



770 USt



541 ft

335 ft +
315 ft

Blending worlds, merging types

LR 1700-1.0**Crawler crane**

Grue sur chenilles

LIEBHERR**Mobile and crawler cranes**

Technical Data

Caractéristiques technique

Crawler crane

Grue sur chenilles	3
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Technical description

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M-Wagon®

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Crane data

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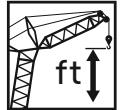
Description of symbols

Explication des symboles	65
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Remarks

Remarques	66
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LR 1700-1.0



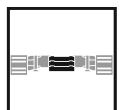
643 ft



525 ft



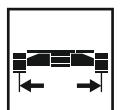
507,100 lb



198,400 lb



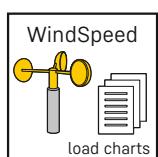
826,700 lb



28 ft 7 in



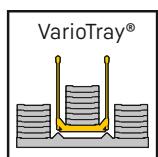
400 kW (544 h.p.)



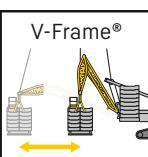
WindSpeed
load charts



M-Wagon®



VarioTray®



V-Frame®



Equipment

Max. capacity	1323 kip at 33 ft radius HSDBV – System with HS 138 ft.
Max. load moment	71,175,000 lb·ft – 967,8 kip at 72 ft radius. HSDBW – System with HS 138 ft and D 118 ft.

770 USt with additional equipment

Crawler travel gear

Crawler chassis	Liebherr crawler chassis consisting of one center section and two crawler carriers with crawler plates 5 ft (optional 6 ft 7 in) and quadruple drive.
Central ballast	2 brackets 11 kip each. Total central ballast 198,4 kip. 8 ballast plates 22 kip each (option).



Crane superstructure

Superstructure frame	Liebherr-slewing platform frame, consisting of slewing platform with winch IV and removable SA-frame, connected to the center section by a roller slewing bearing.
Crane engine with sound insulation	6-cylinder diesel engine, make Liebherr, water cooled, rated power 400 kW (544 h.p.), max torque 1856 lb·ft. Fuel tank approx. 317 gallons, exhaust emissions acc. to (EU) 2016/1628, EPA/CARB or ECE-R.96.
Winch I	Standard hoist winch, hydraulically driven with variable axial piston motor with integrated planetary gear.
Winch IV	Boom hoist.
Reeving winch	Auxiliary winch to reeve the hoist ropes.
Slewing gear	2 slewing gears with integrated planetary gear hydraulically driven by axial piston variable motor.
Crane cabin	Air conditioned crane cabin tiltable to the rear with safety glazing, heat insulating glass, roof window with bullet proof glass, standardized control units ergonomically positioned. Additional thermostatically controlled hot water heating.
Crane control	Setting of configuration data by convenient interactive functions. All crane movements are initiated by means of three 4-way joystick hand levers and two 2-way hand/foot levers. All working movements are independently controllable.
Safety devices	Hoist limit switch. Safety valves against hose and pipe rupture. Drum switch limit at 3 rest layers. Wind speed gauge. Electronic inclination indicator. Aircraft warning control light.
Camera observation	2 color monitors, cameras for all winches, slewing platform, right-hand side and rear.
Counterweight	2 brackets 33 kip each. Total counterweight at superstructure 507 kip. 20 ballast plates 22 kip each.



Boom system

Main boom HS	System 3230/2825 with head section for max. 1323 kip load capacity. Boom length HS 98 ft – 316 ft. Boom length HSDB 138 ft – 354 ft with derrick system.
Main boom (H) SL	System 3230/2825/2420 with head section for max. 1323 kip load capacity. Boom length SL 177 ft – 364 ft, HSLDB 256 ft – 532 ft, HSL3DB 256 ft – 482 ft, HSL6DB 335 ft – 541 ft, HSL9DB 374 ft – 541 ft.
Lattice type luffing fly jib W	System 2420 with head section for max. 1323 kip load capacity. Luffing jib lengths W 39 ft 4 in – 315 ft. Winch V is needed for all luffing jib operations.
Lattice fly jib F	System 2116 with head section for max. 375 kip load capacity. Boom length F 39 ft – 128 ft.
Derrick system D	System 2419 including guy rods. Winch III is needed for all derrick operations. Length 118 ft / 138 ft.
Counterweight frame B	For max. derrick counterweight of 826,7 kip. D 118 ft: for infinitely variable radius from 34 ft 5 in – 59 ft. D 138 ft: for infinitely variable radius from 39 ft 4 in – 52 ft 6 in.
V-frame®	For max. derrick counterweight of 826,7 kip, for infinitely variable radius from 42 ft 8 in – 69 ft.
Counterweight trailer BW	For max. derrick counterweight of 826,7 kip, for infinitely variable radius from 42 ft 8 in – 69 ft.
Derrick-Counterweight	Plates for a total of 826,7 kip.
Winch II	Second hoist winch.
Winch III	Reeving main boom / Derrick operation.
Winch V	Luffing for W-jib configuration.
Winch VI	Auxiliary hoist gear.
Whip line	79,4 kip for attaching to the SW head.

Additional equipment

Mechanical outriggers	For erection of long boom combinations without derrick-counterweight.
Hydraulic assembly jacks	Lifting of the basic machine for assembly/disassembly.
Hydraulic assembly cylinder	For assembly/disassembly of the crawler carrier by the crane itself.
Pin pulling device	Including mobile hydraulic aggregate. For assembly/disassembly of the pins at S and L intermediate sections.

Other items of equipment available on request.

Equipement

Capacité max.	1323 kip pour une portée de 33 ft. Système HSDBW avec HS 138 ft.
Couple de charge max.	71,175,000 lb-ft - 967,8 kip pour une portée de 72 ft. Système HSDBW avec HS 138 ft et D 118 ft.
770 USt avec équipement additionnel	

Train de chenilles

Mécanisme de translation	Le train de chenilles Liebherr est composé d'une partie centrale et de deux longerons avec patins de chenilles 5 ft (en option 6 ft 7 in) et un entraînement à 4 positions.
Contrepoids central	2 consoles de 11 kip. Contrepoids central total 198,4 kip. 8 plaques de lest de 22 kip (option).



Partie tournante

Cadre de la partie tournante	Le cadre de la partie tournante Liebherr est composé de la partie tournante avec treuil IV et du chevalet démontable SA, il est relié à la partie centrale du train de roulement par une couronne d'orientation à rouleaux.
Moteur de la grue avec isolation phonique	Diesel Liebherr 6 cylindres, refroidissement par eau, puissance 400 kW (544 ch), couple de rotation max. 1856 lb-ft. Réservoir de carburant: env. 317 gallons. Emissions des gaz d'échappement conformes au directive (EU) 2016/1628, EPA/CARB ou ECE-R.9.
Treuil I	Treuil de levage standard, commande hydraulique avec moteurs à cylindrée variable et pistons axiaux, réducteur planétaire intégré.
Treuil IV	Mécanisme de relevage.
Treuil de mouflage	Treuil auxiliaire pour le mouflage des câbles de levage.
Mécanisme d'orientation	2 mécanismes d'orientation avec réducteur planétaire intégré, entraînés par un moteur à cylindrée variable et pistons axiaux.
Cabine du grutier	La cabine du grutier est climatisée, inclinable vers l'arrière, possède un vitrage de sécurité, un vitrage isolant thermiquement, une fenêtre de toit en verre blindé, des unités de commande normalisées disposées de façon ergonomique. Chauffage d'appoint et chauffage de l'eau réglé thermostatiquement.
Commande de la grue	Entrée des données de configuration par des fonctions interactives simples. Tous les mouvements de la grues sont commandés par deux manipulateurs à 4 voies et deux pédale/levier à 2 voies. Tous les mouvements de travail peuvent être commandés indépendamment.
Dispositifs de sécurité	Interrupteur de fin de course. Clapets de sécurité contre les ruptures de tuyaux et de flexibles. Coupure de fin de course du tambour avec 3 enroulements de sécurité. Anémomètre de sécurité. Inclinomètre électronique. Balise aérienne.
Surveillance vidéo	2 écrans couleur, caméras pour tous les treuils, partie tournante côté droit et arrière.
Contrepoids	2 consoles de 33 kip chacune. Contrepoids total 507 kip. 20 plaques de lest à 22 kip (option).



Système de flèche

Flèche principale HS	Système 3230/2825 avec élément de tête pour une capacité max. de 1323 kip. Longueur de la flèche HS 98 ft - 315 ft. Longueur de la flèche HSDB 138 ft - 354 ft avec système derrick.
Flèche principale (H)SL	Système 3230/2825/2420 avec élément de tête pour une capacité max. de 1323 kip. Longueur de la flèche SL 177 ft - 364 ft, HSLDB 256 ft - 532 ft, HSL3DB 256 ft - 482 ft, HSL6DB 335 ft - 541 ft, HSL9DB 374 ft - 541 ft.
Fléchette treillis à volée variable W	Système 2420 avec élément de tête pour une capacité max. de 1323 kip. Longueurs de flèche treillis 39 ft 4 in - 315 ft. Le treuil V est nécessaire pour fonctionnement fléchette treillis.
Flechette treillis fixe F	Système 2116 avec élément de tête pour une capacité max. de 375 kip. Longueur de la flèche F 39 ft - 128 ft.
Système derrick D	Le système 2419 comprend des tirants. Le treuil III est nécessaire au mode derrick. Longueur 118 ft / 138 ft.
Palette de lest B	Pour un contrepoids derrick max. de 826,7 kip. D 118 ft: pour des rayons variables progressivement de 34 ft 5 in - 59 ft. D 138 ft: pour des rayons variables progressivement de 39 ft 4 in - 52 ft 6 in.
V-frame®	Pour un contrepoids derrick max. de 826,7 kip et rayons variables progressivement de 42 ft 8 in - 69 ft.
Remorque à contrepoids BW	Pour un contrepoids derrick max. de 826,7 kip et rayons variables progressivement de 42 ft 8 in - 69 ft.
Contrepoids derrick	Plaques de poids total de 826,7 kip.
Treuil II	2. treuil de levage.
Treuil III	Réglage flèche principale/mode derrick.
Treuil V	Réglage fléchette treillis à volée variable.
Treuil VI	Treuil de levage auxiliaire.
Poulies en extrémité de mât	79,4 kip pour le montage sur la tête SW.

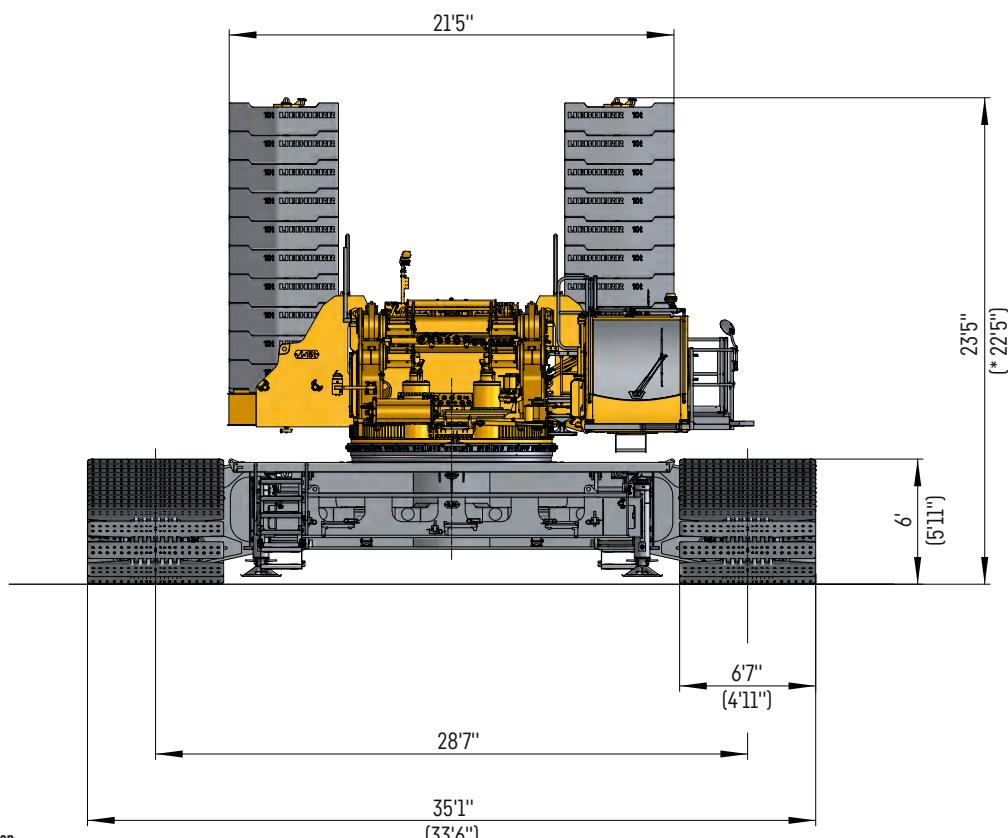
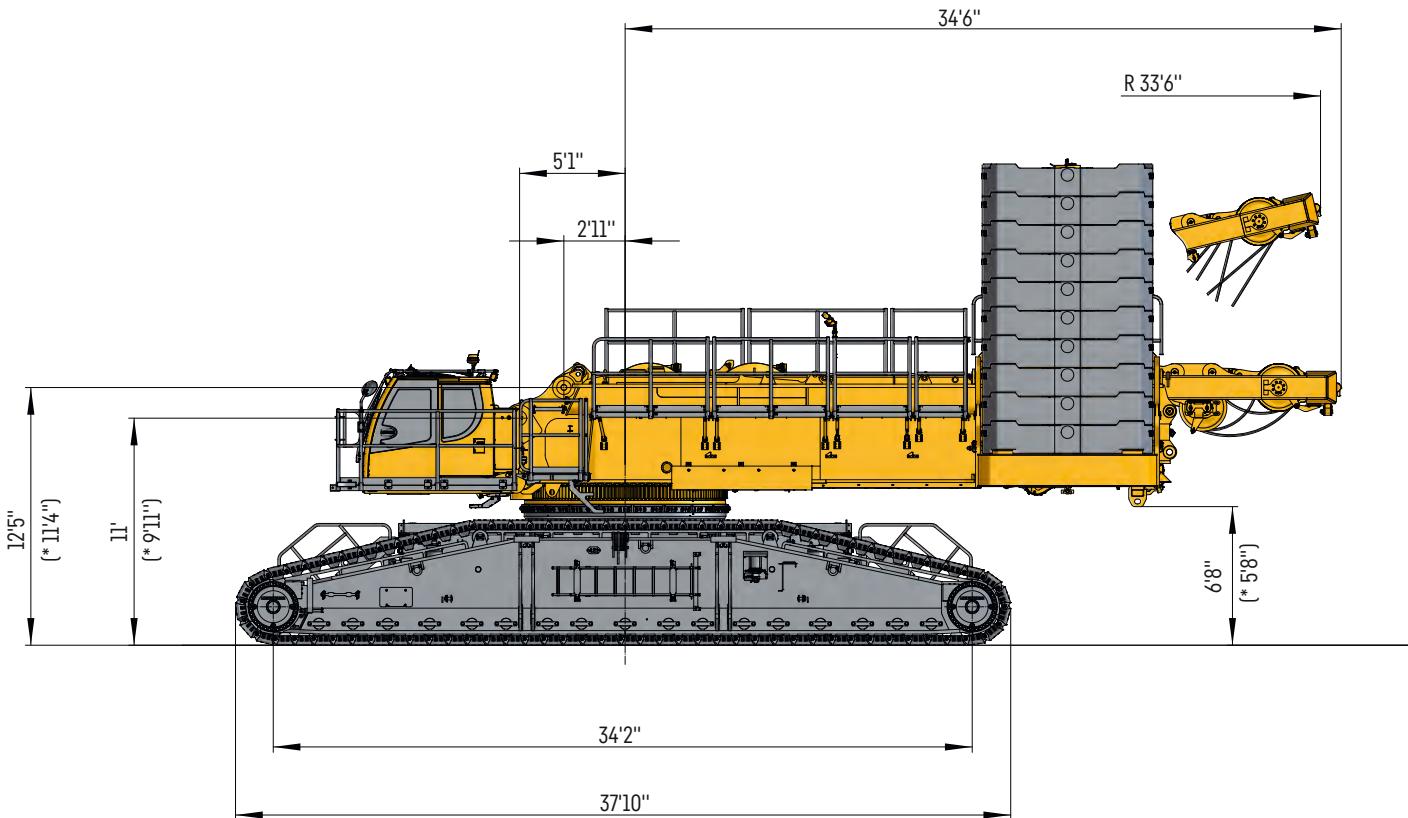
Equipement additionnel

Stab. additionnel mécanique	Il sert au relevage de longues combinaisons de flèche sans contrepoids derrick.
Stabilisateurs hydrauliques de montage	Levage de l'engin de base pour le montage/démontage.
Vérin hydraulique de montage	Pour le montage autonome/démontage du train de chenilles.
Dispositif d'extraction des axes	Il est constitué du composant hydraulique mobile. Il sert à l'insertion et l'extraction d'axes des éléments intermédiaires S et L.

D'autres équipements additionnels sont disponibles sur demande.

Dimensions

Encombrement

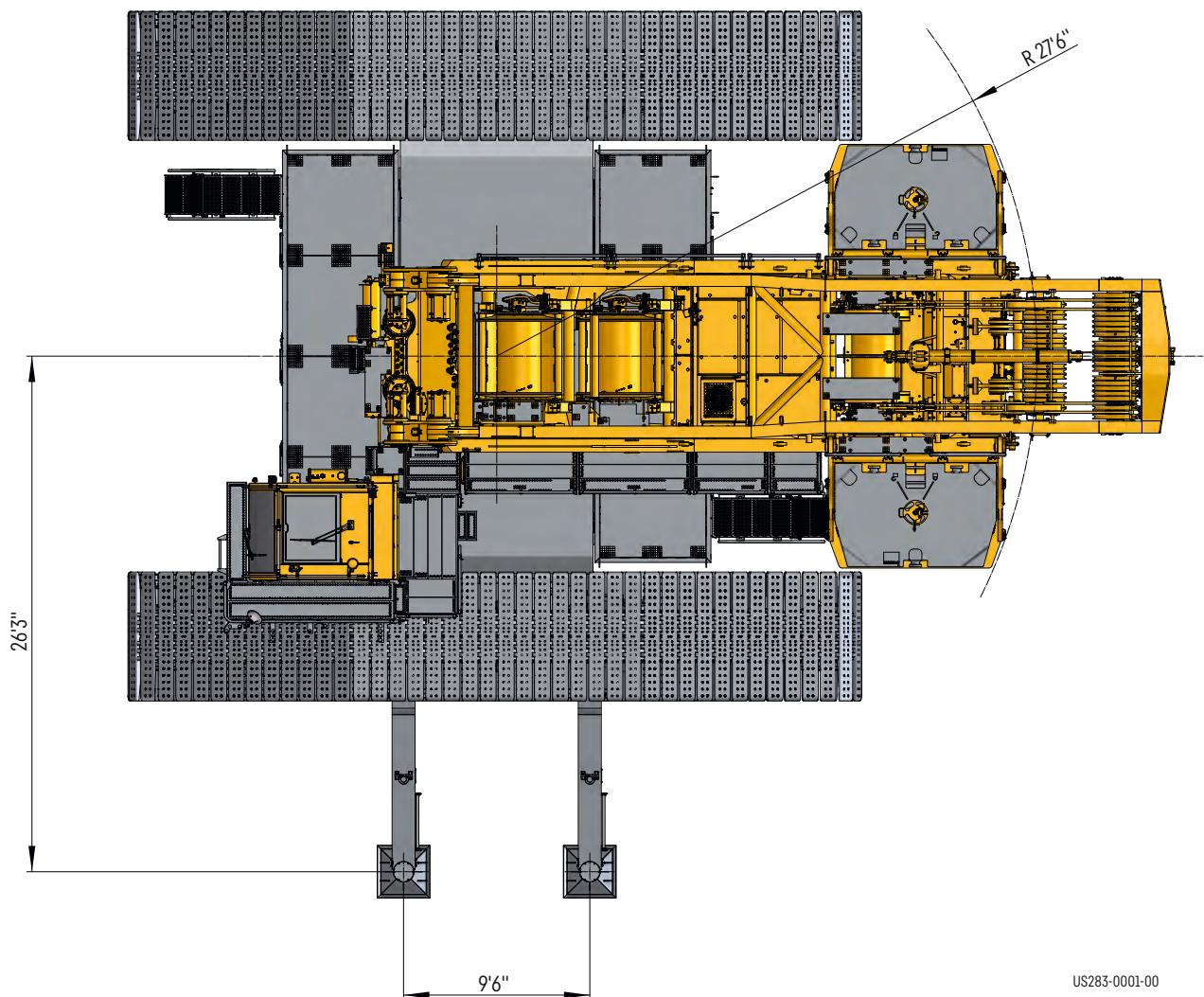


*without · sans Quick Connection

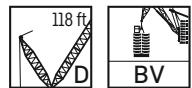
US283-0001-00

Dimensions

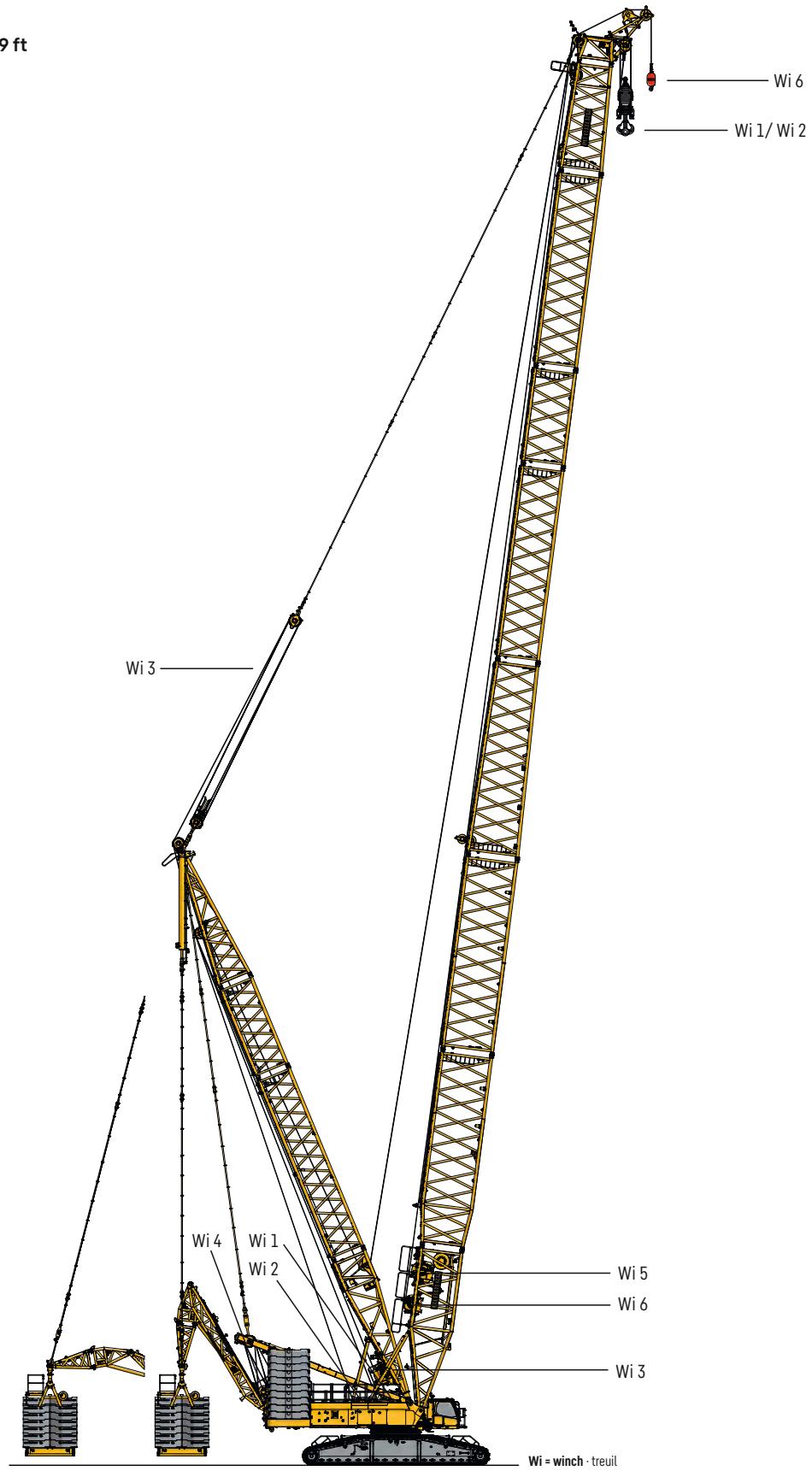
Encombrement



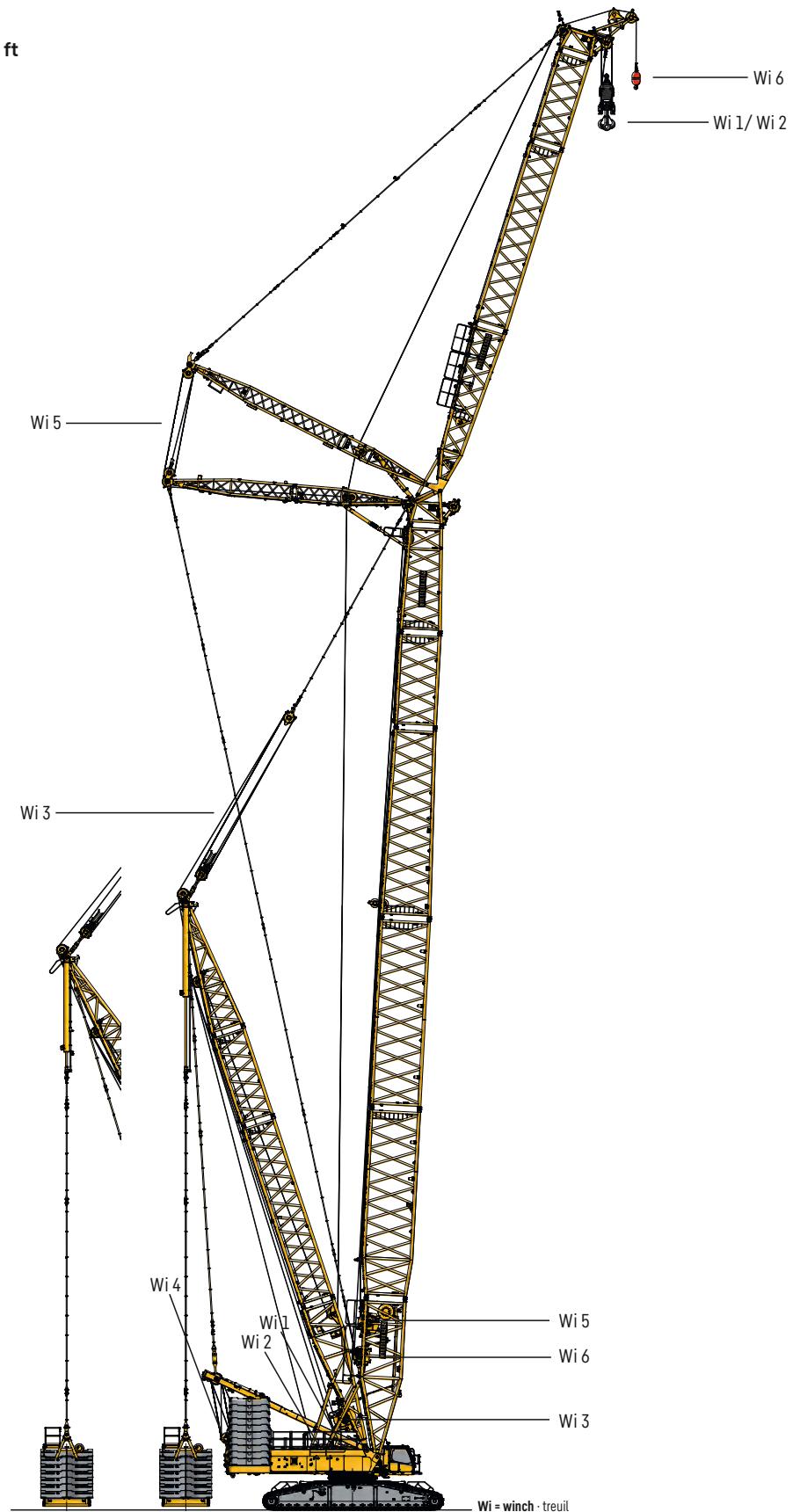
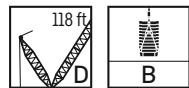
HSDBV



42 ft 8 in - 69 ft



S283-0030-00



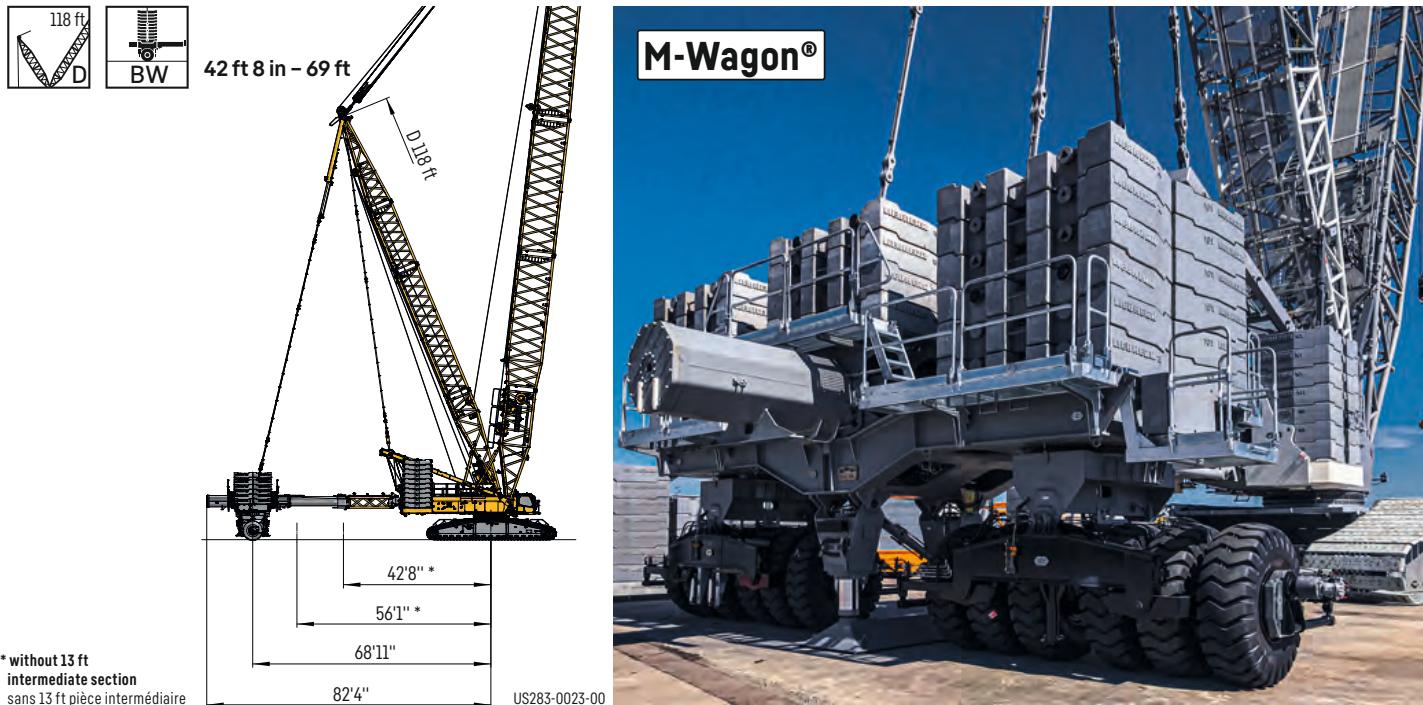
Dimensions

Encombrement



M-Wagon® for 3 crane models

M-Wagon® pour 3 types de grues



M-Wagon®	13 ft intermediate section · pièce intermédiaire	adapter · adaptateur	crane type · type de grue
 One fits all Équipement unique	+ S283-0016-00	+ S283-0017-00	 LR 1700-1.0 S283-0020-00
 S283-0015-00	+ S283-0016-00	+ S283-0018-00	 LR 1800-1.0 S283-0021-00
	+ S283-0016-00	 S283-0019-00	 LR 11000 S283-0022-00

Crane data

Dates de la grue

Winches · Treuils

	V _{ft/min}			
1	0 - 394 ft/min	40,465 lb	1.1"	3773 ft
2	0 - 394 ft/min	40,465 lb	1.1"	3773 ft
3	0 - 377 ft/min	-	-	-
4	0 - 2 x 197 ft/min	-	-	-
5	0 - 345 ft/min	-	-	-
6	0 - 387 ft/min	28,100 lb	0.9"	1968 ft

Working speeds · Vitesses

	Slewing speeds · Vitesses d'orientation	0 - 0,76 rpm
	Travel speeds · Vitesses de translation	0 - 0.75 mph

Hook blocks · Moufles à crochet

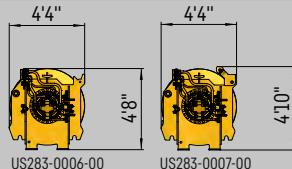
					
1323 / 661 kip	1389 kip	1.1"	2 x 9	2 x 19	18,740 / 24,250 - 35,300 lb
794 / 397 kip	882 kip	1.1"	2 x 5	2 x 11	11,250 - 15,650 / 13,700 - 24,700 lb
529 / 265 kip	551 kip	1.1"	2 x 3	2 x 7	5,300 - 16,300 / 7,930 - 18,950 lb
397 kip	441 kip	1.1"	5	11	4,400 - 15,430 lb
265 kip	276 kip	1.1"	3	7	3,300 - 12,125 lb
110 kip	139 kip	1.1"	1	3	2,200 - 6,615 lb
39.7 kip	44 kip	1.1"	-	1	2,425 lb

Transportation plan

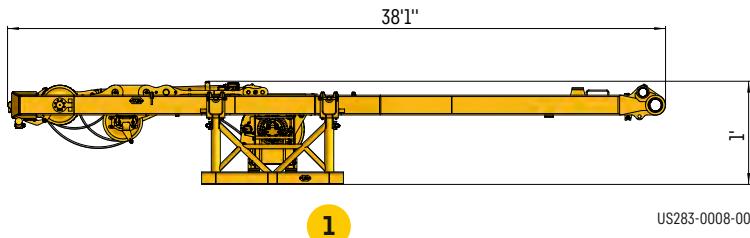
Plan de transport

Part · Partie

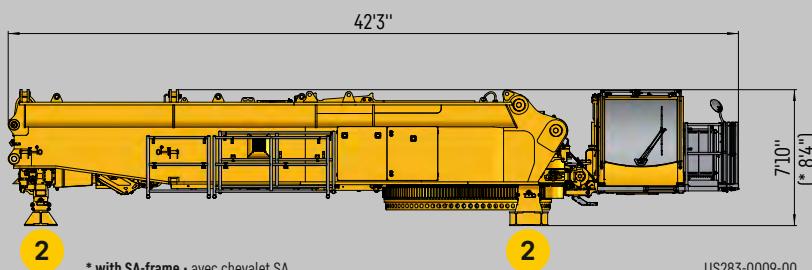
Winches 1 and 2
Treuils 1 et 2



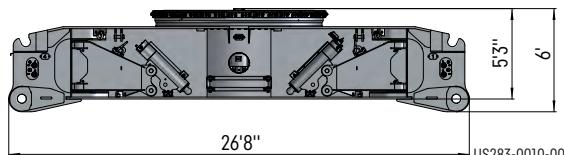
SA-Frame incl. winch IV · Chevalet SA incl. treuil 4



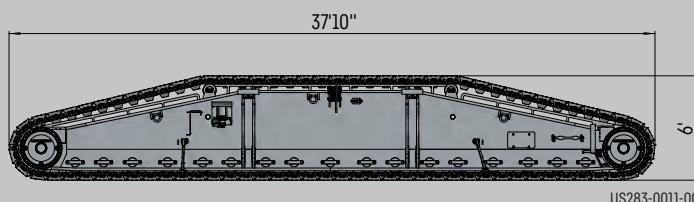
Superstructure without SA-frame and winches · Partie tournante sans chevalet SA et treuils



Middle section
Partie centrale



Crawler track (4-fold, 6'7" pads)
Longeron (4 positions, plaques de 6'7")



