	66
68							99	102	101	99	93	86	72	68
70							92	97	96	95	89	82	70	70
72							84	92	90	91	85	79	68	72
74								86	86	87	81	76	66	74
76								78	81	82	77	73	65	76
78									76	78	74	70	63	78
80									71	74	70	67	61	80
82									66	70	67	64	60	82
84										65	64	60	58	84
86										59	59	57	57	86
88										54	56	54	55	88
90											53	51	53	90
92											50	48	51	92
94											46	45	49	94
96												42	46	96
98												38	42	98
100												35	39	100
102													35	102
104													31	104
106													27	106

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:72m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
18	432													18
20	428	395												20
22	420	388	348											22
24	407	374	339	302										24
26	386	357	328	297	265	240								26
28	365	338	315	289	263	237	215							28
30	340	319	302	278	258	233	211	189						30
32	316	300	288	266	249	226	206	186	163					32
34	292	281	272	254	239	219	201	183	161	147				34
36	267	264	258	241	228	212	196	179	159	144	129			36
38		247	243	228	218	204	191	175	156	142	128	117		38
40		231	227	216	208	197	184	170	153	140	126	115	99	40
42		213	215	204	199	189	178	164	150	137	123	113	98	42
44			201	193	190	180	172	159	147	134	121	111	97	44
46			187	181	180	172	165	154	142	131	119	109	96	46
48			174	170	171	163	158	149	138	128	117	107	95	48
50				159	161	155	151	143	134	124	114	105	94	50
52				150	152	147	143	137	130	120	111	102	92	52
54				140	142	139	136	132	126	116	108	100	90	54
56					133	132	129	127	120	112	105	98	88	56
58					126	124	122	121	115	108	101	95	86	58
60					118	117	116	116	111	103	98	92	84	60
62						110	110	111	107	99	95	89	80	62
64						102	105	106	102	96	92	86	77	64
66						96	99	101	98	92	89	82	75	66
68							94	96.6	94	88	86	79	72	68
70							89	91	90	84	82	77	70	70
72							84	86	86	79	79	74	67	72
74								80	81	75	76	72	65	74
76								75	77	71	73	69	63	76
78								69	73	68	70	63	60	78
80									69	65	67	64	58	80
82									65	61	64	60	56	82
84									60	58	60	57	54	84
86										55	57	55	52	86
88										52	54	53	50	88
90										48	51	50	48	90
92											48	48	46	92
94											44	45	44	94
96												43	42	96
98												40	39	98
100												38	37	100
102													34	102
104													31	104
106													28	106

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:78m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
20	383													20
22	379	362	334											22
24	369	355	330	300										24
26	355	341	319	291	258									26
28	334	328	307	282	250	222	199							28
30	313	311	296	272	241	218	197	174						30
32	291	287	284	262	232	213	194	172	152					32
34	271	269	271	251	222	207	189	169	150	136				34
36	252	246	256	239	211	199	182	166	148	134	120			36
38	229	229	241	226	200	191	176	162	144	132	119	108		38
40		215	223	212	191	182	170	158	141	130	117	107	94	40
42		200	209	201	181	175	163	154	138	128	115	106	93	42
44		185	191	189	172	168	157	149	135	124	113	104	92	44
46			178	176	162	159	150	144	131	121	111	102	90	46
48			165	162	153	151	143	138	127	118	109	100	88	48
50			154	149	144	142	137	132	122	115	106	98	86	50
52				139	136	135	131	126	118	111	102	96	84	52
54				130	128	128	124	120	114	107	99	94	82	54
56					120	120	118	115	109	102	96	91	80	56
58					113	113	112	110	105	99	93	88	77	58
60					105	107	106	105	100	95	90	85	75	60
62						100	100	99	96	92	87	81	73	62
64						94	95	94	92	88	84	78	71	64
66						89	90	89	88	84	80	75	69	66
68							85	84	84	79	77	72	67	68
70							79	79	79	76	74	70	65	70
72							75	75	75	73	71	67	63	72
74								71	71	69	68	65	61	74
76								67	68	66	65	62	58	76
78								63	65	63	61	59	56	78
80									61	59	58	56	54	80
82									58	56	55	53	52	82
84									55	53	52	51	50	84
86										50	50	49	48	86
88										47	48	47	46	88
90										44	46	45	44	90
92											44	43	42	92
94											42	40	40	94
96											40	38	37	96
98												36	35	98
100												34	33	100
102												32	31	102
104													29	104
106													27	106
108													25	108

Lifting capacity on SWDB boom (S-boom angle = 85°)

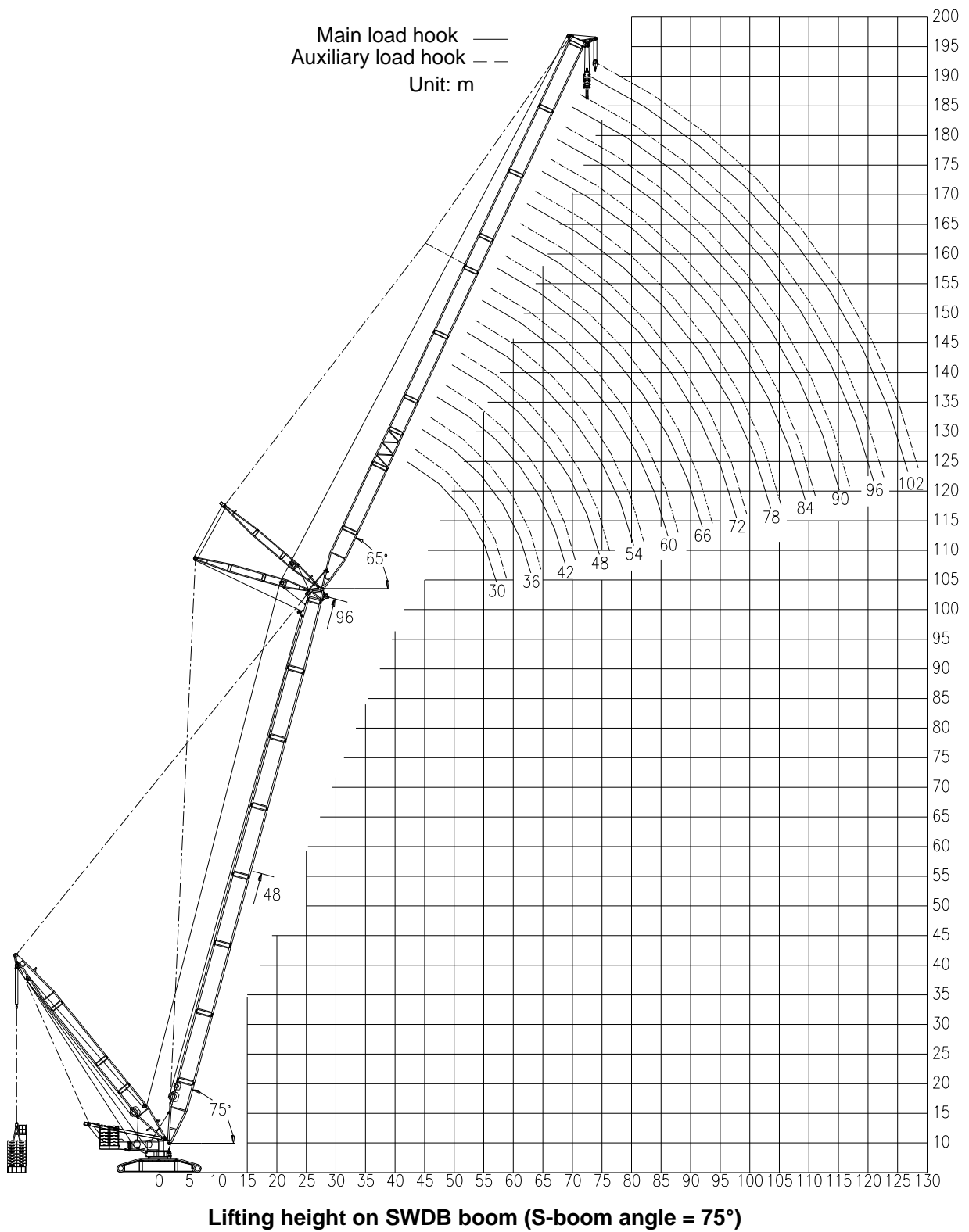
S-boom:84m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
20	351													20
22	344	321												22
24	333	313	283	256										24
26	320	299	275	250	227									26
28	302	283	265	242	221	199								28
30	283	266	253	232	215	195	183							30
32	264	252	239	221	207	190	178	161						32
34	246	236	227	211	199	183	173	157	141	128				34
36	229	221	215	200	191	177	168	154	140	126	113			36
38	214	207	202	190	182	171	162	150	138	124	111	99		38
40		195	189	180	174	163	157	145	136	121	109	98	90	40
42		181	178	171	166	157	152	141	133	119	107	97	89	42
44		168	166	161	157	150	147	137	130	116	105	96	88	44
46			155	152	149	142	140	133	127	113	103	94	87	46
48			143	142	140	136	134	129	124	110	100	92	85	48
50			132	133	132	129	128	124	119	107	98	90	83	50
52				123	123	122	121	119	114	103	96	88	80	52
54				114	116	115	115	113	109	100	93	86	78	54
56				105	108	108	109	108	104	97	90	84	76	56
58					100	101	102	102	98	93	87	82	74	58
60					93	95	96	97	93	89	84	78	72	60
62					87	89	91	92	88	85	80	75	70	62
64						82	86	87	83	80	77	72	68	64
66						76	80	82	78	77	74	69	66	66
68							76	77	75	74	71	66	64	68
70							72	73	72	71	68	64	62	70
72							68	69	69	68	65	62	59	72
74								65	66	65	62	60	57	74
76								62	63	62	58	57	55	76
78								58	60	58	56	55	53	78
80									56	55	54	53	51	80
82									53	52	52	51	49	82
84									50	49	50	49	47	84
86										46	48	47	45	86
88										44	46	45	43	88
90										42	44	43	40	90
92											42	41	38	92
94											40	38	36	94
96											37	36	34	96
98												34	32	98
100												33	30	100
102												30	28	102
104													26	104
106													25	106
108													24	108

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:90m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
20	315													20
22	310	285												22
24	299	279	257											24
26	286	269	252	227	207									26
28	273	257	242	223	203	185								28
30	258	243	232	215	197	180	164							30
32	243	229	219	205	191	175	160	149						32
34	228	216	208	195	183	170	156	147	132					34
36	213	203	196	185	175	163	152	144	130	120				36
38	196	191	185	174	168	157	147	139	128	118	107			38
40		179	173	165	159	151	141	135	125	115	106	96		40
42		168	161	155	151	145	136	131	121	112	105	94	84	42
44		157	151	147	144	138	131	127	118	109	103	92	83	44
46			142	138	135	132	127	122	114	106	100	90	82	46
48			133	130	128	126	121	117	110	103	98	88	81	48
50			125	123	120	119	116	112	106	99	95	86	80	50
52				115	113	113	111	108	103	96	93	84	77	52
54				108	106	107	106	103	98	93	90	82	76	54
56				101	99	100	100	98	94	90	87	80	73	56
58					92	94	95	94	90	87	84	78	71	58
60					86	89	90	90	86	84	80	75	69	60
62					80	84	85	86	83	80	77	73	67	62
64						79	80	82	79	77	74	71	65	64
66						73	76	77	76	74	71	69	63	66
68						68	72	73	73	71	69	66	61	68
70							68	69	70	68	67	64	59	70
72							64	65	67	65	65	62	56	72
74							59	62	64	62	62	59	54	74
76								59	61	58	59	57	52	76
78								56	57	56	57	55	50	78
80								52	54	54	54	53	48	80
82									51	52	51	51	46	82
84									48	50	49	49	44	84
86										48	47	47	42	86
88										46	45	45	40	88
90										44	43	43	38	90
92											41	40	36	92
94											39	39	34	94
96											37	36	31	96
98												34	29	98
100												32	27	100
102												30	26	102
104													24	104
106													23	106
108													21	108

Lifting capacity on SWDB boom (S-boom angle = 85°)

S-boom:96m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
22	281	263												22
24	273	254	233											24
26	263	245	225	205										26
28	251	235	217	199	181	165								28
30	238	225	209	193	176	161	144							30
32	225	213	199	187	171	155	140	132						32
34	212	201	189	179	165	150	136	129	120					34
36	199	190	179	171	158	145	132	126	118	106				36
38	187	178	170	162	152	140	129	123	116	104	95			38
40	177	169	160	154	146	134	126	120	112	102	93	86		40
42		158	152	147	140	130	122	117	109	100	90	84	76	42
44		149	143	139	133	126	118	112	106	98	88	82	75	44
46			135	132	127	120	114	108	103	95	86	80	74	46
48			128	125	121	115	110	105	100	93	84	78	73	48
50			120	118	114	110	106	101	96	90	82	76	71	50
52				111	109	105	102	97	93	87	80	74	70	52
54				105	104	101	98	93	90	84	78	72	68	54
56				99	98	97	94	90	87	82	76	71	66	56
58					93	91	89	86	84	79	74	69	64	58
60					88	87	84	83	81	77	71	67	62	60
62					84	83	80	80	78	74	69	66	61	62
64						80	77	77	75	71	67	65	60	64
66						75	73	73	71	68	65	63	59	66
68						72	70	70	68	66	63	61	57	68
70							67	67	65	63	60	59	55	70
72							64	64	63	61	57	57	52	72
74							62	61	60	59	55	55	50	74
76								58	58	56	53	52	48	76
78								56	56	53	51	50	46	78
80								52	54	50	49	48	45	80
82									50	48	48	46	43	82
84									47	46	46	44	42	84
86									45	44	44	42	41	86
88										42	41	40	39	88
90										40	39	39	38	90
92										38	37	37	36	92
94											35	36	35	94
96											33	34	33	96
98												32	31	98
100												30	29	100
102												29	27	102
104													26	104
106													24	106
108													22	108



Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:48m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
30	475													30
32	465	442												32
34	441	432												34
36	416	408	405											36
38	389	384	381	367										38
40	365	369	359	356	348									40
42	325	339	343	341	337	320								42
44	279	304	323	325	322	317								44
46		273	295	303	305	296	276							46
48		243	269	280	281	276	268	242						48
50		210	246	259	262	260	258	240	207					50
52			222	238	246	243	242	237	205	167				52
54			200	219	228	226	225	223	203	165				54
56				202	213	211	210	212	196	164	137			56
58				183	197	197	198	200	190	162	136	110		58
60					182	184	186	189	183	161	134	109	83	60
62					170	172	175	179	176	159	132	108	82	62
64					156	160	165	169	168	155	128	106	81	64
66					141	148	154	158	160	150	125	104	80	66
68						137	143	149	150	145	122	102	79	68
70						126	134	140	142	139	119	99	78	70
72							126	131	133	133	114	97	77	72
74							117	124	127	126	110	95	76	74
76							107	116	119	120	106	92	74	76
78							97	107	112	113	102	88	71	78
80								100	105	108	97	85	69	80
82								91	98	102	93	82	67	82
84									91	95	87	79	65	84
86									85	86	82	75	63	86
88									79	82	77	71	61	88
90									70	77	71	67	58	90
92										71	67	63	56	92
94										66	63	58	54	94
96										60	58	55	52	96
98											55	52	50	98
100											52	50	47	100
102											49	47	45	102
104												45	43	104
106												43	41	106
108												41	39	108
110													37	110
112													34	112

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:54m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
32	453													32
34	430	423												34
36	406	399	379											36
38	382	376	372											38
40	360	354	353	337										40
42	341	337	335	333	320									42
44	318	319	319	318	315	305								44
46		300	302	304	300	297	267							46
48		269	287	288	287	283	266							48
50		238	266	272	273	268	260	233						50
52			242	256	259	254	248	231	200					52
54			219	235	244	240	236	223	196	170				54
56			196	217	226	223	224	214	192	168				56
58				198	211	210	212	205	188	165	133			58
60				181	196	195	199	195	181	161	134	108		60
62				165	181	182	186	185	176	158	132	107	82	62
64					169	171	175	177	169	152	129	106	81	64
66					154	159	165	168	162	148	127	105	80	66
68					139	147	154	157	154	143	125	104	79	68
70						136	144	148	147	136	122	103	78	70
72						126	134	138	138	130	119	100	77	72
74						113	126	130	130	124	115	98	75	74
76							117	123	123	119	112	96	75	76
78							107	115	116	112	108	94	73	78
80							97	107	108	107	104	91	71	80
82								99	100	100	98	88	69	82
84								91	93	95	93	84	67	84
86								83	86	88	87	80	65	86
88									81	83	82	76	62	88
90									73	78	77	71	60	90
92									68	72	71	67	58	92
94										67	66	63	56	94
96										61	59	58	54	96
98										57	55	54	52	98
100											52	50	48	100
102											48	46	45	102
104												43	42	104
106												40	40	106
108												38	38	108
110													36	110
112													33	112
114													31	114

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:60m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
34	410													34
36	397	378												36
38	375	369	357											38
40	356	351	348	340										40
42	337	333	330	327										42
44	318	316	315	313	311									44
46	302	302	300	299	297	291								46
48		286	286	285	283	280	264							48
50		263	271	272	270	267	259							50
52		233	257	259	258	255	248	232						52
54			238	245	246	244	237	225	200					54
56			216	230	234	232	226	220	197	168				56
58			193	214	221	220	218	212	194	167	133			58
60				197	209	208	208	205	187	165	132			60
62				179	193	193	197	196	182	163	131	105		62
64				162	179	180	184	186	176	159	129	104	81	64
66					167	169	173	175	169	156	127	103	80	66
68					152	157	163	166	162	152	125	102	79	68
70					137	145	152	156	155	147	123	101	78	70
72						134	142	146	148	142	121	99	77	72
74						124	133	137	139	136	117	97	75	74
76						111	125	129	131	129	114	95	73	76
78							115	122	125	123	110	92	71	78
80							105	114	118	116	105	89	69	80
82							95	106	110	110	101	86	67	82
84								98	104	103	97	83	65	84
86								89	97	98	92	79	62	86
88									90	93	87	76	60	88
90									83	87	83	73	58	90
92									77	82	79	70	56	92
94										77	73	66	54	94
96										72	69	61	52	96
98										66	64	58	49	98
100											61	55	47	100
102											57	52	45	102
104											54	48	43	104
106												45	41	106
108												43	39	108
110												41	37	110
112													34	112
114													32	114
116													30	116

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:66m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
34	399													34
36	387													36
38	370	365												38
40	352	348	343											40
42	334	329	327	318										42
44	317	313	311	306	302									44
46	302	299	297	293	291									46
48	286	284	282	280	280	272								48
50		270	268	268	266	262	243							50
52		255	255	256	254	252	236							52
54		227	241	244	248	241	230	210						54
56			228	232	233	230	223	206	183					56
58			212	220	221	218	216	201	180	156				58
60			188	208	210	208	206	194	177	154	129			60
62				194	198	200	198	188	172	151	127	103		62
64				176	186	189	188	180	168	148	125	102		64
66				158	177	178	179	172	163	145	123	101	80	66
68					164	167	168	165	158	140	121	100	79	68
70					150	155	158	156	151	136	118	98	78	70
72					134	144	149	149	144	132	114	96	76	72
74						133	139	141	138	126	111	94	75	74
76						122	130	134	131	121	108	92	73	76
78							122	126	125	115	105	89	71	78
80							113	119	119	110	100	86	69	80
82							104	112	112	105	96	83	67	82
84								105	105	99	92	80	64	84
86								97	99	94	88	77	63	86
88								89	94	88	84	73	60	88
90									88	84	80	71	58	90
92									83	80	75	68	56	92
94									79	75	71	65	54	94
96										71	67	62	52	96
98										67	62	58	49	98
100										62	59	55	47	100
102											56	53	45	102
104											53	49	43	104
106											50	47	41	106
108												45	39	108
110												43	36	110
112													34	112
114													32	114
116													30	116
118													28	118