Total · total



18,5 kip +
18,5 kip

38,6 kip
+ 3,5 kip
Transport bracket
Support de transport

1

90,4 kip
(incl. QC)
+2,6 kip
Transport bracket
Support de transport

2

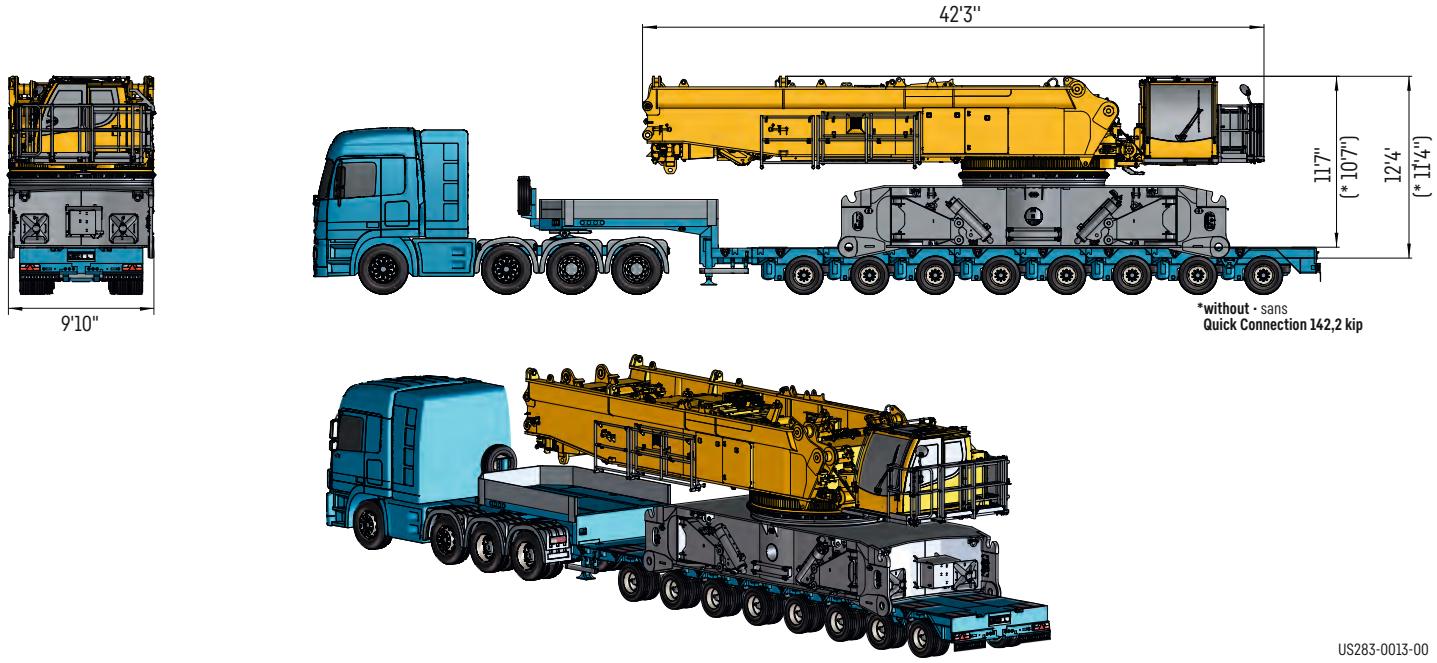
66,1 kip

2 x 94,8 kip

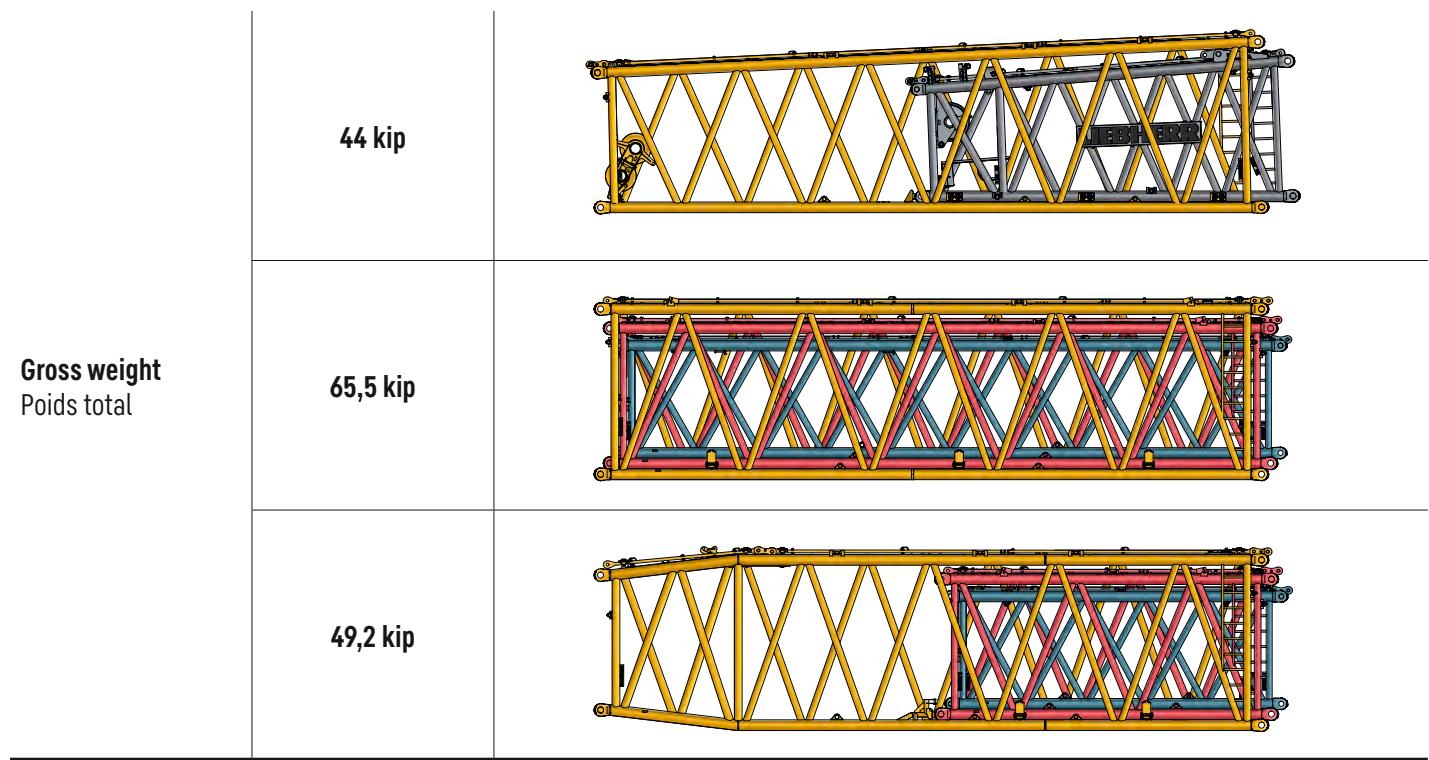
421,7 kip 129 kip 156,5 kip 195,1 kip 166 kip
+Transport bracket
+Support de transport

Transportation plan

Plan de transport



3 x Transport >11 ft 6 in<
3 x transport >11 ft 6 in<



All other components are ≤ 10 ft · Tous les autres composants sont ≤ 10 ft

Overview windsystems

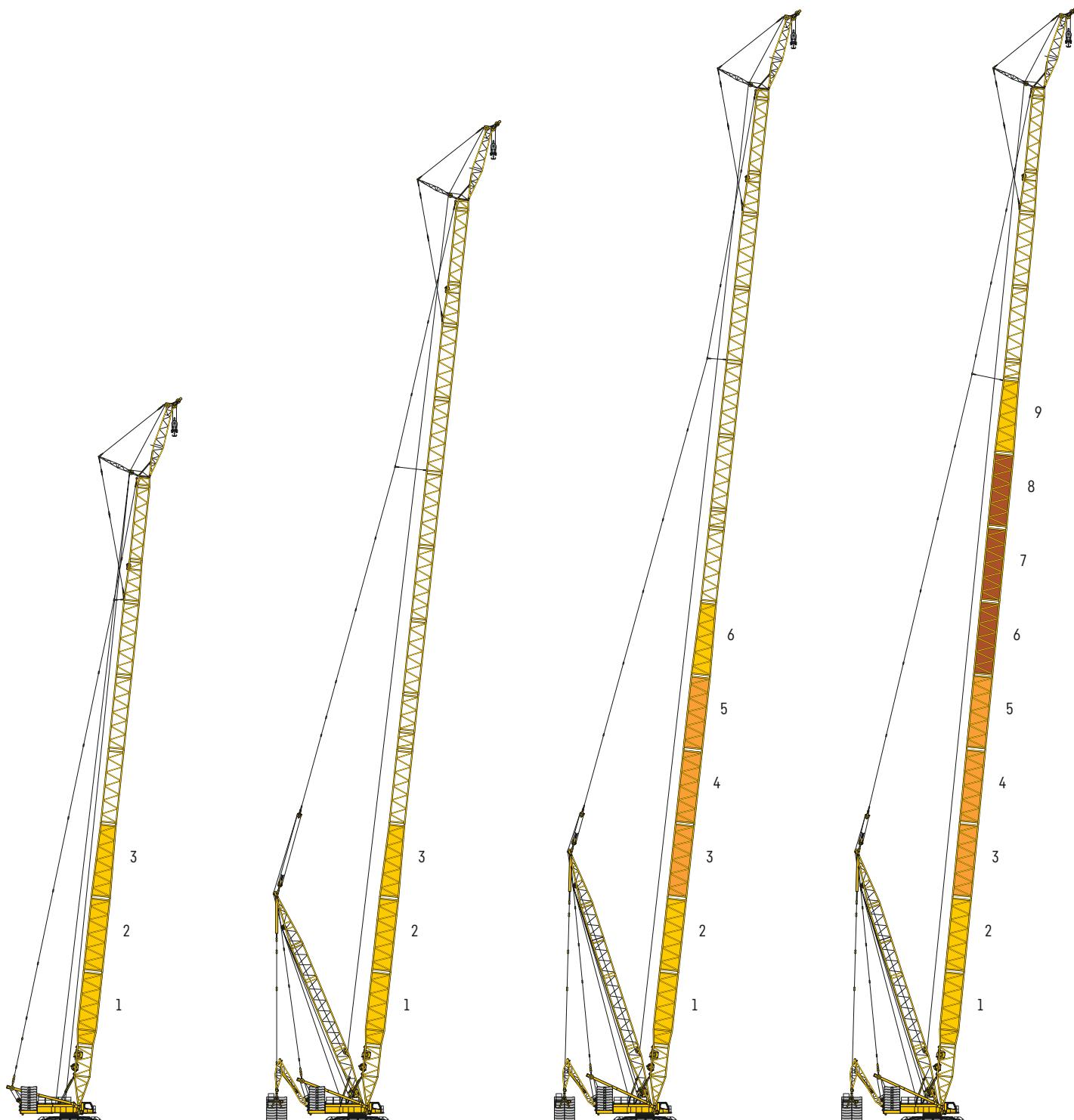
Vue d'ensemble des systèmes de treuils

Easy to identify · Identification facile

3

6

9



HSL 3 ADFBV

HSL 3 ADFBV

HSL 6 ADFBV

HSL 9 ADFBV

S3486

Boom/jib combinations

Configurations de flèche

HS Main boom, heavy · Flèche principale, lourde

HSL Main boom, heavy/light · Flèche principale, lourde/légère

D Derrick · Flèche derrick

W Luffin fly jib, heavy · Flèchette, lourde

B Suspended ballast · Lest suspendu

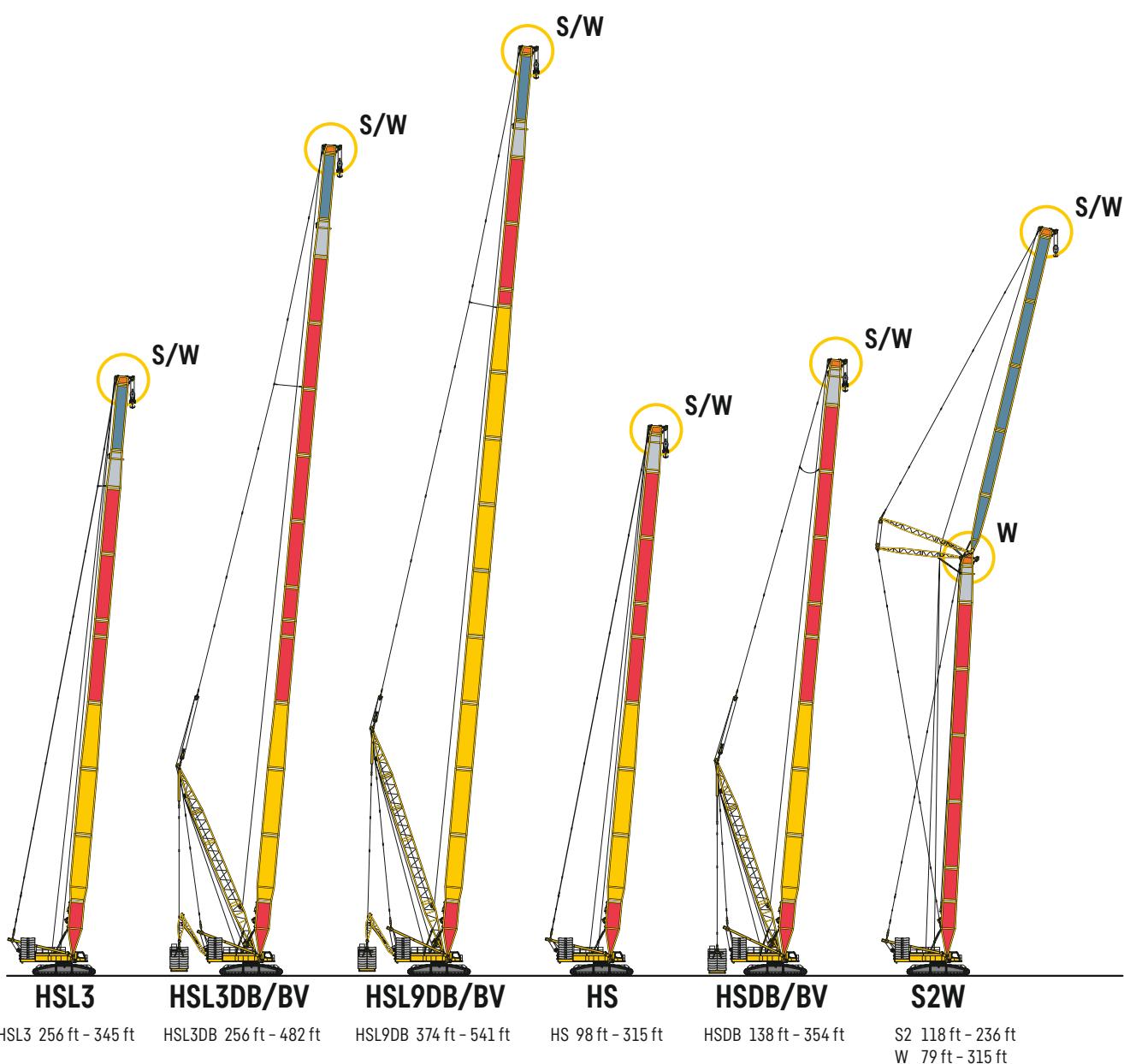
BV Suspended ballast V-frame® · V-frame® de contrepoids suspendu

BW Counterweight trailer M-Wagon · Remorque à contrepoids M-Wagon

S2 Main boom S2 · Flèche principale S2

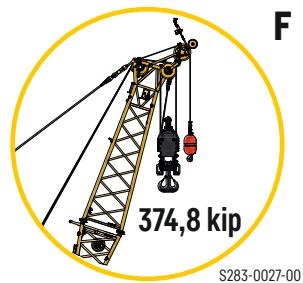
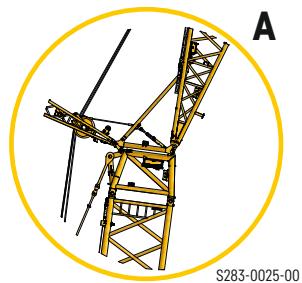
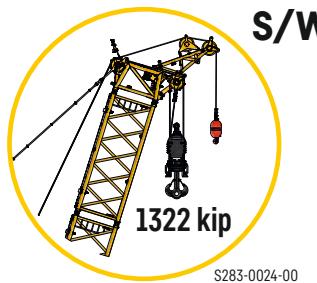
A Adapter · Pièce d'adaptateur

F Fixed lattice jib F · Flèchette a treillis fixe F



Boom/jib combinations

Configurations de flèche



HSDWB/BV

HSDWB 177 ft - 354 ft
W 39 ft - 315 ft

HSL3AF

HSL3AF 256 ft - 335 ft
F 39 ft - 128 ft

HSL3ADFB/BV

HSL3ADFB 256 ft - 482 ft
F 39 ft - 128 ft

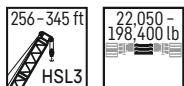
HSL6ADFB/BV

HSL6ADFB 335 ft - 541 ft
F 39 ft - 128 ft

HSL9ADFB/BV

HSL9ADFB 374 ft - 541 ft
F 39 ft - 128 ft

S3488.01



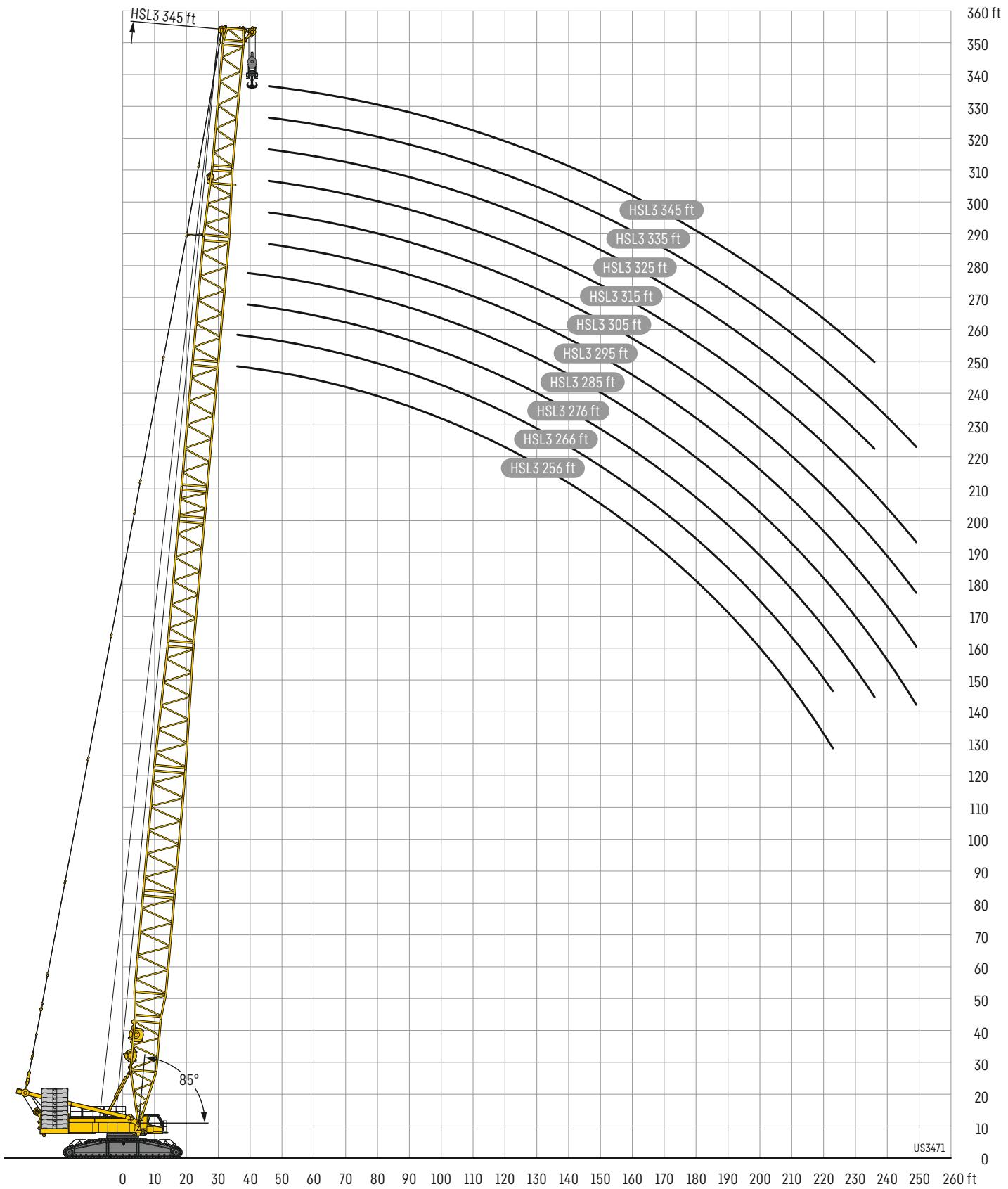
22,050 198,400 lb	418,900 - 507,100 lb
286,600 - 416,700 lb	
154,300 - 284,400 lb	
0 lb	

HSL3 256 – 345 ft										
ft	256 ft	266 ft	276 ft	285 ft	295 ft	305 ft	315 ft	325 ft	335 ft	345 ft
36	614	424								36
38	585	570	552							38
40	556	544	529	514	496					40
45	488	478	469	459	449	435	427	418	403	382
50	436	429	420	410	401	389	385	379	369	356
55	391	384	377	371	364	353	348	342	334	326
60	354	348	342	336	329	320	317	312	306	299
65	322	317	311	306	302	294	289	284	279	274
70	294	289	284	280	276	270	267	261	257	251
75	270	266	261	257	254	248	245	240	237	233
80	249	245	240	236	234	228	226	220	218	215
85	230	226	222	218	216	210	208	203	201	198
90	213	210	206	202	200	195	193	188	186	183
95	198	195	191	188	185	180	178	174	172	170
100	185	181	177	174	172	167	166	161	160	157
105	172	169	165	162	160	156	154	149	148	146
110	161	157	154	152	149	145	143	139	138	136
115	150	147	144	141	140	135	134	129	128	126
120	141	138	135	132	130	126	125	120	119	117
125	132	129	126	124	122	118	116	112	111	109
130	123	121	118	116	114	110	109	105	104	102
135	115	114	111	108	107	103	101	97.5	96.7	95
140	108	106	104	102	99.9	96.2	94.7	90.8	90.3	88.2
145	100	99.1	97.4	95	93.8	89.8	88.5	84.6	84	82.3
150	94	92.4	91	89.1	87.8	84	82.6	78.8	78.3	76.3
155	87.9	86.4	84.8	83.4	82.3	78.4	77.1	73.3	72.9	71.1
160	82.2	80.7	79.2	77.7	77	73.3	71.9	68.2	67.8	66
165	77	75.4	73.8	72.5	72	68.5	67.1	63.4	63	61.3
170	72.1	70.5	68.9	67.4	67.2	63.9	62.6	58.9	58.5	56.7
175	67.5	65.8	64.3	62.8	62.4	59.6	58.2	54.6	54.3	52.5
180	63.2	61.4	59.9	58.4	58.2	55.5	54.2	50.5	50.2	48.5
185	59.2	57.4	55.9	54.2	54	51.5	50.3	46.7	46.4	44.7
190	55.4	53.6	52.1	50.4	50.1	47.5	46.7	43.1	42.8	41
195	51.9	50	48.4	46.8	46.5	43.9	43.1	39.7	39.4	37.6
200	48.5	46.6	45	43.3	43	40.5	39.7	36.3	36.2	34.3
205	45.3	43.4	41.8	40.1	39.8	37.1	36.4	33.3	33	31.2
210	42.3	40.4	38.8	37	36.7	34.1	33.3	30.3	30.1	28.3
215	39.5	37.5	35.9	34.1	33.8	31.2	30.4	27.5	27.3	25.5
220	36.9	34.8	33.2	31.3	31	28.4	27.5	24.8	24.7	22.8
225	34.4	32.3	30.6	28.7	28.4	25.8	24.9	22.2	22.1	20.2
230		29.8	28.2	26.3	25.9	23.3	22.4	19.8	19.7	17.7
235			25.9	23.9	23.5	20.9	19.9	17.3	17.4	15.4
240			23.7	21.7	21.3	18.6	17.7	15	15.2	13.1
245				19.5	19.2	16.5	15.5	12.8	13.1	11
250				17.5	17.2	14.4	13.3			250
255					15.2	12.5	11.4			255

Lifting heights

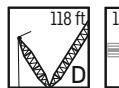
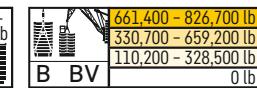
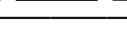
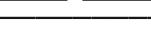
Hauteurs de levage

HSL3



HSL3DB/BV

HSL3 256 - 482

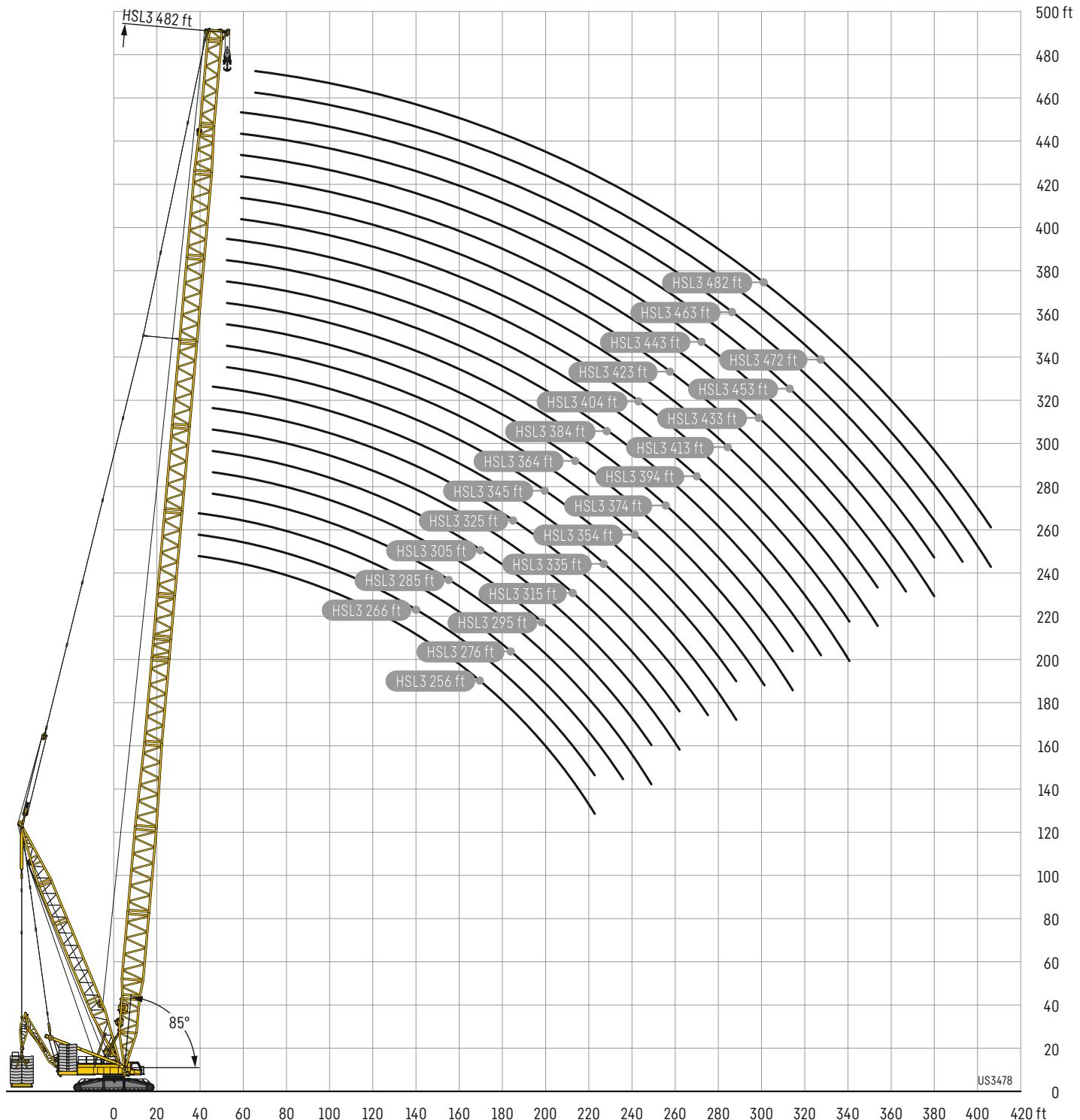
 256-482 ft	 118 ft	 110,200 lb	 330,700 - 418,900 lb	 661,400 - 826,700 lb
		 HSL3	 D	 330,700 - 659,200 lb

		HSL3 256 - 482 ft																							
	ft	256 ft	266 ft	276 ft	285 ft	295 ft	305 ft	315 ft	325 ft	335 ft	345 ft	354 ft	364 ft	374 ft	384 ft	394 ft	404 ft	413 ft	423 ft	433 ft	443 ft	453 ft	463 ft	472 ft	482 ft
38	Ot	566	482																						
	B	818	794																						
40	Ot	537	527	515	436																				
	B	820	796	770	744																				
	BV	824																							
50	Ot	419	412	404	395	391	383	375	369	365	359	352	345	341											
	B	828	803	777	750	725	697	671	645	613	587	559	529	501											
	BV	838	811	785	758	731	704	677	649	617	591	565	533	504											
60	Ot	339	333	327	320	317	310	304	300	296	292	286	280	278	272	269	262	260	257	252	246	242	239	233	
	B	834	809	782	755	729	701	673	645	613	585	554	524	497	468	441	414	384	365	346	329	311	296	283	
	BV	849	823	797	769	741	713	684	656	623	596	564	533	505	475	447	417	383	359	337	325	303	293	283	
70	Ot	280	275	271	264	263	257	252	248	245	242	237	232	230	225	223	217	215	212	208	203	197	193		
	B	837	812	784	756	729	700	674	646	612	579	548	519	492	462	434	411	380	364	346	328	311	295	282	
	BV	858	832	803	776	748	719	691	663	627	593	561	530	501	469	437	407	373	354	334	323	301	291	282	
80	Ot	235	231	227	222	221	215	211	208	205	203	199	193	193	188	186	181	180	178	174	169	166	164	160	
	B	763	756	750	739	722	699	672	642	606	573	542	513	485	453	423	408	375	361	343	325	307	292	278	
	BV	804	776	753	726	704	682	660	641	588	554	520	489	456	426	397	361	351	332	322	298	289	279	259	
90	Ot	200	197	193	188	187	182	179	176	174	171	167	163	158	157	152	151	149	146	141	138	137	133		
	B	678	674	670	664	659	651	637	621	594	563	534	503	474	441	410	403	368	354	338	321	303	288	275	
	BV	732	709	690	667	646	626	606	588	571	555	528	495	467	436	408	392	354	346	329	318	294	285	276	
100	Ot	172	169	165	161	160	156	152	149	148	146	142	138	138	134	133	128	128	126	122	118	116	114	111	
	B	609	605	602	596	594	589	577	563	541	518	489	461	427	397	379	361	349	334	317	299	285	271		
	BV	668	654	636	615	598	581	562	545	530	515	498	471	443	414	389	388	349	342	326	316	291	282	274	
110	Ot	149	146	143	138	138	133	130	128	127	125	121	117	117	113	112	108	108	106	103	98.7	96.7	95.5	92.1	
	B	548	546	544	540	539	534	530	525	521	509	493	468	442	414	384	391	355	344	331	314	296	282	268	
	BV	607	601	590	572	557	541	525	508	495	466	446	422	395	367	384	345	338	324	314	289	281	272	251	
120	Ot	130	127	124	119	119	115	112	109	109	107	103	99.5	99.6	95.8	95	90.7	90.7	89.1	86.2	82.3	80.2	79.2	76.1	
	B	498	495	493	490	490	487	483	480	478	473	466	446	423	397	371	381	350	337	327	310	293	279	266	
	BV	552	547	544	532	520	507	492	478	465	452	437	422	404	374	351	378	341	335	323	313	287	279	271	
130	Ot	113	110	107	103	103	99.3	96.2	94	93.4	91.2	88.2	84.3	84.6	80.8	80.2	76	76	74.7	71.7	68.1	66.2	65	62.2	
	B	454	453	450	447	446	444	441	439	438	435	431	419	403	377	355	366	342	331	319	305	289	276	262	
	BV	504	502	500	494	485	474	461	450	439	427	414	400	387	358	336	333	322	311	286	278	270	248		
140	Ot	98.9	96.1	93.2	89.3	89.3	85.5	82.6	80.4	79.9	77.8	75.1	71.4	71.7	67.9	67.3	63.2	63.4	62	59.3	55.5	53.9	52.9	50	
	B	417	415	413	410	410	407	404	402	402	399	377	390	382	361	341	352	334	321	308	296	282	270	257	
	BV	463	460	459	456	452	444	433	422	413	403	392	379	370	344	321	346	335	330	319	309	285	277	268	
150	Ot	86.6	83.8	81.2	77.2	77.4	73.6	70.7	68.6	68.2	66.1	63.6	59.8	59.0	56.7	56.2	52	52.2	51	48.2	44.7	42.9	42.1	39.3	
	B	385	382	380	377	378	375	373	371	370	368	362	359	344	325	337	321	310	298	286	273	262	250		
	BV	429	426	424	421	420	415	407	398	390	379	370	359	352	329	306	330	321	317	311	303	284	276	265	
160	Ot	75.1	73.2	70.6	66.6	63.1	60.3	58.3	57.9	55.9	53.4	50.3	49.6	46.8	44.3	40.6	41.2	37.7	37.1	33.3	33.7	32.4	29.8		
	B	357	354	353	349	349	346	344	343	343	340	338	334	333	324	308	319	307	297	287	276	264	254	244	
	BV	399	395	394	390	389	386	382	375	368	359	350	339	334	321	315	307	297	289	276	270	260	250	244	
170	Ot	65.2	63.5	61.2	57.3	57.6	53.8	51.2	49.1	48.7	46.8	44.3	40.6	41.2	37.7	37.1	33.3	33.7	32.4	29.8	26.5	24.9	23.9	21.2	
	B	331	329	328	325	321	319	317	315	313	315	314	310	309	303	290	299	292	285	276	265	254	245	236	
	BV	371	368	367	363	363	357	354	347	340	331	322	315	294	276	299	288	284	276	266	262	253	240		
180	Ot	56.3	54.6	52.9	49.1	49.4	45.6	43	40.9	40.6	38.7	36.2	32.6	33.2	29.7	29.2	25.3	25.7	24.6	22.1	18.7	16.3			
	B	309	307	304	302	303	299	297	295	295	293	291	288	287	283	273	279	277	273	264	255	236	228		
	BV	346	343	342	339	339	336	334	332	328	322	314	306	296	277	260	284	279	275	270	263	252	244		
190	Ot	48.7	46.9	45.3	41.8	42	38.3	35.7	33.6	33.4	31.5	28.9	25.4	26	22.4	22.1	18.1	18.6	17.6	15	11.5				
	B	289	286	285	282	280	278	275	273	271	268	267	263	256	260	259	257	252	244	235	227	219			
	BV	324	321	320	317	316	315	313	310	309	305	298	290	279	271	264	270	265	257	251	244	235	227		
200	Ot	4																							

Lifting heights

Hauteurs de levage

HSL3DB/BV



HSL9DB/BV

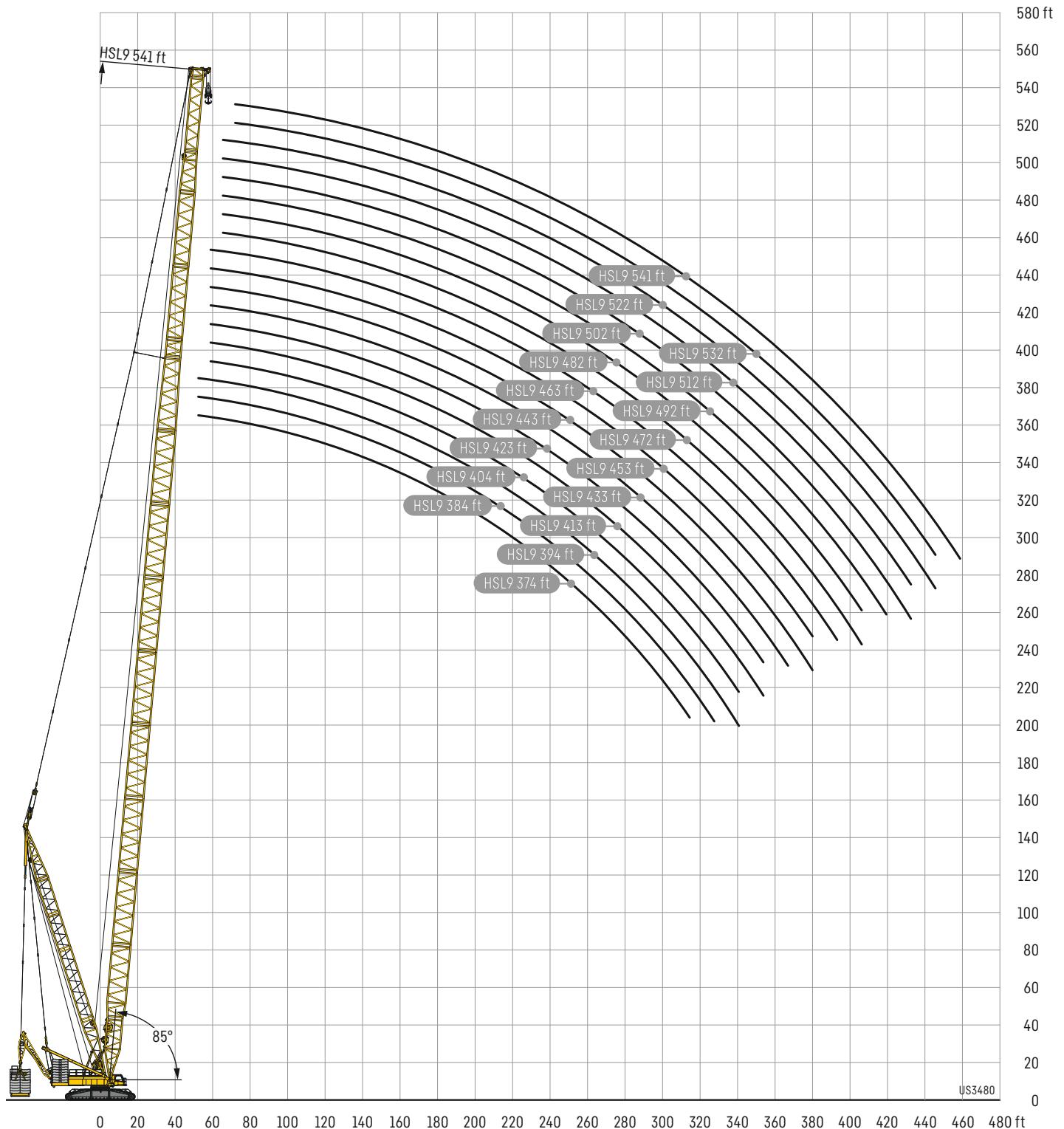
HSL9 374 – 541

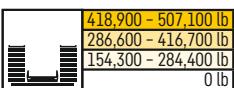
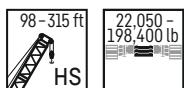