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:72m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
36	373													36
38	356													38
40	339	334												40
42	323	320	316											42
44	307	304	302	291										44
46	292	289	287	281	275									46
48	279	275	273	271	266									48
50	265	265	262	260	256	250								50
52		253	251	250	247	242	228							52
54		242	239	239	237	233	222	198						54
56		220	229	230	228	223	218	197	176					56
58			217	220	218	215	210	195	175					58
60			206	211	210	206	203	191	174	148				60
62			183	201	200	198	195	186	170	146	125			62
64				190	190	188	186	180	166	144	122	99		64
66				173	181	179	178	173	161	142	120	98	77	66
68					171	169	168	165	156	138	118	97	76	68
70					162	161	160	158	150	135	116	96	75	70
72					148	151	151	150	145	131	114	95	74	72
74						142	143	143	138	127	111	93	73	74
76						130	134	136	131	123	108	91	72	76
78						120	126	128	125	118	105	89	70	78
80							117	122	118	112	102	87	67	80
82							109	114	113	107	97	85	65	82
84							100	108	107	102	93	82	63	84
86								100	101	96	89	78	61	86
88								93	95	91	86	75	59	88
90								85	90	87	81	72	57	90
92									84	81	77	69	55	92
94									78	77	73	66	53	94
96									72	73	70	63	51	96
98										69	66	59	48	98
100										65	61	56	46	100
102										60	58	53	44	102
104											55	50	42	104
106											52	47	40	106
108											48	44	38	108
110												41	36	110
112												38	34	112
114												36	32	114
116													29	116
118													27	118
120													25	120

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:78m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
38	352													38
40	334	330												40
42	318	313												42
44	302	300	300											44
46	288	286	284	281										46
48	275	272	270	269	257									48
50	265	260	257	256	250	233								50
52	254	249	247	245	242	230								52
54		238	236	235	233	225	207							54
56		229	227	226	224	219	205	183						56
58			218	216	214	212	203	182	162					58
60			210	208	206	203	200	181	161	142				60
62			201	199	197	196	194	179	160	141				62
64				192	190	188	186	176	159	140	122			64
66				184	182	180	179	173	157	139	121	99		66
68				171	175	173	172	168	155	137	119	98	76	68
70					167	165	164	162	151	133	117	97	75	70
72					159	156	157	156	145	130	114	95	74	72
74					145	148	149	148	140	127	112	93	73	74
76						139	141	142	135	123	109	91	72	76
78						129	132	135	129	119	106	89	70	78
80						118	123	127	123	114	103	87	68	80
82							114	121	117	110	99	85	66	82
84							106	114	112	106	95	83	64	84
86							97	108	107	102	91	80	61	86
88								101	101	96	88	77	59	88
90								93	96	92	84	74	57	90
92								85	91	87	80	71	55	92
94									85	82	76	68	53	94
96									78	76	72	65	51	96
98									72	72	68	61	49	98
100										68	64	58	47	100
102										63	59	55	45	102
104										59	55	52	42	104
106											52	49	40	106
108											49	46	38	108
110											46	42	36	110
112												39	34	112
114												36	32	114
116													30	116
118													28	118
120													25	120

Lifting capacity on SWDB boom (S-boom angle = 75°)

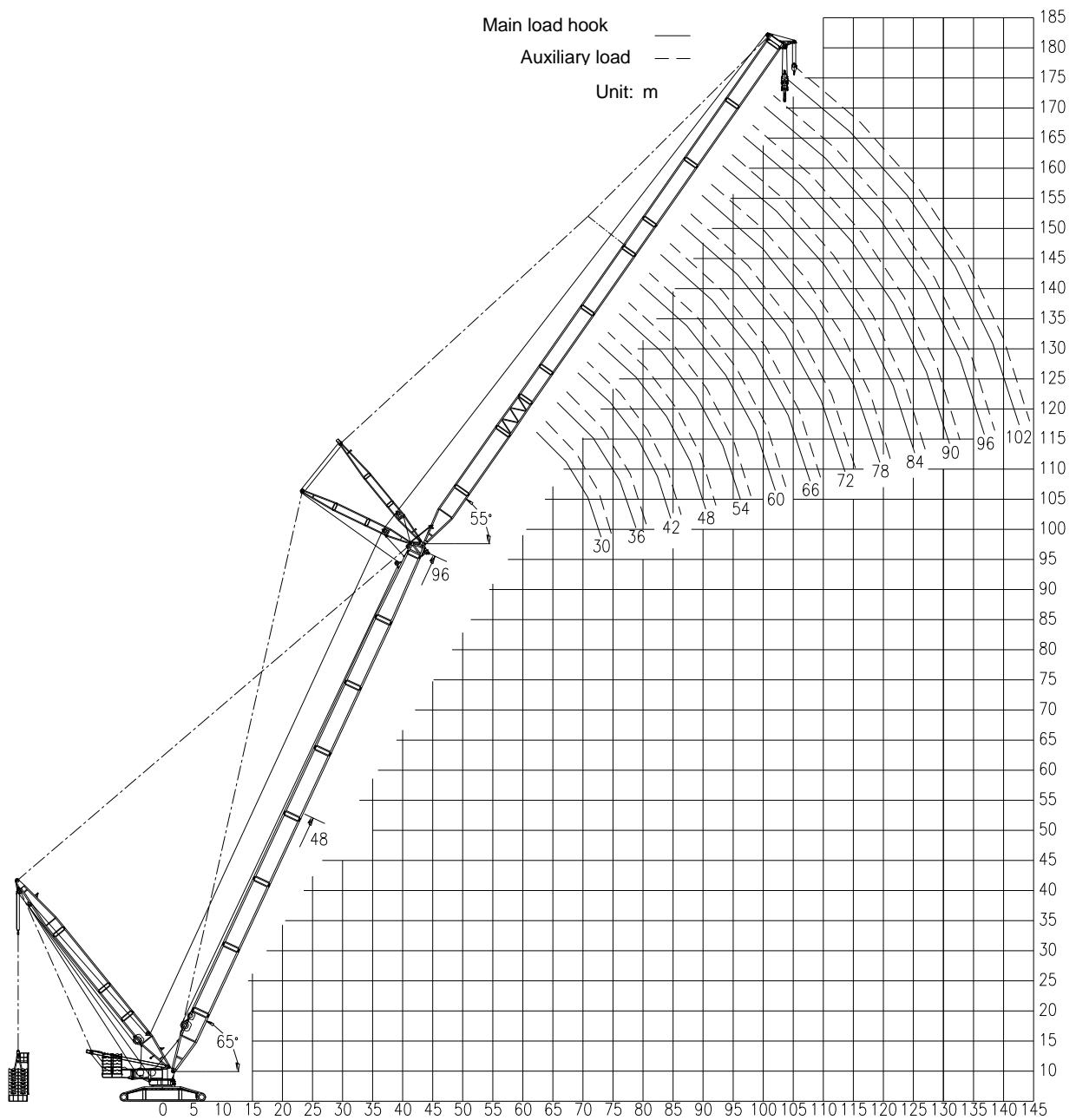
S-boom:84m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
40	321													40
42	307	304												42
44	295	293	283											44
46	281	278	273											46
48	269	265	264	252										48
50	257	254	252	245	231									50
52	247	244	242	237	226	210								52
54		233	231	229	220	208	189							54
56		224	222	220	214	205	188							56
58		215	213	212	208	200	186	168						58
60			206	204	202	195	184	167	149					60
62			197	196	194	190	180	166	148	131				62
64			189	188	187	184	175	163	147	130	112			64
66				181	180	177	170	160	145	129	111			66
68				173	173	171	165	156	143	128	110	94		68
70				164	166	165	160	152	141	126	109	93	74	70
72					159	158	153	148	138	124	108	92	73	72
74					150	150	147	143	134	122	107	91	72	74
76					142	143	141	138	131	120	105	90	71	76
78						134	134	132	127	117	103	88	70	78
80						126	128	127	123	113	101	86	69	80
82						116	122	122	118	110	99	84	67	82
84							115	116	112	106	96	82	65	84
86							108	111	107	102	93	80	63	86
88							99	105	102	98	89	77	61	88
90								99	97	93	86	74	59	90
92								92	91	89	82	71	57	92
94								86	86	84	78	68	55	94
96									81	79	74	65	53	96
98									76	74	69	62	50	98
100									70	69	65	59	48	100
102										65	61	56	46	102
104										61	57	53	44	104
106											54	49	42	106
108											50	46	40	108
110											47	43	38	110
112												40	36	112
114												38	34	114
116												36	32	116
118													29	118
120													27	120
122													25	122

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:90m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
42	281													42
44	273	268												44
46	264	260	253											46
48	256	252	247	238										48
50	246	244	239	232										50
52	237	235	232	228	215									52
54	229	227	223	219	210	193								54
56		218	215	212	205	190	174							56
58		210	208	205	199	187	172	155						58
60		202	200	197	193	183	170	154						60
62			193	190	188	178	167	153	137					62
64			185	183	181	174	164	151	136	123				64
66			178	176	174	169	160	148	134	122	107			66
68				170	168	164	156	145	132	121	107	92		68
70				164	162	159	152	142	130	120	106	91		70
72				155	155	152	148	138	127	117	105	90	73	72
74					148	146	143	134	124	115	104	89	72	74
76					141	140	137	130	121	113	102	88	71	76
78					133	133	131	126	118	110	100	86	70	78
80						126	125	122	114	107	98	84	69	80
82						118	119	117	110	104	95	82	68	82
84						110	112	113	106	101	91	80	67	84
86							106	108	102	97	88	78	66	86
88							100	103	98	93	85	76	65	88
90								98	93	89	82	74	63	90
92								92	89	85	79	71	61	92
94								83	85	81	76	68	59	94
96									82	78	72	65	57	96
98									79	74	69	62	55	98
100									75	70	66	59	53	100
102										67	63	56	50	102
104										64	60	52	48	104
106										61	57	50	46	106
108											53	47	44	108
110											50	45	42	110
112											47	43	40	112
114												41	38	114
116												39	36	116
118												37	34	118
120													32	120
122													29	122
124													27	124

Lifting capacity on SWDB boom (S-boom angle = 75°)

S-boom:96m Suspended ballast:500t Suspended ballast radius:24m Rear counterweight: 250t Central counterweight:70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
42	278													42
44	269													44
46	259	254												46
48	250	247	231											48
50	241	239	226	212										50
52	233	231	221	207	191									52
54	225	223	214	202	188									54
56	216	214	208	196	185	173								56
58		207	202	191	182	170	158							58
60		199	196	186	178	167	155	143						60
62		192	189	181	174	164	153	141	130					62
64			182	175	170	160	151	139	128					64
66			174	170	166	157	149	137	127	118				66
68			166	164	161	153	146	134	126	116	100			68
70				156	155	149	143	132	124	113	100	90		70
72				149	148	145	139	130	122	111	99	89		72
74				142	141	140	134	128	120	109	98	88	71	74
76					133	133	130	125	118	107	96	87	70	76
78					126	127	126	122	116	105	95	86	69	78
80						121	121	118	112	103	94	85	68	80
82						114	116	113	109	101	92	84	67	82
84						108	110	109	106	99	90	82	66	84
86							105	105	103	95	88	80	65	86
88							100	101	99	92	85	78	64	88
90							95	97	95	89	82	76	63	90
92								92	90	86	79	73	61	92
94								88	86	83	76	71	59	94
96								84	82	79	72	68	57	96
98									78	74	69	65	55	98
100									73	70	66	62	52	100
102									69	67	63	59	50	102
104										64	60	56	48	104
106										60	57	53	46	106
108										57	54	49	44	108
110											50	46	42	110
112											47	44	40	112
114											45	42	38	114
116												40	36	116
118												38	34	118
120												36	31	120
122													29	122
124													27	124
126													25	126



Lifting height on SWDB boom (S-boom angle = 65°)

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 48m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
42	353													42
44	334													44
46	317	315												46
48	301	300												48
50	287	285	284											50
52	272	272	271	270										52
54		260	259	258										54
56		235	248	247	236									56
58		207	234	237	230									58
60			214	226	224	212								60
62			193	212	217	208								62
64				197	210	204	193							64
66				180	200	198	189	182						66
68				165	189	190	185	178						68
70					178	181	180	174	162					70
72					166	170	173	169	160					72
74					152	158	164	163	156	142				74
76						147	154	156	152	141				76
78						136	145	148	147	138	120			78
80						125	135	140	140	134	119	95		80
82							127	131	133	128	117	95		82
84							117	124	127	122	114	95	72	84
86							107	116	120	117	110	94	72	86
88								108	112	111	105	94	71	88
90								100	106	106	100	94	71	90
92								92	99	100	95	92	70	92
94									92	95	90	87	70	94
96									85	90	86	84	69	96
98									79	84	81	79	69	98
100										79	76	75	69	100
102										73	71	70	69	102
104										67	67	66	67	104
106											61	62	63	106
108											56	58	60	108
110											50	54	56	110
112												50	52	112
114												46	49	114
116												41	45	116
118													42	118
120													38	120

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 54m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t															
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)	
Radius (m)														Radius (m)	
46	313													46	
48	298	296												48	
50	284	282												50	
52	271	269	268											52	
54	259	257	256											54	
56		246	245	244										56	
58		236	235	234	233									58	
60		218	226	225	223									60	
62			217	216	215	210								62	
64			200	208	207	203								64	
66			179	198	199	197	193							66	
68				183	191	190	187							68	
70				168	178	185	181	177						70	
72				150	166	178	175	171	168					72	
74					153	172	170	166	163					74	
76					141	160	165	161	158	146				76	
78					128	149	155	157	153	144				78	
80						138	146	149	148	140	120			80	
82						128	136	141	142	135	119			82	
84							128	132	135	130	118	95		84	
86								119	125	128	124	115	94	72	86
88								112	117	121	118	110	93	72	88
90									110	114	112	106	92	71	90
92									103	107	106	101	90	71	92
94									94	101	100	96	88	70	94
96										95	94	91	85	70	96
98										90	88	86	82	69	98
100										84	82	81	79	69	100
102											76	76	75	69	102
104											70	71	71	69	104
106											64	66	67	68	106
108												62	63	65	108
110												57	59	61	110
112												52	55	58	112
114													51	54	114
116													47	50	116
118													43	47	118
120														43	120
122														39	122
124														36	124

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 60m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
48	294													48
50	280													50
52	268	266												52
54	256	254	253											54
56	245	244	242											56
58		233	232	231										58
60		224	223	222										60
62		215	214	213	212									62
64			206	205	204	202								64
66			199	198	196	195								66
68			187	191	189	188	186							68
70				184	183	181	180							70
72				173	177	175	174	172						72
74				156	170	169	168	166						74
76					158	160	163	161	158					76
78					146	149	153	155	153	150				78
80					132	139	144	146	147	145				80
82						130	135	138	139	139	121			82
84						119	127	130	131	131	120			84
86						108	119	123	125	125	120	95		86
88							112	115	118	118	118	95	72	88
90							105	108	111	112	112	95	72	90
92							92	103	105	106	106	94	71	92
94								97	99	101	101	94	71	94
96								93	94	95	96	94	70	96
98								80	88	89	91	91	70	98
100									84	85	86	86	69	100
102									79	80	82	83	69	102
104										75	77	78	69	104
106										69	73	74	69	106
108										64	68	70	69	108
110											64	65	66	110
112											59	62	63	112
114											54	58	59	114
116												54	55	116
118												49	52	118
120												45	48	120
122													45	122
124													41	124
126													38	126

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 66m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
50	277													50
52	264													52
54	252	251												54
56	242	240												56
58	232	230	229											58
60		221	220	218										60
62		213	211	210										62
64		204	203	202	201									64
66			196	195	193									66
68			189	188	187	185								68
70			182	181	180	178	175							70
72				175	174	172	170							72
74				169	168	167	165	161						74
76				162	163	161	160	156						76
78					158	156	155	151	148					78
80					149	151	150	147	144					80
82					137	143	145	143	140	136				82
84						132	138	139	136	132	121			84
86						123	130	132	132	128	121			86
88						112	122	126	127	125	120	95		88
90							113	118	120	121	118	95		90
92							105	111	113	114	114	95	72	92
94							95	104	107	108	108	94	71	94
96								97	101	103	103	94	71	96
98								89	95	97	98	94	70	98
100								83	88	91	92	92	70	100
102									84	86	87	88	69	102
104									77	82	84	84	69	104
106									71	77	79	80	69	106
108										71	74	75	69	108
110										66	70	71	69	110
112										60	65	67	68	112
114											61	63	64	114
116											55	59	60	116
118												55	57	118
120												51	53	120
122												47	50	122
124													46	124
126													43	126
128													39	128

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 72m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
52	260													52
54	249													54
56	238	237												56
58	228	227												58
60	219	218	216											60
62	211	209	208											62
64		202	200	199										64
66		194	193	192	189									66
68		187	186	185	183									68
70			180	178	177	173								70
72			174	172	171	168								72
74			168	167	165	163	159							74
76				161	160	158	154	150						76
78				156	155	153	150	146						78
80					150	149	145	142	138					80
82					146	144	141	138	134					82
84					141	140	138	134	130	127				84
86						136	134	130	127	123				86
88						126	131	127	123	120	117			88
90						116	124	124	120	117	113	96		90
92							116	120	117	114	110	95		92
94							107	113	114	111	107	95	72	94
96							99	106	109	108	105	94	72	96
98								99	103	105	102	94	71	98
100								92	97	99	99	94	71	100
102								85	91	93	94	93	70	102
104									85	88	89	89	70	104
106									80	84	85	85	69	106
108									74	78	81	81	69	108
110										73	76	77	69	110
112										68	71	73	69	112
114										62	67	68	69	114
116											62	65	65	116
118											58	61	62	118
120											53	57	58	120
122												50	54	122
124												40	51	124
126												30	47	126
128													44	128
130													40	130
132													37	132

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 78m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
56	234													56
58	225	223												58
60	216	214												60
62	208	206	204											62
64	200	198	197											64
66		191	190	186										66
68		184	183	181										68
70		178	177	175	171									70
72			171	169	166	162								72
74			165	164	161	157								74
76			160	159	156	152	148							76
78				154	152	148	144							78
80				149	148	144	140	136						80
82				144	143	140	136	132	129					82
84					139	136	132	129	125					84
86					135	133	129	125	122	118				86
88					131	129	125	122	118	115				88
90						126	122	119	115	112	108			90
92						119	119	116	112	109	105			92
94						108	117	113	109	106	103	95		94
96							110	110	107	103	100	95	72	96
98							102	108	104	101	97	94	72	98
100								101	102	98	95	92	71	100
102								94	99	96	92	89	71	102
104								87	93	93	90	87	70	104
106									86	89	88	85	70	106
108									82	85	86	83	69	108
110									75	80	82	81	69	110
112										75	77	78	69	112
114										70	73	74	69	114
116										64	68	70	69	116
118											64	66	66	118
120											59	62	63	120
122											54	58	59	122
124												54	56	124
126												50	52	126
128												45	49	128
130													45	130
132													42	132
134													39	134

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 84m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
58	220													58
60	212													60
62	204	201												62
64	196	194	190											64
66	189	188	184											66
68		181	178	174										68
70		175	172	168										70
72		169	167	163	160									72
74			162	159	155									74
76			157	154	150	146								76
78			152	150	146	142	138							78
80				146	142	138	134							80
82				141	138	134	130	127						82
84				137	135	130	127	123						84
86					131	127	123	120	116					86
88					128	124	120	117	113	110				88
90					124	121	117	114	110	107				90
92						118	114	111	107	104	100			92
94						115	111	108	104	101	98			94
96						111	109	105	102	98	95	92		96
98							106	103	99	96	93	89		98
100							104	100	97	93	90	87	72	100
102							95	98	94	91	88	84	71	102
104								96	92	89	86	82	71	104
106								89	90	87	83	80	70	106
108								83	88	85	81	78	70	108
110									84	83	79	76	69	110
112									77	81	78	74	69	112
114										77	76	73	69	114
116										71	74	71	68	116
118										66	70	69	66	118
120											65	67	64	120
122											61	63	63	122
124											56	59	61	124
126												55	57	126
128												51	53	128
130												47	50	130
132													46	132
134													43	134
136													39	136