Lifting heights

Hauteurs de levage

HSL9DB/BV

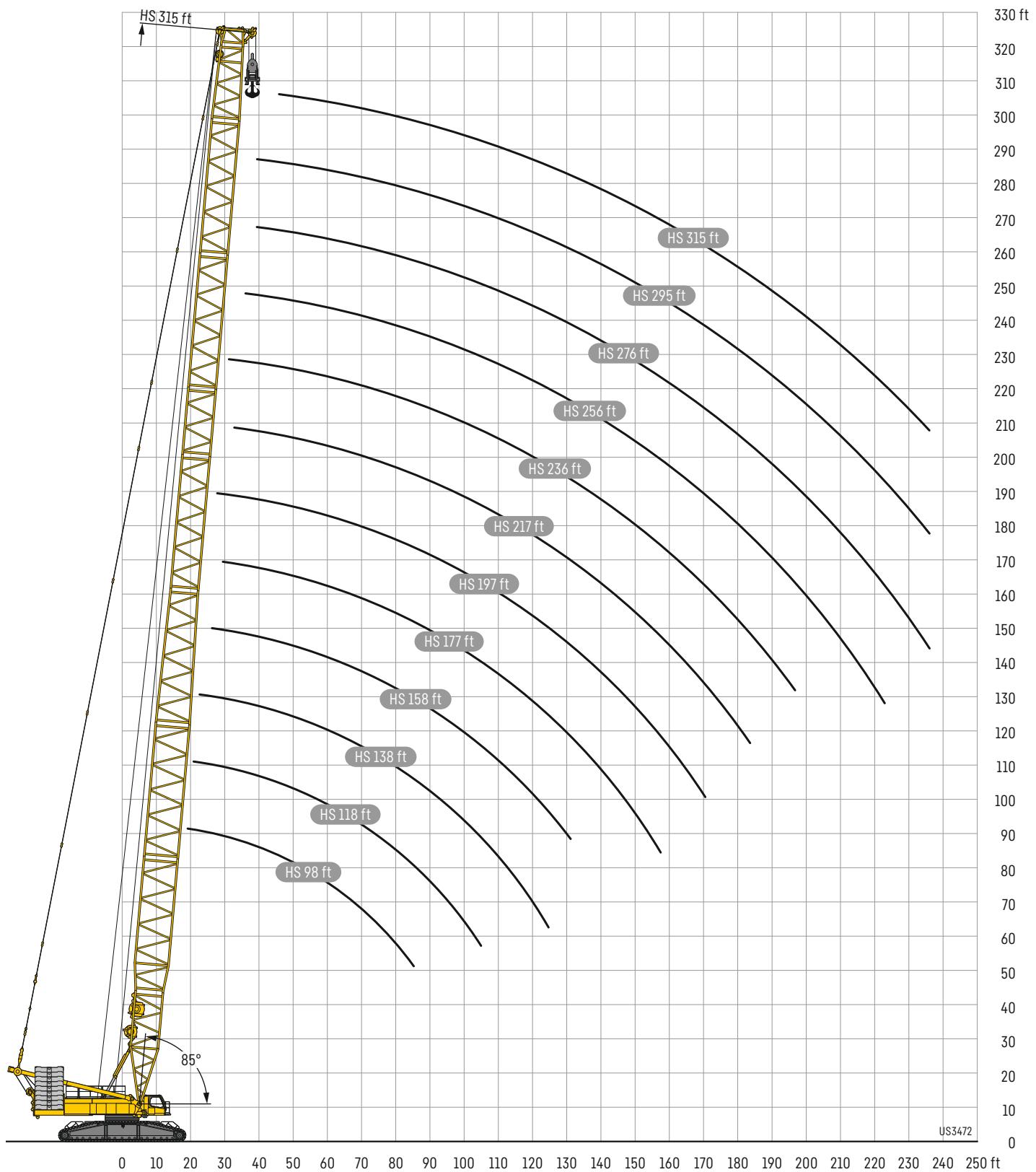


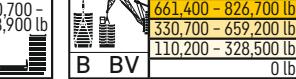


HS 98 – 315 ft												
	98 ft	118 ft	138 ft	158 ft	177 ft	197 ft	217 ft	236 ft	256 ft	276 ft	295 ft	315 ft
19	1322											19
20	1322											20
22	1319	1286										22
24	1240	1216	1215									24
26	1139	1134	1119	1088								26
28	1054	1043	1029	1002	960							28
30	972	967	954	919	892	849						30
32	903	901	879	857	824	794	758					32
34	841	838	826	798	769	742	710	677				34
36	788	784	776	745	723	694	667	637	609			36
38	742	738	727	706	676	653	628	602	578	548		38
40	698	694	684	667	640	617	593	568	548	524	494	40
50	539	535	527	516	494	476	460	443	428	412	396	379
60	434	430	422	413	396	382	370	356	346	334	323	311
70	354	352	345	340	326	315	305	295	286	276	269	260
80	292	289	283	282	275	265	257	248	240	232	226	218
90	246	243	237	235	231	226	219	211	205	197	192	185
100		208	202	200	195	192	189	181	176	169	165	158
110			174	172	167	164	163	157	152	146	142	136
120			152	149	144	141	140	136	132	126	123	117
130				131	126	122	121	118	115	110	106	101
140				116	110	107	105	102	100	95.2	92.4	87.4
150					96.9	93.4	91.4	88.1	86.4	82.9	80.2	75.3
160						82	79.8	76.4	74.6	71.6	69.5	64.7
170						72.3	69.8	66.4	64.5	61.3	60.1	55.3
180							61.2	57.5	55.5	52.3	51.4	46.9
190							53.6	49.8	47.8	44.4	43.5	39.4
200								43	40.8	37.3	36.3	32.6
220									29.2	25.5	24.3	21
240										16	14.6	11.2

Lifting heights

Hauteurs de levage



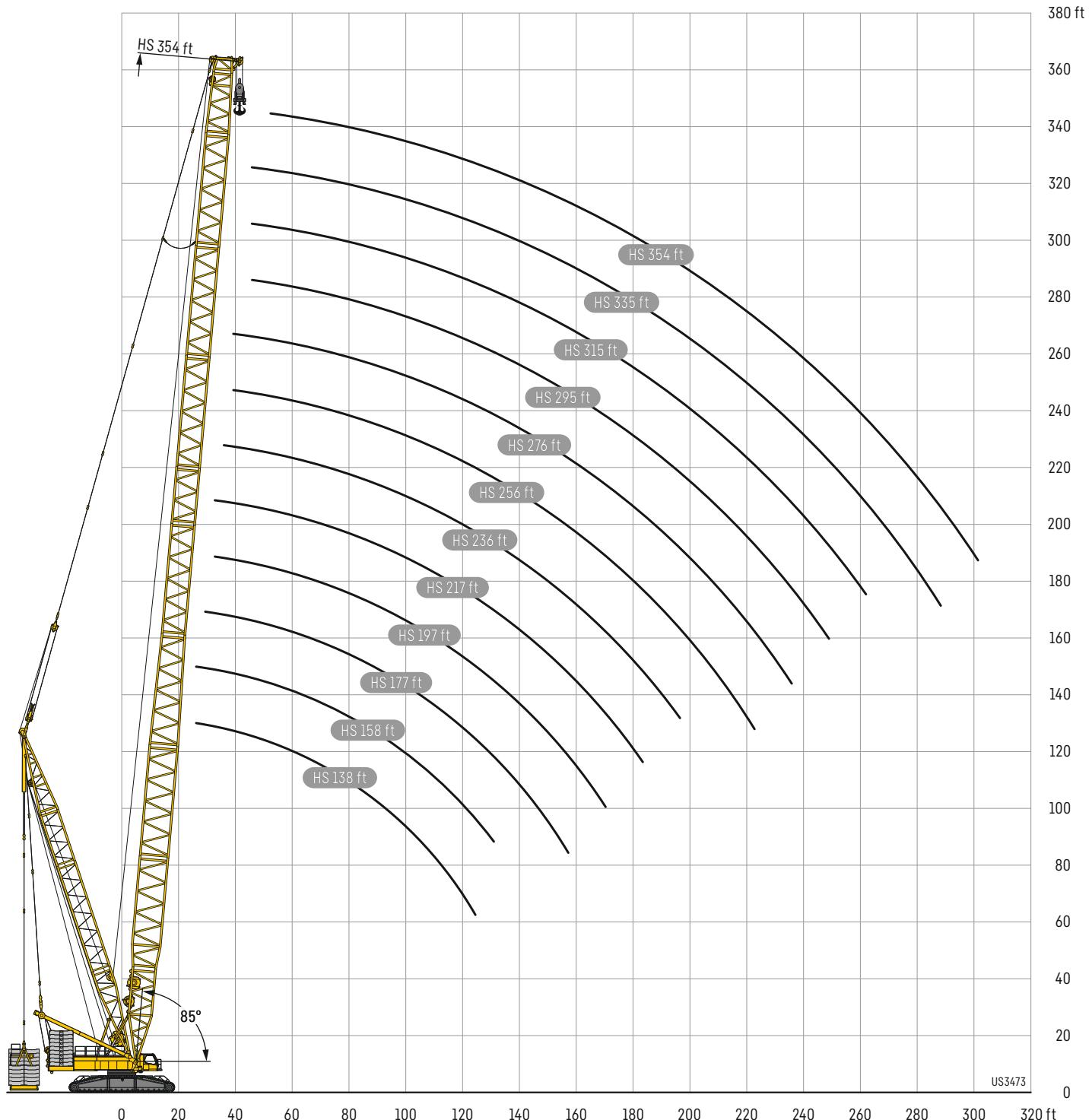
 138–354 ft HS	 118 ft D	 110,200 lb 418,900 lb	 330,700–659,200 lb 110,200–328,500 lb 0 lb BV
---------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------

		HS 138 – 354 ft											
		138 ft	158 ft	177 ft	197 ft	217 ft	236 ft	256 ft	276 ft	295 ft	315 ft	335 ft	354 ft
26	Ot B BV	1133 1322											
28	Ot B BV	1041 1322	987 1322										
30	Ot B BV	963 1322	925 1322	871 1322									
32	Ot B BV	908 1322	857 1322	806 1322	767 1287								
34	Ot B BV	843 1322	797 1322	752 1322	716 1289	684 1222							
36	Ot B BV	785 1322	744 1322	703 1322	671 1291	642 1224	615 1095						
38	Ot B BV	734 1322	696 1322	659 1322	629 1293	604 1225	580 1094	558 981					
40	Ot B BV	689 1322	655 1322	621 1322	594 1295	570 1225	547 1092	528 979	508 876				
50	Ot B BV	522 1251	499 1232	474 1219	456 1202	439 1153	424 1082	410 972	397 870	384 779	370 699	359 628	347 563
60	Ot B BV	416 1075	398 1063	378 1050	364 1037	351 1023	339 996	330 931	320 862	310 773	299 694	290 624	280 559
70	Ot B BV	341 919	327 912	310 902	298 891	288 883	279 872	272 852	263 818	256 764	246 688	239 619	231 556
80	Ot B BV	279 800	274 794	260 785	250 780	241 772	233 765	227 757	220 745	214 723	206 700	199 677	192 613
90	Ot B BV	233 709	229 701	221 693	211 686	204 683	197 678	192 671	186 665	180 655	173 636	168 601	161 539
100	Ot B BV	198 633	194 628	187 617	181 613	174 608	168 604	164 602	158 596	153 589	147 581	142 568	136 524
110	Ot B BV	171 570	166 566	159 557	155 551	150 548	144 544	140 541	136 538	131 534	125 526	120 519	115 496
120	Ot B BV	149 495	144 514	137 506	133 501	130 496	124 493	121 491	116 487	112 484	107 479	102 474	97.1 464
130	Ot B BV	126 470	119 462	114 457	112 453	108 449	104 447	100 444	96.1 441	90.9 437	87.1 434	81.9 427	
140	Ot B BV	111 420	103 425	99.2 420	96.4 417	93.6 412	90.4 410	86 407	82.4 405	77.3 400	73.6 397	68.8 393	
150	Ot B BV	90.8 393	86.3 387	83.2 384	80.5 381	78.3 378	74 374	70.5 372	65.4 369	61.8 366	57.3 361		
160	Ot B BV			75.4 359	72.1 355	69.1 352	67.6 350	63.4 346	60 344	55 340	51.5 338	47.1 334	
170	Ot B BV			66.1 334	62.5 330	59.4 326	58.2 325	54.1 322	50.8 319	45.9 315	42.4 312	38 309	
180	Ot B BV				54.3 308	50.8 304	49.4 302	45.8 299	42.7 297	37.7 293	34.3 290	29.9 286	
190	Ot B BV					47.3 289	43.4 284	41.9 282	38.6 279	35.3 277	30.5 273	27 270	22.6 266
200	Ot B BV						37 267	35.1 264	32.1 260	28.8 259	23.9 255	20.5 253	16.1 249
220	Ot B BV							24.1 233	20.8 229	17.9 228	12.7 224	221 224	218 242
240	Ot B BV								11.7 203		195 220	191 217	191 214
260	Ot B BV									175 197	172 194	168 190	
280	Ot B BV									152 174	149 170		
300	Ot B BV										132 152		

Lifting heights

Hauteurs de levage

HSDB/BV





118 ft
79-315 ft
S2

22,050 -
198,400 lb
W

418,900 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lb

Wmax
R
47

S2 118 ft																	
	W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft	W 295 ft	W 315 ft				
38	313.0	313.0												38			
40	670.0	670.0 ^u												40			
50	531.0	531.0	512.0	495.0	495.0 ^u									50			
60	438.0	438.0	423.0	423.0	411.0 ^u	399.0	399.0	388.0	388.0					60			
70	367.0	367.0	360.0	360.0	350.0 ^u	340.0	340.0	331.0	331.0	323.0	323.0			70			
80	311.0	311.0	309.0	304.0	295.0	295.0	288.0	288.0	280.0 ^u	272.0	284.0 ^u	265.0	265.0	80			
90	267.0	267.0	266.0	267.0	267.0	260.0	254.0	254.0	247.0	247.0	240.0	255.0 ^u	234.0	90			
100		226.0 ^u	233.0	233.0	233.0	231.0	231.0	226.0	226.0	220.0	214.0	226.0 ^u	208.0 ^u	100			
110		195.0 ^u	206.0	206.0	206.0	204.0	204.0	203.0	203.0	198.0	198.0	192.0	197.0 ^u	187.0			
120		170.0 ^u		175.0 ^u	183.0	183.0 ^u	182.0	182.0	181.0 ^u	179.0	179.0	174.0	169.0	170.0			
130		146.0 ^u		153.0 ^u	164.0	164.0	163.0	162.0	162.0 ^u	161.0	161.0	158.0	153.0	130			
140		123.0 ^u		134.0 ^u	140.0 ^u	147.0	147.0	146.0	146.0	145.0	145.0	143.0	140.0	140			
150		105.0 ^u		116.0 ^u	124.0 ^u	133.0	133.0	132.0	132.0	130.0	130.0	129.0	127.0	150			
160		89.2 ^u		98.0 ^u	109.0 ^u	113.0 ^u	120.0	120.0 ^u	119.0	119.0	116.0	116.0 ^u	115.0	160			
170		75.7 ^u		84.1 ^u	94.7 ^u	101.0 ^u	109.0	109.0	108.0	108.0	106.0	106.0	104.0	170			
180				70.8 ^u	80.1 ^u	89.1 ^u		92.2 ^u	98.7	98.7	96.6	96.6	94.4	180			
190					59.8 ^u	68.8 ^u	77.1 ^u	83.6 ^u	90.4	90.4	88.3	88.3	86.1	190			
200						57.4 ^u	64.7 ^u	74.0 ^u		75.3 ^u	80.9	80.9	78.8	200			
220							45.3 ^u	53.4 ^u	59.9 ^u	61.0 ^u	66.0	66.0	63.9	220			
240								36.3 ^u	42.0 ^u	47.8 ^u	48.4 ^u	53.5	53.5	48.3	240		
260									27.0 ^u	32.6 ^u	37.0 ^u	37.9 ^u	42.7	42.7	34.0	260	
280										19.6 ^u	23.7 ^u	28.5 ^u	29.0 ^u	31.9	31.9	27.4	280
300											15.0 ^u	20.9 ^u	21.1 ^u	24.7	24.7	22.1	300
320													15.0 ^u	17.7	17.7	320	

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°



138 ft
79-315 ft
S2

22,050 -
198,400 lb
W

418,900 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lb

Wmax
R
47

S2 138 ft																			
	W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft	W 295 ft	W 315 ft						
40	640.0	640.0												40					
50	510.0	510.0	494.0	494.0	479.0	479.0								50					
60	423.0	423.0	410.0	410.0	399.0	409.0 ^u	387.0	393.0 ^u	375.0	375.0				60					
70	360.0 ^u	349.0	349.0 ^u	341.0	342.0 ^u	331.0	338.0 ^u	321.0	335.0 ^u	312.0	322.0 ^u	302.0	302.0	70					
80	308.0 ^u	304.0	304.0	296.0	296.0	288.0	288.0	279.0	298.0 ^u	266.0	282.0 ^u	257.0	257.0	80					
90	265.0 ^u	266.0	266.0	261.0	261.0	254.0	254.0	246.0	261.0 ^u	240.0	275.0 ^u	235.0	262.0 ^u	90					
100	225.0 ^u	232.0 ^u	232.0 ^u	232.0	227.0	220.0	224.0 ^u	214.0	252.0 ^u	210.0	242.0 ^u	202.0	222.0 ^u	100					
110	191.0 ^u	204.0	204.0	205.0	205.0 ^u	204.0	204.0	198.0	198.0	192.0	229.0 ^u	188.0	222.0 ^u	110					
120	167.0 ^u		175.0 ^u	183.0	183.0 ^u	182.0	182.0	179.0	179.0	174.0	205.0 ^u	171.0	202.0 ^u	120					
130	145.0 ^u		150.0 ^u	164.0	164.0	163.0	163.0	161.0	161.0	159.0	182.0 ^u	155.0	182.0 ^u	130					
140	123.0 ^u		133.0 ^u		140.0 ^u	147.0	147.0	144.0	144.0	159.0 ^u	142.0	161.0 ^u	133.0 ^u	140					
150	104.0 ^u		116.0 ^u		122.0 ^u	132.0	132.0	131.0	131.0	129.0	136.0 ^u	141.0 ^u	127.0 ^u	150					
160	88.4 ^u		98.7 ^u		109.0 ^u		113.0 ^u	119.0	119.0	117.0	117.0	121.0 ^u	114.0	120.0 ^u	160				
170	73.9 ^u		83.2 ^u		94.5 ^u		99.3 ^u	108.0	108.0	107.0	107.0	106.0 ^u	103.0	104.0 ^u	170				
180	62.4 ^u		70.8 ^u		80.9 ^u		87.8 ^u		90.9 ^u	97.6	97.6	96.9	93.2	93.4	180				
190			58.6 ^u		67.8 ^u		76.7 ^u		80.6 ^u	89.2	88.5	88.5	85.0	84.8	190				
200			49.0 ^u		57.5 ^u		65.5 ^u		71.8 ^u		81.0	77.7	77.7	77.3	77.3	200			
220					38.8 ^u		45.5 ^u		52.8 ^u		57.9 ^u	60.1 ^u	65.0	64.5	64.5	220			
240						29.1 ^u		35.3 ^u		41.6 ^u		46.8 ^u		53.8	53.8	240			
260							21.2 ^u		26.8 ^u		32.5 ^u		35.2 ^u		41.9	41.9	260		
280								13.9 ^u		19.6 ^u		24.2 ^u		27.3 ^u		38.6	38.6	280	
300											17.8 ^u		14.1 ^u		19.6 ^u		26.6	26.6	300
320																17.1	17.1	320	

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°



158 ft

79-315 ft
198,400 lb22,050 -
198,400 lb418,900 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lbWmax
R

47

	S2 158 ft															
	W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft	W 295 ft	W 315 ft	ft		
ft	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax		
50	492.0	509.0 ⁽¹⁾	475.0	487.0 ⁽¹⁾	275.0	275.0									50	
60	409.0	413.0 ⁽¹⁾	396.0	427.0 ⁽¹⁾	385.0	415.0 ⁽¹⁾	374.0	384.0 ⁽¹⁾	364.0	364.0					60	
70	350.0	350.0	338.0	367.0 ⁽¹⁾	330.0	380.0 ⁽¹⁾	321.0	355.0 ⁽¹⁾	312.0	332.0 ⁽¹⁾	302.0	310.0 ⁽¹⁾	284.0	284.0	70	
80	304.0	304.0 ⁽¹⁾	294.0	307.0 ⁽¹⁾	287.0	345.0 ⁽¹⁾	279.0	325.0 ⁽¹⁾	273.0	307.0 ⁽¹⁾	264.0	292.0 ⁽¹⁾	258.0	269.0 ⁽¹⁾	80	
90	264.0	264.0 ⁽¹⁾	260.0	260.0	253.0	309.0 ⁽¹⁾	247.0	295.0 ⁽¹⁾	241.0	282.0 ⁽¹⁾	233.0	275.0 ⁽¹⁾	228.0	254.0 ⁽¹⁾	90	
100	224.0*	224.0*	230.0	230.0 ⁽¹⁾	226.0	274.0 ⁽¹⁾	220.0	266.0 ⁽¹⁾	215.0	257.0 ⁽¹⁾	208.0	257.0 ⁽¹⁾	204.0	239.0 ⁽¹⁾	100	
110		188.0 ⁽¹⁾	203.0	203.0	203.0	238.0 ⁽¹⁾	198.0	236.0 ⁽¹⁾	194.0	231.0 ⁽¹⁾	187.0	240.0 ⁽¹⁾	183.0	224.0 ⁽¹⁾	110	
120		164.0 ⁽¹⁾	175.0*	175.0*	181.0	203.0*	180.0	206.0 ⁽¹⁾	176.0	206.0 ⁽¹⁾	169.0	223.0 ⁽¹⁾	166.0	209.0 ⁽¹⁾	120	
130		143.0 ⁽¹⁾		147.0 ⁽¹⁾	162.0	168.0 ⁽¹⁾	161.0	177.0 ⁽¹⁾	160.0	181.0 ⁽¹⁾	154.0	205.0 ⁽¹⁾	151.0	194.0 ⁽¹⁾	130	
140		123.0 ⁽¹⁾		130.0 ⁽¹⁾		138.0 ⁽¹⁾	145.0	147.0 ⁽¹⁾	144.0	156.0 ⁽¹⁾	141.0	188.0 ⁽¹⁾	138.0	179.0 ⁽¹⁾	140	
150		103.0 ⁽¹⁾		113.0 ⁽¹⁾		119.0 ⁽¹⁾	131.0	131.0	131.0	131.0 ⁽¹⁾	128.0	170.0 ⁽¹⁾	127.0	164.0 ⁽¹⁾	150	
160		87.1 ⁽¹⁾		97.7 ⁽¹⁾		105.0 ⁽¹⁾		111.0 ⁽¹⁾	119.0	119.0	116.0	153.0 ⁽¹⁾	116.0	149.0 ⁽¹⁾	160	
170		73.6 ⁽¹⁾		82.3 ⁽¹⁾		92.1 ⁽¹⁾	96.1 ⁽¹⁾	108.0	108.0	105.0	135.0 ⁽¹⁾	105.0	134.0 ⁽¹⁾	101.0	146.0 ⁽¹⁾	170
180		60.2 ⁽¹⁾		68.8 ⁽¹⁾		79.6 ⁽¹⁾	85.4 ⁽¹⁾		90.8 ⁽¹⁾	96.2	118.0 ⁽¹⁾	95.6	119.0 ⁽¹⁾	92.0	92.0	180
190		50.2 ⁽¹⁾		57.7 ⁽¹⁾		67.2 ⁽¹⁾	74.2 ⁽¹⁾		78.8 ⁽¹⁾	87.9	100.0 ⁽¹⁾	87.3	104.0 ⁽¹⁾	83.7	83.7	190
200				46.4 ⁽¹⁾		55.7 ⁽¹⁾	63.8 ⁽¹⁾		69.9 ⁽¹⁾		82.5 ⁽¹⁾	79.9	89.3 ⁽¹⁾	76.5	76.5	200
220						36.4 ⁽¹⁾	43.3 ⁽¹⁾		51.3 ⁽¹⁾		55.2 ⁽¹⁾	39.8 ⁽¹⁾	59.4 ⁽¹⁾	63.8	63.8	220
240							26.4 ⁽¹⁾						44.3 ⁽¹⁾		44.9 ⁽¹⁾	240
260									15.4 ⁽¹⁾	24.7 ⁽¹⁾		31.7 ⁽¹⁾		32.8 ⁽¹⁾	260	
280											12.7 ⁽¹⁾		22.2 ⁽¹⁾	25.8 ⁽¹⁾	25.9 ⁽¹⁾	280
300													12.4 ⁽¹⁾		30.4	30.4
320														181 ⁽¹⁾	23.4	23.4

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°



177 ft

79-315 ft
198,400 lb22,050 -
198,400 lb418,900 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lbWmax
R

47

	S2 177 ft																		
	W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft	W 295 ft	W 315 ft	ft					
ft	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax	87/85* Wmax													
50	475.0	517.0 ⁽¹⁾	458.0	470.0 ⁽¹⁾											50				
60	396.0	470.0 ⁽¹⁾	384.0	431.0 ⁽¹⁾	373.0	399.0 ⁽¹⁾	363.0	363.0							60				
70	339.0	422.0 ⁽¹⁾	329.0	392.0 ⁽¹⁾	320.0	367.0 ⁽¹⁾	312.0	312.0 ⁽¹⁾	302.0	302.0	290.0	290.0			70				
80	296.0	374.0 ⁽¹⁾	286.0	353.0 ⁽¹⁾	280.0	334.0 ⁽¹⁾	272.0	272.0	264.0	264.0	258.0	258.0	248.0	248.0	80				
90	262.0	326.0 ⁽¹⁾	253.0	314.0 ⁽¹⁾	247.0	302.0 ⁽¹⁾	241.0	241.0	234.0	234.0	228.0	228.0	221.0	221.0 ⁽¹⁾	90				
100	223.0*	278.0 ⁽¹⁾	227.0	275.0 ⁽¹⁾	221.0	270.0 ⁽¹⁾	215.0	215.0	209.0	209.0	204.0	204.0	198.0	198.0	100				
110		230.0 ⁽¹⁾	202.0	237.0 ⁽¹⁾	200.0	238.0 ⁽¹⁾	194.0	194.0 ⁽¹⁾	188.0	188.0	183.0	183.0	178.0	178.0	110				
120		182.0*	174.0*	198.0*	180.0	205.0 ⁽¹⁾	176.0	176.0	171.0	171.0	166.0	166.0	161.0	161.0	120				
130		140.0 ⁽¹⁾		159.0 ⁽¹⁾	162.0	173.0 ⁽¹⁾	160.0	160.0	155.0	155.0	151.0	151.0	146.0	146.0	130				
140		122.0 ⁽¹⁾		127.0 ⁽¹⁾	140.0*	141.0*	145.0	145.0	141.0	141.0	138.0	138.0	134.0	134.0	140				
150		104.0 ⁽¹⁾		111.0 ⁽¹⁾		118.0 ⁽¹⁾	131.0	131.0	129.0	129.0 ⁽¹⁾	126.0	126.0	122.0	122.0 ⁽¹⁾	150				
160		86.5 ⁽¹⁾		96.6 ⁽¹⁾		104.0 ⁽¹⁾	114.0*	117.0	117.0	116.0	116.0	112.0	112.0	109.0	91.8	86.9			
170		72.8 ⁽¹⁾		82.6 ⁽¹⁾		90.8 ⁽¹⁾		95.4 ⁽¹⁾	107.0	107.0	106.0	106.0	103.0	103.0	80.2	83.8	83.8		
180		60.8 ⁽¹⁾		68.6 ⁽¹⁾		78.6 ⁽¹⁾		83.9 ⁽¹⁾	93.3*	96.4	96.4 ⁽¹⁾	94.2	94.2	92.3	84.9	84.9	76.6	76.6	
190		48.6 ⁽¹⁾		57.1 ⁽¹⁾		67.1 ⁽¹⁾		72.6 ⁽¹⁾		76.4 ⁽¹⁾	88.0	88.0	86.0	84.4	81.9	77.9	77.9		
200		39.8 ⁽¹⁾		47.0 ⁽¹⁾		55.6 ⁽¹⁾		62.9 ⁽¹⁾		67.4 ⁽¹⁾	76.8*	76.8*	78.7	77.1	75.0	71.5	64.3		
220				28.9 ⁽¹⁾		36.7 ⁽¹⁾		43.3 ⁽¹⁾		49.4 ⁽¹⁾		54.1 ⁽¹⁾	62.7*	64.3	64.3	62.4	59.1	55.7	
240						20.9 ⁽¹⁾		32.8 ⁽¹⁾		39.5 ⁽¹⁾		42.2 ⁽¹⁾		45.3 ⁽¹⁾	51.9	48.7	48.7	45.3	
260								19.0 ⁽¹⁾		25.4 ⁽¹⁾		29.8 ⁽¹⁾		32.0 ⁽¹⁾	40.0	40.0	36.7	36.7	
280											18.0 ⁽¹⁾		17.4 ⁽¹⁾		24.3 ⁽¹⁾	25.2 ⁽¹⁾	29.5	27.7	
300													16.8 ⁽¹⁾		17.2 ⁽¹⁾	22.7	22.7	20.1	20.1
320															15.8	15.8	20.8	320	

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°

197 ft
S279-315 ft
198,400 lb22,050 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lbWmax
R

47

S2 197 ft

	W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft	W 295 ft	W 315 ft				
ft	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax			
50	458.0	498.0 ^u	442.0	447.0 ^u											50		
60	384.0	446.0 ^u	372.0	420.0 ^u	360.0	360.0	345.0	345.0							60		
70	330.0	430.0 ^u	319.0	392.0 ^u	310.0	310.0	302.0	302.0	295.0	295.0	269.0	269.0			70		
80	286.0	396.0 ^u	279.0	364.0 ^u	271.0	271.0	264.0	264.0	258.0	258.0	249.0	249.0	231.0	231.0	80		
90	250.0	362.0 ^u	245.0	336.0 ^u	240.0	240.0	234.0	234.0	229.0	229.0	221.0	221.0	214.0	214.0	90		
100	220.0*	328.0 ^u	217.0	308.0 ^u	212.0	212.0	209.0	209.0	204.0	204.0	197.0	197.0 ^u	192.0	192.0	100		
110		294.0 ^u	193.0	280.0 ^u	189.0	189.0	186.0	186.0	183.0	183.0	178.0	178.0	172.0	172.0	110		
120		260.0*	173.0*	252.0 ^u	170.0	170.0 ^u	166.0	166.0 ^u	164.0	164.0	159.0	159.0	155.0	155.0	120		
130		226.0 ^u		224.0 ^u	154.0	154.0 ^u	151.0	151.0 ^u	148.0	148.0	144.0	144.0	140.0	140.0	130		
140		192.0 ^u		196.0 ^u	138.0*	138.0*	137.0	137.0 ^u	135.0	135.0 ^u	130.0	130.0	126.0	126.0	140		
150		158.0 ^u		168.0 ^u		117.0 ^u	126.0	126.0	123.0	123.0 ^u	119.0	119.0 ^u	115.0	115.0 ^u	150		
160		124.0 ^u		140.0 ^u		100.0 ^u	112.0*	112.0*	113.0	113.0 ^u	109.0	109.0 ^u	105.0	105.0	160		
170		90.5 ^u		112.0 ^u		87.6 ^u		94.1 ^u	104.0	104.0	100.0	100.0	96.4	96.4	170		
180		59.2 ^u		84.4 ^u		75.3 ^u		81.0 ^u	92.7*	92.7*	92.3	92.3	88.8	88.8	180		
190		48.4 ^u		56.5 ^u		64.6 ^u		70.4 ^u		76.5 ^u	85.4	85.4	81.9	81.9	190		
200		37.6 ^u		45.4 ^u		53.9 ^u		59.9 ^u		66.0 ^u	75.0*	75.0*	75.8	75.8	200		
220		21.4 ^u		27.3 ^u		34.4 ^u		41.6 ^u		48.1 ^u	51.5 ^u	60.8*	60.8*	42.0	220		
240										32.7 ^u		36.7 ^u	39.7 ^u	48.8*	48.8*	240	
260											23.1 ^u		21.1 ^u	30.3 ^u	38.4*	38.4*	260
280														22.5 ^u	28.5*	28.5*	280
300															21.1*	21.1*	300
320															15.2*	15.2*	320

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°

217 ft
S279-276 ft
198,400 lb22,050 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lbWmax
R

47

S2 217 ft

	W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft										
ft	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax									
50	398.0	407.0 ^u	365.0	365.0									50								
60	360.0	380.0 ^u	335.0	335.0	308.0	308.0	284.0	284.0					60								
70	317.0	353.0 ^u	305.0	305.0	289.0*	289.0*	264.0	264.0	243.0	243.0			70								
80	274.0	326.0 ^u	269.0	269.0	261.0	261.0	246.0*	246.0*	233.0*	233.0*	211.0	211.0	192.0	192.0	80						
90	239.0	300.0 ^u	235.0	235.0	230.0	230.0	225.0	225.0	213.0	213.0	203.0*	203.0*	183.0	183.0	90						
100	213.0*	273.0 ^u	207.0	208.0 ^u	202.0	203.0 ^u	199.0	199.0	194.0	194.0	186.0	186.0 ^u	176.0*	176.0*	100						
110		246.0 ^u	186.0*	187.0 ^u	181.0	181.0 ^u	178.0	178.0 ^u	173.0	173.0	171.0	171.0	162.0	162.0	110						
120		219.0 ^u	170.0*	170.0*	164.0*	164.0 ^u	160.0*	160.0 ^u	155.0	155.0	153.0	153.0	148.0	148.0	120						
130		192.0 ^u	147.0 ^u	150.0*	150.0 ^u	146.0*	146.0 ^u	141.0*	141.0*	138.0	138.0 ^u	134.0	134.0 ^u	129.0	129.0	130					
140		165.0 ^u	124.0 ^u	137.0*	137.0*	134.0*	134.0*	129.0*	129.0*	125.0 ^u	125.0 ^u	121.0	121.0 ^u	116.0	116.0 ^u	140					
150		138.0 ^u	108.0 ^u		117.0 ^u	123.0*	123.0 ^u	118.0*	118.0 ^u	115.0*	115.0 ^u	111.0*	111.0 ^u	105.0	106.0 ^u	150					
160		111.0 ^u	92.3 ^u		98.8 ^u	112.0*	112.0*	109.0*	109.0 ^u	106.0*	106.0 ^u	102.0*	102.0 ^u	96.4*	96.5 ^u	160					
170		84.2 ^u	79.0 ^u		86.5 ^u		94.6 ^u	99.9*	99.9*	98.2*	98.2*	94.0*	94.0*	88.6*	88.6*	170					
180		57.3 ^u	67.1 ^u		74.1 ^u		80.0 ^u	90.9*	90.9*	90.3*	90.3*	87.0*	87.0*	81.7*	81.7*	180					
190		46.7 ^u	55.2 ^u		63.3 ^u		69.6 ^u		75.5 ^u	82.3*	82.3*	80.1*	80.1*	75.5*	75.5*	190					
200		37.3 ^u	42.8 ^u		53.1 ^u		58.5 ^u		63.8 ^u	74.9*	74.9*	73.1*	73.1*	69.5*	69.5*	200					
220				26.3 ^u		27.9 ^u		41.1 ^u		45.4 ^u		51.0 ^u	60.7*	60.7*	57.4	57.4	220				
240						13.9 ^u				30.4 ^u		32.2 ^u		39.4 ^u	47.3*	47.3*	46.4	46.4	240		
260												18.7 ^u				28.5 ^u	36.9*	36.9*	35.9	35.9	260
280															20.7 ^u	27.4*	27.4*	26.8	26.8	280	
300																	20.0*	20.0*	300		

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°



158-197 ft



418,900 - 507,100 lb
198,400 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lb



47

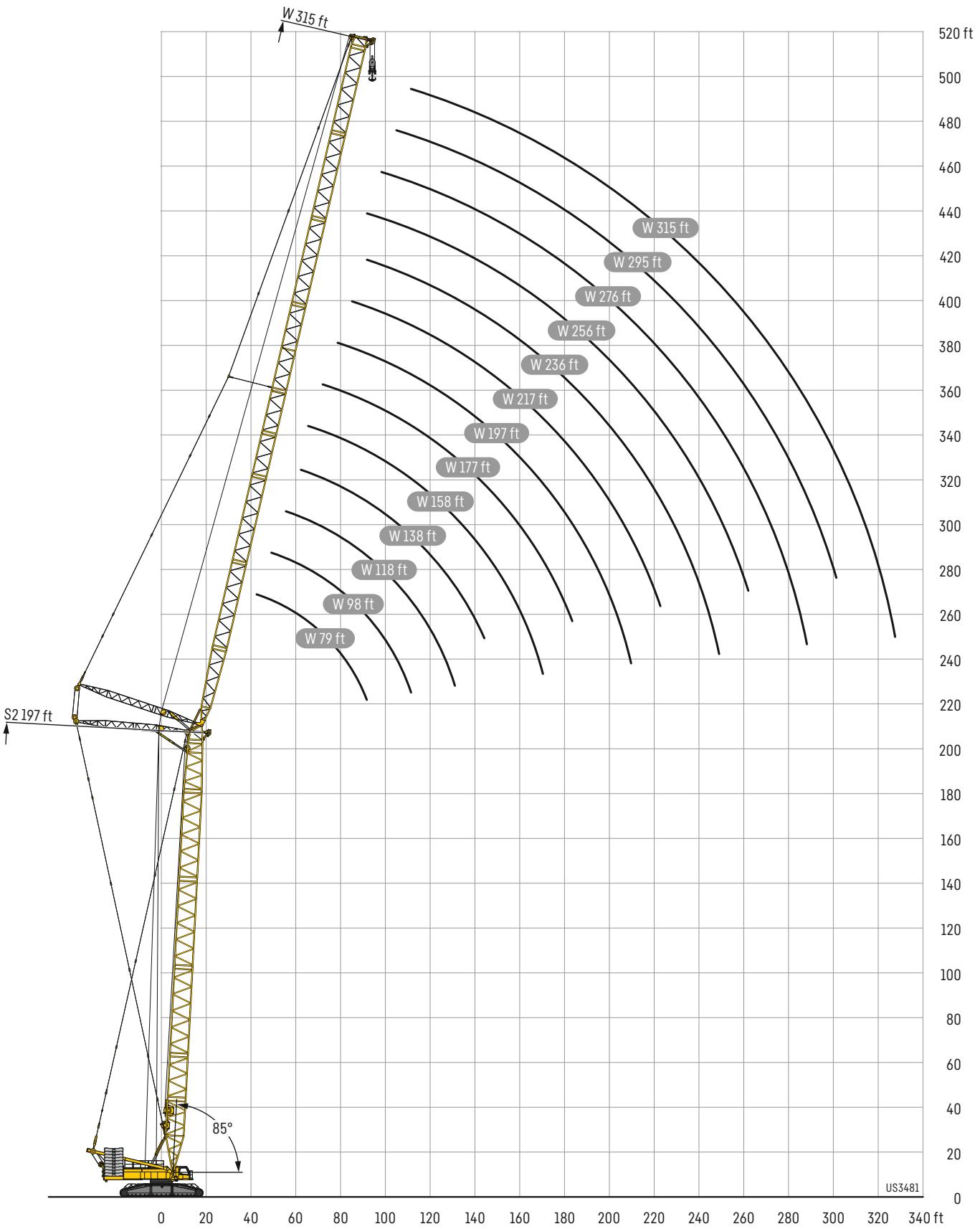
ft	S2 236 ft							ft	
	W 158 ft		W 177 ft		W 197 ft				
	87/85*	Wmax	87/85*	Wmax	87/85*	Wmax	87/85*		
70	225,0	225,0						70	
80	212,0	212,0 ⁽²⁾	194,0	194,0	177,0	177,0		80	
90	203,0*	203,0*	186,0*	186,0*	168,0	168,0		90	
100	184,0	184,0	176,0*	176,0 ⁽²⁾	162,0*	162,0*		100	
110	166,0	167,0 ⁽⁴⁾	159,0	159,0 ⁽³⁾	152,0*	152,0*		110	
120	150,0*	151,0 ⁽⁵⁾	145,0*	145,0 ⁽⁴⁾	139,0*	139,0 ⁽³⁾		120	
130	137,0*	137,0*	132,0*	132,0*	127,0*	127,0 ⁽⁴⁾		130	
140	126,0*	126,0*	120,0*	120,0 ⁽⁵⁾	116,0*	116,0*		140	
150	116,0*	116,0*	111,0*	111,0*	106,0*	106,0 ⁽⁵⁾		150	
160	107,0*	107,0*	102,0*	102,0 ⁽²⁾	97,6*	97,6*		160	
170	99,2*	99,2 ⁽¹⁰⁾	94,2*	94,2*	90,0*	90,0*		170	
180	90,6*	90,6*	87,3*	87,3 ⁽⁹⁾	83,3*	83,3*		180	
190		75,9 ⁽¹¹⁾	80,2*	80,2*	77,1*	77,1*		190	
200		63,1 ⁽¹¹⁾	73,0*	73,0*	71,1*	71,1*		200	
220		45,1 ⁽¹¹⁾		48,6 ⁽¹¹⁾	58,9*	58,9*		220	
240		25,8 ⁽⁸⁾		33,1 ⁽¹¹⁾			37,2 ⁽¹¹⁾	240	
260		11,1 ⁽⁸⁾					24,9 ⁽¹¹⁾	260	