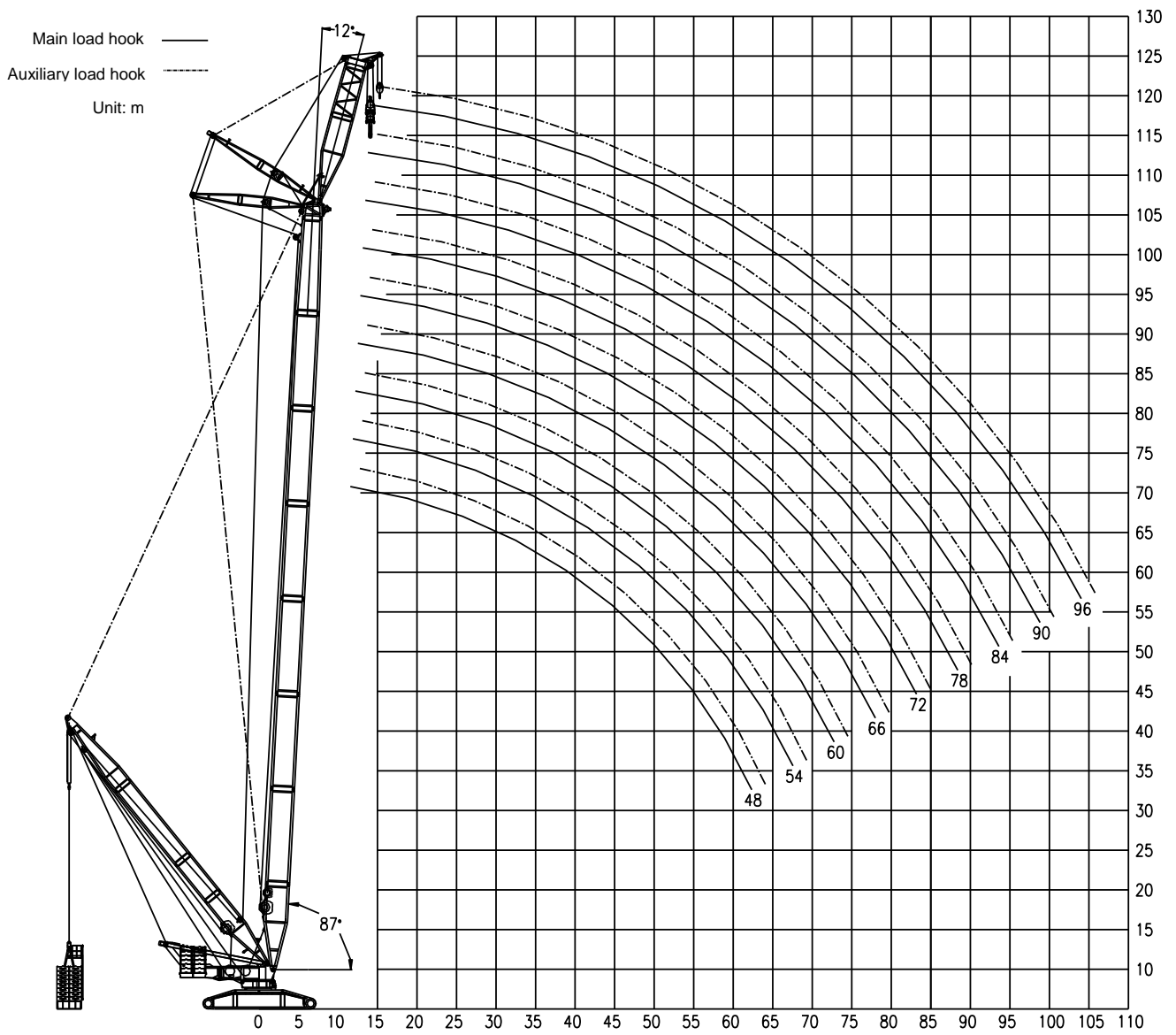
Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 90m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
60	205													60
62	198													62
64	191	187												64
66	185	181												66
68	179	175	171											68
70	172	170	166	162										70
72		165	161	157										72
74		160	156	152	148									74
76			152	148	144									76
78			148	144	140	136								78
80			144	140	136	132								80
82				136	132	128	125							82
84				133	129	125	121	118						84
86				129	125	121	118	114						86
88					122	118	115	111	108					88
90					119	115	112	108	105					90
92					117	113	109	105	102	99				92
94						110	106	103	99	96	93			94
96						107	104	100	97	93	90			96
98						105	101	98	94	91	88	84		98
100							99	95	92	88	85	82		100
102							97	93	90	86	83	80	72	102
104							95	91	87	84	81	78	71	104
106								89	85	82	79	76	71	106
108								87	83	80	77	74	70	108
110								85	82	78	75	72	69	110
112									80	76	73	70	67	112
114									78	75	71	68	65	114
116									72	73	70	67	63	116
118										72	68	65	62	118
120										68	67	63	60	120
122										62	65	62	59	122
124											62	61	57	124
126											58	59	56	126
128											52	57	55	128
130												53	53	130
132												48	51	132
134													47	134
136													44	136
138													40	138

Lifting capacity on SWDB boom (S-boom angle = 65°)

S-boom: 96m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t														
W-jib length (m)	30	36	42	48	54	60	66	72	78	84	90	96	102	W-jib length (m)
Radius (m)														Radius (m)
62	190													62
64	184													64
66	178	174												66
68	172	168												68
70	167	163	159											70
72	162	158	154											72
74		154	150	146										74
76		149	145	142	138									76
78		145	141	137	134									78
80			137	134	130	126								80
82			134	130	126	122								82
84			131	127	123	119	115							84
86				123	120	116	112	109						86
88				120	117	113	109	106						88
90				118	114	110	106	103	99					90
92					111	107	104	100	97					92
94					108	104	101	97	94	91				94
96						102	98	95	92	88				96
98						100	96	93	89	86	83			98
100						97	94	90	87	84	80	77		100
102							92	88	85	81	78	75		102
104							89	86	83	79	76	73	70	104
106							88	84	81	77	74	71	68	106
108								82	79	75	72	69	66	108
110								80	77	74	70	67	64	110
112								78	75	72	69	65	62	112
114									73	70	67	64	61	114
116									72	69	65	62	59	116
118									70	67	64	61	57	118
120										66	62	59	56	120
122										64	61	58	55	122
124										62	60	56	53	124
126											58	55	52	126
128											57	54	51	128
130											54	53	49	130
132												51	48	132
134												50	47	134
136												45	46	136
138													44	138
140													42	140
142													38	142

2.7 Lifting performance on SFvDB boom

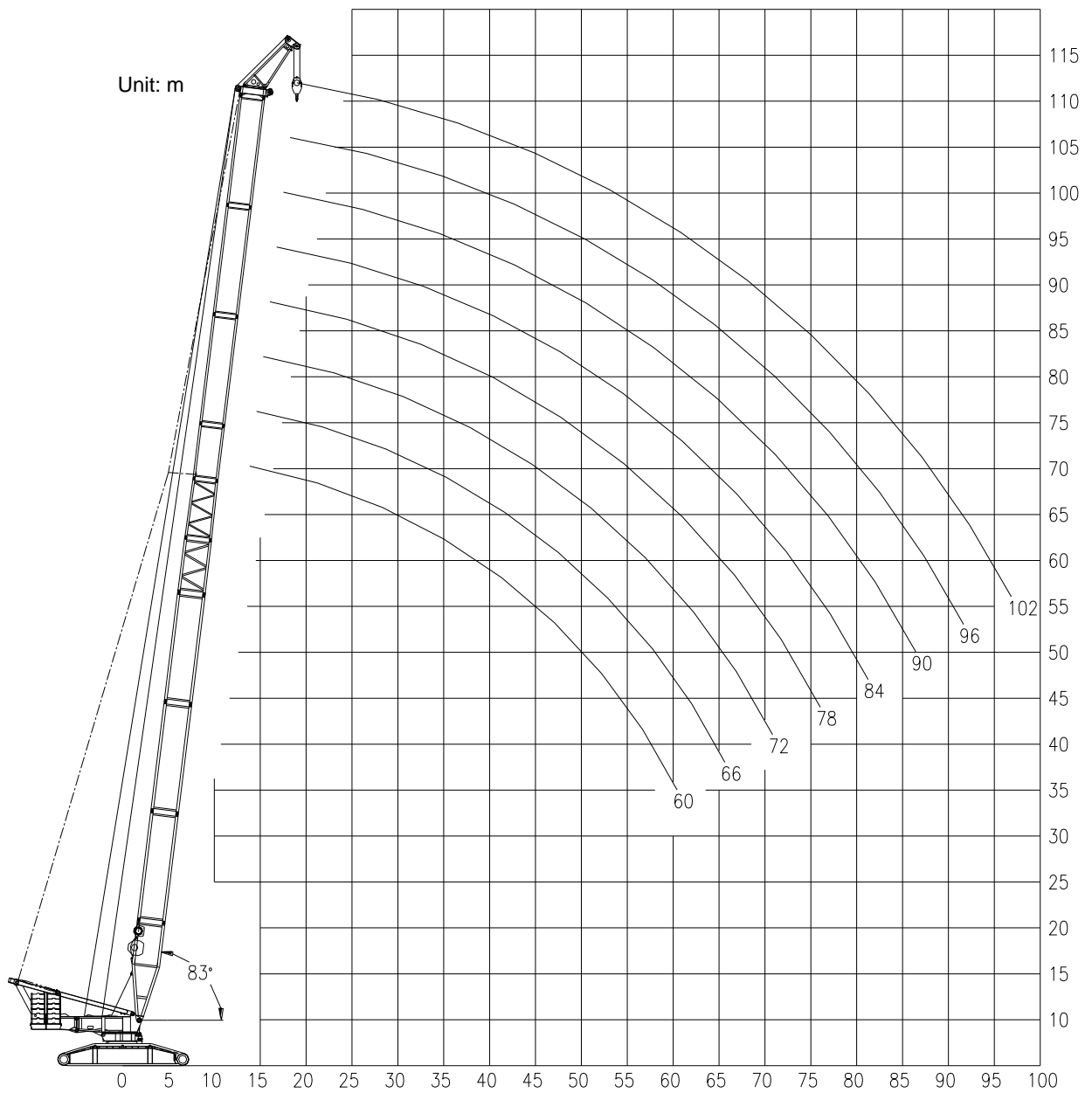


Lifting height on SFvDB boom

Lifting capacity on SFvDB boom (Fv-jib angle=12°)

Fv-jib: 18m Suspended ballast: 500t Suspended ballast radius: 24m Rear counterweight: 250t Central counterweight: 70t Unit: t										
S-boom length (m)	48	54	60	66	72	78	84	90	96	S-boom length (m)
Radius (m)										Radius (m)
14	650									14
16	650	650	650	580	526					16
18	650	650	649	575	525	490	440	402		18
20	650	650	635	569	523	489	438	401	348	20
22	650	645	622	560	519	488	435	400	347	22
24	634	631	609	546	514	483	433	398	346	24
26	583	581	579	528	506	478	429	395	345	26
28	539	536	534	508	495	470	425	391	343	28
30	500	498	496	485	477	460	420	387	341	30
32	466	464	461	459	456	443	413	383	339	32
34	436	434	431	429	429	422	401	377	336	34
36	409	407	404	402	401	396	387	370	332	36
38	385	383	380	378	376	371	366	358	325	38
40	363	361	359	356	354	349	344	338	318	40
42	344	341	339	336	333	328	323	318	308	42
44	324	323	321	318	314	310	305	300	293	44
46	305	304	303	301	298	293	288	283	278	46
48	284	287	285	284	282	277	272	268	263	48
50	263	271	270	268	267	263	258	254	249	50
52	244	257	255	254	253	250	245	240	236	52
54	225	244	242	241	239	237	233	228	224	54
56	208	229	230	229	227	226	222	217	212	56
58	190	213	219	218	216	214	211	206	202	58
60	173	197	208	207	205	204	201	197	192	60
62	156	182	199	197	196	194	192	187	183	62
64		168	185	188	187	185	183	179	174	64
66		152	172	180	178	177	175	171	166	66
68		140	159	172	170	169	167	163	159	68
70			145	161	163	161	159	156	152	70
72			132	149	156	154	152	149	145	72
74				137	149	148	146	142	138	74
76				126	138	141	140	136	132	76
78				116	128	135	134	131	126	78
80					118	128	128	125	121	80
82					108	119	123	120	116	82
84						109	117	115	111	84
86						100	109	109	106	86
88						91	100	104	101	88
90							93	98	96	90
92							84	91	91	92
94							75	84	86	94
96								77	82	96
98								70	76	98
100									69	100
102									62	102
104									55	104

2.8 Lifting performance on SLHS boom



Lifting height on SLHS boom

Lifting capacity on SLHS boom

HS-jib: 7m Rear counterweight: 250t Central counterweight: 70t Unit: t				
SL-boom length (m)	90	96	102	SL-boom length (m)
Radius (m)				Radius (m)
18	180	180		18
20	180	180	180	20
22	180	178	176	22
24	173	172	170	24
26	162	160	158	26
28	156	153	150	28
30	142	139	136	30
32	129	127	124	32
34	119	116	113	34
36	109	106	103	36
38	100	97	95	38
40	92	90	87	40
42	85	83	80	42
44	78	77	74	44
46	72	71	69	46
48	67	65	63	48
50	62	60	58	50
52	57	55	53	52
54	53	51	49	54
56	49	47	45	56
58	45	43	41	58
60	42	40	38	60
62	39	37	35	62
64	36	34	32	64
66	33	31	29	66
68	30	29	27	68
70	28	27	25	70
72	26	25	23	72
74	24	23	21	74
76	21	20	18	76
78	18	17	16	78
80	15	15	14	80
82	13	13	12	82
84	12	11	11	84
86		10	9	86
88		9	8	88
90		8	7	90

3. Technical instructions

3.1 Working mechanism

Hoisting winches

The crane is fitted with three hoisting winches: hoisting winch 1, hoisting winch 2 and hoisting winch 3. All of them are composed of imported axial piston variable displacement motor, reducer, normally closed brake as well as wire rope. And they are controlled independently.

The hoisting rope is a kind of rotation resistant wire rope imported from Germany.

For hoisting winches 1 and 2, maximum single rope speed on outermost rope layer can reach 133m/min.

Winch synchronization is fitted on the crane to synchronize the hoisting winch 1 and hoisting winch 2.

For hoisting winch 3, maximum single rope speed on outermost rope layer can reach 133m/min.

Derricking winches

Main boom derricking winch, luffing jib derricking winch and superlift derricking winch are all composed of imported axial piston variable displacement motor, reducer and normally closed brake as well as wire rope.

The derricking rope is a kind of special wire rope imported from Germany.

Maximum single rope speed on outermost rope layer of main boom derricking winch reaches 55×2 m/min.

Maximum single rope speed on outermost rope layer of luffing jib derricking winch reaches 120 m/min.

Maximum single rope speed on outermost rope layer of superlift derricking winch reaches 127 m/min.

Slewing mechanism

Slewing mechanism of closed oil circuit, driven by three slewing gears, is composed of constant displacement hydraulic motor, gear reducer, brake and pinion gear as well as slewing ring.

Slewing mechanism has controllable free swing function which can reduce the impacts on the crane and ensure that the slewing motions are initiated and stopped more stably.

Imported 3-row roller type, external-gear slewing ring is of strong load-bearing capacity and high precision, which can ensure stable and accurate slewing motion.

Infinitely variable speed from 0 to 1.0 r/min

Travel gear

There are four hydraulic motors and four traveling reducers fitted in the travel gear. The hydraulic motor and traveling reducer are all imported from Germany. The operator can use hand levers or travel gear pedals to control the traveling movements, such as traveling straight ahead / backwards, turning with a crawler, differential steering, turning on spot, traveling with load. This kind of design enables the crane to have high maneuverability.

Traveling speed: 0 – 1.0 km/h

Max. gradeability: 20%

Through tension cylinder which is controlled by an individual pump, the tension degree of crawler can be adjusted quickly and conveniently.

A-frame erecting mechanism

A-frame erecting mechanism consists of A-frame, erection cylinder, auxiliary hydraulic system and so on. It is mainly used for the assembly, dismantling or conversion of the machine on the site. After the A-frame is erected over 90°, it can be used to connect anchoring rods, assemble boom sections as well as fit crawler carrier assy.

Crawler carrier self-assembly & dismantling mechanism

Crawler carrier self-assembly & dismantling mechanism consists of folding brackets, support cylinders, support cylinder control valves, crawler carrier connecting pin spindles and so on.

The support cylinders are the main load bearing components to raise the basic machine during self-assembly & dismantling of crawler carrier.

The crawler carrier can be assembled and dismantled by the crane itself without the help of auxiliary crane. The crawler carrier, which is lifted by A-frame and A-frame erecting mechanism, can be connected to undercarriage central section via pin spindles, which are driven by pin pulling device. Therefore, not only the working efficiency is improved and the labor intensity is reduced, but also safe operation is guaranteed.

3.2 Crane system

Hydraulic system

Hydraulic system is composed of main pump, hydraulic motor, auxiliary control valve, hydraulic oil tank, oil cooler and so on.

The crane has hoisting hydraulic system, derricking hydraulic system, slewing hydraulic system, traveling hydraulic system, servo-assisted hydraulic system, tilting-back support hydraulic system, suspended ballast lifting hydraulic system, cooling system, auxiliary hydraulic system and so on.

Main hydraulic elements are imported from Germany.

Application of closed pump-control hydraulic system has the advantages of high efficiency, energy-saving, great reliability, smooth operation and quick reaction speed as well as long service life.

Electro-hydraulic proportional control elements facilitate precise and intelligent control. In addition, the hydraulic system is installed with different alarm functions to check if the pressure of working mechanism is normal and the filter is clogged, so that the safety and reliability of hydraulic system is improved greatly.

Electrical system

24 Volt DC, negative ground, two batteries

The electrical system of the crane includes power, engine start, engine shutdown, indicator light, warning device, illumination device, fan, wiper, horn, hoisting limiter, hydraulic oil cooling fan, digital display system, PLC controller, load moment limiter, engine preheating device, safety equipment etc. which not only ensure safe operation of the crane but also provide a good working environment.

CAN bus control technology applied in the crane can connect the engine, PLC controller, load moment limiter and digital display efficiently, possessing fault detecting and self-diagnosis functions. The crane is also fitted with GPS/GPRS and long-distance fault diagnosis system.

Crane engine

Imported Cummins electronic fuel injection engine with CAN bus interface

Rated output power: 641kw, 2100r/min

Maximum output torque: 3776Nm, 1400r/min

Exhaust emissions: U.S. EPA Tier 2 and EU Stage II

Fuel tank has a great capacity of 1600 L, which can ensure long time working of engine.

Digital display system

The 10.4-inch LCD, having several language versions, can show various data collected by PLC controller, such as engine speed, coolant temperature, engine oil pressure, pressure of hydraulic pump, pressure of oil circuit, working status of winch, crane information during operation and so on. In this way, it can monitor the working state of the crane at any time. When abnormal conditions occur, the system will send out yellow or red warning signal.

Central lubricating system

There are three sets of central lubricating systems (one fitted on superstructure, two fitted on undercarriage), which not only make the maintenance work convenient, but also reduce the wear and tear of components.

3.3 Safety devices

Many safety devices, mechanical, electronic or hydraulic, are fitted on the crane to ensure safe operation of crane.

Load moment limiter

Load moment limiter is composed of digital LCD, central unit, signal converter, sensor and so on.

When actual load moment reaches 90% of the maximum permissible load moment, the warning light will light up, and the buzzer will sound. When actual load moment approaches the maximum permissible load moment, the dangerous movements will be cut off automatically to avoid accidents caused by overloading of crane, and thus ensure normal and safe crane operation.

The following data can be shown on the digital LCD:

- Moment ratio
- Main boom angle
- Main boom length
- Working radius
- Actual load
- Rated lifting load
- Tension force sensor
- Maximum permissible lifting height
- Wind speed at the top of boom

Overflow valves in hydraulic system

The overflow valve fitted in hydraulic system can restrain the pressure in the oil circuit from rising irregularly, thus protecting such hydraulic elements as hydraulic oil pump and hydraulic motor against damage and preventing the hydraulic system from being overloaded.

Closed-circuit monitoring system

Monitor the winding condition of wire rope on crane winches, working status of suspended ballast and its surrounding conditions.

Tricolor warning light

Remind conductor and crane operator of load status during operation in time.

Tilting-back support devices

Both main boom and derrick boom are fitted with two tilting-back support cylinders. With the application of intelligent control, the pressure of tilting-back support cylinder can be adjusted automatically according to different boom angle, thus preventing the boom from tilting backwards and allowing the movement “derricking boom up” to be carried out more stably.

Both luffing jib and luffing jib strut 2 are outfitted with a mechanical tilting-back support mechanism.

Luffing jib strut 1 adopts advanced hydro-pneumatic tilting-back support cylinder. The tilting-back supporting force can be changed automatically in line with luffing jib angle.

Lowering limiter

Hoisting limiter

Angle indicator

Derricking (luffing) limiter

Crane inclination sensor

Safety catch

Anemometer

3.4 Operator's cab

Spacious, comfortable and all-steel construction cab is equipped with sun visor, adjustable seat, wiper, electric control levers, display of load moment limiter, digital display, air conditioning, fan, interior illumination, radio (CD player, mp3 player and DVD player are optional), cigarette lighter and fire extinguisher etc.