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°

Lifting heights

Hauteurs de levage

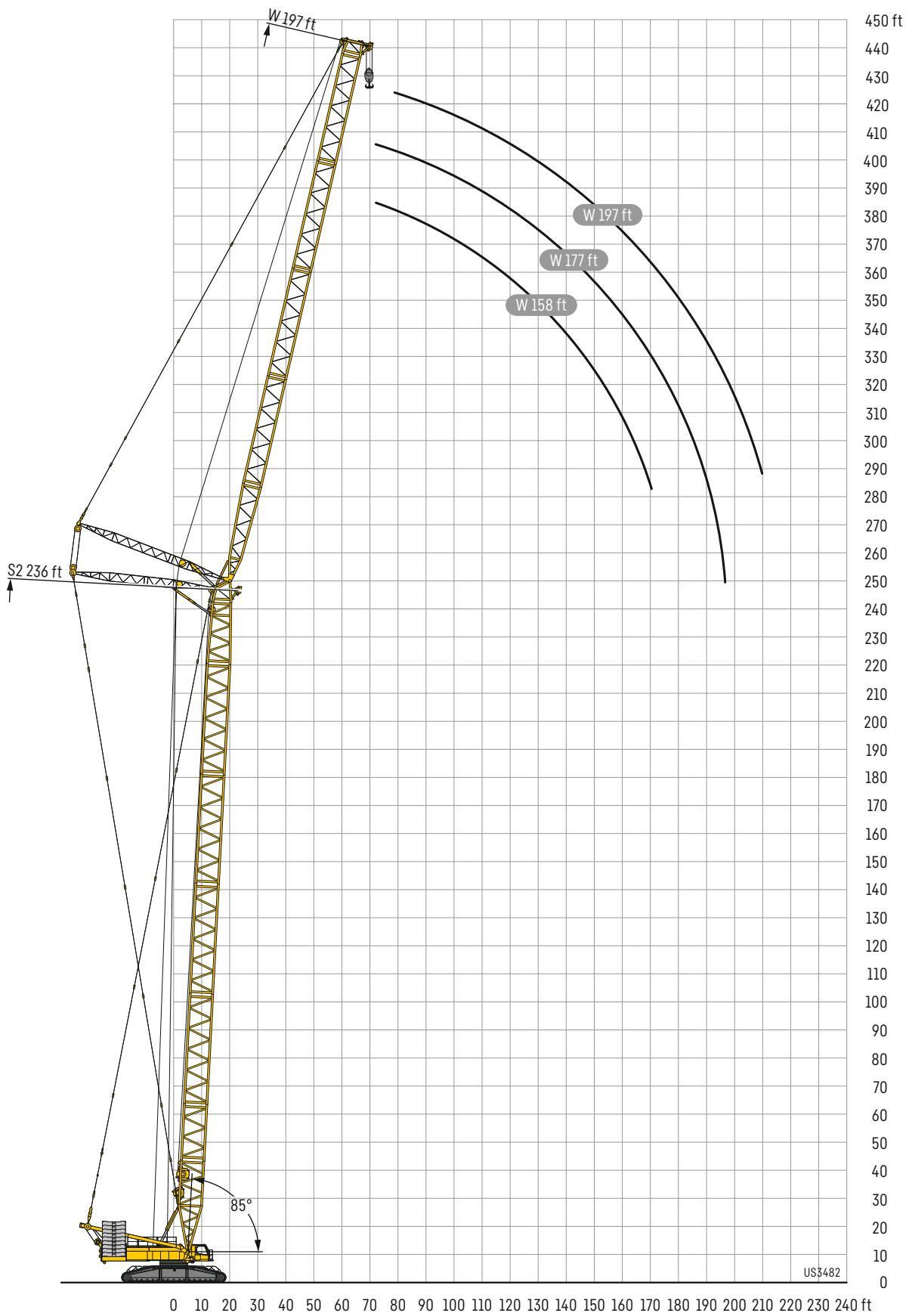
S2W



Lifting heights

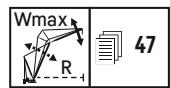
Hauteurs de levage

S2W





661,400 - 826,700 lb
330,700 - 659,200 lb
110,200 - 328,500 lb
0 lb



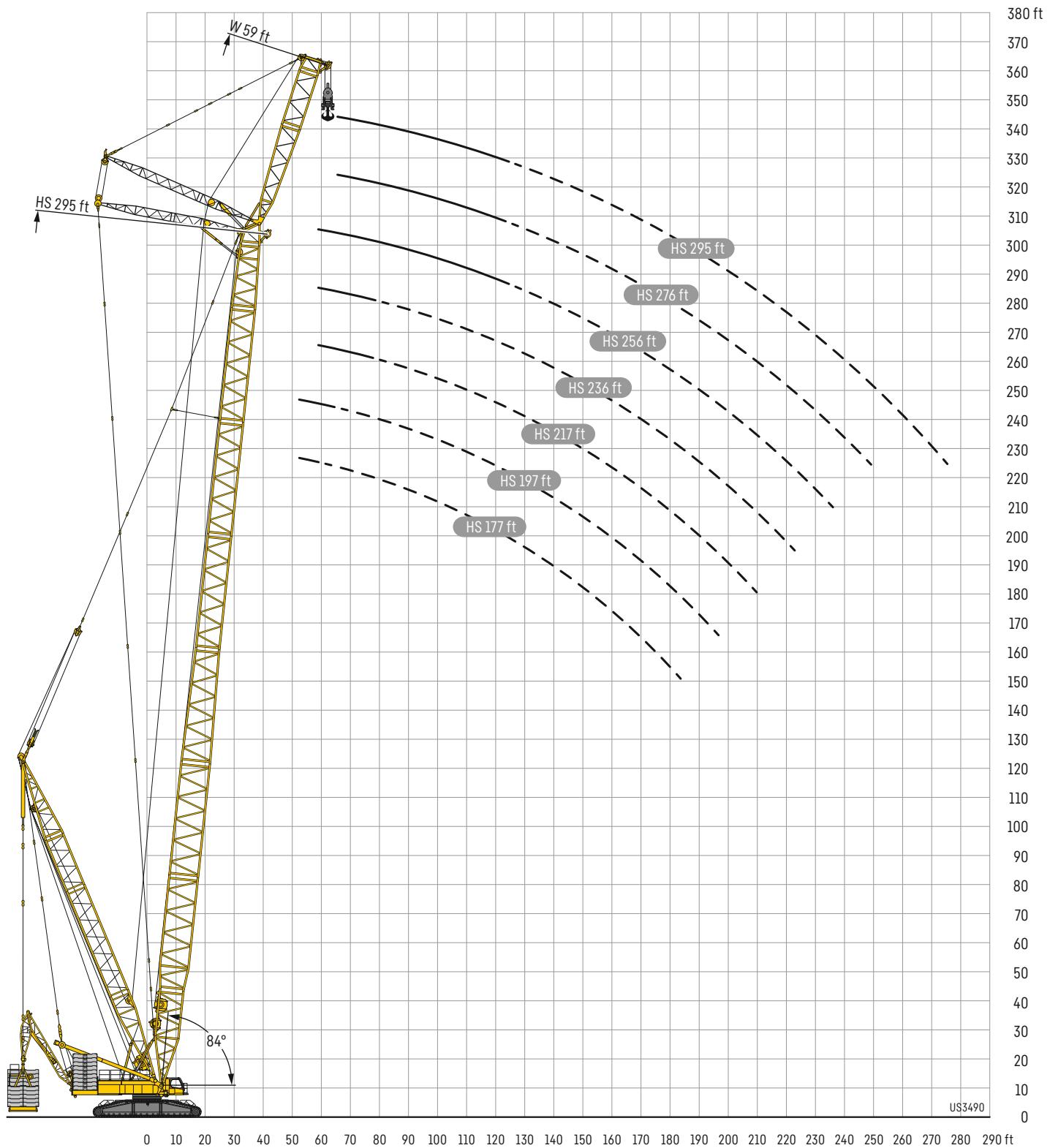
HS 177 – 295 ft

ft	HS 177 ft				HS 197 ft				HS 217 ft				HS 236 ft				HS 256 ft				HS 276 ft				HS 295 ft						
	W 39 ft		W 59 ft		W 39 ft		W 59 ft		W 39 ft		W 59 ft		W 39 ft		W 59 ft		W 39 ft		W 59 ft		W 39 ft		W 59 ft		W 39 ft		W 59 ft				
	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax	84	Wmax			
45	B BV	1077.0 1077.0	1069.0 ^① 1077.0 ^①																												
50	B BV	1014.0 1032.0	1046.0 ^① 1076.0 ^①	821.0 826.0	821.0 ^① 826.0	949.0 969.0	972.0 ^① 1003.0 ^①			865.0 881.0	875.0 ^① 895.0 ^①			782.0 797.0																	
60	B BV	990.0 ^② 1059.0 ^②	846.0 860.0	849.0 ^③ 865.0 ^③		938.0 ^② 994.0 ^②	795.0 800.0	799.0 ^② 811.0 ^②		855.0 ^② 894.0 ^②	732.0 743.0	753.0 ^② 762.0 ^②		777.0 ^② 796.0 ^②	664.0 677.0	682.0 ^② 695.0 ^②	659.0 671.0	695.0 ^② 711.0 ^②	605.0 616.0	612.0 ^② 623.0 ^②	599.0 609.0	620.0 ^② 633.0 ^②	549.0 558.0								
70	B BV	867.0 ^② 939.0 ^③	844.0 ^② 879.0 ^②	848.0 ^② 920.0 ^②		808.0 ^② 813.0 ^②		808.0 ^② 864.0 ^②		757.0 ^② 769.0 ^②		766.0 ^② 789.0 ^②	613.0 627.0	679.0 ^② 692.0 ^②		690.0 ^② 709.0 ^②	564.0 574.0	608.0 ^② 621.0 ^②		616.0 ^② 632.0 ^②	514.0 523.0	542.0 ^② 556.0 ^②	470.0 476.0	489.0 ^② 498.0 ^②							
80	B BV	756.0 ^④ 830.0 ^①	755.0 ^③ 827.0 ^③	749.0 ^④ 821.0 ^④		739.0 ^③ 785.0 ^③		733.0 ^④ 789.0 ^④		713.0 ^② 738.0 ^②		710.0 ^④ 741.0 ^④		660.0 ^② 680.0 ^②		655.0 ^③ 687.0 ^③		604.0 ^② 620.0 ^②		601.0 ^② 624.0 ^②		538.0 ^② 540.0 ^②		485.0 ^② 498.0 ^②							
90	B BV	675.0 ^① 747.0 ^①	671.0 ^④ 735.0 ^③	663.0 ^① 733.0 ^①		662.0 ^④ 718.0 ^④		650.0 ^④ 715.0 ^④		649.0 ^④ 690.0 ^④		640.0 ^④ 693.0 ^④		612.0 ^④ 650.0 ^④		608.0 ^④ 657.0 ^④		572.0 ^② 603.0 ^②		571.0 ^② 610.0 ^②		524.0 ^② 547.0 ^②		479.0 ^② 498.0 ^②							
100	B BV	602.0 ^④ 667.0 ^④	602.0 ^① 667.0 ^①	596.0 ^④ 661.0 ^④		592.0 ^① 655.0 ^①		588.0 ^④ 652.0 ^④		584.0 ^④ 640.0 ^④		576.0 ^④ 639.0 ^④		563.0 ^④ 620.0 ^④		562.0 ^④ 623.0 ^④		540.0 ^④ 586.0 ^④		541.0 ^④ 595.0 ^④		506.0 ^④ 536.0 ^④		470.0 ^④ 497.0 ^④							
110	B BV	534.0 ^④ 594.0 ^④	543.0 ^③ 602.0 ^③	535.0 ^④ 594.0 ^④		537.0 ^② 595.0 ^②		530.0 ^③ 589.0 ^③		528.0 ^④ 587.0 ^④		524.0 ^④ 582.0 ^④		518.0 ^④ 574.0 ^④		516.0 ^④ 573.0 ^④		505.0 ^④ 560.0 ^④		503.0 ^④ 558.0 ^④		487.0 ^④ 525.0 ^④		460.0 ^④ 496.0 ^④							
120	B BV	473.0 ^① 528.0 ^①	490.0 ^④ 544.0 ^④	475.0 ^④ 530.0 ^④		487.0 ^④ 541.0 ^④		477.0 ^④ 532.0 ^④		481.0 ^③ 535.0 ^③		475.0 ^④ 529.0 ^④		474.0 ^② 527.0 ^②		470.0 ^③ 523.0 ^②		466.0 ^② 518.0 ^②		461.0 ^② 513.0 ^②		454.0 ^② 495.0 ^②		443.0 ^② 484.0 ^②							
130	B BV	432.0 ^④ 483.0 ^④	438.0 ^④ 488.0 ^④	425.0 ^② 476.0 ^①		440.0 ^④ 490.0 ^④		425.0 ^④ 475.0 ^④		438.0 ^④ 488.0 ^④		428.0 ^④ 478.0 ^④		433.0 ^④ 483.0 ^④		427.0 ^④ 477.0 ^④		428.0 ^④ 476.0 ^④		422.0 ^④ 469.0 ^④		419.0 ^② 460.0 ^②		411.0 ^② 454.0 ^②							
140	B BV	392.0 ^④ 439.0 ^④	398.0 ^④ 445.0 ^④	389.0 ^④ 437.0 ^④		393.0 ^④ 440.0 ^④		383.0 ^④ 430.0 ^④		396.0 ^④ 443.0 ^④		381.0 ^④ 427.0 ^④		395.0 ^④ 442.0 ^④		385.0 ^④ 431.0 ^④		392.0 ^④ 439.0 ^④		384.0 ^④ 428.0 ^④		387.0 ^④ 426.0 ^②		380.0 ^④ 421.0 ^②							
150	B BV	354.0 ^④ 399.0 ^③	366.0 ^③ 410.0 ^③	355.0 ^④ 399.0 ^④		361.0 ^④ 405.0 ^④		353.0 ^④ 397.0 ^④		354.0 ^④ 397.0 ^④		348.0 ^④ 391.0 ^③		357.0 ^④ 400.0 ^④		342.0 ^④ 386.0 ^④		358.0 ^④ 401.0 ^④		346.0 ^④ 388.0 ^④		355.0 ^④ 392.0 ^④		351.0 ^④ 389.0 ^②							
160	B BV	327.0 ^④ 369.0 ^④	334.0 ^④ 376.0 ^④	320.0 ^② 362.0 ^②		333.0 ^④ 374.0 ^④		322.0 ^④ 364.0 ^④		328.0 ^④ 369.0 ^④		320.0 ^④ 362.0 ^④		321.0 ^④ 362.0 ^④		316.0 ^④ 357.0 ^④		323.0 ^④ 364.0 ^④		308.0 ^② 349.0 ^①		323.0 ^④ 360.0 ^④		323.0 ^④ 359.0 ^④							
170	B BV	299.0 ^④ 339.0 ^④	306.0 ^④ 345.0 ^④	297.0 ^④ 336.0 ^④		304.0 ^④ 344.0 ^④		291.0 ^④ 330.0 ^④		302.0 ^④ 342.0 ^④		293.0 ^④ 332.0 ^④		298.0 ^④ 337.0 ^④		292.0 ^④ 331.0 ^④		293.0 ^④ 331.0 ^④		286.0 ^④ 325.0 ^④		292.0 ^④ 329.0 ^④		294.0 ^④ 330.0 ^④							
180	B BV			283.0 ^④ 321.0 ^④		273.0 ^④ 310.0 ^④		279.0 ^④ 316.0 ^④		270.0 ^④ 307.0 ^④		277.0 ^④ 314.0 ^④		266.0 ^④ 303.0 ^④		275.0 ^④ 312.0 ^④		267.0 ^④ 304.0 ^④		272.0 ^④ 309.0 ^④		265.0 ^④ 301.0 ^④		266.0 ^④ 303.0 ^④		265.0 ^④ 301.0 ^④					
190	B BV			261.0 ^④ 296.0 ^④				259.0 ^④ 294.0 ^④		249.0 ^④ 284.0 ^④		253.0 ^④ 288.0 ^④		246.0 ^④ 281.0 ^④		252.0 ^④ 288.0 ^④		243.0 ^④ 278.0 ^④		252.0 ^④ 287.0 ^④		243.0 ^④ 278.0 ^④		248.0 ^④ 283.0 ^④		244.0 ^④ 279.0 ^④					
200	B BV							239.0 ^④ 273.0 ^④		228.0 ^④ 262.0 ^④		236.0 ^④ 269.0 ^④		227.0 ^④ 261.0 ^④		230.0 ^④ 264.0 ^④		224.0 ^④ 258.0 ^④		231.0 ^④ 265.0 ^④		221.0 ^④ 254.0 ^④		222.0 ^④ 262.0 ^④		220.0 ^④ 260.0 ^④		222.0 ^④ 262.0 ^④			
220	B BV											201.0 ^④ 231.0 ^④						199.0 ^④ 220.0 ^④		192.0 ^④ 222.0 ^④		196.0 ^④ 227.0 ^④		188.0 ^④ 219.0 ^④		192.0 ^④ 222.0 ^④		193.0 ^④ 224.0 ^④			
240	B BV																		168.0 ^④ 196.0 ^④		159.0 ^④ 188.0 ^④		165.0 ^④ 194.0 ^④		163.0 ^④ 191.0 ^④		160.0 ^④ 166.0 ^④				
260	B BV																														

Lifting heights

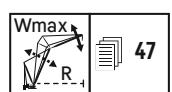
Hauteurs de levage

HSDWB/BV





	661,400 - 826,700 lb
	330,700 - 659,200 lb
	110,200 - 328,500 lb
	0 lb



47

HS 177 ft																					
ft	W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft								
	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax							
45 B BV																					
50 B BV																					
60 B BV	752.0 756.0	798.0 ^① 810.0 ^①	684.0 688.0	691.0 ^① 696.0 ^①	572.0* 500.0	597.0 ^① 509.0 ^①	507.0* 440.0	509.0 ^① 440.0													
70 B BV	689.0 694.0	788.0 ^① 812.0 ^①	637.0 640.0	583.0 595.0	597.0 ^① 603.0 ^①	512.0 517.0	512.0 433.0*	442.0 ^① 431.0 ^①	378.0* 344.0	379.0 ^① 382.0	325.0* 234.0*	325.0* 234.0*									
80 B BV	624.0 629.0	741.0 ^② 779.0 ^②	591.0 593.0	693.0 ^③ 703.0 ^③	547.0 550.0	596.0 ^① 603.0 ^①	499.0 500.0	499.0 444.0	440.0 444.0	380.0 382.0	313.0* 276.0	318.0 ^① 277.0 ^①	234.0* 197.0*								
90 B BV	527.0 528.0	665.0 ^③ 719.0 ^③	543.0 547.0	654.0 ^② 670.0 ^②	512.0 516.0	589.0 ^① 599.0 ^①	472.0 475.0	499.0 ^② 504.0 ^②	428.0 432.0	431.0 ^① 436.0 ^①	368.0 371.0	311.0 313.0	276.0 278.0	228.0* 197.0*							
100 B BV	411.0 411.0	599.0 ^④ 656.0 ^①	470.0 471.0	592.0 ^③ 633.0 ^③	473.0 477.0	566.0 ^② 583.0 ^②	442.0 447.0	499.0 ^② 508.0 ^②	408.0 412.0	427.0 ^② 432.0	350.0 354.0	356.0 ^② 361.0 ^②	296.0 299.0	296.0 299.0							
110 B BV		541.0 ^① 600.0 ^①	391.0 391.0	538.0 ^④ 590.0 ^④	416.0 415.0	531.0 ^② 556.0 ^②	416.0 417.0	489.0 ^② 505.0 ^②	386.0 391.0	423.0 ^② 429.0 ^②	333.0 337.0	350.0 ^② 355.0 ^②	283.0 286.0	289.0 ^② 292.0 ^②							
120 B BV		492.0 ^③ 546.0 ^③	304.0 304.0	489.0 ^① 543.0 ^①	362.0 362.0	496.0 ^① 530.0 ^①	369.0 369.0	463.0 ^② 490.0 ^②	362.0 364.0	416.0 ^② 423.0 ^②	315.0 319.0	345.0 ^② 349.0 ^②	270.0 272.0	284.0 ^② 287.0 ^②							
130 B BV		450.0 ^⑤ 500.0 ^⑤		448.0 ^③ 498.0 ^②	307.0 324.0	465.0 ^① 476.0 ^②	324.0 325.0	436.0 ^② 413.0 ^②	325.0 302.0	406.0 ^② 342.0 ^②	298.0 259.0	338.0 ^② 282.0 ^②	257.0 258.0	279.0 ^② 266.0 ^②							
140 B BV		414.0 ^⑨ 457.0 ^⑤		413.0 ^⑤ 459.0 ^④	243.0 243.0	435.0 ^① 458.0 ^②	289.0 289.0	408.0 ^② 449.0 ^②	288.0 288.0	397.0 ^④ 403.0 ^④	282.0 285.0	330.0 ^② 334.0 ^②	243.0 245.0	273.0 ^② 276.0 ^②							
150 B BV		379.0 ^⑩ 417.0 ^⑥		382.0 ^⑦ 422.0 ^⑥		404.0 ^① 426.0 ^①	248.0 248.0	379.0 ^② 419.0 ^②	260.0 260.0	375.0 ^② 386.0 ^②	261.0 262.0	322.0 ^② 327.0 ^②	228.0 230.0	266.0 ^② 269.0 ^②							
160 B BV		345.0 ^⑩ 383.0 ^⑨		353.0 ^⑦ 388.0 ^⑧		373.0 ^① 397.0 ^①	198.0 199.0	353.0 ^③ 389.0 ^②	228.0 228.0	350.0 ^② 367.0 ^②	239.0 239.0	310.0 ^② 318.0 ^②	215.0 216.0	259.0 ^② 262.0							
170 B BV		317.0 ^⑧ 357.0 ^⑧		323.0 ^⑦ 369.0 ^⑦		342.0 ^① 359.0 ^②		327.0 ^④ 347.0 ^④	197.0 214.0	325.0 ^② 309.0 ^②	214.0 204.0	296.0 ^② 255.0 ^②	203.0 210.0	252.0 ^② 255.0 ^②							
180 B BV		293.0 ^⑧ 330.0 ^⑧		297.0 ^⑨ 334.0 ^⑨		311.0 ^① 340.0 ^①		303.0 ^④ 331.0 ^③	156.0 156.0	302.0 ^③ 327.0 ^③	190.0 190.0	282.0 ^③ 300.0 ^②	193.0 194.0	245.0 ^② 247.0 ^②							
190 B BV		267.0 ^⑥ 303.0 ^⑥		276.0 ^⑧ 312.0 ^⑧		280.0 ^⑤ 313.0 ^⑤		281.0 ^③ 308.0 ^③	165.0 165.0	268.0 ^③ 291.0 ^②	178.0 178.0	237.0 ^② 250.0 ^②	207.0 203.0	215.0 ^② 214.0 ^②							
200 B BV		249.0 ^⑥ 283.0 ^⑥		256.0 ^⑧ 290.0 ^⑧		263.0 ^⑤ 295.0 ^⑤		261.0 ^④ 290.0 ^③	131.0 131.0	255.0 ^③ 282.0 ^②	167.0 169.0	232.0 ^③ 236.0 ^②	169.0 170.0	208.0 ^② 211.0 ^②							
220 B BV						219.0 ^⑥ 250.0 ^⑥			228.0 ^④ 256.0 ^②	109.0 109.0	215.0 ^② 217.0 ^②	134.0 134.0	216.0 ^② 223.0 ^②	207.0 ^② 209.0 ^②	212.0 ^② 213.0 ^②						
240 B BV						196.0 ^⑥ 224.0 ^⑥		202.0 ^⑧ 227.0 ^④	207.0 ^④ 227.0 ^④	205.0 ^⑤ 226.0 ^②	195.0 ^③ 204.0 ^②	199.0 ^② 209.0 ^②	116.0 116.0	190.0 ^② 191.0 ^②	121.0 ^② 121.0						
260 B BV						175.0 ^⑥ 201.0 ^⑥		181.0 ^⑥ 204.0 ^⑥		175.0 ^④ 191.0 ^④	182.0 ^⑥ 193.0 ^⑥	178.0 ^③ 180.0 ^③	175.0 ^② 175.0 ^②	97.5 97.5	156.0 ^③ 157.0 ^③	102.0 ^③ 101.0 ^③					
280 B BV								157.0 ^⑥ 181.0 ^⑥	161.0 ^⑦ 183.0 ^⑥	158.0 ^③ 177.0 ^③	158.0 ^③ 176.0 ^③	156.0 ^③ 168.0 ^③		148.0 ^③ 149.0 ^③	148.0 ^③ 153.0 ^③	126.0 ^③ 127.0					
300 B BV									141.0 ^⑦ 163.0 ^⑥	143.0 ^⑦ 161.0 ^⑥	141.0 ^④ 159.0 ^④	141.0 ^④ 155.0 ^④	140.0 ^③ 141.0 ^③	135.0 ^③ 141.0 ^③	124.0 ^③ 125.0 ^③	68.8 68.9	108.0 ^④ 109.0 ^④				
320 B BV										127.0 ^⑦ 145.0 ^⑥	128.0 ^⑦ 143.0 ^⑥	126.0 ^④ 141.0 ^④	123.0 ^③ 133.0 ^③	120.0 ^③ 133.0 ^③	116.0 ^③ 118.0 ^③	104.0 ^④ 104.0 ^④	56.0 55.9	89.2 ^④ 89.9 ^④			
340 B BV											113.0 ^⑦ 129.0 ^⑥	116.0 ^⑦ 128.0 ^⑥	112.0 ^④ 120.0 ^④	108.0 ^③ 112.0 ^③	108.0 ^③ 112.0 ^③	98.1 ^③ 98.5 ^③	86.0 ^④ 86.7 ^④				
360 B BV												102.0 ^⑦ 117.0 ^⑥	101.0 ^⑦ 113.0 ^⑥	96.9 ^④ 105.0 ^④	93.2 ^③ 105.0 ^③	93.3 ^③ 105.0 ^③	93.3 ^③ 104.0 ^③	80.8 ^④ 81.3 ^④			
380 B BV													89.0 ^⑦ 100.0 ^⑥	85.9 ^④ 98.0 ^④	85.9 ^③ 98.0 ^③	83.6 ^③ 88.1 ^②	77.5 ^③ 81.8 ^③	76.9 ^④ 62.5 ^④	76.9 ^④ 68.3 ^④		
400 B BV																					
420 B BV																					
440 B BV																					

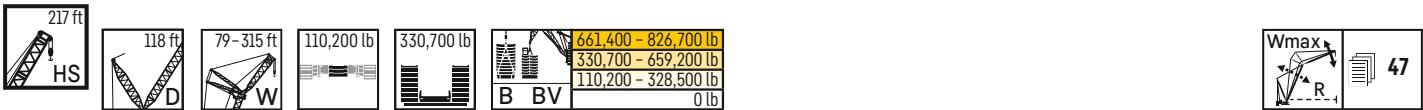


		661,400 - 826,700 lb 330,700 - 659,200 lb 110,200 - 328,500 lb 0 lb
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		HS 197 ft																												
		W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft		W 217 ft		W 236 ft		W 256 ft		W 276 ft		W 295 ft		W 315 ft				
ft		87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax			
45	B	725.0*	734.0 ¹⁾																											
50	B	684.0*	736.0 ¹⁾	625.0* ¹⁾	631.0 ¹⁾																									
60	B	696.0	736.0 ¹⁾	633.0	637.0 ¹⁾	528.0*	549.0 ¹⁾	471.0*	472.0 ¹⁾																					
	BV	697.0	739.0 ¹⁾	634.0	638.0 ¹⁾																									
70	B	630.0	733.0 ¹⁾	590.0	635.0 ¹⁾	538.0	551.0 ¹⁾	477.0	477.0 ¹⁾	404.0*	412.0 ¹⁾	354.0*	355.0 ¹⁾																	
	BV	641.0	739.0 ¹⁾	590.0	638.0 ¹⁾	539.0	556.0 ¹⁾	481.0	481.0																					
80	B	567.0	711.0 ¹⁾	546.0	632.0 ¹⁾	507.0	549.0 ¹⁾	461.0	461.0	412.0	412.0	358.0	358.0	297.0*	301.0 ¹⁾	262.0*	262.0 ¹⁾													
	BV	580.0	725.0 ¹⁾	549.0	638.0 ¹⁾	507.0	556.0 ¹⁾	461.0	461.0	415.0	415.0	360.0	360.0																	
90	B	507.0	651.0 ³⁾	494.0	607.0 ¹⁾	474.0	547.0 ¹⁾	436.0	456.0 ²⁾	398.0	400.0 ³⁾	349.0	349.0	296.0	296.0	256.0*	260.0 ¹⁾	218.0*	219.0 ¹⁾	187.0*	188.0 ¹⁾	161.0*	161.0*							
	BV	524.0	682.0 ¹⁾	507.0	625.0 ¹⁾	476.0	557.0 ¹⁾	438.0	458.0 ²⁾	400.0	402.0 ³⁾	352.0	352.0	298.0	298.0															
100	B	444.0	589.0 ⁴⁾	441.0	569.0 ³⁾	431.0	525.0 ¹⁾	409.0	455.0 ²⁾	377.0	399.0 ³⁾	333.0	337.0 ²⁾	284.0	284.0	257.0	257.0	217.0	217.0	183.0*	186.0 ¹⁾	157.0*	159.0 ¹⁾	136.0*	136.0 ¹⁾	116.0*				
	BV	445.0	639.0 ¹⁾	456.0	602.0 ¹⁾	443.0	536.0 ¹⁾	412.0	460.0 ²⁾	380.0	403.0 ³⁾	338.0	342.0 ²⁾	286.0	286.0	259.0	259.0	219.0	219.0											
110	B		536.0 ⁶⁾	398.0	528.0 ⁴⁾	394.0	498.0 ¹⁾	382.0	455.0 ²⁾	359.0	399.0 ³⁾	318.0	333.0 ²⁾	272.0	276.0 ²⁾	252.0	252.0	214.0	214.0	183.0	183.0	157.0	157.0 ¹⁾	133.0*	134.0 ¹⁾	113.0*	114.0 ¹⁾			
	BV		589.0 ¹⁾	406.0	576.0 ¹⁾	407.0	519.0 ²⁾	388.0	462.0 ²⁾	361.0	404.0 ³⁾	323.0	338.0 ²⁾	275.0	279.0 ²⁾	255.0	255.0	215.0	215.0	185.0	185.0	158.0	158.0							
120	B		485.0 ⁸⁾	324.0	486.0 ⁵⁾	362.0	471.0 ¹⁾	353.0	437.0 ²⁾	340.0	397.0 ³⁾	303.0	329.0 ²⁾	260.0	273.0 ²⁾	247.0	250.0 ²⁾	211.0	211.0 ²⁾	181.0	181.0	155.0	155.0	133.0	133.0	113.0	113.0 ¹⁾			
	BV		539.0 ¹⁾	324.0	534.0 ¹⁾	371.0	505.0 ²⁾	364.0	458.0 ²⁾	343.0	404.0 ³⁾	307.0	334.0 ²⁾	263.0	276.0 ²⁾	250.0	253.0 ²⁾	212.0	213.0 ²⁾	182.0	182.0	156.0	156.0	134.0	134.0	113.0	113.0			
130	B		444.0 ⁴⁾		443.0 ¹⁰⁾	317.0	444.0 ¹⁾	326.0	419.0 ²⁾	318.0	388.0 ³⁾	289.0	325.0 ²⁾	249.0	269.0 ²⁾	242.0	249.0 ²⁾	208.0	210.0 ²⁾	178.0	179.0 ²⁾	153.0	153.0	131.0	131.0	111.0	111.0			
	BV		494.0 ⁴⁾		491.0 ¹⁰⁾	318.0	484.0 ²⁾	331.0	455.0 ²⁾	325.0	398.0 ³⁾	292.0	330.0 ²⁾	251.0	272.0 ²⁾	245.0	252.0 ²⁾	210.0	212.0 ²⁾	180.0	180.0 ²⁾	154.0	154.0	132.0	132.0	112.0	112.0			
140	B		409.0 ¹⁰⁾		407.0 ⁴⁾	259.0	417.0 ¹¹⁾	296.0	399.0 ²⁾	292.0	380.0 ³⁾	274.0	318.0 ²⁾	236.0	264.0 ²⁾	237.0	248.0 ²⁾	205.0	209.0 ²⁾	176.0	178.0 ²⁾	151.0	152.0 ²⁾	129.0	129.0 ²⁾	109.0	109.0			
	BV		455.0 ¹¹⁾		453.0 ⁹⁾	259.0	451.0 ²⁾	294.0	439.0 ²⁾	294.0	391.0 ³⁾	277.0	323.0 ²⁾	239.0	267.0 ²⁾	240.0	251.0 ²⁾	207.0	211.0 ²⁾	177.0	179.0 ²⁾	152.0	153.0 ²⁾	130.0	130.0	110.0	110.0			
150	B		377.0 ¹⁰⁾		377.0 ⁶⁾		390.0 ¹¹⁾	256.0	372.0 ²⁾	266.0	367.0 ³⁾	259.0	312.0 ²⁾	223.0	259.0 ²⁾	232.0	246.0 ²⁾	202.0	209.0 ²⁾	173.0	177.0 ²⁾	149.0	150.0 ²⁾	127.0	128.0 ²⁾	108.0	108.0 ²⁾			
	BV		419.0 ⁷⁾		420.0 ⁵⁾		419.0 ⁵⁾	256.0	415.0 ²⁾	266.0	381.0 ³⁾	262.0	317.0 ²⁾	225.0	262.0 ²⁾	235.0	250.0 ²⁾	204.0	211.0 ²⁾	174.0	178.0 ²⁾	150.0	151.0 ²⁾	128.0	129.0 ²⁾	108.0	108.0 ²⁾			
160	B		345.0 ¹⁰⁾		351.0 ¹⁰⁾		363.0 ¹¹⁾	212.0	347.0 ⁵⁾	234.0	344.0 ²⁾	242.0	304.0 ²⁾	212.0	253.0 ²⁾	226.0	243.0 ²⁾	199.0	207.0 ²⁾	170.0	176.0 ²⁾	146.0	149.0 ²⁾	125.0	127.0 ²⁾	106.0	106.0 ²⁾			
	BV		383.0 ¹⁰⁾		389.0 ⁴⁰⁾		388.0 ¹¹⁾	212.0	386.0 ²⁾	234.0	362.0 ²⁾	243.0	310.0 ²⁾	214.0	256.0 ²⁾	227.0	247.0 ²⁾	201.0	209.0 ²⁾	172.0	177.0 ²⁾	148.0	150.0 ²⁾	126.0	127.0 ²⁾	106.0	107.0 ²⁾			
170	B		313.0 ¹⁰⁾		324.0 ¹⁰⁾		336.0 ¹¹⁾	324.0 ⁵⁾	320.3	322.0 ²⁾	219.0	293.0 ³⁾	200.0	247.0 ²⁾	217.0	242.0 ²⁾	196.0	206.0 ³⁾	168.0	174.0 ²⁾	144.0	148.0 ²⁾	123.0	125.0 ²⁾	104.0	105.0 ²⁾				
	BV		351.0 ¹⁰⁾		359.0 ⁴⁰⁾		360.0 ¹¹⁾	358.0 ²⁾	203.0	342.0 ²⁾	219.0	301.0 ²⁾	202.0	250.0 ²⁾	218.0	246.0 ²⁾	198.0	208.0 ³⁾	169.0	176.0 ²⁾	146.0	149.0 ²⁾	124.0	126.0 ²⁾	105.0	106.0 ²⁾				
180	B		290.0 ⁹⁾		297.0 ⁹⁾		310.0 ¹¹⁾	303.0 ⁵⁾	167.0	301.0 ³⁾	195.0	279.0 ³⁾	191.0	241.0 ²⁾	201.0	239.0 ³⁾	193.0	205.0 ³⁾	165.0	173.0 ³⁾	142.0	146.0 ²⁾	121.0	124.0 ²⁾	102.0	104.0 ²⁾				
	BV		327.0 ⁹⁾		330.0 ⁷⁾		335.0 ¹¹⁾	332.0 ⁵⁾	167.0	323.0 ³⁾	194.0	291.0 ²⁾	192.0	244.0 ²⁾	202.0	243.0 ³⁾	195.0	207.0 ³⁾	167.0	174.0 ³⁾	144.0	147.0 ³⁾	122.0	125.0 ²⁾	103.0	105.0 ²⁾				
190	B		267.0 ⁸⁾		274.0 ¹⁰⁾		283.0 ¹¹⁾	282.0 ⁵⁾		281.0 ⁴⁾	170.0	266.0 ⁴⁾	179.0	234.0 ²⁾	185.0	237.0 ³⁾	185.0	203.0 ³⁾	163.0	171.0 ³⁾	140.0	146.0 ³⁾	120.0	122.0 ³⁾	101.0	103.0 ²⁾				
	BV		303.0 ⁸⁾		308.0 ¹⁰⁾		310.0 ¹¹⁾	307.0 ⁵⁾		304.0 ⁴⁾	170.0	282.0 ²⁾	180.0	237.0 ²⁾	185.0	241.0 ³⁾	187.0	205.0 ³⁾	164.0	173.0 ³⁾	142.0	147.0 ³⁾	121.0	123.0 ³⁾	101.0	104.0 ²⁾				
200	B		245.0 ⁸⁾		254.0 ¹⁰⁾		259.0 ¹¹⁾	261.0 ⁵⁾		262.0 ⁴⁾	139.0	252.0 ⁴⁾	164.0	228.0 ²⁾	169.0	231.0 ^{2)</sup}														