3.5 Load hook

Rotatable load hook with safety catch:

1250t load hook (can be dismembered into 750t, 650t, 400t and 350t load hooks): 2×17 pulleys

400t load hook: 2×5 pulleys

80t load hook: 3 pulleys

4. Transport dimensions and weights of main components

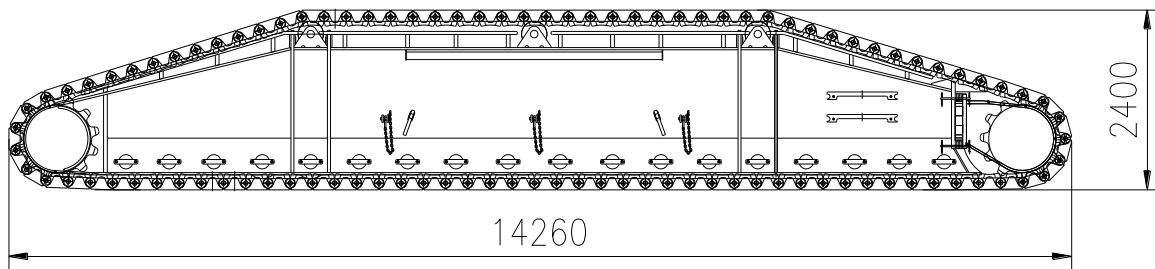
- **Crawler carrier assy.**

Total weight: 80t, separable for transportation

Weight of track pad: 40t

Weight of crawler carrier: 40t

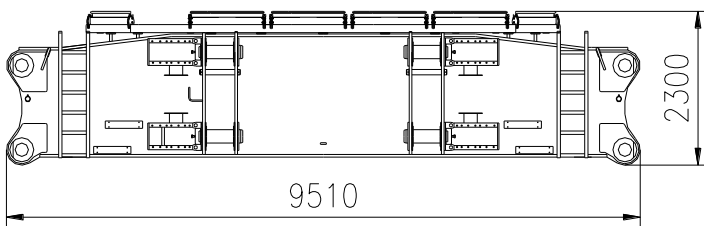
Total width: 2000mm



- **Undercarriage cross section**

Weight: 20t

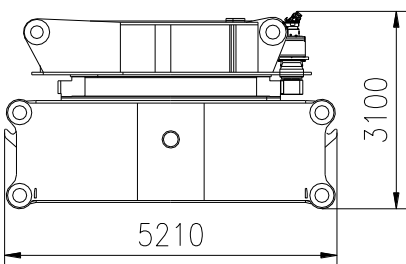
Width: 1845mm



- **Undercarriage slewing centre**

Weight: 47.2t

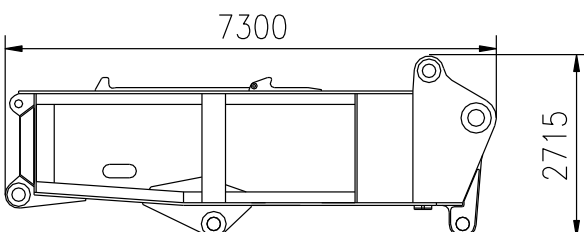
Width: 3540mm



- **Front section of slewing table**

Weight: 24.8t

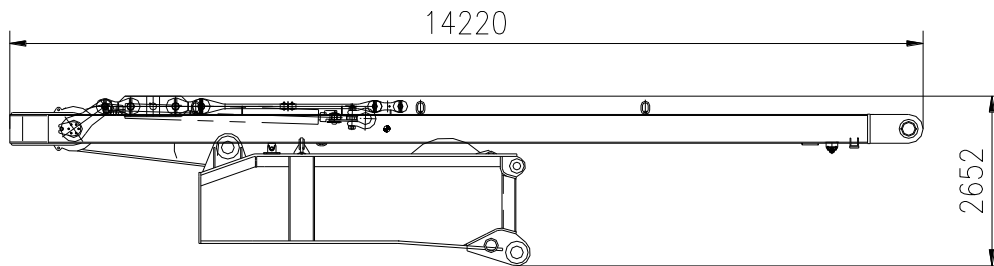
Width: 3450mm



- **Rear section of slewing table with A-frame and main boom derricking winch**

Weight: 31.2t

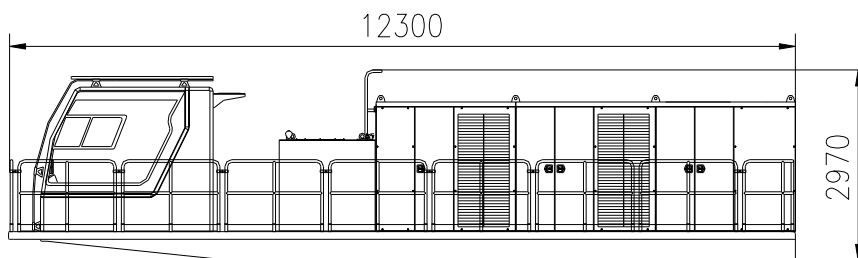
Width: 3300mm



- **Power unit**

Weight: 18t

Width: 3420mm



- **Hoisting winches 1 and 2, luffing jib derricking winch and superlift derricking winch**

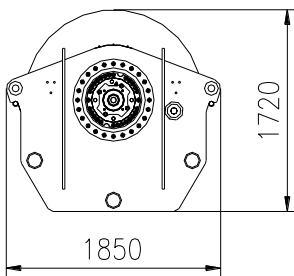
Weight of hoisting winch 1: 13.1t

Weight of hoisting winch 2: 13.1t

Weight of luffing jib derricking winch: 10.3t

Weight of superlift derricking winch: 12.6t

Width of hoisting winch, luffing jib derricking winch and superlift derricking winch: 2300mm



- **Central counterweight support, rear counterweight carrier and counterweight plate**

Weight of central counterweight support: 5.2t

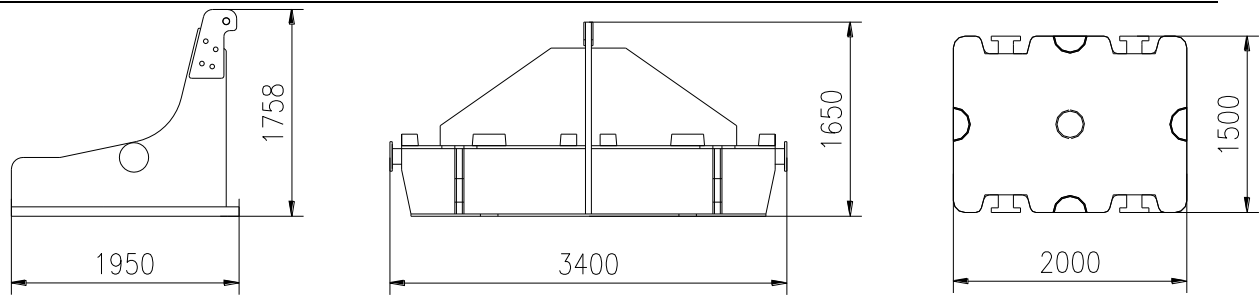
Weight of rear counterweight carrier: 5.2t