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HS 217 ft																										
		W 79 ft	W 98 ft	W 118 ft	W 138 ft	W 158 ft	W 177 ft	W 197 ft	W 217 ft	W 236 ft	W 256 ft	W 276 ft	W 295 ft	W 315 ft												
ft		87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax	87°/85 Wmax												
45	B BV	667.0* 668.0 ¹⁾																								
50	B BV	639.0* 669.0 ¹⁾	581.0* 581.0 ¹⁾																							
60	B BV	647.0 647.0	670.0 ¹⁾ 674.0 ¹⁾	588.0 588.0	588.0 588.0	491.0* 509.0 ¹⁾	440.0* 440.0*																			
70	B BV	596.0 597.0	667.0 ¹⁾ 671.0 ¹⁾	550.0 549.0	581.0 ¹⁾ 583.0 ¹⁾	501.0 501.0	510.0 ¹⁾ 511.0 ¹⁾	448.0 452.0	448.0 452.0	378.0* 333.0*	385.0 ¹⁾ 333.0*															
80	B BV	538.0 550.0	664.0 ¹⁾ 667.0 ¹⁾	513.0 511.0	577.0 ¹⁾ 581.0 ¹⁾	472.0 472.0	506.0 ¹⁾ 509.0 ¹⁾	430.0 430.0	430.0 ¹⁾ 433.0 ¹⁾	386.0 388.0	386.0 388.0	325.0* 282.0*	335.0 ¹⁾ 286.0 ¹⁾	249.0* 249.0*												
90	B BV	488.0 502.0	617.0 ¹⁾ 644.0 ¹⁾	470.0 475.0	566.0 ¹⁾ 576.0 ¹⁾	443.0 443.0	502.0 ¹⁾ 507.0 ¹⁾	407.0 408.0	421.0 ¹⁾ 422.0 ¹⁾	371.0 372.0	371.0 334.0	330.0 334.0	282.0 285.0	282.0 285.0												
100	B BV	437.0 452.0	572.0 ²⁾ 612.0 ¹⁾	425.0 439.0	536.0 ¹⁾ 564.0 ¹⁾	410.0 413.0	488.0 ¹⁾ 496.0 ¹⁾	382.0 384.0	420.0 ²⁾ 423.0 ²⁾	351.0 353.0	369.0 ²⁾ 371.0 ²⁾	318.0 320.0	320.0 ²⁾ 274.0	272.0 274.0	244.0 246.0	208.0 209.0	208.0 ¹⁾ 209.0	175.0* 175.0	178.0 ¹⁾ 151.0*	151.0 ¹⁾ 152.0 ¹⁾	130.0* 130.0					
110	B BV		527.0 ³⁾ 576.0 ¹⁾	389.0 401.0	505.0 ¹⁾ 551.0 ¹⁾	378.0 387.0	466.0 ¹⁾ 480.0 ¹⁾	361.0 362.0	419.0 ²⁾ 423.0 ²⁾	334.0 335.0	368.0 ²⁾ 371.0 ²⁾	304.0 307.0	317.0 ²⁾ 320.0 ²⁾	261.0 264.0	264.0 ²⁾ 242.0	240.0 242.0	205.0 206.0	176.0 177.0	176.0 177.0	151.0 151.0	151.0 ¹⁾ 151.0	127.0* 129.0 ¹⁾	109.0* 109.0 ¹⁾			
120	B BV		483.0 ⁷⁾ 531.0 ¹⁾	342.0 343.0	472.0 ¹⁾ 523.0 ¹⁾	349.0 360.0	446.0 ²⁾ 475.0 ²⁾	339.0 342.0	411.0 ²⁾ 422.0 ²⁾	318.0 319.0	368.0 ²⁾ 372.0 ²⁾	292.0 294.0	314.0 ²⁾ 318.0 ²⁾	251.0 254.0	261.0 ²⁾ 240.0 ²⁾	235.0 238.0	238.0 ²⁾ 240.0 ²⁾	202.0 204.0	202.0 ²⁾ 204.0	174.0 175.0	174.0 175.0	149.0 150.0	149.0 150.0	128.0 128.0	128.0 128.0	108.0 109.0
130	B BV		441.0 ⁸⁾ 487.0 ³⁾		436.0 ¹⁾ 485.0 ¹⁾	322.0 326.0	426.0 ¹⁾ 469.0 ¹⁾	315.0 323.0	399.0 ²⁾ 420.0 ²⁾	302.0 303.0	364.0 ²⁾ 371.0 ²⁾	279.0 282.0	311.0 ²⁾ 316.0 ²⁾	240.0 243.0	258.0 ²⁾ 262.0 ²⁾	230.0 233.0	237.0 ²⁾ 240.0 ²⁾	199.0 201.0	201.0 ²⁾ 203.0 ²⁾	171.0 173.0	172.0 ²⁾ 173.0 ²⁾	147.0 148.0	147.0 148.0	126.0 127.0	126.0 127.0	107.0 107.0
140	B BV		404.0 ⁹⁾ 450.0 ⁵⁾	403.0 ⁷⁾ 448.0 ²⁾	272.0 272.0	399.0 ²⁾ 413.0 ²⁾	293.0 302.0	388.0 ²⁾ 418.0 ²⁾	284.0 288.0	359.0 ²⁾ 369.0 ²⁾	266.0 280.0	306.0 ²⁾ 311.0 ²⁾	229.0 231.0	255.0 ²⁾ 259.0 ²⁾	225.0 226.0	236.0 ²⁾ 239.0 ²⁾	196.0 198.0	200.0 ²⁾ 203.0 ²⁾	169.0 170.0	171.0 ²⁾ 172.0 ²⁾	145.0 146.0	145.0 ²⁾ 147.0 ²⁾	124.0 125.0	124.0 ²⁾ 125.0	105.0 106.0	
150	B BV		373.0 ¹⁰⁾ 417.0 ⁹⁾	372.0 ⁹⁾ 415.0 ⁴⁾		373.0 ¹¹⁾ 413.0 ²⁾	264.0 265.0	366.0 ²⁾ 401.0 ³⁾	265.0 367.0 ²⁾	354.0 ²⁾ 256.0	253.0 306.0 ²⁾	301.0 ²⁾ 220.0	218.0 219.0	251.0 ²⁾ 239.0 ²⁾	219.0 219.0	235.0 ²⁾ 239.0 ²⁾	193.0 195.0	200.0 ²⁾ 202.0 ²⁾	166.0 168.0	170.0 ²⁾ 172.0 ²⁾	143.0 144.0	145.0 ²⁾ 146.0 ²⁾	122.0 123.0	123.0 ²⁾ 124.0 ²⁾	104.0 104.0 ¹⁾	
160	B BV		344.0 ¹¹⁾ 385.0 ⁹⁾	347.0 ⁹⁾ 387.0 ⁷⁾		349.0 ¹¹⁾ 385.0 ⁴⁾	222.0 222.0	342.0 ³⁾ 380.0 ³⁾	239.0 240.0	337.0 ²⁾ 355.0 ³⁾	240.0 243.0	296.0 ²⁾ 301.0 ²⁾	207.0 209.0	246.0 ²⁾ 249.0 ²⁾	211.0 212.0	232.0 ²⁾ 236.0 ²⁾	190.0 192.0	199.0 ²⁾ 202.0 ²⁾	164.0 165.0	169.0 ²⁾ 171.0 ²⁾	141.0 142.0	144.0 ²⁾ 145.0 ²⁾	120.0 121.0	122.0 ²⁾ 123.0 ²⁾	102.0 103.0 ²⁾	
170	B BV		314.0 ¹²⁾ 353.0 ¹⁰⁾	323.0 ⁹⁾ 359.0 ⁷⁾		326.0 ¹²⁾ 360.0 ⁵⁾	320.0 ⁵⁾ 356.0 ³⁾	209.0 208.0	316.0 ³⁾ 342.0 ³⁾	222.0 223.0	285.0 ³⁾ 293.0 ²⁾	197.0 199.0	241.0 ²⁾ 245.0 ²⁾	204.0 204.0	231.0 ²⁾ 235.0 ²⁾	187.0 188.0	197.0 ²⁾ 200.0 ²⁾	161.0 163.0	168.0 ²⁾ 170.0 ²⁾	139.0 140.0	143.0 ²⁾ 144.0 ²⁾	119.0 120.0	121.0 ²⁾ 122.0 ²⁾	100.0 101.0		
180	B BV		286.0 ¹³⁾ 322.0 ⁸⁾	298.0 ¹⁰⁾ 332.0 ⁷⁾		303.0 ¹¹⁾ 335.0 ⁵⁾	300.0 ⁶⁾ 333.0 ⁴⁾	175.0 175.0	297.0 ²⁾ 323.0 ²⁾	199.0 199.0	277.0 ²⁾ 283.0 ²⁾	189.0 190.0	235.0 ²⁾ 239.0 ²⁾	197.0 197.0	229.0 ²⁾ 233.0 ²⁾	183.0 183.0	200.0 ²⁾ 200.0 ²⁾	159.0 161.0	166.0 ²⁾ 168.0 ²⁾	137.0 138.0	141.0 ²⁾ 143.0 ²⁾	117.0 118.0	120.0 ²⁾ 121.0 ²⁾	98.7 99.5	100.0 ²⁾ 101.0 ²⁾	
190	B BV		265.0 ¹⁴⁾ 300.0 ⁸⁾	274.0 ¹⁰⁾ 306.0 ⁸⁾		281.0 ¹⁵⁾ 310.0 ⁶⁾		278.0 ⁴⁾ 310.0 ⁶⁾	175.0 304.0	266.0 ⁴⁾ 273.0 ²⁾	187.0 180.0	228.0 ²⁾ 234.0 ²⁾	177.0 187.0	196.0 ²⁾ 210.0 ²⁾	157.0 177.0	166.0 ²⁾ 198.0 ²⁾	135.0 158.0	140.0 ²⁾ 168.0 ²⁾	115.0 136.0	118.0 ²⁾ 142.0 ²⁾	97.2 116.0	100.0 ²⁾ 119.0 ²⁾	99.3 ²⁾ 100.0 ²⁾			
200	B BV		245.0 ¹⁵⁾ 278.0 ⁸⁾	251.0 ¹⁰⁾ 284.0 ⁸⁾		261.0 ¹⁶⁾ 288.0 ⁶⁾		262.0 ⁶⁾ 285.0 ³⁾	147.0 147.0	252.0 ⁴⁾ 263.0 ²⁾	166.0 170.0	221.0 ²⁾ 228.0 ²⁾	172.0 172.0	225.0 ²⁾ 229.0 ²⁾	171.0 171.0	195.0 ²⁾ 197.0 ²⁾	154.0 156.0	164.0 ²⁾ 166.0 ²⁾	133.0 134.0	140.0 ²⁾ 141.0 ²⁾	114.0 115.0	117.0 ²⁾ 119.0 ²⁾	95.7 96.5	97.9 ²⁾ 98.7 ²⁾		
220	B BV		208.0 ¹⁶⁾ 239.0 ¹³⁾	216.0 ¹⁰⁾ 247.0 ⁸⁾		223.0 ¹⁷⁾ 253.0 ⁸⁾		227.0 ³⁾ 252.0 ⁴⁾	124.0 ⁴⁾ 244.0 ²⁾	207.0 ²⁾ 217.0 ²⁾	141.0 141.0	211.0 ⁴⁾ 217.0 ²⁾	114.0 148.0	191.0 ⁴⁾ 194.0 ²⁾	144.0 144.0	162.0 ²⁾ 164.0 ²⁾	129.0 130.0	137.0 ⁴⁾ 140.0 ²⁾	110.0 111.0	115.0 ²⁾ 116.0 ²⁾	92.2 93.0	97.1 ²⁾ 97.1 ²⁾	96.2 ²⁾ 97.1 ²⁾			
240	B BV		178.0 ¹⁷⁾ 207.0 ¹⁴⁾	185.0 ¹⁰⁾ 213.0 ⁸⁾		193.0 ¹⁸⁾ 221.0 ⁸⁾		198.0 ²⁾ 224.0 ²⁾	198.0 ⁵⁾ 221.0 ⁴⁾	198.0 ²⁾ 204.0 ²⁾	191.0 ²⁾ 204.0 ²⁾	104.0 104.0	191.0 ⁴⁾ 206.0 ²⁾	121.0 121.0	181.0 ⁴⁾ 186.0 ²⁾	125.0 125.0	160.0 ²⁾ 164.0 ²⁾	106.0 110.0	113.0 ²⁾ 114.0 ²⁾	88.8 108.0	93.7 ⁴⁾ 114.0 ²⁾	94.5 ⁴⁾ 89.6				
260	B BV				159.0 ¹⁸⁾ 185.0 ¹⁵⁾	165.0 ¹⁹⁾ 191.0 ¹⁴⁾		172.0 ⁸⁾ 198.0 ⁸⁾	176.0 ²⁾ 201.0 ²⁾	176.0 ⁷⁾ 188.0 ⁶⁾	174.0 ⁴⁾ 188.0 ⁵⁾	172.0 ⁴⁾ 193.0 ³⁾	89.6 89.4	167.0 ⁴⁾ 179.0 ³⁾	102.0 102.0	152.0 ⁴⁾ 155.0 ³⁾	105.0 105.0	132.0 ⁴⁾ 133.0 ⁴⁾	102.0 103.0	111.0 ²⁾ 112.0 ²⁾	85.9 86.7	91.7 ⁴⁾ 92.5 ⁴⁾	91.7 ⁴⁾ 92.5 ⁴⁾			
280	B BV							147.0 ⁶⁾	154.0 ⁹⁾	159.0 ⁹⁾	158.0 ⁶⁾	154.0 ⁵⁾	153.0 ⁴⁾	74.6	144.0 ³⁾	85.7	128.0 ⁴⁾	88.7	110.0 ²⁾	83.3	89.9 ⁵⁾	89.9 ⁵⁾				
300	B BV							172.0 ⁶⁾	177.0 ⁸⁾	179.0 ⁶⁾	171.0 ⁴⁾	175.0 ³⁾	171.0 ³⁾	74.6	144.0 ³⁾	85.7	129.0 ⁴⁾	89.2	111.0 ²⁾	84.2	90.8 ⁵⁾	89.4 ⁴⁾				
320	B BV									118.0 ⁷⁾	124.0 ⁹⁾	125.0 ⁸⁾	126.0 ⁶⁾	123.0 ⁵⁾	123.0 ⁵⁾	119.0 ⁴⁾	50.4	104.0 ⁴⁾	59.2	87.1 ⁴⁾						
340	B BV									140.0 ⁷⁾	142.0 ⁹⁾	139.0 ⁵⁾	139.0 ³⁾	132.0 ³⁾	132.0 ³⁾	119.0 ⁴⁾	50.4	105.0 ⁴⁾	59.2	87.9 ⁴⁾						
360	B BV										106.0 ⁷⁾	109.0 ⁹⁾	112.0 ⁷⁾	109.0 ⁵⁾	106.0 ⁴⁾	106.0 ⁴⁾	106.0 ⁴⁾	50.4	99.8 ⁴⁾	39.4	83.6 ⁵⁾ </					



		661,400 - 826,700 lb
		330,700 - 659,200 lb
		110,200 - 328,500 lb

0 lb

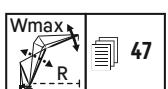


47

HS 236 ft																
ft	W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft			
	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax		
45	B BV	603.0*	603.0*													
50	B BV	581.0*	600.0 ^①	529.0*	529.0*											
60	B BV	589.0 596.0	600.0 ^① 609.0 ^①	491.0*	529.0 ^①	451.0*	464.0 ^①	406.0*	406.0*							
70	B BV	545.0 552.0	598.0 ^① 606.0 ^①	507.0 506.0	526.0 ^① 528.0 ^①	461.0 461.0	465.0 ^① 465.0 ^①	386.0*	407.0 ^①	350.0*	356.0 ^①	310.0*	310.0*			
80	B BV	495.0 505.0	596.0 ^① 602.0 ^①	471.0 472.0	521.0 ^① 525.0 ^①	436.0 435.0	460.0 ^① 461.0 ^①	397.0 396.0	398.0 ^① 399.0 ^①	358.0 359.0	358.0 359.0	302.0*	310.0 ^①	265.0* 268.0 ^①		
90	B BV	449.0 462.0	574.0 ^① 591.0 ^①	430.0 440.0	516.0 ^① 521.0 ^①	408.0 409.0	454.0 ^① 458.0 ^①	375.0 376.0	385.0 ^② 385.0 ^②	343.0 344.0	343.0 347.0 ^②	308.0 308.0	308.0 268.0	266.0 228.0* 232.0 ^①		
100	B BV	406.0 ^① 420.0	540.0 ^① 575.0 ^①	390.0 403.0	498.0 ^① 514.0 ^①	375.0 382.0 ^①	447.0 ^① 452.0 ^①	353.0 353.0	383.0 ^② 384.0 ^②	325.0 326.0	338.0 ^② 339.0 ^②	296.0 295.0 ^②	296.0 ^② 259.0	257.0* 257.0 ^① 230.0 232.0		
110	B BV		506.0 ^① 560.0 ^①	359.0 371.0	479.0 ^① 507.0 ^①	347.0 357.0	430.0 ^② 435.0 ^②	332.0 334.0	381.0 ^② 383.0 ^②	310.0 310.0	337.0 ^② 339.0 ^②	284.0 283.0	295.0 ^② 295.0 ^②	248.0 250.0 ^② 225.0 228.0		
120	B BV		471.0 ^① 520.0 ^①	334.0 344.0	458.0 ^① 497.0 ^①	323.0 333.0	418.0 ^② 432.0 ^②	310.0 316.0	378.0 ^② 382.0 ^②	295.0 295.0	336.0 ^② 338.0 ^②	273.0 271.0	294.0 ^② 296.0 ^②	238.0 241.0 221.0 226.0 ^②		
130	B BV		438.0 ^① 480.0 ^①		426.0 ^① 471.0 ^①	300.0 309.0	405.0 ^② 429.0 ^②	290.0 299.0	373.0 ^② 379.0 ^②	279.0 281.0	335.0 ^② 337.0 ^②	261.0 260.0	293.0 ^② 296.0 ^②	229.0 232.0 216.0 225.0 ^②		
140	B BV		401.0 ^① 443.0 ^④		394.0 ^⑧ 439.0 ^②	281.0 283.0	389.0 ^② 419.0 ^②	271.0 279.0	367.0 ^② 377.0 ^②	263.0 267.0	332.0 ^② 335.0 ^②	250.0 248.0	290.0 ^② 294.0 ^②	210.0 222.0 220.0 225.0 ^②		
150	B BV		368.0 ^⑩ 410.0 ^⑩			363.0 ^② 408.0 ^③	254.0 402.0 ^③	357.0 ^② 370.0 ^②	246.0 262.0	329.0 ^② 370.0 ^②	237.0 237.0	286.0 ^② 291.0 ^②	210.0 212.0 204.0 225.0 ^②			
160	B BV		341.0 ^⑩ 381.0 ^⑩		340.0 ^⑩ 380.0 ^⑩	338.0 ^④ 377.0 ^④	231.0 231.0	334.0 ^② 359.0 ^②	231.0 237.0	323.0 ^② 328.0 ^②	224.0 226.0	282.0 ^② 287.0 ^②	200.0 203.0 197.0 223.0 ^②			
170	B BV		314.0 ^⑩ 352.0 ^⑩		318.0 ^⑩ 355.0 ^⑩	316.0 ^④ 353.0 ^④		313.0 ^④ 345.0 ^④	216.0 216.0	310.0 ^④ 321.0 ^④	210.0 215.0	276.0 ^② 283.0 ^②	191.0 193.0 190.0 221.0 ^②			
180	B BV		286.0 ^⑩ 323.0 ^⑩		295.0 ^⑩ 330.0 ^⑩	297.0 ^⑩ 329.0 ^⑩		294.0 ^⑤ 325.0 ^④	183.0 183.0	291.0 ^③ 312.0 ^④	198.0 199.0	270.0 ^⑤ 276.0 ^③	184.0 186.0 187.0 ^③ 216.0 ^③			
190	B BV		261.0 ^⑩ 296.0 ^⑩		273.0 ^⑩ 306.0 ^⑩	278.0 ^⑨ 308.0 ^⑥		277.0 ^⑦ 306.0 ^⑤	181.0 197.0	260.0 ^④ 266.0 ^③	175.0 177.0	220.0 ^② 226.0 ^②	174.0 176.0 164.0 163.0 ^③			
200	B BV		243.0 ^⑩ 276.0 ^⑩		250.0 ^⑩ 282.0 ^⑩	259.0 ^⑦ 287.0 ^⑤		260.0 ^④ 280.0 ^④	154.0 153.0	249.0 ^④ 256.0 ^④	166.0 167.0	213.0 ^② 221.0 ^②	164.0 169.0 159.0 ^③			
220	B BV		206.0 ^⑩ 236.0 ^⑩		213.0 ^⑩ 244.0 ^⑩	222.0 ^⑩ 248.0 ^⑩		227.0 ^⑩ 250.0 ^⑩	122.0 ^⑩ 130.0	228.0 ^⑩ 236.0 ^④	225.0 ^⑤ 236.0 ^④	130.0 ^⑩ 121.0 ^④	145.0 146.0 ^④ 184.0 ^④ 186.0 ^④			
240	B BV		177.0 ^⑩ 205.0 ^⑩		182.0 ^⑩ 210.0 ^⑩	190.0 ^⑩ 218.0 ^⑩		195.0 ^⑨ 221.0 ^⑩	198.0 ^⑨ 220.0 ^⑩	198.0 ^⑨ 212.0 ^⑩	190.0 ^⑩ 209.0 ^⑩	180.0 ^⑩ 190.0 ^⑩	184.0 ^④ 186.0 ^④ 187.0 ^④ 190.0 ^④			
260	B BV					156.0 ^⑩ 182.0 ^⑩	163.0 ^⑩ 189.0 ^⑩	169.0 ^⑩ 195.0 ^⑩	174.0 ^⑩ 199.0 ^⑩	174.0 ^⑩ 195.0 ^⑩	167.0 ^⑩ 190.0 ^⑩	172.0 ^⑩ 188.0 ^⑩	93.8 174.0 ^⑩			
280	B BV					140.0 ^⑩ 164.0 ^⑩	145.0 ^⑩ 169.0 ^⑩	152.0 ^⑩ 176.0 ^⑩	156.0 ^⑩ 177.0 ^⑩	152.0 ^⑩ 173.0 ^⑩	153.0 ^⑩ 170.0 ^⑩	150.0 ^⑩ 168.0 ^⑩	78.4 141.0 ^⑩			
300	B BV						125.0 ^⑩ 147.0 ^⑩	130.0 ^⑩ 153.0 ^⑩	137.0 ^⑩ 157.0 ^⑩	140.0 ^⑩ 157.0 ^⑩	137.0 ^⑩ 158.0 ^⑩	135.0 ^⑩ 156.0 ^⑩	130.0 ^⑩ 142.0 ^⑩			
320	B BV							112.0 ^⑩ 133.0 ^⑩	117.0 ^⑩ 137.0 ^⑩	123.0 ^⑩ 140.0 ^⑩	125.0 ^⑩ 141.0 ^⑩	123.0 ^⑩ 140.0 ^⑩	119.0 ^⑩ 133.0 ^⑩			
340	B BV								100.0 ^⑩ 119.0 ^⑩	105.0 ^⑩ 124.0 ^⑩	109.0 ^⑩ 124.0 ^⑩	112.0 ^⑩ 124.0 ^⑩	108.0 ^⑩ 121.0 ^⑩			
360	B BV									88.7 ^⑩ 108.0 ^⑩	93.0 ^⑩ 112.0 ^⑩	97.2 ^⑩ 111.0 ^⑩	98.1 ^⑩ 108.0 ^⑩	95.0 ^⑩ 103.0 ^⑩		
380	B BV										77.5 ^⑩ 96.4 ^⑩	82.6 ^⑩ 101.0 ^⑩	84.3 ^⑩ 97.3 ^⑩	83.9 ^⑩ 93.7 ^⑩	81.7 ^⑩ 88.0 ^⑩	
400	B BV										67.8 ^⑩ 86.1 ^⑩	71.9 ^⑩ 89.6 ^⑩	85.1 ^⑩ 102.0 ^⑩	81.0 ^⑩ 99.1 ^⑩	76.5 ^⑩ 41.7 ^⑩	
420	B BV											57.2 ^⑩ 75.5 ^⑩	58.8 ^⑩ 86.1 ^⑩	61.5 ^⑩ 75.2 ^⑩	59.6 ^⑩ 72.8 ^⑩	50.1 ^⑩ 47.3 ^⑩
440	B BV												65.5 ^⑩	68.0 ^⑩	64.9 ^⑩	
460	B BV													56.8 ^⑩	40.9 ^⑩	56.9 ^⑩
480	B BV														31.4 ^⑩	47.1 ^⑩



	661,400 - 826,700 lb
	330,700 - 659,200 lb
	110,200 - 328,500 lb
	0 lb

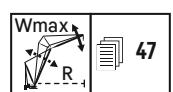


47

HS 256 ft																
ft	W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft			
	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax		
50	B BV	529.0* 540.0 ⁽¹⁾														
60	B BV	536.0 544.0	541.0 ⁽¹⁾ 548.0 ⁽¹⁾	452.0* 458.0 ⁽¹⁾	477.0 ⁽¹⁾ 480.0 ⁽¹⁾	415.0* 425.0	422.0 ⁽¹⁾ 425.0 ⁽¹⁾	376.0* 376.0*	376.0*							
70	B BV	502.0 509.0	537.0 ⁽¹⁾ 545.0 ⁽¹⁾	463.0 466.0	475.0 ⁽¹⁾ 480.0 ⁽¹⁾	424.0 425.0	424.0 ⁽¹⁾ 425.0 ⁽¹⁾	357.0* 360.0	373.0 ⁽¹⁾ 368.0 ⁽¹⁾	323.0* 330.0	327.0 ⁽¹⁾ 330.0	288.0* 288.0*				
80	B BV	463.0 472.0	533.0 ⁽¹⁾ 542.0 ⁽¹⁾	436.0 437.0	470.0 ⁽¹⁾ 475.0 ⁽¹⁾	402.0 401.0	419.0 ⁽¹⁾ 420.0 ⁽¹⁾	366.0 366.0	367.0 ⁽¹⁾ 368.0 ⁽¹⁾	330.0 330.0	279.0* 285.0	286.0 ⁽¹⁾ 290.0	218.0* 218.0*			
90	B BV	421.0 433.0	525.0 ⁽¹⁾ 537.0 ⁽¹⁾	401.0 408.0	466.0 ⁽¹⁾ 470.0 ⁽¹⁾	378.0 378.0	413.0 ⁽¹⁾ 415.0 ⁽¹⁾	347.0 347.0	353.0 ⁽¹⁾ 318.0 ⁽¹⁾	316.0 316.0	284.0 285.0	249.0 251.0	213.0* 251.0	180.0* 184.0		
100	B BV	382.0 395.0	505.0 ⁽¹⁾ 528.0 ⁽¹⁾	366.0 377.0	458.0 ⁽¹⁾ 464.0 ⁽¹⁾	351.0 353.0	408.0 ⁽¹⁾ 411.0 ⁽¹⁾	327.0 327.0	350.0 ⁽²⁾ 350.0 ⁽²⁾	300.0 300.0	308.0 ⁽²⁾ 309.0 ⁽²⁾	273.0 273.0	241.0 243.0	215.0 217.0		
110	B BV	485.0 ⁽¹⁾ 520.0 ⁽¹⁾	337.0 348.0	448.0 ⁽¹⁾ 457.0 ⁽¹⁾	325.0 332.0	394.0 ⁽¹⁾ 398.0 ⁽¹⁾	310.0 309.0	347.0 ⁽²⁾ 349.0 ⁽²⁾	286.0 286.0	307.0 ⁽²⁾ 308.0 ⁽²⁾	262.0 262.0	270.0 ⁽²⁾ 271.0 ⁽²⁾	233.0 236.0	233.0 ⁽²⁾ 236.0 ⁽²⁾		
120	B BV	458.0 ⁽¹⁾ 499.0 ⁽¹⁾	316.0 326.0	438.0 ⁽¹⁾ 450.0 ⁽¹⁾	303.0 312.0	387.0 ⁽²⁾ 391.0 ⁽²⁾	290.0 293.0	345.0 ⁽²⁾ 347.0 ⁽²⁾	273.0 272.0	306.0 ⁽²⁾ 307.0 ⁽²⁾	252.0 251.0	270.0 ⁽²⁾ 271.0 ⁽²⁾	225.0 228.0	232.0 ⁽²⁾ 235.0 ⁽²⁾		
130	B BV	424.0 ⁽¹⁾ 467.0 ⁽²⁾	416.0 ⁽¹⁾ 437.0 ⁽²⁾	283.0 292.0	382.0 ⁽²⁾ 388.0 ⁽²⁾	272.0 278.0	342.0 ⁽²⁾ 344.0 ⁽²⁾	259.0 259.0	305.0 ⁽²⁾ 306.0 ⁽²⁾	241.0 241.0	269.0 ⁽²⁾ 270.0 ⁽²⁾	217.0 220.0	230.0 ⁽²⁾ 234.0 ⁽²⁾	210.0 210.0		
140	B BV	391.0 ⁽³⁾ 434.0 ⁽³⁾	387.0 ⁽¹⁾ 419.0 ⁽³⁾	267.0 275.0	377.0 ⁽²⁾ 384.0 ⁽²⁾	256.0 263.0	338.0 ⁽²⁾ 341.0 ⁽²⁾	245.0 246.0	302.0 ⁽²⁾ 304.0 ⁽²⁾	231.0 230.0	269.0 ⁽²⁾ 270.0 ⁽²⁾	208.0 ⁽²⁾ 211.0	229.0 ⁽²⁾ 233.0 ⁽²⁾	195.0 194.0		
150	B BV	363.0 ⁽³⁾ 402.0 ⁽³⁾	359.0 ⁽³⁾ 393.0 ⁽³⁾		241.0	335.0 ⁽²⁾ 373.0 ⁽³⁾	231.0	299.0 ⁽²⁾ 326.0	221.0	266.0 ⁽²⁾ 302.0	200.0	227.0 ⁽²⁾ 231.0	188.0 188.0			
160	B BV	337.0 ⁽³⁾ 372.0 ⁽³⁾	335.0 ⁽³⁾ 368.0 ⁽⁴⁾		227.0	323.0 ⁽³⁾ 324.0	218.0 224.0	296.0 ⁽²⁾ 299.0 ⁽²⁾	209.0	264.0 ⁽²⁾ 266.0 ⁽²⁾	192.0 194.0	224.0 ⁽²⁾ 228.0 ⁽²⁾	182.0 181.0	206.0 ⁽²⁾ 207.0 ⁽²⁾		
170	B BV	312.0 ⁽¹⁰⁾ 346.0 ⁽¹⁰⁾	314.0 ⁽¹⁰⁾ 343.0 ⁽⁴⁾		311.0 ⁽⁵⁾ 337.0 ⁽⁵⁾	307.0 ⁽³⁾ 319.0 ⁽⁴⁾	205.0 212.0	289.0 ⁽³⁾ 291.0	198.0 203.0	261.0 ⁽²⁾ 264.0 ⁽²⁾	184.0 186.0	221.0 ⁽²⁾ 225.0 ⁽²⁾	176.0 ⁽²⁾ 176.0 ⁽²⁾	204.0 ⁽²⁾ 206.0 ⁽²⁾		
180	B BV	287.0 ⁽¹⁰⁾ 321.0 ⁽¹⁰⁾	293.0 ⁽¹⁰⁾ 321.0 ⁽⁸⁾		289.0 ⁽⁵⁾ 318.0 ⁽⁵⁾	293.0 ⁽⁷⁾ 318.0 ⁽⁵⁾	190.0 308.0 ⁽⁵⁾	279.0 ⁽²⁾ 283.0 ⁽²⁾	187.0 193.0	256.0 ⁽³⁾ 258.0 ⁽²⁾	177.0 ⁽²⁾ 180.0 ⁽²⁾	218.0 ⁽²⁾ 222.0 ⁽²⁾	170.0 168.0	202.0 ⁽²⁾ 204.0 ⁽²⁾		
190	B BV	262.0 ⁽¹⁰⁾ 295.0 ⁽¹⁰⁾	272.0 ⁽¹⁰⁾ 300.0 ⁽³⁾		276.0 ⁽¹⁰⁾ 299.0 ⁽³⁾	273.0 ⁽⁶⁾ 293.0 ⁽⁶⁾		269.0 ⁽²⁾ 275.0 ⁽⁴⁾	177.0 181.0	249.0 ⁽³⁾ 253.0 ⁽³⁾	169.0 173.0	212.0 ⁽²⁾ 218.0 ⁽²⁾	163.0 163.0	200.0 ⁽²⁾ 202.0 ⁽²⁾		
200	B BV	240.0 ⁽⁸⁾ 273.0 ⁽⁸⁾	251.0 ⁽¹⁰⁾ 280.0 ⁽¹⁰⁾		258.0 ⁽¹⁰⁾ 281.0 ⁽⁸⁾	258.0 ⁽⁸⁾ 277.0 ⁽⁶⁾		254.0 ⁽⁵⁾ 265.0 ⁽⁵⁾	160.0 160.0	243.0 ⁽⁴⁾ 247.0 ⁽⁴⁾	160.0 163.0	207.0 ⁽³⁾ 214.0 ⁽²⁾	154.0 159.0	198.0 ⁽³⁾ 199.0 ⁽²⁾		
220	B BV	206.0 ⁽⁸⁾ 236.0 ⁽⁸⁾	211.0 ⁽⁸⁾ 241.0 ⁽⁸⁾		222.0 ⁽¹⁰⁾ 247.0 ⁽⁷⁾	227.0 ⁽⁷⁾ 247.0 ⁽⁷⁾		223.0 ⁽⁶⁾ 229.0 ⁽⁵⁾	134.0 134.0	193.0 ⁽⁴⁾ 205.0 ⁽³⁾	137.0 142.0	192.0 ⁽⁴⁾ 194.0 ⁽³⁾	130.0 135.0	204.0 ⁽²⁾ 206.0 ⁽²⁾		
240	B BV	174.0 ⁽⁴⁾ 202.0 ⁽⁴⁾	182.0 ⁽⁸⁾ 210.0 ⁽⁸⁾		188.0 ⁽⁸⁾ 216.0 ⁽⁸⁾	196.0 ⁽¹⁰⁾ 219.0 ⁽⁸⁾		199.0 ⁽³⁾ 217.0 ⁽⁹⁾	198.0 ⁽⁴⁾ 210.0 ⁽⁵⁾	177.0 ⁽⁴⁾ 197.0 ⁽²⁾	115.0 115.0	183.0 ⁽⁵⁾ 185.0 ⁽⁵⁾	116.0 120.0	166.0 ⁽⁴⁾ 168.0 ⁽³⁾		
260	B BV	150.0 ⁽⁶⁾ 176.0 ⁽⁶⁾	154.0 ⁽⁶⁾ 180.0 ⁽⁶⁾		163.0 ⁽⁸⁾ 189.0 ⁽⁸⁾	168.0 ⁽⁸⁾ 194.0 ⁽⁸⁾		172.0 ⁽⁸⁾ 192.0 ⁽⁶⁾	174.0 ⁽⁷⁾ 194.0 ⁽⁷⁾	121.0 ⁽⁸⁾ 141.0 ⁽⁸⁾	162.0 ⁽⁵⁾ 180.0 ⁽⁵⁾	137.0 ⁽⁴⁾ 172.0 ⁽³⁾	123.0 ⁽⁴⁾ 130.0	174.0 ⁽³⁾ 176.0 ⁽³⁾		
280	B BV		133.0 ⁽⁸⁾ 157.0 ⁽⁸⁾		138.0 ⁽⁶⁾ 162.0 ⁽⁶⁾	145.0 ⁽⁸⁾ 169.0 ⁽⁸⁾		150.0 ⁽⁸⁾ 174.0 ⁽⁷⁾	153.0 ⁽⁸⁾ 170.0 ⁽⁴⁾	148.0 ⁽⁶⁾ 168.0 ⁽⁵⁾	152.0 ⁽⁶⁾ 168.0 ⁽⁵⁾	146.0 ⁽⁶⁾ 158.0 ⁽⁵⁾	81.4 81.5	137.0 ⁽⁵⁾ 140.0 ⁽⁴⁾		
300	B BV				119.0 ⁽⁶⁾ 142.0 ⁽⁶⁾	123.0 ⁽⁶⁾ 146.0 ⁽⁶⁾		130.0 ⁽⁸⁾ 152.0 ⁽⁸⁾	135.0 ⁽⁹⁾ 157.0 ⁽⁷⁾	135.0 ⁽⁶⁾ 154.0 ⁽⁵⁾	133.0 ⁽⁶⁾ 149.0 ⁽⁵⁾	126.0 ⁽⁶⁾ 145.0 ⁽⁵⁾	67.7 77.0	115.0 ⁽⁴⁾ 118.0 ⁽⁴⁾		
320	B BV				105.0 ⁽⁶⁾ 127.0 ⁽⁶⁾	109.0 ⁽⁶⁾ 131.0 ⁽⁶⁾		116.0 ⁽⁹⁾ 138.0 ⁽⁹⁾	121.0 ⁽⁸⁾ 141.0 ⁽⁸⁾	121.0 ⁽⁸⁾ 141.0 ⁽⁷⁾	119.0 ⁽⁶⁾ 138.0 ⁽⁵⁾	115.0 ⁽⁶⁾ 133.0 ⁽⁵⁾	107.0 ⁽⁶⁾ 115.0 ⁽⁵⁾	55.8 55.8		
340	B BV				93.6 ⁽⁶⁾ 114.0 ⁽⁶⁾	98.0 ⁽⁷⁾ 118.0 ⁽⁷⁾		104.0 ⁽⁹⁾ 123.0 ⁽⁸⁾	108.0 ⁽⁹⁾ 126.0 ⁽⁸⁾	108.0 ⁽⁹⁾ 125.0 ⁽⁸⁾	105.0 ⁽⁶⁾ 122.0 ⁽⁵⁾	99.6 ⁽⁴⁾ 112.0 ⁽⁴⁾	92.6 ⁽⁴⁾ 104.0 ⁽³⁾	44.0 44.0		
360	B BV					82.8 ⁽⁷⁾ 102.0 ⁽⁷⁾		86.6 ⁽⁷⁾ 106.0 ⁽⁷⁾	92.0 ⁽⁹⁾ 111.0 ⁽⁸⁾	96.0 ⁽⁹⁾ 111.0 ⁽⁷⁾	95.7 ⁽⁸⁾ 108.0 ⁽⁸⁾	91.6 ⁽⁶⁾ 104.0 ⁽⁵⁾	86.9 ⁽⁴⁾ 94.4 ⁽⁵⁾	76.5 ⁽⁵⁾ 79.1 ⁽⁵⁾		
380	B BV							72.3 ⁽⁷⁾ 91.6 ⁽⁷⁾	75.8 ⁽⁷⁾ 94.6 ⁽⁷⁾	81.1 ⁽⁹⁾ 97.6 ⁽⁸⁾	84.1 ⁽⁷⁾ 96.0 ⁽⁶⁾	83.5 ⁽⁸⁾ 92.9 ⁽⁵⁾	80.3 ⁽⁶⁾ 88.4 ⁽⁵⁾	74.7 ⁽⁵⁾ 77.9 ⁽⁵⁾		
400	B BV								62.1 ⁽⁷⁾ 81.0 ⁽⁷⁾	65.7 ⁽⁷⁾ 84.4 ⁽⁷⁾	69.9 ⁽⁹⁾ 84.4 ⁽⁷⁾	72.3 ⁽⁹⁾ 85.5 ⁽⁸⁾	73.0 ⁽⁸⁾ 80.0 ⁽⁵⁾	68.3 ⁽⁴⁾ 72.8 ⁽⁴⁾		
420	B BV									53.1 ⁽⁷⁾ 71.8 ⁽⁷⁾	55.7 ⁽⁷⁾ 73.8 ⁽⁷⁾	59.2 ⁽⁹⁾ 74.2 ⁽⁸⁾	62.2 ⁽⁹⁾ 71.7 ⁽⁶⁾	62.0 ⁽⁸⁾ 66.8 ⁽⁶⁾		
440	B BV										43.5 ⁽⁷⁾ 61.8 ⁽⁷⁾	45.3 ⁽⁷⁾ 63.5 ⁽⁷⁾	50.3 ⁽⁷⁾ 64.8 ⁽⁷⁾	51.8 ⁽⁷⁾ 60.7 ⁽⁵⁾	40.9 ⁽⁹⁾ 54.8 ⁽⁷⁾	
460	B BV											34.4 ⁽⁷⁾ 52.0 ⁽⁷⁾	37.8 ⁽⁷⁾ 55.0 ⁽⁷⁾	44.0 ⁽⁷⁾ 54.8 ⁽⁷⁾	29.7 ⁽⁷⁾ 45.6 ⁽⁷⁾	40.9 ⁽⁹⁾ 54.8 ⁽⁷⁾
480	B BV												28.1 ⁽⁷⁾ 44.0 ⁽⁷⁾	29.7 ⁽⁷⁾ 45.6 ⁽⁷⁾		
500	B BV													21.4 ⁽⁷⁾ 35.4 ⁽⁷⁾		