Weight of counterweight plate: 10t

Width of central counterweight support: 2906mm

Width of rear counterweight carrier: 2200mm

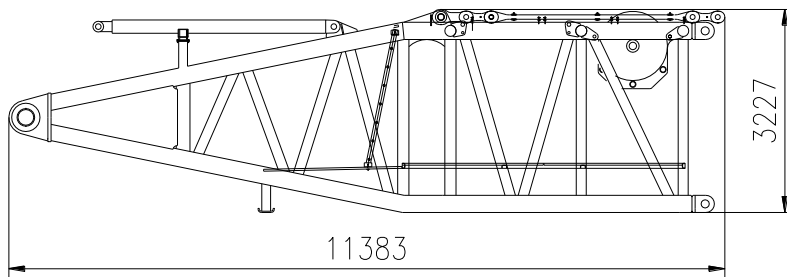
Height of counterweight plate: 630mm



- **Main boom pivot section with hoisting winch 3**

Weight: 26.5t

Width: 3490mm

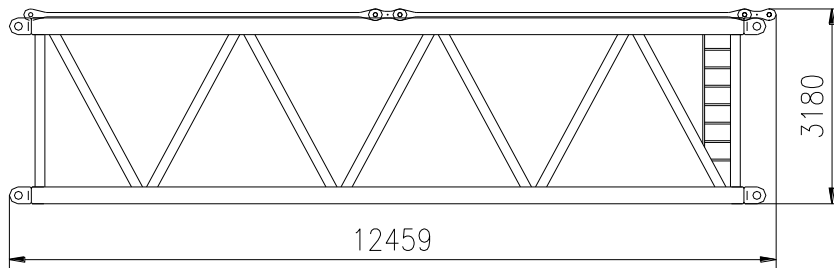


- **12m main boom intermediate section**

Weight of 12m main boom intermediate section (heavy duty): 13.6t

Weight of 12m main boom intermediate section (standard): 12.5t

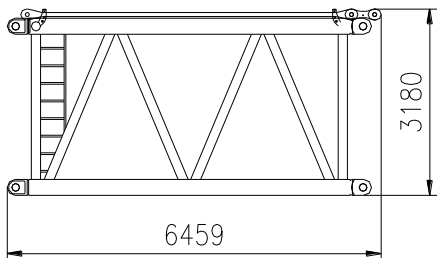
Width: 3490mm



- **6m main boom intermediate section**

Weight: 7.6t

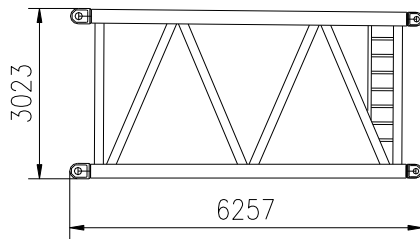
Width: 3490mm



- **Reducing section of main boom**

Weight: 4.5t

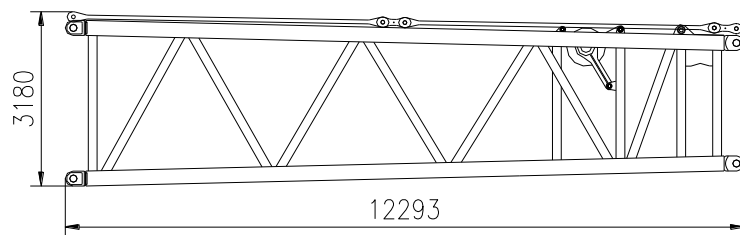
Width: 3490mm



- **Main boom head adapter**

Weight: 14.6t

Width: 3490mm



- **Head section, pulley block and tip boom of main boom**

Weight of head section: 9.7t

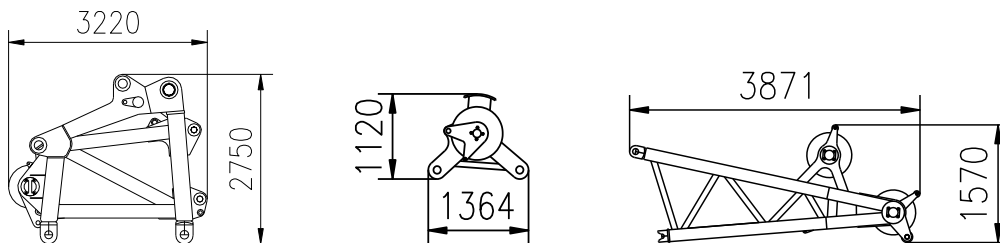
Weight of pulley block: 1.8t

Weight of tip boom: 1.3t

Width of head section: 3000mm

Width of pulley block: 1875mm

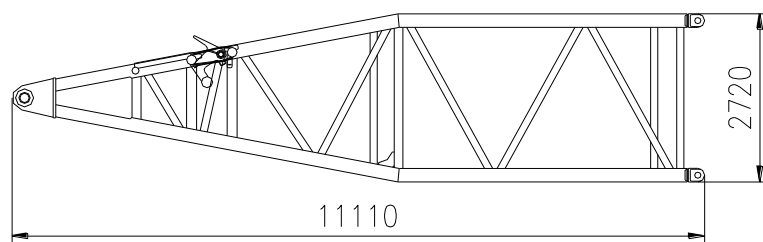
Width of tip boom: 1380 mm



- **Luffing jib pivot section**

Weight: 8.1t

Width: 3350mm



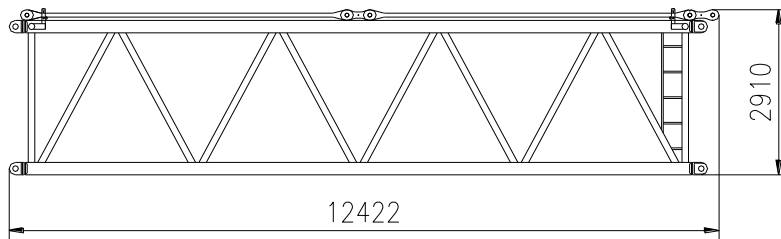
- **12m luffing jib intermediate section**

Weight of 12m luffing jib intermediate section (heavy duty): 8.1t

Weight of 12m luffing jib intermediate section (standard): 7.6t

Width of 12m luffing jib intermediate section (heavy duty): 3220mm

Width of 12m luffing jib intermediate section (standard): 2920mm

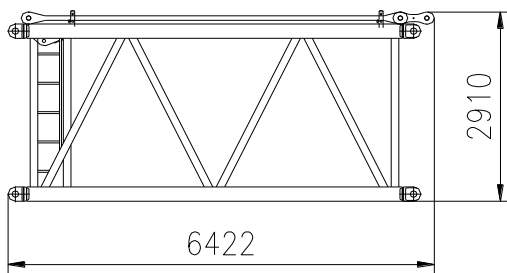


- **6m luffing jib intermediate section**

Weight of 6m luffing jib intermediate section (with intermediate tensioner): 4.5t

Weight of 6m luffing jib intermediate section (standard): 4.2t

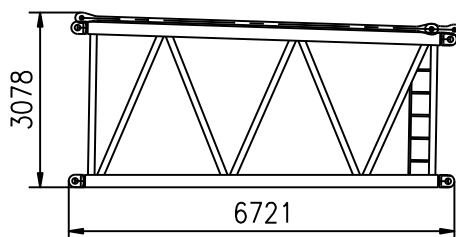
Width: 3000mm



- **Reducing section of luffing jib**

Weight: 4.5t

Width: 3220mm



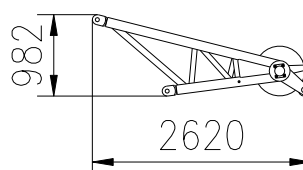
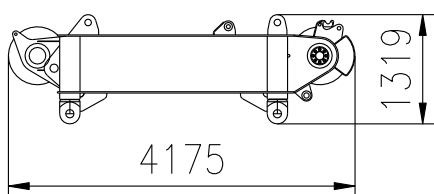
- **Head section and tip boom of luffing jib**

Weight of head section: 6.4t

Weight of tip boom: 0.5t

Width of head section: 3000mm

Width of tip boom: 740mm



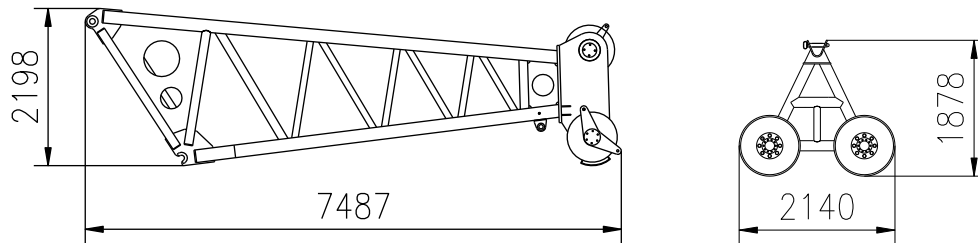
- **Wind plant jib and running wheel**

Weight of wind plant jib: 4.4t

Weight of running wheel: 1.5t

Width of wind plant jib: 2900mm

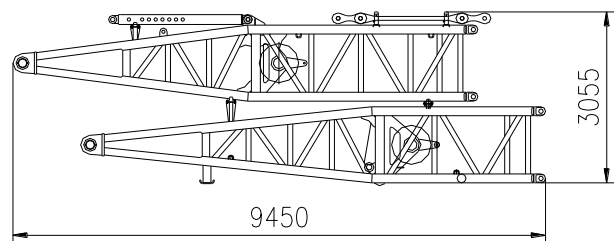
Width of running wheel: 3300mm



- **Pivot section of luffing jib struts 1 and 2**

Weight: 12t

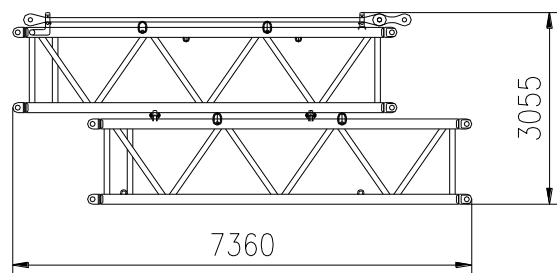
Width: 3180mm



- **Intermediate section of luffing jib struts 1 and 2**

Weight: 4.5t

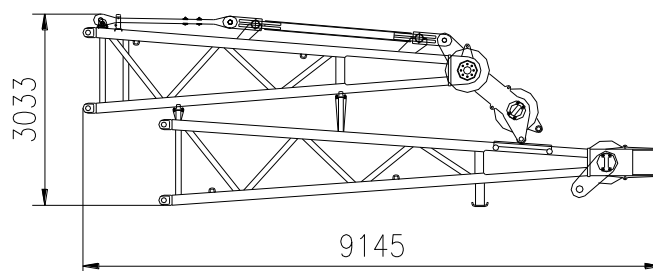
Width: 2860mm



- **Head of luffing jib struts 1 and 2**

Weight: 11.3t

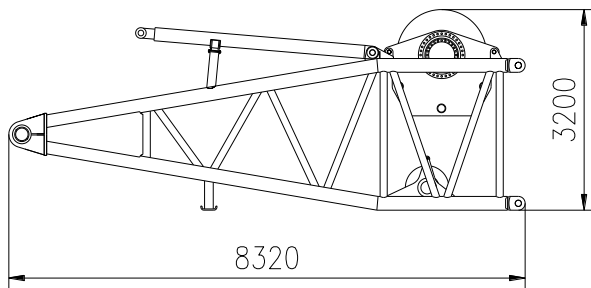
Width: 2860mm



- **Derrick boom pivot section**

Weight: 23.3t

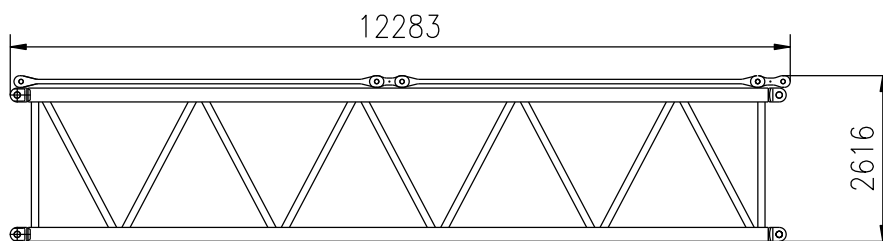
Width: 3230mm



- **12m derrick boom intermediate section**

Weight: 10.2t

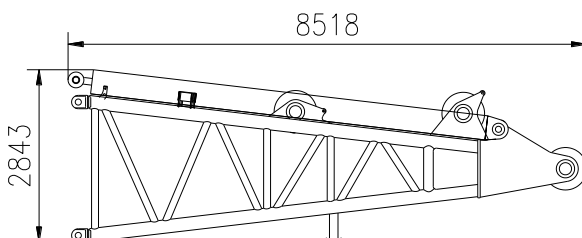
Width: 2920mm



- **Derrick boom head**

Weight: 16t

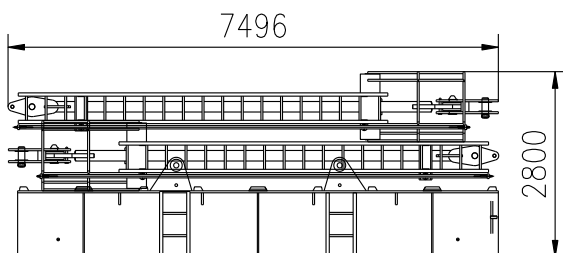
Width: 3100mm



- **Suspended ballast base plate**

Weight: 20t

Width: 3300mm



Note:

The dimensions and weights of crane main components are for reference only. They are subject to the actual components we supply.