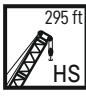
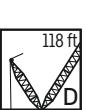
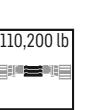
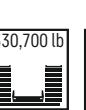
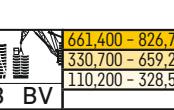
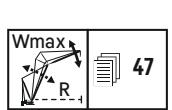
	661,400 - 826,700 lb
	330,700 - 659,200 lb
	110,200 - 328,500 lb
	0 lb



47

HS 276 ft														
ft	W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft	
	B	87°/85 Wmax	B	87°/85 Wmax	B	87°/85 Wmax	B	87°/85 Wmax	B	87°/85 Wmax	B	87°/85 Wmax	B	87°/85 Wmax
50	B BV	479.0* 486.0 ¹⁾	486.0 ¹⁾ 411.0* 430.0 ¹⁾	378.0* 382.0 ¹⁾										
60	B BV	486.0 493.0	486.0 ¹⁾ 493.0	411.0* 430.0 ¹⁾	378.0* 382.0 ¹⁾									
70	B BV	457.0 464.0	481.0 ¹⁾ 489.0 ¹⁾	421.0 427.0	428.0 ¹⁾ 434.0 ¹⁾	386.0 388.0	386.0 388.0	327.0* 338.0 ¹⁾	338.0 ¹⁾ 297.0* 299.0 ¹⁾	297.0* 299.0 ¹⁾				
80	B BV	426.0 434.0	477.0 ¹⁾ 486.0 ¹⁾	397.0 402.0	423.0 ¹⁾ 428.0 ¹⁾	368.0 368.0	379.0 ¹⁾ 380.0 ¹⁾	335.0 336.0	337.0 ¹⁾ 339.0 ¹⁾	285.0* 299.0 ¹⁾	256.0* 262.0 ¹⁾	230.0* 231.0 ¹⁾	202.0* 202.0*	
90	B BV	389.0 399.0	473.0 ¹⁾ 483.0 ¹⁾	369.0 376.0	419.0 ¹⁾ 423.0 ¹⁾	346.0 347.0	374.0 ¹⁾ 375.0 ¹⁾	318.0 318.0	332.0 ¹⁾ 334.0 ¹⁾	291.0 291.0	292.0 ¹⁾ 293.0 ¹⁾	261.0 261.0	261.0 261.0	
100	B BV	354.0 364.0	463.0 ¹⁾ 475.0 ¹⁾	338.0 347.0	415.0 ¹⁾ 417.0 ¹⁾	323.0 325.0	370.0 ¹⁾ 370.0 ¹⁾	300.0 300.0	326.0 ¹⁾ 330.0 ¹⁾	277.0 277.0	282.0 ¹⁾ 282.0 ¹⁾	250.0 250.0	250.0 ¹⁾ 250.0	
110	B BV	333.0 344.0	453.0 ¹⁾ 466.0 ¹⁾	312.0 321.0	408.0 ¹⁾ 411.0 ¹⁾	300.0 306.0	360.0 ¹⁾ 361.0 ¹⁾	284.0 284.0	321.0 ¹⁾ 326.0 ¹⁾	264.0 264.0	280.0 ¹⁾ 280.0 ¹⁾	241.0 246.0 ²⁾	246.0 ²⁾ 219.0	195.0 195.0
120	B BV		444.0 ¹⁾ 458.0 ¹⁾	292.0 301.0	401.0 ¹⁾ 405.0 ¹⁾	281.0 287.0	352.0 ¹⁾ 352.0 ¹⁾	266.0 269.0	312.0 ¹⁾ 313.0 ¹⁾	252.0 251.0	279.0 ¹⁾ 279.0 ¹⁾	231.0 230.0	245.0 ²⁾ 246.0 ²⁾	211.0 211.0
130	B BV	414.0 ¹⁾ 434.0 ³⁾	279.0 288.0	393.0 ¹⁾ 398.0 ¹⁾	262.0 268.0	348.0 ¹⁾ 348.0 ¹⁾	250.0 256.0	309.0 ¹⁾ 310.0 ¹⁾	239.0 239.0	277.0 ¹⁾ 278.0 ¹⁾	222.0 221.0	244.0 ²⁾ 245.0 ²⁾	204.0 204.0	215.0 ²⁾ 217.0 ²⁾
140	B BV	384.0 ²⁾ 411.0 ⁴⁾		376.0 ²⁾ 382.0 ²⁾	248.0 254.0	343.0 ²⁾ 344.0 ²⁾	235.0 242.0	305.0 ²⁾ 307.0 ²⁾	226.0 228.0	275.0 ²⁾ 276.0 ²⁾	212.0 211.0	244.0 ²⁾ 244.0 ²⁾	196.0 196.0	214.0 ²⁾ 217.0 ²⁾
150	B BV	356.0 ⁴⁾ 386.0 ⁴⁾		352.0 ³⁾ 367.0 ⁴⁾	234.0 232.0	334.0 ²⁾ 337.0 ²⁾	222.0 228.0	302.0 ²⁾ 304.0 ²⁾	213.0 217.0	272.0 ²⁾ 273.0 ²⁾	202.0 202.0	241.0 ²⁾ 242.0 ²⁾	189.0 189.0	213.0 ²⁾ 216.0 ²⁾
160	B BV	332.0 ⁹⁾ 360.0 ⁴⁾		328.0 ⁵⁾ 349.0 ⁵⁾		322.0 ⁵⁾ 325.0 ⁵⁾	211.0 217.0	295.0 ²⁾ 298.0 ²⁾	202.0 207.0	269.0 ²⁾ 271.0 ²⁾	192.0 193.0	239.0 ²⁾ 240.0 ²⁾	182.0 181.0	211.0 ²⁾ 214.0 ²⁾
170	B BV	308.0 ¹⁰⁾ 335.0 ⁵⁾		305.0 ⁵⁾ 329.0 ⁵⁾		287.0 ⁵⁾ 313.0 ⁵⁾	192.0 197.0	264.0 ²⁾ 267.0 ²⁾	181.0 186.0	237.0 ²⁾ 238.0 ²⁾	174.0 174.0	208.0 ²⁾ 212.0 ²⁾	161.0 160.0	186.0 ²⁾ 187.0 ²⁾
180	B BV	285.0 ¹⁰⁾ 312.0 ⁸⁾		288.0 ¹⁰⁾ 309.0 ⁵⁾		287.0 ⁴⁾ 299.0 ⁴⁾	182.0 188.0	258.0 ²⁾ 260.0 ²⁾	173.0 178.0	233.0 ²⁾ 235.0 ²⁾	166.0 168.0	205.0 ²⁾ 209.0 ²⁾	155.0 154.0	185.0 ²⁾ 186.0 ²⁾
190	B BV	261.0 ¹⁰⁾ 291.0 ⁹⁾		269.0 ¹⁰⁾ 290.0 ⁷⁾		271.0 ⁹⁾ 283.0 ⁶⁾		265.0 ⁵⁾ 269.0 ⁵⁾		251.0 ⁴⁾ 253.0 ⁴⁾	164.0 169.0	229.0 ⁵⁾ 230.0 ⁵⁾	158.0 162.0	202.0 ²⁾ 207.0 ²⁾
200	B BV	238.0 ¹⁰⁾ 269.0 ¹⁰⁾		249.0 ¹⁰⁾ 272.0 ⁸⁾		255.0 ¹⁰⁾ 269.0 ⁷⁾		251.0 ⁷⁾ 258.0 ⁷⁾		243.0 ⁵⁾ 243.0 ⁵⁾	156.0 160.0	223.0 ⁴⁾ 224.0 ³⁾	150.0 154.0	198.0 ³⁾ 203.0 ²⁾
220	B BV	204.0 ⁸⁾ 234.0 ⁸⁾		210.0 ¹⁰⁾ 238.0 ⁸⁾		221.0 ¹⁰⁾ 240.0 ⁸⁾		223.0 ⁸⁾ 236.0 ⁸⁾		220.0 ⁶⁾ 228.0 ⁶⁾	134.0 137.0	187.0 ⁶⁾ 195.0 ⁵⁾	126.0 130.0	174.0 ⁵⁾ 180.0 ⁴⁾
240	B BV	172.0 ⁸⁾ 200.0 ⁸⁾		180.0 ⁸⁾ 208.0 ⁸⁾		187.0 ¹⁰⁾ 212.0 ¹⁰⁾		195.0 ⁸⁾ 213.0 ⁹⁾		198.0 ⁸⁾ 210.0 ⁹⁾	173.0 ⁵⁾ 190.0 ⁵⁾	167.0 ⁶⁾ 171.0 ⁵⁾	107.0 115.0	151.0 ⁴⁾ 153.0 ³⁾
260	B BV	147.0 ⁶⁾ 173.0 ⁶⁾		153.0 ⁸⁾ 179.0 ⁸⁾		161.0 ⁸⁾ 186.0 ⁸⁾		166.0 ¹⁰⁾ 190.0 ¹⁰⁾		173.0 ⁸⁾ 191.0 ⁸⁾	113.0 115.0	167.0 ⁵⁾ 171.0 ⁵⁾	100.0 110.0	133.0 ³⁾ 134.0 ³⁾
280	B BV	125.0 ⁶⁾ 149.0 ⁶⁾		130.0 ⁸⁾ 154.0 ⁸⁾		137.0 ⁸⁾ 160.0 ⁸⁾		142.0 ⁸⁾ 172.0 ¹⁰⁾		149.0 ⁸⁾ 168.0 ⁸⁾	149.0 ⁸⁾ 168.0 ⁸⁾	145.0 ⁸⁾ 165.0 ⁸⁾	137.0 ⁷⁾ 144.0 ⁷⁾	125.0 ⁶⁾ 132.0 ⁶⁾
300	B BV			110.0 ⁶⁾ 133.0 ⁶⁾		117.0 ⁶⁾ 138.0 ⁶⁾		121.0 ⁸⁾ 144.0 ⁸⁾		128.0 ⁸⁾ 151.0 ⁹⁾	132.0 ¹⁰⁾ 154.0 ⁹⁾	132.0 ⁸⁾ 152.0 ⁸⁾	126.0 ⁷⁾ 148.0 ⁸⁾	118.0 ⁷⁾ 140.0 ⁸⁾
320	B BV					98.6 ⁶⁾ 119.0 ⁶⁾		103.0 ⁶⁾ 124.0 ⁶⁾		109.0 ⁹⁾ 135.0 ⁹⁾	119.0 ¹⁰⁾ 140.0 ¹⁰⁾	118.0 ⁸⁾ 136.0 ⁸⁾	115.0 ⁸⁾ 136.0 ⁸⁾	110.0 ⁷⁾ 121.0 ⁸⁾
340	B BV					86.2 ⁶⁾ 106.0 ⁶⁾		91.4 ⁶⁾ 112.0 ⁶⁾		96.4 ⁶⁾ 116.0 ⁹⁾	103.0 ⁷⁾ 123.0 ⁹⁾	106.0 ⁶⁾ 125.0 ⁹⁾	104.0 ⁶⁾ 122.0 ⁹⁾	99.7 ⁷⁾ 117.0 ⁹⁾
360	B BV					76.1 ⁶⁾ 96.0 ⁶⁾		80.0 ⁷⁾ 106.0 ⁷⁾		86.3 ⁹⁾ 109.0 ⁹⁾	89.5 ⁹⁾ 111.0 ⁹⁾	94.6 ¹¹⁾ 109.0 ⁹⁾	90.7 ⁸⁾ 108.0 ⁹⁾	85.7 ⁵⁾ 101.0 ⁹⁾
380	B BV							65.2 ⁷⁾ 85.0 ⁷⁾		70.8 ⁷⁾ 90.0 ⁷⁾		74.1 ⁹⁾ 93.2 ⁹⁾		82.3 ¹¹⁾ 97.0 ⁹⁾
400	B BV									56.8 ⁷⁾ 76.3 ⁷⁾		59.4 ⁷⁾ 78.6 ⁷⁾		78.0 ⁸⁾ 93.7 ⁶⁾
420	B BV									46.5 ⁷⁾ 65.8 ⁷⁾		64.3 ⁹⁾ 83.3 ⁹⁾		67.6 ⁸⁾ 84.7 ⁸⁾
440	B BV									50.5 ⁷⁾ 59.6 ⁷⁾		54.0 ⁹⁾ 69.2 ⁷⁾		67.5 ⁸⁾ 82.7 ⁷⁾
460	B BV									38.5 ⁷⁾ 56.9 ⁷⁾		50.9 ⁷⁾ 62.2 ⁷⁾		67.5 ⁸⁾ 79.8 ⁶⁾
480	B BV											32.7 ⁷⁾ 49.4 ⁷⁾		36.4 ⁹⁾ 53.6 ⁹⁾
500	B BV													26.1 ⁷⁾ 41.4 ⁷⁾

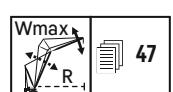
1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°

	295 ft		118 ft		79-315 ft		110,200 lb		330,700 lb		661,400 - 826,700 lb		330,700 - 659,200 lb		110,200 - 328,500 lb		0 lb		Wmax		R	47
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		HS 295 ft																									
ft	B	W79 ft		W98 ft		W118 ft		W138 ft		W158 ft		W177 ft		W197 ft		W217 ft		W236 ft		W256 ft		W276 ft		W295 ft		W315 ft	
		87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax		
50	B BV	431.0*	434.0 ⁽¹⁾																								
60	B BV	404.0*	435.0 ⁽¹⁾	371.0*	384.0 ⁽¹⁾	340.0*	341.0 ⁽¹⁾																				
70	B BV	417.0	433.0 ⁽¹⁾	381.0	384.0 ⁽¹⁾	323.0*	343.0 ⁽¹⁾	296.0*	303.0 ⁽¹⁾	267.0*	268.0 ⁽¹⁾																
80	B BV	391.0	430.0 ⁽¹⁾	361.0	381.0 ⁽¹⁾	333.0	342.0 ⁽¹⁾	304.0	304.0 ⁽¹⁾	257.0*	269.0 ⁽¹⁾	230.0*	235.0 ⁽¹⁾	207.0*	208.0 ⁽¹⁾												
90	B BV	359.0	427.0 ⁽¹⁾	338.0	378.0 ⁽¹⁾	315.0	340.0 ⁽¹⁾	290.0	303.0 ⁽¹⁾	264.0	268.0 ⁽¹⁾	236.0	236.0 ⁽¹⁾	201.0*	208.0 ⁽¹⁾	178.0*	180.0 ⁽¹⁾	156.0*	156.0 ⁽¹⁾	134.0*	134.0*						
100	B BV	327.0	423.0 ⁽¹⁾	311.0	375.0 ⁽¹⁾	296.0	337.0 ⁽¹⁾	276.0	301.0 ⁽¹⁾	253.0	267.0 ⁽¹⁾	229.0	229.0 ⁽¹⁾	206.0	206.0	180.0	180.0 ⁽¹⁾	153.0*	156.0 ⁽¹⁾	133.0*	134.0 ⁽¹⁾	113.0 ⁽¹⁾	96.9*	96.9*			
110	B BV	306.0	420.0 ⁽¹⁾	288.0	373.0 ⁽¹⁾	276.0	333.0 ⁽¹⁾	262.0	300.0 ⁽¹⁾	243.0	266.0 ⁽¹⁾	221.0	225.0 ⁽²⁾	200.0	200.0	178.0	178.0	155.0	155.0	134.0	134.0	112.0*	113.0 ⁽¹⁾				
120	B BV		416.0 ⁽¹⁾	269.0	370.0 ⁽¹⁾	258.0	325.0 ⁽²⁾	246.0	295.0 ⁽¹⁾	232.0	266.0 ⁽¹⁾	214.0	226.0 ⁽²⁾	195.0	198.0 ⁽²⁾	175.0	175.0 ⁽²⁾	154.0	154.0	133.0	133.0	113.0	113.0	94.9*	96.4 ⁽¹⁾		
130	B BV		401.0 ⁽¹⁾	255.0	367.0 ⁽¹⁾	241.0	323.0 ⁽²⁾	231.0	289.0 ⁽²⁾	220.0	258.0 ⁽²⁾	205.0	227.0 ⁽²⁾	189.0	198.0 ⁽²⁾	171.0	175.0 ⁽²⁾	152.0	152.0 ⁽²⁾	131.0	131.0	113.0	96.4	96.4	80.9 ⁽¹⁾		
140	B BV		375.0 ⁽²⁾		357.0 ⁽²⁾	228.0	321.0 ⁽²⁾	218.0	288.0 ⁽²⁾	207.0	258.0 ⁽²⁾	196.0	228.0 ⁽²⁾	183.0	197.0 ⁽²⁾	167.0	175.0 ⁽²⁾	149.0	152.0 ⁽²⁾	129.0	130.0 ⁽²⁾	111.0	111.0 ⁽²⁾	95.5	95.5	80.6	80.6
150	B BV		350.0 ⁽⁴⁾	342.0 ⁽³⁾	218.0	319.0 ⁽²⁾	205.0	286.0 ⁽²⁾	196.0	256.0 ⁽²⁾	185.0	228.0 ⁽²⁾	176.0	196.0 ⁽²⁾	162.0	175.0 ⁽²⁾	146.0	152.0 ⁽²⁾	128.0	130.0 ⁽²⁾	110.0	111.0 ⁽²⁾	94.3	94.3	79.6	79.6	
160	B BV		326.0 ⁽⁹⁾	321.0 ⁽⁴⁾	310.0 ⁽⁹⁾	195.0	284.0 ⁽²⁾	185.0	254.0 ⁽²⁾	176.0	226.0 ⁽²⁾	168.0	195.0 ⁽²⁾	156.0	175.0 ⁽²⁾	142.0	152.0 ⁽²⁾	125.0	130.0 ⁽²⁾	108.0	110.0 ⁽²⁾	93.0	93.9 ⁽²⁾	78.5	78.7 ⁽²⁾		
170	B BV		305.0 ⁽¹⁰⁾	301.0 ⁽⁴⁾	297.0 ⁽⁴⁾	187.0	276.0 ⁽³⁾	176.0	252.0 ⁽²⁾	166.0	224.0 ⁽²⁾	160.0	192.0 ⁽²⁾	149.0	174.0 ⁽²⁾	138.0	152.0 ⁽²⁾	123.0	130.0 ⁽²⁾	106.0	110.0 ⁽²⁾	91.7	93.4 ⁽²⁾	77.4	78.3 ⁽²⁾		
180	B BV		283.0 ⁽¹⁰⁾	283.0 ⁽³⁾	280.0 ⁽⁵⁾	196.0	268.0 ⁽²⁾	186.0	246.0 ⁽²⁾	158.0	223.0 ⁽²⁾	152.0	190.0 ⁽²⁾	142.0	172.0 ⁽²⁾	133.0	150.0 ⁽²⁾	119.0	129.0 ⁽²⁾	104.0	110.0 ⁽²⁾	93.3	93.0 ⁽²⁾	76.4	77.8 ⁽²⁾		
190	B BV		261.0 ⁽¹⁰⁾	265.0 ⁽¹⁰⁾	265.0 ⁽⁷⁾	260.0 ⁽⁵⁾	160.0	239.0 ⁽⁴⁾	151.0	218.0 ⁽³⁾	144.0	188.0 ⁽²⁾	136.0	170.0 ⁽²⁾	128.0	149.0 ⁽³⁾	116.0	128.0 ⁽²⁾	102.0	109.0 ⁽²⁾	88.9	92.5 ⁽²⁾	75.2	77.3 ⁽²⁾			
200	B BV		240.0 ⁽¹⁰⁾	246.0 ⁽¹⁰⁾	250.0 ⁽¹⁰⁾	247.0 ⁽⁶⁾		232.0 ⁽³⁾	143.0	213.0 ⁽⁹⁾	137.0	185.0 ⁽³⁾	129.0	169.0 ⁽³⁾	122.0	148.0 ⁽³⁾	112.0	128.0 ⁽³⁾	98.9	108.0 ⁽³⁾	87.1	91.9 ⁽²⁾	74.0	76.8 ⁽²⁾			
220	B BV		202.0 ⁽⁸⁾	210.0 ⁽¹⁰⁾	219.0 ⁽¹⁰⁾	222.0 ⁽¹¹⁾		218.0 ⁽⁷⁾		203.0 ⁽⁵⁾	122.0	178.0 ⁽⁴⁾	116.0	167.0 ⁽³⁾	110.0	146.0 ⁽³⁾	103.0	126.0 ⁽³⁾	92.5	107.0 ⁽³⁾	82.1	91.1 ⁽³⁾	70.9	75.3 ⁽³⁾			
240	B BV		173.0 ⁽⁸⁾	177.0 ⁽⁸⁾	187.0 ⁽¹⁰⁾	194.0 ⁽¹⁰⁾		198.0 ⁽⁸⁾		189.0 ⁽⁷⁾		167.0 ⁽³⁾	103.0	159.0 ⁽⁴⁾	97.4	142.0 ⁽⁴⁾	91.0	124.0 ⁽⁴⁾	84.2	105.0 ⁽³⁾	76.6	89.1 ⁽³⁾	66.6	74.3 ⁽³⁾			
260	B BV		145.0 ⁽⁶⁾	152.0 ⁽⁸⁾	159.0 ⁽⁸⁾	167.0 ⁽¹⁰⁾		173.0 ⁽⁹⁾		172.0 ⁽⁹⁾		156.0 ⁽⁷⁾		154.0 ⁽⁶⁾	86.4	138.0 ⁽³⁾	80.4	121.0 ⁽⁴⁾	74.4	102.0 ⁽⁴⁾	69.1	87.3 ⁽⁴⁾	62.0	73.1 ⁽⁴⁾			
280	B BV		125.0 ⁽⁶⁾	127.0 ⁽⁶⁾	136.0 ⁽⁸⁾	141.0 ⁽⁸⁾		149.0 ⁽¹⁰⁾		151.0 ⁽⁹⁾		143.0 ⁽¹⁰⁾		146.0 ⁽⁸⁾	132.0 ⁽⁶⁾	71.2	117.0 ⁽³⁾	65.2	99.8 ⁽⁴⁾	60.8	85.9 ⁽⁴⁾	55.1	71.8 ⁽⁴⁾				
300	B BV		109.0 ⁽⁶⁾	114.0 ⁽⁶⁾	121.0 ⁽⁸⁾	126.0 ⁽⁸⁾		131.0 ⁽¹⁰⁾		130.0 ⁽¹⁰⁾		131.0 ⁽⁸⁾		125.0 ⁽⁸⁾	113.0 ⁽⁷⁾	57.5	71.1 ⁽⁶⁾	52.6	84.0 ⁽⁵⁾	47.8	70.6 ⁽⁴⁾						
320	B BV				97.4 ⁽⁶⁾	101.0 ⁽⁶⁾		108.0 ⁽⁸⁾		112.0 ⁽⁹⁾		116.0 ⁽¹⁰⁾		117.0 ⁽⁹⁾	114.0 ⁽⁸⁾		107.0 ⁽⁸⁾	94.8 ⁽⁷⁾	46.1	82.2 ⁽⁶⁾	40.7	69.2 ⁽⁵⁾					
340	B BV				119.0 ⁽⁶⁾	123.0 ⁽⁶⁾		129.0 ⁽⁸⁾		133.0 ⁽⁹⁾		135.0 ⁽⁸⁾		131.0 ⁽⁸⁾	127.0 ⁽⁷⁾		116.0 ⁽⁸⁾	99.0 ⁽⁵⁾	48.1	84.6 ⁽⁵⁾	42.4	70.7 ⁽⁵⁾					
360	B BV					85.4 ⁽⁶⁾	89.2 ⁽⁶⁾		95.2 ⁽⁹⁾		101.0 ⁽⁹⁾		103.0 ⁽⁹⁾	102.0 ⁽⁹⁾		97.3 ⁽⁹⁾	90.9 ⁽⁹⁾		79.4 ⁽⁷⁾	35.1	83.3 ⁽⁵⁾	36.8	69.5 ⁽⁵⁾				
380	B BV					106.0 ⁽⁶⁾			74.4 ⁽⁶⁾		77.9 ⁽⁷⁾		85.0 ⁽⁹⁾	88.0 ⁽⁹⁾		90.6 ⁽⁹⁾	87.7 ⁽⁹⁾		83.0 ⁽⁹⁾		77.5 ⁽⁹⁾		65.9 ⁽⁸⁾				
400	B BV								94.7 ⁽⁶⁾		105.0 ⁽⁹⁾		107.0 ⁽⁹⁾	109.0 ⁽⁸⁾		104.0 ⁽⁸⁾	97.3 ⁽⁹⁾		90.9 ⁽⁹⁾		82.3 ⁽⁶⁾		68.9 ⁽⁶⁾				
420	B BV										63.8 ⁽⁷⁾		68.7 ⁽⁷⁾	73.0 ⁽⁹⁾		77.2 ⁽⁹⁾	78.1 ⁽⁹⁾		74.8 ⁽⁹⁾		70.7 ⁽⁹⁾		63.9 ⁽⁹⁾				
440	B BV										55.5 ⁽⁷⁾		57.3 ⁽⁷⁾	63.2 ⁽⁹⁾		65.8 ⁽⁹⁾	66.6 ⁽⁹⁾		66.6 ⁽⁹⁾		58.4 ⁽⁸⁾		67.7 ⁽⁸⁾				
460	B BV										75.1 ⁽⁷⁾		76.7 ⁽⁷⁾	82.4 ⁽⁹⁾		83.8 ⁽⁹⁾	82.7 ⁽⁸⁾		82.7 ⁽⁸⁾		79.0 ⁽⁸⁾		74.1 ⁽⁸⁾				
480	B BV												45.1 ⁽⁷⁾	48.5 ⁽⁷⁾		52.8 ⁽⁹⁾	55.1 ⁽⁹⁾		55.1 ⁽⁹⁾		57.2 ⁽⁹⁾		52.9 ⁽⁹⁾				
500	B BV												64.1 ⁽⁷⁾	67.5 ⁽⁷⁾		71.1 ⁽⁹⁾	72.1 ⁽⁹⁾		72.1 ⁽⁹⁾		72.3 ⁽⁸⁾		66.6 ⁽⁷⁾				
520	B BV																										

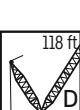
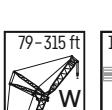
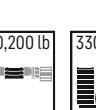
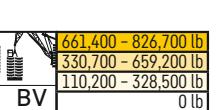
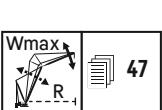


	661,400 - 826,700 lb
	330,700 - 659,200 lb
	110,200 - 328,500 lb
	0 lb

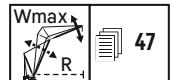
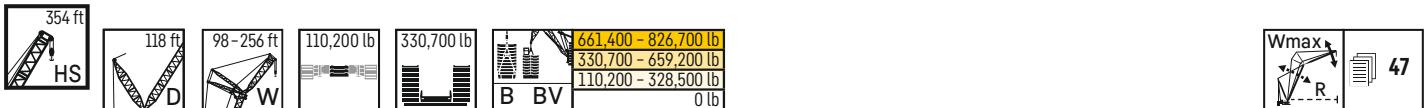


47

HS 315 ft																		
ft	W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft					
	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax				
50	B BV	389.0*	389.0 ¹¹															
60	B BV	366.0*	388.0 ¹¹	336.0* 344.0 ¹¹	308.0* 308.0*													
70	B BV	376.0 379.0	386.0 ¹¹ 391.0 ¹¹	344.0 347.0	345.0 ¹¹ 348.0 ¹¹	293.0* 301.0	307.0 ¹¹ 306.0 ¹¹	266.0* 272.0	271.0 ¹¹ 272.0	241.0* 231.0*	241.0* 239.0 ¹¹	209.0* 212.0 ¹¹	187.0* 187.0*					
80	B BV	353.0 358.0	382.0 ¹¹ 388.0 ¹¹	326.0 330.0	341.0 ¹¹ 345.0 ¹¹	301.0 303.0	306.0 ¹¹ 308.0 ¹¹	272.0 275.0	272.0 275.0	231.0* 237.0	239.0 ¹¹ 258.0 ¹¹	209.0* 213.0	187.0* 193.0					
90	B BV	327.0 332.0	378.0 ¹¹ 386.0 ¹¹	306.0 310.0	338.0 ¹¹ 343.0 ¹¹	285.0 286.0	304.0 ¹¹ 306.0 ¹¹	260.0 261.0	269.0 ¹¹ 272.0 ¹¹	236.0 237.0	238.0 ¹¹ 258.0 ¹¹	213.0 213.0	180.0* 186.0 ¹¹	160.0* 162.0 ¹¹				
100	B BV	300.0 305.0	375.0 ¹¹ 385.0 ¹¹	285.0 288.0	355.0 ¹¹ 340.0 ¹¹	269.0 269.0	301.0 304.0 ¹¹	248.0 247.0	268.0 ¹¹ 270.0 ¹¹	227.0 226.0	238.0 ¹¹ 230.0 ¹¹	207.0 206.0	207.0 ¹¹ 207.0 ¹¹	185.0 185.0				
110	B BV	280.0 286.0	373.0 ¹¹ 384.0 ¹¹	265.0 268.0	333.0 ¹¹ 338.0 ¹¹	253.0 255.0	299.0 ¹¹ 302.0 ¹¹	236.0 235.0	266.0 ¹¹ 269.0 ¹¹	218.0 216.0	237.0 ¹¹ 251.0 ¹¹	200.0 198.0	202.0 ¹¹ 201.0 ¹¹	181.0 179.0				
120	B BV		371.0 ¹¹ 384.0 ¹¹	247.0 251.0	331.0 ¹¹ 338.0 ¹¹	237.0 240.0	290.0 ¹¹ 294.0 ¹¹	224.0 223.0	265.0 ¹¹ 266.0 ¹¹	209.0 207.0	237.0 ¹¹ 232.0 ¹¹	194.0 191.0	203.0 ¹¹ 202.0 ¹¹	176.0 174.0				
130	B BV		370.0 ¹¹ 383.0 ¹¹	234.0 239.0	330.0 ¹¹ 338.0 ¹¹	222.0 225.0	290.0 ¹¹ 294.0 ¹¹	211.0 212.0	257.0 ¹¹ 259.0 ¹¹	199.0 197.0	229.0 ¹¹ 230.0 ¹¹	187.0 183.0	204.0 ¹¹ 203.0 ¹¹	171.0 167.0				
140	B BV		355.0 ¹¹ 371.0 ¹¹		328.0 ¹¹ 337.0 ¹¹	210.0 213.0	290.0 ¹¹ 294.0 ¹¹	199.0 201.0	257.0 ¹¹ 259.0 ¹¹	188.0 188.0	229.0 ¹¹ 230.0 ¹¹	178.0 175.0	204.0 ¹¹ 204.0 ¹¹	165.0 161.0				
150	B BV		339.0 ¹¹ 357.0 ¹¹	200.0 205.0	289.0 ¹¹ 295.0 ¹¹	187.0 189.0	257.0 ¹¹ 260.0 ¹¹	178.0 180.0	229.0 ¹¹ 230.0 ¹¹	169.0 168.0	205.0 ¹¹ 204.0 ¹¹	180.0 ¹¹ 180.0 ¹¹	159.0 155.0	180.0 ¹¹ 180.0 ¹¹				
160	B BV		317.0 ¹¹ 337.0 ¹¹	309.0 ¹¹ 320.0 ¹¹	285.0 ¹¹ 292.0 ¹¹	178.0 181.0	257.0 ¹¹ 260.0 ¹¹	168.0 170.0	229.0 ¹¹ 230.0 ¹¹	161.0 161.0	204.0 ¹¹ 204.0 ¹¹	151.0 149.0	179.0 ¹¹ 180.0 ¹¹	140.0 136.0				
170	B BV		298.0 ¹¹ 317.0 ¹¹	293.0 ¹¹ 306.0 ¹¹	276.0 ¹¹ 284.0 ¹¹	171.0 175.0	254.0 ¹¹ 258.0 ¹¹	160.0 162.0	229.0 ¹¹ 231.0 ¹¹	152.0 153.0	204.0 ¹¹ 204.0 ¹¹	144.0 143.0	178.0 ¹¹ 179.0 ¹¹	134.0 131.0				
180	B BV		277.0 ¹¹ 297.0 ¹¹	277.0 ¹¹ 290.0 ¹¹	271.0 ¹¹ 278.0 ¹¹	153.0 155.0	248.0 ¹¹ 253.0 ¹¹	153.0 155.0	227.0 ¹¹ 229.0 ¹¹	145.0 146.0	203.0 ¹¹ 204.0 ¹¹	137.0 137.0	176.0 ¹¹ 178.0 ¹¹	122.0 126.0				
190	B BV		257.0 ¹¹ 278.0 ¹¹	260.0 ¹¹ 274.0 ¹¹	258.0 ¹¹ 267.0 ¹¹	148.0 151.0	223.0 ¹¹ 226.0 ¹¹	138.0 140.0	202.0 ¹¹ 204.0 ¹¹	130.0 131.0	174.0 ¹¹ 177.0 ¹¹	120.0 121.0	156.0 ¹¹ 156.0 ¹¹	110.0 111.0				
200	B BV		237.0 ¹¹ 260.0 ¹¹	243.0 ¹¹ 259.0 ¹¹	244.0 ¹¹ 254.0 ¹¹	134.0 139.0	234.0 ¹¹ 239.0 ¹¹	121.0 122.0	198.0 ¹¹ 198.0 ¹¹	124.0 126.0	172.0 ¹¹ 176.0 ¹¹	116.0 116.0	154.0 ¹¹ 155.0 ¹¹	109.0 107.0				
220	B BV		197.0 ¹¹ 226.0 ¹¹	209.0 ¹¹ 229.0 ¹¹	216.0 ¹¹ 229.0 ¹¹	116.0 ¹¹ 121.0 ¹¹	191.0 ¹¹ 209.0 ¹¹	116.0 ¹¹ 120.0 ¹¹	176.0 ¹¹ 180.0 ¹¹	112.0 114.0	165.0 ¹¹ 170.0 ¹¹	104.0 106.0	150.0 ¹¹ 153.0 ¹¹	98.4 92.2				
240	B BV		170.0 ¹¹ 197.0 ¹¹	174.0 ¹¹ 202.0 ¹¹	186.0 ¹¹ 204.0 ¹¹	119.0 ¹¹ 120.0 ¹¹	191.0 ¹¹ 194.0 ¹¹	116.0 ¹¹ 120.0 ¹¹	176.0 ¹¹ 182.0 ¹¹	158.0 ¹¹ 164.0 ¹¹	93.5 95.2	145.0 ¹¹ 149.0 ¹¹	87.7 88.7	128.0 ¹¹ 132.0 ¹¹	81.5 82.0			
260	B BV		143.0 ¹¹ 169.0 ¹¹	150.0 ¹¹ 176.0 ¹¹	156.0 ¹¹ 181.0 ¹¹	115.0 ¹¹ 118.0 ¹¹	165.0 ¹¹ 177.0 ¹¹	117.0 ¹¹ 117.0 ¹¹	168.0 ¹¹ 171.0 ¹¹	149.0 ¹¹ 158.0 ¹¹	136.0 ¹¹ 144.0 ¹¹	124.0 ¹¹ 129.0 ¹¹	117.0 ¹¹ 117.0 ¹¹	110.0 ¹¹ 110.0 ¹¹	96.8 97.5			
280	B BV		121.0 ¹¹ 145.0 ¹¹	127.0 ¹¹ 145.0 ¹¹	135.0 ¹¹ 151.0 ¹¹	113.0 ¹¹ 116.0 ¹¹	137.0 ¹¹ 141.0 ¹¹	114.0 ¹¹ 116.0 ¹¹	147.0 ¹¹ 158.0 ¹¹	149.0 ¹¹ 151.0 ¹¹	141.0 ¹¹ 143.0 ¹¹	130.0 ¹¹ 139.0 ¹¹	119.0 ¹¹ 125.0 ¹¹	63.9 65.2				
300	B BV		102.0 ¹¹ 125.0 ¹¹	106.0 ¹¹ 129.0 ¹¹	114.0 ¹¹ 136.0 ¹¹	119.0 ¹¹ 141.0 ¹¹	122.0 ¹¹ 145.0 ¹¹	130.0 ¹¹ 145.0 ¹¹	127.0 ¹¹ 140.0 ¹¹	125.0 ¹¹ 134.0 ¹¹	127.0 ¹¹ 134.0 ¹¹	113.0 ¹¹ 122.0 ¹¹	100.0 ¹¹ 106.0 ¹¹	51.0 52.1	86.8 ¹¹ 90.5 ¹¹			
320	B BV			88.8 ¹¹ 111.0 ¹¹	94.7 ¹¹ 116.0 ¹¹	99.7 ¹¹ 121.0 ¹¹	105.0 ¹¹ 126.0 ¹¹	110.0 ¹¹ 131.0 ¹¹	113.0 ¹¹ 129.0 ¹¹	112.0 ¹¹ 124.0 ¹¹	108.0 ¹¹ 118.0 ¹¹	96.4 ¹¹ 104.0 ¹¹	83.3 ¹¹ 88.6 ¹¹	40.2 41.2	72.4 ¹¹ 75.4 ¹¹			
340	B BV				78.6 ¹¹ 99.7 ¹¹	81.9 ¹¹ 103.0 ¹¹	87.7 ¹¹ 108.0 ¹¹	93.7 ¹¹ 114.0 ¹¹	97.9 ¹¹ 116.0 ¹¹	99.1 ¹¹ 112.0 ¹¹	97.3 ¹¹ 109.0 ¹¹	92.1 ¹¹ 101.0 ¹¹	80.4 ¹¹ 86.7 ¹¹	70.5 ¹¹ 74.3 ¹¹	29.9 30.5			
360	B BV					66.8 ¹¹ 87.6 ¹¹	71.1 ¹¹ 91.4 ¹¹	77.3 ¹¹ 97.3 ¹¹	82.4 ¹¹ 102.0 ¹¹	85.0 ¹¹ 102.0 ¹¹	86.4 ¹¹ 99.6 ¹¹	82.9 ¹¹ 94.8 ¹¹	77.3 ¹¹ 84.9 ¹¹	65.3 ¹¹ 73.3 ¹¹				
380	B BV						57.0 ¹¹ 68.4 ¹¹	61.9 ¹¹ 77.5 ¹¹	67.0 ¹¹ 81.8 ¹¹	70.4 ¹¹ 86.6 ¹¹	74.0 ¹¹ 88.8 ¹¹	73.7 ¹¹ 86.7 ¹¹	69.6 ¹¹ 80.9 ¹¹	65.3 ¹¹ 72.2 ¹¹	56.3 ¹¹ 59.8 ¹¹			
400	B BV							48.5 ¹¹ 68.4 ¹¹	52.4 ¹¹ 71.9 ¹¹	55.9 ¹¹ 75.4 ¹¹	60.6 ¹¹ 77.8 ¹¹	62.7 ¹¹ 77.7 ¹¹	62.0 ¹¹ 74.3 ¹¹	58.8 ¹¹ 69.2 ¹¹	53.6 ¹¹ 59.2 ¹¹			
420	B BV								40.0 ¹¹ 59.1 ¹¹	42.5 ¹¹ 61.3 ¹¹	47.2 ¹¹ 65.7 ¹¹	50.2 ¹¹ 65.7 ¹¹	52.3 ¹¹ 66.6 ¹¹	52.4 ¹¹ 66.3 ¹¹	48.1 ¹¹ 58.5 ¹¹	48.1 ¹¹ 58.5 ¹¹		
440	B BV									31.2 ¹¹ 48.9 ¹¹	35.0 ¹¹ 52.5 ¹¹	37.7 ¹¹ 55.5 ¹¹	40.9 ¹¹ 56.1 ¹¹	43.9 ¹¹ 57.0 ¹¹	42.6 ¹¹ 53.4 ¹¹	42.6 ¹¹ 53.4 ¹¹		
460	B BV										25.1 ¹¹ 40.9 ¹¹	26.8 ¹¹ 45.8 ¹¹	29.6 ¹¹ 47.5 ¹¹	33.8 ¹¹ 47.5 ¹¹	35.1 ¹¹ 47.4 ¹¹			
480	B BV											18.2 ¹¹ 32.4 ¹¹	13.9 ¹¹ 34.7 ¹¹	23.7 ¹¹ 38.1 ¹¹	26.1 ¹¹ 38.7 ¹¹			
500	B BV												25.4 ¹¹	27.3 ¹¹	30.0 ¹¹	17.2 ¹¹		

	335 ft		118 ft		79-315 ft		110,200 lb		330,700 lb		661,400 - 826,700 lb		330,700 - 659,200 lb		110,200 - 328,500 lb		0 lb		Wmax		R	47
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		HS 335 ft																									
		W 79 ft		W 98 ft		W 118 ft		W 138 ft		W 158 ft		W 177 ft		W 197 ft		W 217 ft		W 236 ft		W 256 ft		W 276 ft		W 295 ft		W 315 ft	
ft		87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax	87°/85	Wmax		
50	B BV	3510*	3510*																								
60	B BV	332.0*	349.0 ¹⁾	304.0*	309.0 ¹⁾	276.0*	276.0*																				
70	B BV	342.0	348.0 ¹⁾	311.0	311.0	265.0*	275.0 ¹⁾	239.0*	243.0 ¹⁾	217.0*	217.0*																
80	B BV	322.0	343.0 ¹⁾	297.0	307.0 ¹⁾	271.0	274.0 ¹⁾	228.0*	242.0 ¹⁾	209.0*	216.0 ¹⁾	188.0*	190.0 ¹⁾	168.0*	168.0*												
90	B BV	301.0	339.0 ¹⁾	280.0	304.0 ¹⁾	258.0	272.0 ¹⁾	235.0	241.0 ¹⁾	214.0	215.0 ¹⁾	180.0*	190.0 ¹⁾	163.0*	167.0 ¹⁾	144.0*	146.0 ¹⁾	128.0*	128.0*								
100	B BV	278.0	336.0 ¹⁾	263.0	301.0 ¹⁾	245.0	270.0 ¹⁾	225.0	239.0 ¹⁾	207.0	214.0 ¹⁾	186.0	189.0 ¹⁾	166.0	166.0	139.0*	145.0 ¹⁾	124.0*	127.0 ¹⁾	108.0*	109.0 ¹⁾	93.1*	93.1*				
110	B BV	259.0	335.0 ¹⁾	245.0	299.0 ¹⁾	232.0	268.0 ¹⁾	215.0	239.0 ¹⁾	199.0	214.0 ¹⁾	181.0	188.0 ¹⁾	163.0	163.0	144.0	144.0	128.0	128.0	106.0*	110.0 ¹⁾	91.7*	92.9 ¹⁾				
120	B BV		333.0 ¹⁾	229.0	298.0 ¹⁾	218.0	263.0 ¹⁾	205.0	238.0 ¹⁾	192.0	214.0 ¹⁾	175.0	188.0 ¹⁾	159.0	161.0 ²⁾	141.0	141.0	126.0	126.0	109.0	109.0	93.1	93.1				
130	B BV		343.0 ¹⁾	233.0	303.0 ¹⁾	221.0	267.0 ¹⁾	207.0	240.0 ¹⁾	193.0	214.0 ¹⁾	176.0	189.0 ¹⁾	159.0	161.0 ²⁾	141.0	141.0	125.0	125.0	109.0	109.0	93.4	93.4				
140	B BV		325.0 ²⁾		295.0 ¹⁾	193.0	260.0 ²⁾	182.0	231.0 ²⁾	174.0	207.0 ²⁾	162.0	185.0 ¹⁾	149.0	161.0 ²⁾	135.0	141.0 ²⁾	120.0	123.0 ²⁾	106.0	106.0 ²⁾	91.6	91.6				
150	B BV		327.0 ²⁾		290.0 ²⁾	184.0	259.0 ²⁾	172.0	230.0 ²⁾	165.0	207.0 ²⁾	155.0	184.0 ²⁾	144.0	162.0 ²⁾	131.0	141.0 ²⁾	118.0	124.0 ²⁾	104.0	107.0 ²⁾	90.1	90.8 ²⁾				
160	B BV		303.0 ²⁾		282.0 ²⁾	193.0	259.0 ²⁾	176.0	232.0 ²⁾	160.0	234.0 ²⁾	150.0	189.0 ²⁾	138.0	140.0 ²⁾	123.0	123.0	107.0	107.0	92.1	92.1	79.1	79.1				
170	B BV		291.0 ²⁾		273.0 ²⁾	196.0	263.0 ²⁾	185.0	232.0 ²⁾	176.0	208.0 ²⁾	163.0	183.0 ²⁾	150.0	162.0 ²⁾	135.0	141.0 ²⁾	120.0	123.0 ²⁾	105.0	106.0 ²⁾	90.8	78.3				
180	B BV		273.0 ²⁾		262.0 ²⁾	197.0	259.0 ²⁾	172.0	230.0 ²⁾	165.0	207.0 ²⁾	155.0	184.0 ²⁾	144.0	162.0 ²⁾	131.0	141.0 ²⁾	118.0	124.0 ²⁾	104.0	106.0 ²⁾	89.3	90.1 ²⁾				
190	B BV		254.0 ²⁾		255.0 ¹⁰⁾	237.0 ²⁾	219.0 ²⁾	136.0	202.0 ²⁾	126.0	181.0 ²⁾	118.0	159.0 ²⁾	111.0	140.0 ²⁾	103.0	123.0 ²⁾	93.0	107.0 ²⁾	81.6	90.6 ²⁾	71.7	77.1 ²⁾				
200	B BV		235.0 ¹⁰⁾		239.0 ¹⁰⁾	229.0 ²⁾	214.0 ²⁾	197.0 ³⁾	121.0	177.0 ⁹⁾	113.0	158.0 ²⁾	105.0	139.0 ²⁾	98.4	122.0 ²⁾	89.6	106.0 ²⁾	78.9	90.1 ²⁾	69.8	77.2 ²⁾					
210	B BV		254.0 ⁷⁾		249.0 ⁷⁾	238.0 ⁷⁾	219.0 ⁵⁾	197.0 ³⁾	121.0	177.0 ⁹⁾	115.0	161.0 ²⁾	107.0	140.0 ²⁾	99.3	123.0 ²⁾	90.1	106.0 ²⁾	79.3	90.6 ²⁾	69.8	77.2 ²⁾					
220	B BV		198.0 ¹⁰⁾		207.0 ¹⁰⁾	208.0 ¹⁰⁾	199.0 ⁸⁾	185.0 ⁹⁾		170.0 ⁴⁾	103.0	153.0 ⁹⁾	94.6	135.0 ²⁾	88.7	119.0 ²⁾	81.6	103.0 ²⁾	73.0	87.5 ²⁾							
230	B BV		223.0 ⁹⁾		223.0 ⁷⁾	218.0 ⁸⁾	206.0 ⁸⁾	191.0 ⁹⁾		174.0 ⁴⁾	105.0	157.0 ⁹⁾	96.2	138.0 ²⁾	89.9	121.0 ²⁾	82.4	104.0 ²⁾	73.4	88.4 ²⁾	64.9	75.6 ²⁾					
240	B BV		167.0 ⁸⁾		175.0 ¹⁰⁾	182.0 ¹⁰⁾	181.0 ¹⁰⁾	173.0 ⁹⁾		160.0 ⁶⁾		145.0 ⁵⁾	85.2	130.0 ⁴⁾	79.4	116.0 ³⁾	73.2	100.0 ²⁾	66.5	85.0 ³⁾							
250	B BV		195.0 ⁸⁾		198.0 ⁹⁾	197.0 ⁸⁾	189.0 ⁹⁾	181.0 ⁸⁾		167.0 ²⁾		152.0 ⁹⁾	86.9	135.0 ³⁾	80.7	119.0 ³⁾	74.1	102.0 ²⁾	67.1	86.5 ³⁾	59.9	73.9 ³⁾					
260	B BV		143.0 ⁸⁾		148.0 ⁸⁾	155.0 ¹⁰⁾	159.0 ¹⁰⁾	160.0 ⁹⁾		137.0 ⁴⁾		124.0 ⁵⁾	70.7	111.0 ⁴⁾	64.7	97.3 ⁵⁾	58.7	83.0 ³⁾			51.4	61.6 ³⁾					
270	B BV		169.0 ⁸⁾		174.0 ⁸⁾	177.0 ⁹⁾	173.0 ⁹⁾	169.0 ⁹⁾		160.0 ²⁾		147.0 ³⁾	72.4	116.0 ³⁾	65.7	100.0 ³⁾	59.6	84.8 ³⁾	54.5	72.2 ³⁾	47.2	60.1 ³⁾					
280	B BV		118.0 ⁶⁾		126.0 ⁸⁾	132.0 ⁸⁾	137.0 ¹⁰⁾	141.0 ¹⁰⁾		140.0 ¹¹⁾		131.0 ⁹⁾		118.0 ⁷⁾		106.0 ⁵⁾	56.9	93.4 ⁴⁾	51.3	80.4 ⁴⁾							
290	B BV		142.0 ⁴⁾		150.0 ⁸⁾	156.0 ⁹⁾	156.0 ⁹⁾	155.0 ¹³⁾		150.0 ³⁾		142.0 ²⁾		126.0 ³⁾		113.0 ³⁾	58.6	97.5 ³⁾	52.2	82.6 ³⁾	47.3	70.5 ³⁾					
300	B BV		100.0 ⁶⁾		104.0 ⁶⁾	112.0 ⁸⁾	116.0 ⁸⁾	123.0 ¹⁰⁾		124.0 ¹¹⁾		122.0 ¹¹⁾		112.0 ⁹⁾		101.0 ²⁾	89.9 ⁶⁾	44.5	77.7 ⁵⁾								
310	B BV		123.0 ⁶⁾		126.0 ⁶⁾	135.0 ⁸⁾	138.0 ⁸⁾	141.0 ⁸⁾		136.0 ⁵⁾		133.0 ⁹⁾		122.0 ¹⁰⁾		110.0 ³⁾	94.9 ⁶⁾	46.1	80.8 ⁴⁾	41.0	68.8 ⁴⁾	35.6	56.8 ⁴⁾				
320	B BV		82.4 ⁶⁾		87.3 ⁶⁾	91.6 ⁸⁾	97.7 ⁸⁾	104.0 ⁸⁾		108.0 ¹¹⁾		104.0 ¹¹⁾		97.0 ¹⁰⁾		85.6 ²⁾		74.7 ³⁾			30.2	55.7 ⁴⁾					
330	B BV		104.0 ⁴⁾		109.0 ⁴⁾	113.0 ⁶⁾	119.0 ⁶⁾	124.0 ⁸⁾		124.0 ⁸⁾		121.0 ⁸⁾		115.0 ⁹⁾		107.0 ³⁾	92.7 ⁴⁾		79.1 ⁴⁾	35.8	67.2 ⁴⁾						
340	B BV				70.8 ⁶⁾	76.1 ⁶⁾	78.9 ⁶⁾	87.1 ⁸⁾		91.5 ⁹⁾		95.8 ¹¹⁾		93.3 ¹¹⁾		90.3 ¹¹⁾	46.1	80.8 ⁴⁾	41.0	68.8 ⁴⁾	35.6	54.3 ⁵⁾					
350	B BV					81.9 ⁶⁾	85.3 ⁶⁾	89.6 ⁸⁾		94.8 ⁹⁾		97.0 ⁹⁾		95.2 ⁹⁾		92.1 ⁶⁾	46.1	82.4 ⁴⁾	41.0	68.8 ⁴⁾	35.6	56.8 ⁴⁾					
360	B BV						50.0 ⁶⁾	55.9 ⁶⁾		59.0 ⁷⁾		65.3 ⁹⁾		68.0 ⁹⁾		71.6 ¹¹⁾		68.6 ¹¹⁾		64.0 ¹¹⁾							
370	B BV						71.0<sup																				



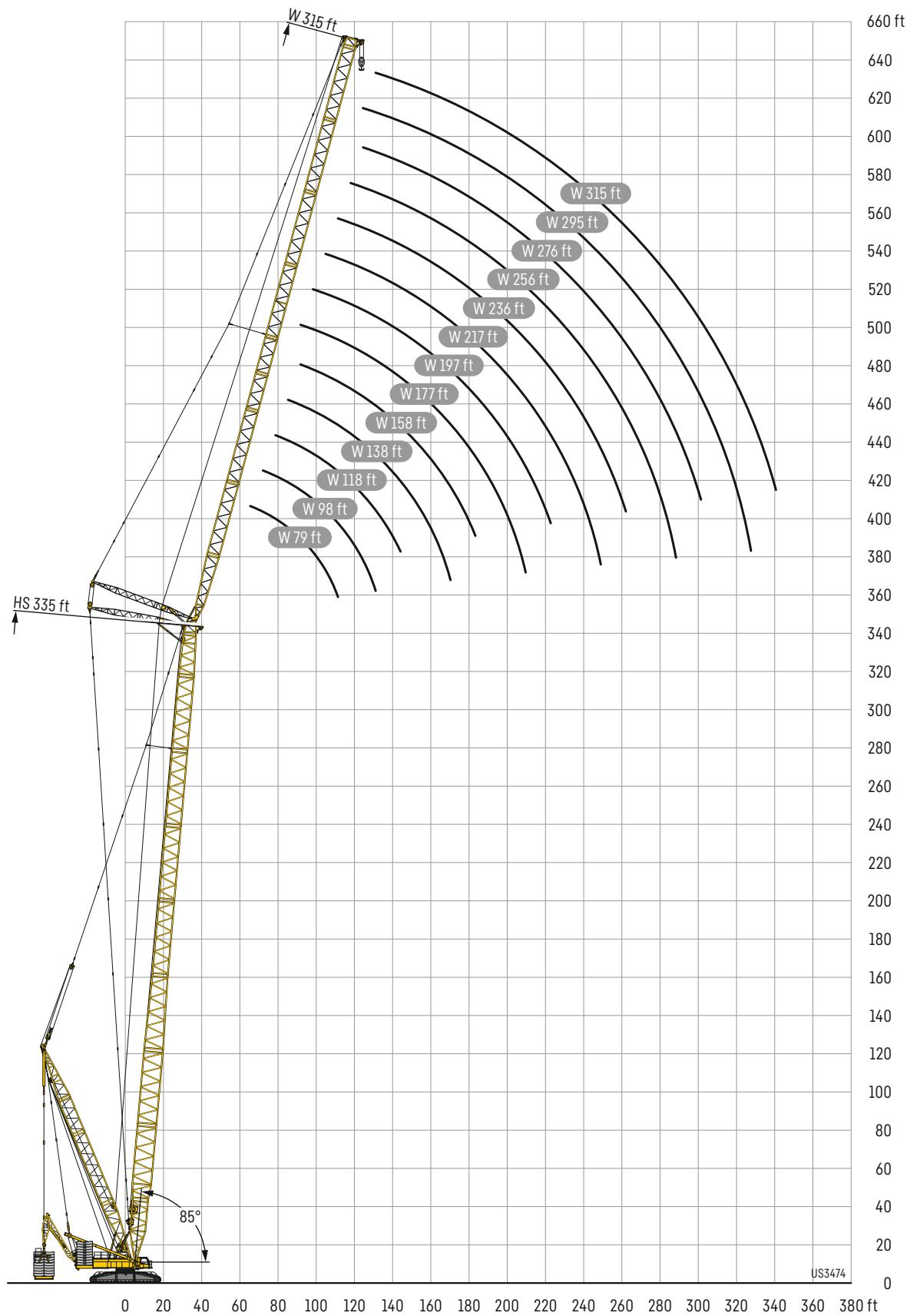
		HS 354 ft																	
ft	B	W98ft		W118ft		W138ft		W158ft		W 177ft		W197ft		W217ft		W236ft		W256ft	
		87*/85	Wmax	87*/85	Wmax	87*/85	Wmax	87*/85	Wmax	87*/85	Wmax	87*/85	Wmax	87*/85	Wmax	87*/85	Wmax	87*/85	Wmax
55	B BV	275.0*	275.0*																
60	B BV	270.0*	273.0 ⁽¹⁾	245.0*	245.0*														
70	B BV	257.0*	272.0 ⁽¹⁾	235.0*	242.0 ⁽¹⁾	213.0*	215.0 ⁽¹⁾	193.0*	193.0*										
80	B BV	263.0 264.0	270.0 ⁽¹⁾ 270.0 ⁽¹⁾	239.0 238.0	241.0 ⁽¹⁾ 239.0 ⁽¹⁾	204.0*	214.0 ⁽¹⁾	185.0*	190.0 ⁽¹⁾										
90	B BV	251.0 251.0	268.0 ⁽¹⁾ 267.0 ⁽¹⁾	229.0 228.0	239.0 ⁽¹⁾ 238.0 ⁽¹⁾	209.0	213.0 ⁽¹⁾	189.0	189.0 ⁽¹⁾										
100	B BV	236.0 237.0	265.0 ⁽¹⁾ 265.0 ⁽¹⁾	218.0	237.0 ⁽¹⁾	201.0	212.0 ⁽¹⁾	183.0	188.0 ⁽¹⁾	161.0	163.0 ⁽¹⁾	144.0	144.0						
110	B BV	223.0 224.0	263.0 ⁽¹⁾ 262.0 ⁽¹⁾	208.0 208.0	235.0 ⁽¹⁾ 234.0 ⁽¹⁾	193.0	210.0 ⁽¹⁾	177.0	186.0 ⁽¹⁾	157.0	163.0 ⁽¹⁾	140.0	140.0 ⁽¹⁾	124.0	124.0 ⁽¹⁾	110.0	110.0		
120	B BV	208.0 211.0	261.0 ⁽¹⁾ 261.0 ⁽¹⁾	198.0 198.0	233.0 ⁽¹⁾ 232.0 ⁽¹⁾	185.0	208.0 ⁽¹⁾	170.0	185.0 ⁽¹⁾	152.0	162.0 ⁽¹⁾	137.0	138.0 ⁽²⁾	121.0	121.0	108.0	108.0	93.6	93.6
130	B BV	197.0 200.0	258.0 ⁽¹⁾ 259.0 ⁽¹⁾	186.0 187.0	231.0 ⁽¹⁾ 226.0 ⁽²⁾	176.0	205.0 ⁽¹⁾	164.0	184.0 ⁽¹⁾	148.0	161.0 ⁽¹⁾	133.0	138.0 ⁽²⁾	118.0	120.0 ⁽²⁾	105.0	105.0	91.7	91.7
140	B BV		256.0 ⁽¹⁾	175.0	229.0 ⁽¹⁾	166.0	202.0 ⁽²⁾	157.0	180.0 ⁽²⁾	143.0	161.0 ⁽¹⁾	129.0	138.0 ⁽²⁾	115.0	120.0 ⁽²⁾	103.0	105.0 ⁽²⁾	89.8	89.9 ⁽²⁾
150	B BV		254.0 ⁽¹⁾	166.0	228.0 ⁽¹⁾	157.0	201.0 ⁽²⁾	149.0	180.0 ⁽²⁾	137.0	157.0 ⁽²⁾	125.0	139.0 ⁽²⁾	112.0	120.0 ⁽²⁾	100.0	105.0 ⁽²⁾	87.8	89.9 ⁽²⁾
160	B BV		247.0 ⁽²⁾		225.0 ⁽¹⁾	149.0	200.0 ⁽²⁾	140.0	179.0 ⁽²⁾	131.0	157.0 ⁽²⁾	121.0	139.0 ⁽²⁾	109.0	120.0 ⁽²⁾	97.6	105.0 ⁽²⁾	85.7	90.0 ⁽²⁾
170	B BV		242.0 ⁽⁴⁾		220.0 ⁽²⁾	143.0	199.0 ⁽²⁾	133.0	178.0 ⁽²⁾	126.0	157.0 ⁽²⁾	116.0	139.0 ⁽²⁾	105.0	121.0 ⁽²⁾	94.8	105.0 ⁽²⁾	83.4	90.1 ⁽²⁾
180	B BV		233.0 ⁽⁴⁾		214.0 ⁽³⁾	196.0 ⁽²⁾	127.0	177.0 ⁽²⁾											
190	B BV		230.0 ⁽⁸⁾		210.0 ⁽⁵⁾	192.0 ⁽³⁾	123.0	175.0 ⁽²⁾											
200	B BV		221.0 ⁽¹⁰⁾		202.0 ⁽⁶⁾	187.0 ⁽⁴⁾	172.0 ⁽³⁾												
220	B BV		195.0 ⁽¹⁰⁾		191.0 ⁽¹⁰⁾	176.0 ⁽⁷⁾	163.0 ⁽⁵⁾												
240	B BV		169.0 ⁽¹⁰⁾		170.0 ⁽¹⁰⁾	166.0 ⁽¹⁰⁾	155.0 ⁽⁸⁾												
260	B BV		144.0 ⁽⁸⁾		149.0 ⁽¹⁰⁾	149.0 ⁽¹⁰⁾	145.0 ⁽¹⁰⁾												
280	B BV		123.0 ⁽⁸⁾		127.0 ⁽⁸⁾	132.0 ⁽¹⁰⁾	130.0 ⁽¹⁰⁾												
300	B BV		102.0 ⁽⁸⁾		109.0 ⁽⁸⁾	113.0 ⁽⁸⁾	116.0 ⁽¹⁰⁾												
320	B BV		83.4 ⁽⁶⁾		89.9 ⁽⁸⁾	95.9 ⁽⁸⁾	100.0 ⁽⁸⁾												
340	B BV		67.6 ⁽⁶⁾		72.2 ⁽⁶⁾	78.5 ⁽⁸⁾	84.0 ⁽⁸⁾												
360	B BV		57.5 ⁽⁶⁾		62.0 ⁽⁶⁾	67.7 ⁽⁸⁾	89.6 ⁽⁹⁾												
380	B BV				48.3 ⁽⁶⁾	52.2 ⁽⁶⁾	76.7 ⁽⁹⁾												
400	B BV					39.6 ⁽⁶⁾													
420	B BV					59.4 ⁽⁶⁾	62.9 ⁽⁷⁾	66.7 ⁽⁹⁾											
440	B BV						50.1 ⁽⁷⁾	53.6 ⁽⁷⁾											
460	B BV							41.7 ⁽⁷⁾	43.8 ⁽⁷⁾										
480	B BV								33.1 ⁽⁷⁾										
500	B BV																26.4 ⁽⁷⁾		22.5 ⁽⁴⁾
																		13.7 ⁽⁴⁾	

1) 12° 2) 17° 3) 22° 4) 27° 5) 32° 6) 37° 7) 42° 8) 47° 9) 52° 10) 57° 11) 62°

Lifting heights

Hauteurs de levage

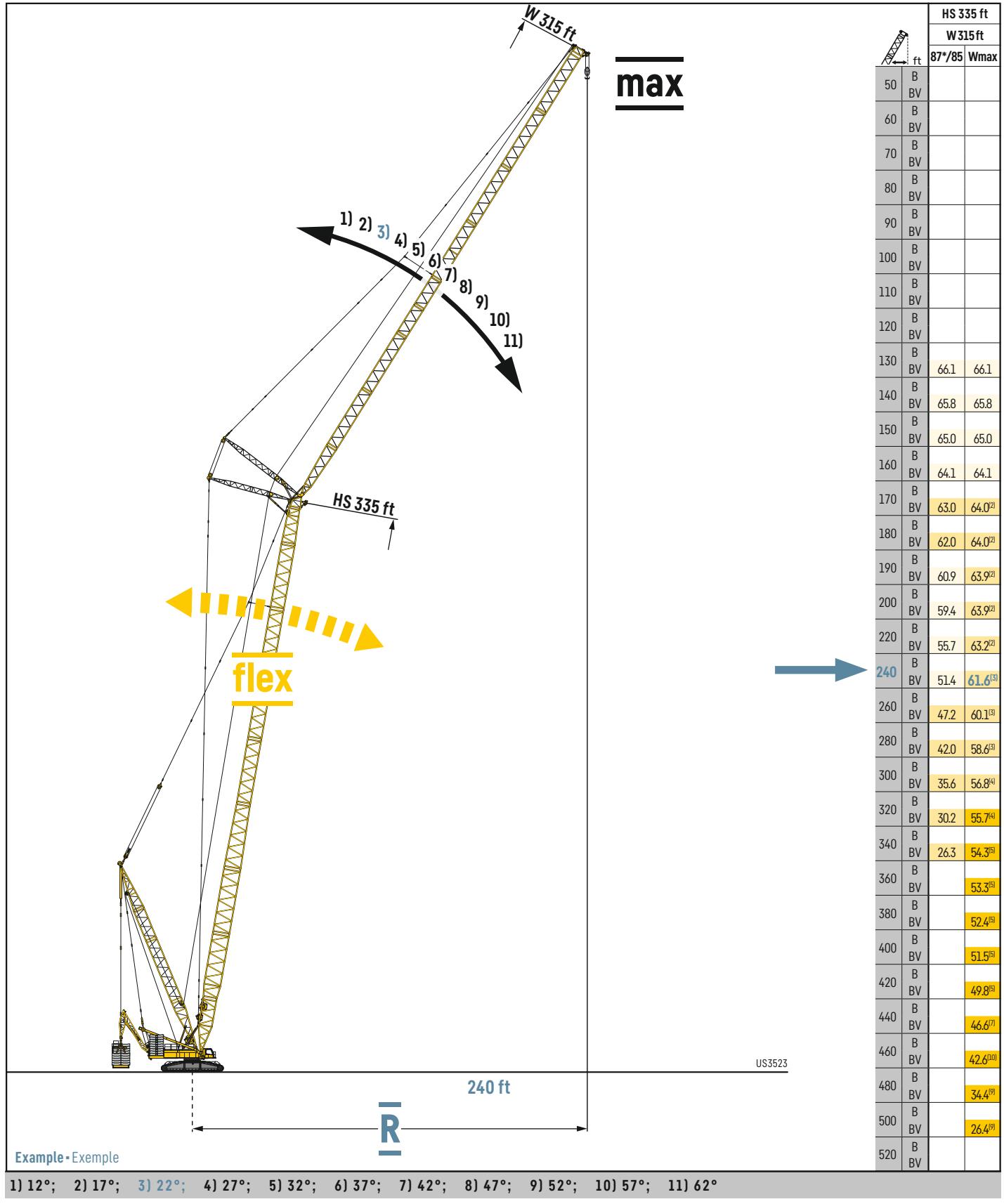
HSDWB/BV



Example

Exemple

Wmax



HSL3AF

HSL3 256 – 266



256 ft
HSL3
39–128 ft
110,200 lb
330,700 lb
418,900 – 507,100 lb
286,600 – 416,700 lb
154,300 – 284,400 lb
0 lb

ft	HSL3 256 ft																		ft									
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft			F 89 ft			F 98 ft			F 108 ft		F 118 ft		F 128 ft		
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	30°	30°				
50	375	367		354																					50			
60	355	342	219	326	282		286	241		254	222													60				
70	298	301	209	297	264	183	264	225	165	234	207		189		177		169		163					70				
80	255	258	201	255	248	175	245	211	158	217	194	139	177	126	164	116	156	150						80				
90	221	223	193	220	225	168	222	199	151	203	182	133	166	120	154	111	145	104	140	98.5	94.5	91.3		90				
100	193	195	186	193	197	162	195	188	145	189	171	128	156	115	144	106	136	98.9	130	93.4	89.3	86		100				
110	170	171	177	170	174	156	172	174	140	171	162	123	147	110	135	101	128	94.3	122	88.7	84.5	81.2		110				
120	150	152	159	150	154	151	155	135	152	154	118	139	106	128	96.6	120	90	114	84.5	101	80.3	76.9		120				
130	134	135	142	134	137	143	136	138	131	136	140	114	132	102	121	92.6	114	107	80.6	76.4	72.9			130				
140	119	121	127	120	123	129	122	124	125	122	125	110	124	98.1	115	89	107	82.5	101	77	72.8	69.3		140				
150	106	108	113	107	110	115	109	111	116	109	113	106	113	94.7	109	85.7	102	79.3	96	73.8	69.5	66		150				
160	94.3	95.3	100	95.4	98	102	98.2	99.5	104	98.4	102	102	91.6	101	82.7	96.8	76.3	91.1	70.8	66.5	62.9			160				
170	83.7	84.7	89.2	84.7	87.2	91	87.5	88.7	93.1	88.1	90.9	94.7	91.9	88.7	91.8	79.8	91.7	73.5	86.6	68	63.8	60.1		170				
180	74.4	75.3	79.4	75.4	77.7	81.2	78.1	79.2	83.3	78.6	81.3	84.7	82.4	84.3	82.6	77.2	83.4	70.9	81.5	65.5	61.2	57.6		180				
190	66.2	66.9	70.9	67.2	69.2	72.6	69.7	70.7	74.6	70.3	72.8	75.9	73.8	77.1	74	74.8	74.9	68.6	74.6	63.1	58.8	55.1		190				
200	58.9	59.6	63.2	59.9	61.7	64.8	62.3	63.2	66.8	62.7	65.2	67.9	66	69.2	66.2	69.6	67.2	66.2	66.8	60.9	56.6	52.9		200				
220	46.4	46.9	50.1	47.1	48.8	51.3	49.3	50.1	53.1	49.6	51.8	54	52.7	55.3	52.8	55.8	53.9	57.3	53.6	56.5	52.7	49		220				
240	36	36.4	39	36.6	38.1	40.1	38.6	39.2	41.7	38.9	40.8	42.6	41.7	43.8	41.9	44.4	42.9	45.8	42.7	45.9	46.4	45.2		240				
260	27.8	28	29.6	28.2	29.3	30.6	29.9	30.2	32.1	30.1	31.6	32.9	32.5	34.2	32.6	34.7	33.7	36.1	33.6	36.3	36.8	36.7		260				
280										23.2	23.6	24.9	23.7	24.9	25.7	25.7	26.7	25.9	27.2	26.8	28.3	26.7	28.5	28.9		280		
300																								300				
320																								320				
340																								340				



266 ft
HSL3
39–128 ft
110,200 lb
330,700 lb
418,900 – 507,100 lb
286,600 – 416,700 lb
154,300 – 284,400 lb
0 lb

ft	HSL3 266 ft																		ft								
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft			F 89 ft			F 98 ft			F 108 ft		F 118 ft		F 128 ft	
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	30°	30°			
50	375			328	283		287	242		255														50			
60	348	344	219	328	283					255														60			
70	292	296	210	292	266	183	265	227	165	236	207		190		177		169		163					70			
80	250	253	201	249	249	176	246	213	158	219	194	139	177	126	165	116	157							80			
90	216	218	194	216	221	169	218	201	152	204	183	134	167	121	155	111	146	104	140	98.6	94.6			90			
100	188	191	187	188	193	163	191	190	146	189	173	128	157	115	145	106	137	99.1	131	93.6	89.4	86.2		100			
110	166	167	175	166	177	157	168	170	141	167	164	123	148	111	137	101	129	94.6	123	89	84.9	81.5		110			
120	146	148	156	147	150	152	149	151	136	148	153	119	140	106	129	97.1	121	90.4	115	84.9	80.7	77.2		120			
130	130	132	139	130	134	140	133	134	132	132	136	115	133	102	122	93.2	115	86.6	109	81	76.8	73.3		130			
140	116	117	124	116	119	125	119	120	125	118	122	111	122	98.8	116	89.6	109	83.1	103	77.5	73.3	69.7		140			
150	103	105	111	104	107	112	106	108	114	106	110	107	110	95.4	109	86.4	103	79.9	97.2	74.3	70	66.5		150			
160	91.9	93	98.2	92.8	95.6	100	95.3	96.8	102	95.1	98.6	102	99	92.3	98.4	83.4	97.3	76.9	92.2	71.3	67.1	63.5		160			
170	81.4	82.3	87.2	82.6	85	89.2	85.2	86.7	91.5	85.4	88.7	92.7	89.3	88.8	88.8	80.6	89.4	74.2	86.7	68.6	64.3	60.7		170			
180	72.1	72.9	77.5	73.2	75.5	79.4	75.9	77.2	81.5	76.4	79.3	82.8	80.3	84.1	80.2	78	80.8	71.6	79.8	66.1	61.8	58.1		180			
190	63.9	64.7	68.9	64.9	67.1	70.6	67.5	68.7	72.7	68	70.7	73.9	71.7	75.3	71.8	74.1	72.8	69.2	72.2	63.7	59.4	55.7		190			
200	56.6	57.3	61.1	57.5	59.6	62.8	59.9	61	64.7	60.4	62.9	65.7	63.8	67.1	64	67.8	65	66.8	64.6	61.6	57.2	53.5		200			
220	43.9	44.4	47.9	44.6	46.4	49.2	46.9	47.7	50.9	47.3	49.5	51.9	50.5	53.2	50.6	53.8	51.6	55.2	51.4	55.4	53.2	49.6		220			
240	33.4	33																									

HSL3AF

HSL3 276 – 285



276 ft
HSL3
39–128 ft
110,200 lb
330,700 lb
418,900 – 507,100 lb
286,600 – 416,700 lb
154,300 – 284,400 lb
0 lb

ft	HSL3 276 ft																		ft									
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft			F 89 ft			F 98 ft			F 108 ft		F 118 ft		F 128 ft		
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	30°	30°				
50	375																									50		
60	342	343	220	329	284		287	242		256															60			
70	288	291	210	287	267	184	267	227	165	237	208		190		177		169		163						70			
80	246	248	202	245	251	176	247	214	159	220	196	140	178	126	166		158		152						80			
90	212	215	194	212	217	170	214	202	152	206	184	134	167	121	155	111	147	104	141	98.7					90			
100	185	187	188	185	190	163	187	189	147	186	174	129	158	116	146	106	138	99.4	132	93.8	89.6	86.3			100			
110	162	164	173	163	167	158	165	167	142	164	165	124	149	111	138	102	130	94.9	124	89.3	85.1	81.7			110			
120	143	145	153	144	148	152	146	148	137	146	150	119	142	107	131	97.5	122	90.9	116	85.2	81	77.5			120			
130	127	129	136	127	131	137	130	132	132	129	134	115	133	103	124	93.7	116	87	110	81.5	77.2	73.7			130			
140	113	114	122	113	117	123	116	118	124	115	120	111	120	99.4	117	90.2	110	83.6	104	78	73.7	70.7			140			
150	101	102	109	101	104	110	104	105	112	103	107	107	108	96.1	107	87	104	80.4	98.4	74.8	70.5	66.9			150			
160	90	91.1	96.9	90.3	93.5	98.5	92.9	94.3	100	92.6	96.4	100	96.6	93.2	96.3	84	96.7	77.4	93.1	71.9	67.6	64			160			
170	79.9	81	86	80.7	83.5	87.9	83.3	84.6	90	83.1	86.6	90.8	86.9	89.2	86.7	81.2	87.1	74.7	85.9	69.2	64.8	61.2			170			
180	70.7	71.6	76.2	71.6	74.2	78.1	74.5	75.7	80.3	74.6	77.7	81.5	78.3	82.4	78	78.3	78.5	72.2	77.7	66.7	62.3	58.7			180			
190	62.4	63.3	67.6	63.4	65.8	69.3	66.1	67.1	71.4	66.4	69.3	72.6	70.1	74	70.1	74.5	70.9	70	70.1	64.3	60	56.3			190			
200	55	55.8	59.9	55.8	58.1	61.5	58.4	59.4	63.4	58.8	61.5	64.5	62.4	65.8	62.5	66.4	63.4	66.3	63	62	57.8	54.1			200			
220	42.3	42.8	46.5	43	44.9	47.8	45.4	46.2	49.6	45.7	48.1	50.6	49	51.9	49.1	52.4	50.2	53.9	49.9	53.9	52.9	50.2			220			
240	31.7	32.2	35.3	32.4	34.1	36.5	34.6	35.3	38.2	34.9	37.1	39.1	37.9	40.4	38.1	40.9	39.2	42.4	38.9	42.5	43	42.8			240			
260	23.9	24.3	26.6	24.6	25.9	27.6	26.5	27	28.9	26.8	28.2	29.6	29	30.8	29.1	31.3	30.2	32.7	29.8	32.9	33.4	33.2			260			
280		17.1	18.9	17.4	18.6	20	19.4	19.9	21.7	19.8	21.4	22.6	22.4	23.9	22.6	24.4	23.7	25.5	23.6	25.7	26.1	26			280			
300										14.7	13.5	14.8	15.7	15.9	17	16.1	17.7	17.4	19.3	17.4	19.7	20.3	20.2			300		
320																	11.6	11.8	13.2	11.8	13.6	14.3	14.4			320		



285 ft
HSL3
39–128 ft
110,200 lb
330,700 lb
418,900 – 507,100 lb
286,600 – 416,700 lb
154,300 – 284,400 lb
0 lb

ft	HSL3 285 ft																		ft									
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft			F 89 ft			F 98 ft			F 108 ft		F 118 ft		F 128 ft		
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	30°	30°				
50	375																								50			
60	336	339	220	330	285		288	243		256														60				
70	282	286	211	282	268	184	268	228		238	209		191		178									70				
80	241	244	203	241	246	176	242	215	159	222	196	140	179	126	166		158		152					80				
90	208	210	195	208	213	170	210	204	153	208	185	134	168	121	156	111	148	104	142					90				
100	181	183	188	181	186	164	183	186	147	183	175	129	159	116	147	106	139	99.6	133	94	89.8	86.4		100				
110	158	160	169	159	163	158	161	164	142	161	164	124	150	112	139	102	131	95.2	125	89.6	85.3	81.9		110				
120	140	141	150	140	144	151	142	145	137	142	147	120	143	107	131	98	124	112	118	85.6	81.3	77.8		120				
130	123	125	133	124	127	134	126	128	133	126	130	116	131	104	125	94.2	117	87.5	111	81.9	77.6	74.1		130				
140	109	111	118	110	113	119	112	114	121	112	116	112	117	100	116	90.7	111	84.1	105	78.5	74.1	70.6		140				
150	97.2	98.4	105	97.7	101	107	100	102	108	100	104	108	104	96.7	104	87.6	104	80.9	99.4	75.3	71	67.4		150				
160	86.4	87.6	94	87	90.1	95.5	89.4	91.2	97.2	89.5	93.1	97.9	93.7	93.6	93.2	84.6	93.5	78	92.2	72.4	68.1	64.4		160				
170	76.9	77.9	83.8	77.4	80.4	85.4	79.9	81.5	87.1	79.9	83.4	87.8	84	87.9	83.5	81.9	84	75.3	83.2	69.7	65.3	61.7		170				
180	68.3	69.2	74.3	68.9	71.6	76.1	71.4	72.9	78.1	71.4	74.7	78.7	75.4	79.9	74.9	78.5	75.6	72.7	74.8	67.2	62.9	59.2		180				
190	60	60.9	65.6	60.9	63.4	67.4	63.5	64.8	69.3	63.7	66.9	70.4	67.5	71.6	67.2	71.8	68	69.9	67.2	64.9	60.5	56.9		190				
200	52.5	53.3	57.8	53.4	55.7	59.4	56	57.1	61.3	56.4	59.2	62.3	60.1	63.8	60.1	64.3	61	65.7	60.3	62.7	58.4	54.6		200				
220	39.7	40.3	44.2	40.4	42.5	45.6	42.9	43.9	47.4	43.3	45.8	48.4	46.7	49.8	46.9	50.4	47.9	51.8	47									

HSL3AF

HSL3 295 – 305



330,700 lb
418,900 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lb

ft	HSL3 295 ft																		ft									
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft			F 89 ft			F 98 ft			F 108 ft		F 118 ft		F 128 ft		
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	30°	30°	30°	30°				
50	276																									50		
60	331	335		327	285		289			256															60			
70	279	282	211	278	269	184	269	229		239	209		191		178										70			
80	238	241	203	237	243	177	240	216	159	223	197	140	179	127	167			158		152					80			
90	205	208	196	205	210	170	207	205	153	205	186	134	169	121	157	111	149	104	142						90			
100	179	181	188	179	183	164	181	184	148	180	177	129	160	116	148	107	139	99.8	133	94.1	89.9	86.6		100				
110	156	158	167	157	161	159	159	162	143	158	164	125	152	112	140	102	132	95.5	125	89.8	85.5	82.1		110				
120	138	139	148	138	142	149	141	143	138	140	145	121	143	108	132	98.3	125	91.5	118	85.9	81.6	78.1		120				
130	122	123	131	122	126	133	125	127	132	124	129	117	129	104	125	94.6	118	87.9	112	82.2	77.9	74.4		130				
140	108	109	117	108	112	118	111	113	120	110	115	113	115	101	114	91.2	112	84.5	106	78.9	74.5	71		140				
150	95.8	97.2	104	96.2	99.6	105	98.9	101	107	98.7	103	108	103	97.4	102	88.1	103	81.4	100	75.7	71.4	67.8		150				
160	85.1	86.4	92.8	85.5	88.8	94.2	88.3	89.9	96	88	91.9	96.6	92.4	93.8	91.7	85.1	92.1	78.5	91	72.9	68.5	64.8		160				
170	75.7	76.8	82.9	76	79.2	84.2	78.8	80.2	86	78.5	82.3	86.7	82.7	87.7	82.2	82.4	82.9	75.9	81.9	70.2	65.9	62.2		170				
180	67.2	68.2	73.9	67.5	70.6	75.2	70.3	71.6	77	70.1	73.7	77.7	74.1	78.7	73.8	77.6	74.4	73.3	73.4	67.7	63.4	59.6		180				
190	59.3	60.3	65.2	59.9	62.7	66.8	62.6	63.8	68.7	62.5	65.9	69.6	66.4	70.6	66.2	70.9	66.8	70.4	65.9	65.3	61.1	57.3		190				
200	51.9	52.7	57.3	52.6	55.1	58.8	55.4	56.4	60.7	55.6	58.6	61.9	59.4	63.1	59.2	63.5	59.8	64.5	59.2	62.3	58.8	55.1		200				
220	39	39.7	43.8	39.7	41.9	45.2	42.3	43.2	46.9	42.6	45.2	47.9	46.1	49.3	46.2	49.8	47.2	51.3	46.9	51.4	51.6	50.1		220				
240	28.8	29.2	32.7	29.3	31.1	33.9	31.6	32.3	35.5	31.8	34.2	36.5	35.1	37.7	35.2	38.2	36.3	39.7	35.9	39.9	40.3	40		240				
260	21	21.5	24.3	21.7	23.4	25.5	23.9	24.5	26.8	24.2	26	27.4	26.7	28.5	26.7	28.8	27.6	30.2	27.4	30.4	30.7	30.6		260				
280	13.9	14.2	16.6	14.5	15.9	17.7	16.6	17.2	19.4	17	18.8	20.3	19.8	21.6	20	22.1	21.2	23.4	21.1	23.5	23.9	23.8		280				
300										12.4			12.2	13.4	13.2	14.7	13.5	15.3	14.7	16.9	14.7	17.2	17.8	17.8	300			
320																						11.1	11.8	11.8	320			

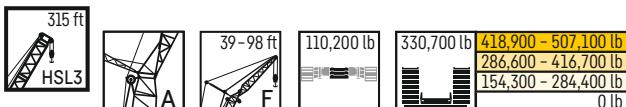


330,700 lb
418,900 - 507,100 lb
286,600 - 416,700 lb
154,300 - 284,400 lb
0 lb

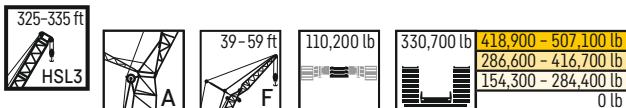
ft	HSL3 305 ft																		ft						
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft			F 89 ft			F 98 ft		F 108 ft		F 118 ft		
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	30°	30°	
60	325	329		324	285		289			256														60	
70	273	277	212	273	270	184	270	229		239	210		191											70	
80	233	236	204	233	238	177	235	217	159	224	198	140	180		167		159			153				80	
90	201	203	197	201	206	171	203	204	154	202	187	135	170	121	157	111	149		143					90	
100	174	177	187	175	179	165	177	180	148	176	177	130	161	117	149	107	140	99.9	134	94.2	89.9		100		
110	152	154	164	153	157	160	155	158	143	155	160	125	153	112	141	103	133	95.7	126	90	85.7		110		
120	134	136	144	134	138	146	137	139	138	136	141	121	141	108	134	98.7	126	91.9	119	86.1	81.8		120		
130	118	120	128	118	122	129	121	123	131	121	125	117	126	105	125	95.1	119	88.3	113	82.6	78.2		130		
140	104	106	113	105	108	115	107	109	117	107	112	113	112	101	111	91.7	111	85	107	79.3	74.9		140		
150	92.3	93.6	101	92.7	96.4	102	95.6	97.3	104	95.2	99.4	105	99.8	98.1	99.2	88.6	99.6	81.9	98.4	76.2	71.8		150		
160	81.7	82.8	89.8	82.1	85.6	91.2	84.9	86.5	92.9	84.7	88.8	93.7	89.2	94.1	88.6	85.7	89.1	79	88	73.3	68.9		160		
170	72.2	73.3	79.8	72.7	76	81.2	75.4	77	82.9	75.4	79.2	83.9	79.6	84.8	79.3	82.4	79.9	76.4	78.8	70.7	66.3		170		
180	63.8	64.8	71	64.3	67.4	72.3	66.9	68.5	74	67	70.6	74.9	71.2	76	70.9	76.2	71.4	73.9	70.5	68.2	63.9		180		
190	56.2	57.2	62.8	56.7	59.7	64.3	59.4	60.8	66	59.4	62.8	66.8	63.5	67.9	63.2	68.1	63.8	68.6	63.1	65.5	61.6		190		
200	49.3	50.1	55.1	49.9	52.6	56.7	52.5	53.8	58.5	52.6	55.8	59.4	56.5	60.6	56.2	60.8	57	62.1	56.3	61.8	59.1		200		
220	36.5	37.1	41.6	37.3	39.5	43	39.8	40.9	44.8	40.2	42.9	45.7	43.8	47.2	43.9	47.8	44.9	49.2	44.3	49.3	49.4		220		
240	26.7	27.2	30.5	27.3	28.9	31.6	29.4	30.2	33.3	29.5	31.9	34.3	32.8	35.6	33	36.2	34	37.6	33.8	37.9	38.2		240		
260	18.5	19	22.2	19.3	21	23.5	21.6	22.3	24.9	22.1	24.1	25.7	24.8	26.7	24.9	27.2	25.8	28.4	25.6	28.5	29		260		
280	11.4	11.7	14.4	12	13.5	15.6	14.2	14.9	17																

HSL3AF

HSL3 315 – 335



ft	HSL3 315 ft																ft		
	F 39 ft			F 49 ft			F 59 ft			F 69 ft			F 79 ft		F 89 ft		F 98 ft		
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	15°	30°	15°	30°			
60	319	323		318	285		289										60		
70	269	272	212	268	270	184	270	230		240	210		191				70		
80	229	232	205	229	234	177	231	218	159	225	198	140	180		168		80		
90	197	200	198	197	202	171	200	203	154	198	188	135	171	122	158	112	90		
100	171	173	183	171	176	166	174	177	148	173	178	130	162	117	150	107	100		
110	149	151	161	149	154	159	152	155	144	152	157	126	154	113	142	103	110		
120	131	133	141	131	135	143	134	136	139	133	138	121	139	109	134	99	120		
130	115	117	125	115	119	127	118	120	129	118	123	118	123	105	122	95.5	130		
140	101	103	111	102	106	112	105	107	114	104	109	113	109	102	109	92.1	140		
150	89.3	90.8	98.3	90	93.6	99.7	92.7	94.6	102	92.5	96.8	102	97.2	98.3	96.7	89.1	150		
160	78.7	80.2	87.1	79.4	82.8	88.8	82.1	84.1	90.4	82.2	86.2	91.3	86.6	92.3	86.1	86.3	86.6	160	
170	69.4	70.7	77.2	70	73.2	78.8	72.8	74.5	80.6	72.8	76.6	81.4	77.3	82.5	76.9	82.1	77.3	170	
180	61.1	62.2	68.4	61.6	64.7	69.9	64.5	66	71.7	64.4	68.1	72.4	68.8	73.7	68.3	73.8	69	180	
190	53.6	54.6	60.5	54	57.1	61.9	56.9	58.3	63.7	56.8	60.5	64.5	61.1	65.7	60.7	65.9	61.5	190	
200	46.8	47.7	53.3	47.2	50.2	54.6	50.1	51.3	56.4	50	53.5	57.2	54.1	58.3	53.9	58.7	54.7	200	
220	34.6	35.3	39.8	35.2	37.7	41.2	38	39	43.1	38.2	41.2	44.2	42	45.5	41.9	45.9	42.7	220	
240	25.1	25.6	28.9	25.6	27.4	30	27.7	28.5	31.8	28.1	30.3	32.7	31.2	34	31.2	34.6	32.3	240	
260	16.7	17.2	20.6	17.4	19.3	21.9	19.8	20.6	23.5	19.9	22.5	24.4	23.2	25.4	23.1	25.8	24.2	260	
280			12.8		11.8	14	12.5	13.1	15.7	12.8	14.9	16.7	15.9	18.1	15.8	18.4	16.8	280	
300													11.1		11.6			13	300

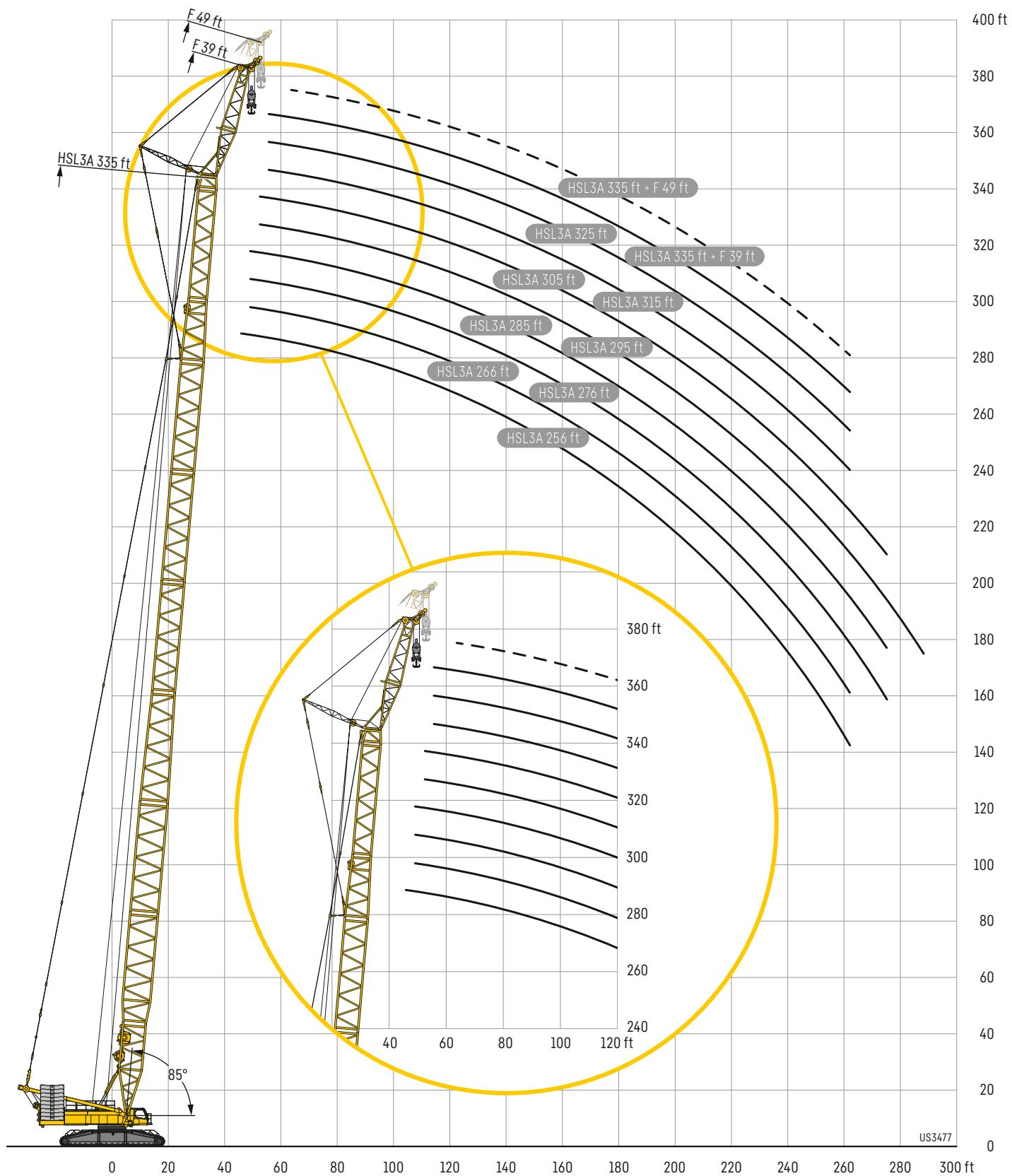


ft	HSL3 325 ft												HSL3 335 ft						ft
	F 39 ft			F 49 ft			F 59 ft			F 39 ft			F 49 ft						
	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°	30°	10°	15°		
60	313	317		312						309	313		308					60	
70	263	266	212	263	267	184	265	229		260	264	212	262	266				70	
80	224	227	204	224	230	177	226	217	159	222	224	205	224	227	178			80	
90	192	195	198	193	198	171	195	199	153	190	193	198	193	196	172			90	
100	167	169	180	167	172	166	170	173	149	165	167	178	168	170	166			100	
110	145	147	157	145	150	159	148	151	144	144	146	156	146	149	157			110	
120	127	129	138	127	132	140	130	133	139	126	128	137	128	131	139			120	
130	111	113	122	112	116	123	115	117	125	110	112	121	113	115	122			130	
140	97.6	99.2	107	98.1	102	109	101	103	111	96.7	98.3	107	99.4	101	108			140	
150	85.9	87.4	94.9	86.4	90	96.6	89.3	91.2	98.5	85.2	86.5	94.3	87.6	89.3	95.8			150	
160	75.4	76.7	84	75.8	79.5	85.6	79	80.8	87.4	74.7	75.9	83.5	77.3	78.9	84.9			160	
170	66.1	67.3	74.2	66.5	70.1	75.6	69.6	71.2	77.7	65.4	66.6	73.8	68	69.5	75.2			170	
180	57.7	58.8	65.4	58.2	61.6	66.8	61.2	62.7	68.7	57	58.3	65	59.7	61	66.5			180	
190	50.2	51.2	57.5	50.8	54	58.9	53.7	55.1	60.7	49.7	50.8	57.1	52.2	53.4	58.6			190	
200	43.4	44.4	50.4	44	47	51.7	46.8	48.2	53.4	43	44	50	45.4	46.5	51.4			200	
220	31.7	32.5	37.5	32.3	35	39	35	36.2	40.8	31.4	32.2	37.5	33.6	34.7	38.8			220	
240	22	22.7	27	22.5	25	28.2	25.2	26.2	29.8	21.7	22.4	27.1	23.8	24.7	28.1			240	
260	13.8	14.3	18.4	14.2	16.4	19.7	16.8	17.6	21.2	13.5	14.1	18.5	15.5	16.2	19.5			260	
280						11.8			13.4								11.8	280	

Lifting heights

Hauteurs de levage

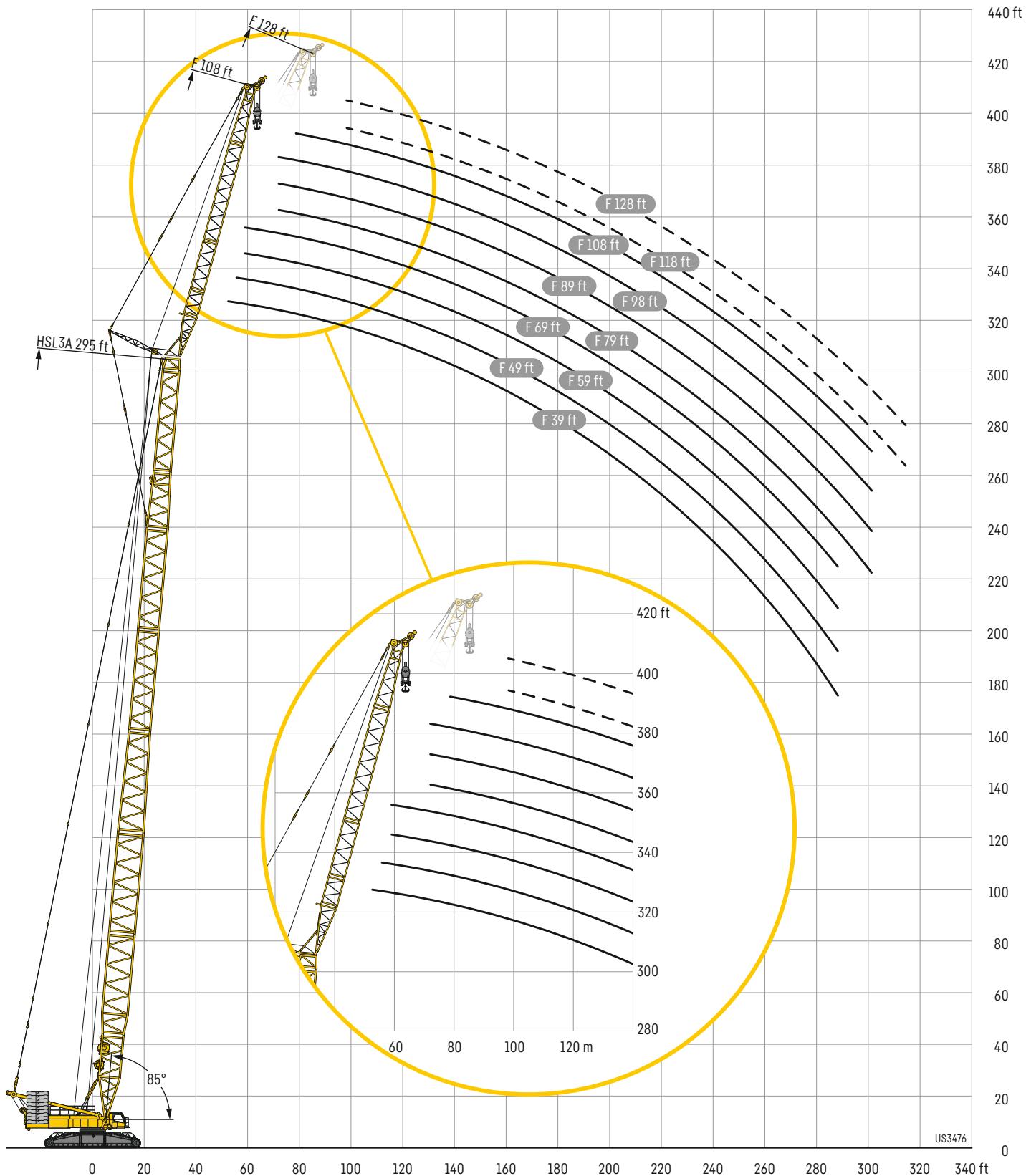
HSL3AF



Lifting heights

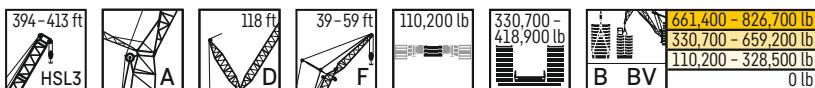
Hauteurs de levage

HSL3AF

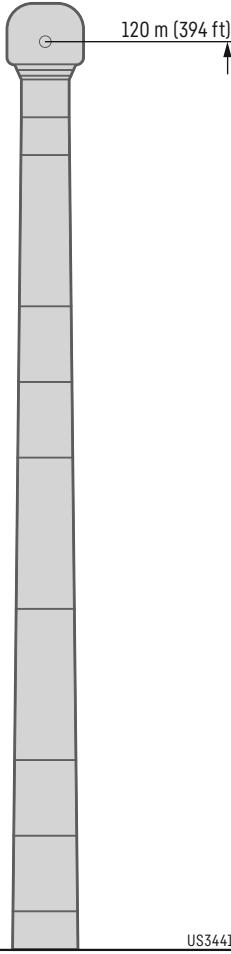


HSL3ADFB/BV

HSL3A 394 – 413



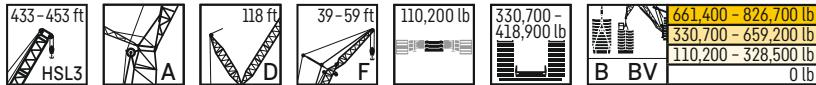
ft	HSL3 394 ft			HSL3 404 ft			HSL3 413 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°								
60	Ot B BV	274 317		271 307			218 291		
70	Ot B BV	229 317 318	232 284 285	232 259 260	227 306 307	228 276 277	225 291 292	225 262 263	225 239
80	Ot B BV	194 316 318	197 284 285	198 256 256	192 305 307	193 275 276	190 289 291	191 261 262	192 239 240
90	Ot B BV	166 315 317	169 283 284	164 245 245	164 304 306	165 274 276	163 288 290	163 260 261	164 238 239
100	Ot B BV	142 312 316	145 277 278	140 234 234	141 303 306	142 273 274	140 286 289	140 258 260	141 233 233
110	Ot B BV	122 309 313	125 266 267	126 224 224	121 300 305	122 267 268	120 283 287	121 255 258	122 224 224
120	Ot B BV	105 304 310	108 255 256	109 214 214	104 296 302	105 257 257	106 216 216	103 279 284	104 252 254
130	Ot B BV	90.4 299 303	93.8 245 245	94.6 206 205	89.1 291 298	90 247 247	91 207 207	89 275 281	89.7 246 247
140	Ot B BV	77.7 291 292	80.9 236 236	81.9 197 197	76.4 286 294	77.3 238 238	78.3 199 199	76.4 271 278	77.1 238 238
150	Ot B BV	66.5 281 281	69.7 227 227	70.8 190 190	65.2 281 290	66.1 230 229	67.1 192 192	65.3 266 274	66.1 230 230
160	Ot B BV	56.6 271 271	59.7 219 219	60.7 183 183	55.3 273 281	56.1 221 221	57.2 185 185	55.5 261 271	56.2 222 222
170	Ot B BV	47.9 262 262	50.8 211 211	51.9 177 177	46.5 265 271	47.3 213 213	48.3 216 216	46.6 257 267	47.3 214 215
180	Ot B BV	39.8 253 254	43 204 204	44 171 171	38.5 256 262	39.4 206 206	40.4 172 172	38.9 248 261	39.6 207 208
190	Ot B BV	32.6 245 246	35.7 198 198	36.6 165 165	31.4 249 253	32.1 199 199	33.3 166 166	31.7 243 254	32.4 200 201
200	Ot B BV	26.2 238 238	29 192 192	30.2 160 160	24.8 241 244	25.6 192 192	26.8 161 160	25.1 239 247	26 193 194
220	Ot B BV	14.7 220 225	17.7 181 181	18.7 150 150	13.5 220 229	14.2 180 181	15.3 150 151	13.9 219 228	14.5 182 183
240	Ot B BV	196 196	171 163	142 135	195 196	170 162	142 135	195 193	172 163
260	Ot B BV	175 196	162 163	135 135	174 196	161 162	134 135	174 193	163 164
280	Ot B BV	156 178	153 155	128 128	155 177	151 155	128 128	155 176	152 156
300	Ot B BV	140 161	141 148	122 122	139 160	138 148	122 122	139 160	138 150
320	Ot B BV	125 144	127 142	117 117	124 144	124 140	117 117	124 144	125 141
340	Ot B BV	112 130	114 131	111 113	111 129	111 130	112 112	111 130	112 130
360	Ot B BV	100 117	102 119	103 109	98.9 116	99.5 117	101 109	99.4 117	100 117
380	Ot B BV								
400	Ot B BV								



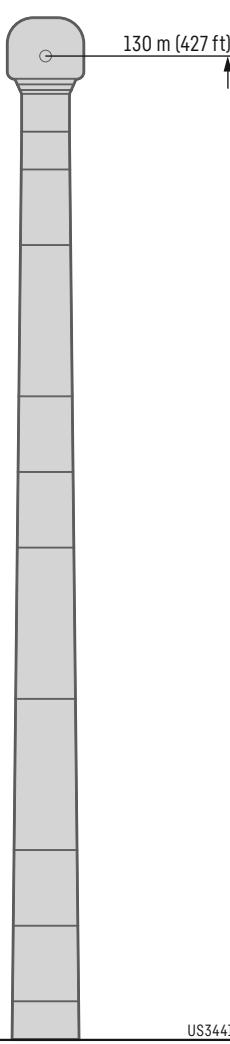
US3441

HSL3ADFB/BV

HSL3A 433 – 453



ft	HSL3 433 ft			HSL3 443 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°					
65	Ot B BV	236 271		231 260		
70	Ot B BV	216 270 271	219 245 246	211 259 260	211 236	209 217
80	Ot B BV	183 268 270	183 244 245	187 224 225	178 257 259	179 235 236
90	Ot B BV	155 267 269	156 243 244	159 223 224	151 255 257	152 233 235
100	Ot B BV	132 265 268	133 241 243	137 223 224	128 252 255	130 231 233
110	Ot B BV	113 261 265	114 238 241	110 220 222	111 248 252	114 228 230
120	Ot B BV	97 257 262	97.7 234 238	102 217 220	93.3 244 248	94.2 224 227
130	Ot B BV	82.7 252 258	83.6 230 235	87.4 214 216	79.2 240 244	80 220 223
140	Ot B BV	70.2 248 254	71.2 227 231	66.8 209 208	67.7 235 240	71.8 216 218
150	Ot B BV	59.3 243 249	60.2 222 226	55.9 202 200	56.9 230 236	60.8 198 198
160	Ot B BV	49.6 238 245	50.3 217 220	54.3 195 193	46.3 225 231	51.1 206 210
170	Ot B BV	40.8 231 240	41.7 211 214	45.5 188 186	37.7 219 227	42.4 186 184
180	Ot B BV	33.1 226 235	33.9 205 207	37.7 180 179	29.8 214 222	34.6 196 200
190	Ot B BV	26.1 219 230	26.9 198 200	30.6 173 173	23 208 217	27.5 172 172
200	Ot B BV	19.7 214 226	20.3 192 194	24.2 167 167	16.5 202 212	21.2 185 191
220	Ot B BV	12.8 204 215		12.8 181 183		
240	Ot B BV	190 201	171 173	148 149	182 193	165 172
260	Ot B BV	168 185	163 164	141 141	165 180	158 164
280	Ot B BV	150 170	149 156	134 134	147 166	146 156
300	Ot B BV	134 154	134 148	127 128	131 151	131 147
320	Ot B BV	120 139	120 139	120 123	117 136	117 135
340	Ot B BV	107 125	107 126	110 118	104 123	105 123
360	Ot B BV	95.5 113	95.8 113	98.2 114	92.8 110	93 111
380	Ot B BV	85 101	85.5 102	88.1 104	82.5 98.8	85.6 99.5
400	Ot B BV	75.4 90.8	76 91.5	78.6 94	73.1 88.6	73.7 89.1
420	Ot B BV			64.4 84.4	64.9 78.4	67.4 79.4
						82.2



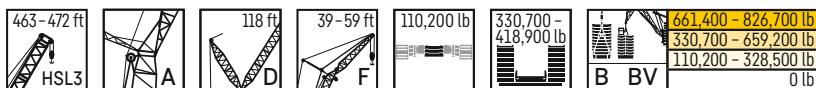
ft	HSL3 453 ft			
	F 39 ft	F 49 ft	F 59 ft	
	10°			
65	Ot B BV	227 249		
70	Ot B BV	208 248 249	212 228	
80	Ot B BV	175 247 249	179 227 228	180 209 210
90	Ot B BV	149 245 247	152 226 227	153 209 209
100	Ot B BV	126 242 246	130 224 226	131 207 209
110	Ot B BV	107 239 243	111 221 224	112 205 207
120	Ot B BV	91.2 235 240	95.2 217 220	96.2 201 204
130	Ot B BV	77.3 231 236	81.1 214 217	82.3 199 201
140	Ot B BV	65.1 228 233	68.8 210 214	70 195 198
150	Ot B BV	54.3 223 229	58 206 210	59.2 192 194
160	Ot B BV	44.6 219 225	48.3 202 207	49.5 188 190
170	Ot B BV	36 214 221	39.7 198 203	40.9 185 185
180	Ot B BV	28.3 210 217	31.9 194 199	33.1 180 180
190	Ot B BV	21.5 205 213	24.8 190 195	26.1 174 174
200	Ot B BV	15 199 209	18.6 184 191	19.8 168 169
220	Ot B BV	19.1 191 201	17.7 177 183	15.8 159
240	Ot B BV	18.1 181 189	16.7 167 176	14.9 150
260	Ot B BV	16.3 163 175	16.0 169 169	14.1 143
280	Ot B BV	14.5 145 162	14.7 147 161	13.5 136
300	Ot B BV	13.0 130 148	13.2 150 130	12.8 128 130
320	Ot B BV	11.5 115 135	11.8 137 137	11.7 125
340	Ot B BV	10.3 103 121	10.5 124 124	10.6 119
360	Ot B BV	9.13 91.3 109	9.35 111 111	9.45 110
380	Ot B BV	81.4 97.8 100	83.5 101 101	84.3 101
400	Ot B BV	72.1 72.1 87.6	74.1 89.6 89.6	75.2 90.7
420	Ot B BV	63.4 77.8 80.1	65.2 80.1 81.4	66.5 81.4
440	Ot B BV			58.4 72.2

US3441

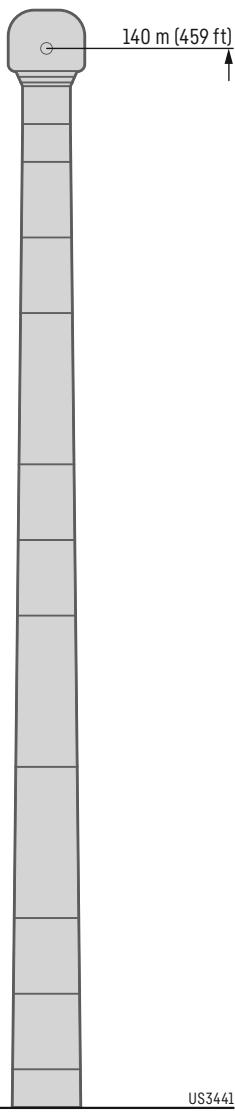
US3441

HSL3ADFB/BV

HSL3A 463 – 472



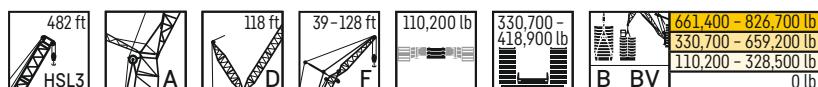
ft	HSL3 463 ft			HSL3 472 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°					
65	Ot B BV	222 238				
70	Ot B BV	203 237 239	207 219		202 228 225	203 210
80	Ot B BV	171 236 237	175 218 219	176 202 203	170 226 228	171 194 194
90	Ot B BV	144 234 236	148 216 217	149 201 201	144 224 226	145 192 193
100	Ot B BV	122 231 234	126 214 215	127 198 200	122 221 224	123 190 191
110	Ot B BV	104 227 231	108 210 213	109 195 197	104 218 221	104 186 188
120	Ot B BV	87.7 224 228	91.7 207 210	92.7 192 194	87.8 214 218	88.7 197 200
130	Ot B BV	73.7 220 224	77.8 203 206	78.8 189 191	73.9 211 214	74.9 194 196
140	Ot B BV	61.6 216 221	65.6 200 188	66.7 186 210	61.7 207 193	62.9 190 178
150	Ot B BV	50.9 212 217	54.7 196 199	56 182 184	51.1 202 206	52.2 186 189
160	Ot B BV	41.4 208 213	45.1 192 196	46.4 178 180	41.6 198 202	42.6 182 185
170	Ot B BV	32.8 203 209	36.6 188 192	37.8 175 176	33.1 193 197	34 179 181
180	Ot B BV	25.1 198 205	28.8 184 188	30.1 172 172	25.4 188 193	26.3 175 177
190	Ot B BV	18.2 194 200	21.8 180 184	23 166 168	18.5 184 189	19.4 170 173
200	Ot B BV	12 189 196	15.6 174 180			20.7 156 158
220	Ot B BV	179 188	167 172	152 157	171 176	154 159
240	Ot B BV	171 180	157 165	145 149	161 169	146 150
260	Ot B BV	159 170	150 158	136 142	153 161	136 142
280	Ot B BV	142 157	142 151	129 135	142 152	129 135
300	Ot B BV	127 143	129 143	123 129	126 143	123 128
320	Ot B BV	113 131	115 132	114 123	113 131	113 123
340	Ot B BV	100 118	102 121	103 118	99.8 118	100 117
360	Ot B BV	88.6 106	91.1 109	91.9 109	88.7 106	89.1 107
380	Ot B BV	78.9 95.4	80.8 97.5	81.5 98.2	78.5 95.2	78.7 95.5
400	Ot B BV	69.7 85.2	71.6 87.4	72.7 88.5	69.4 85.2	70.6 86.4
420	Ot B BV	61 75.7	63.1 78	64.2 79.1	60.9 75.8	61.3 76.2
440	Ot B BV		55.1 68.6	56.2 70.3	53 66.1	53.5 66.9
460	Ot B BV					47.3 59.2



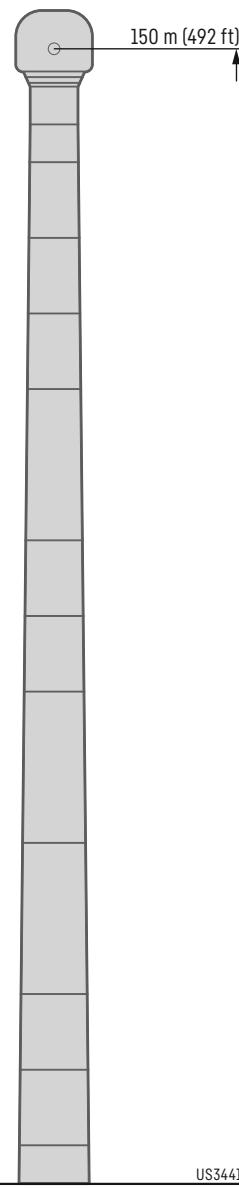
US3441

HSL3ADFB/BV

HSL3A 482



		HSL3 482 ft									
		F 39 ft	F 49 ft	F 59 ft	F 69 ft	F 79 ft	F 89 ft	F 98 ft	F 108 ft	F 118 ft	F 128 ft
		10°				15°				30°	
ft	ft										
70	Ot B BV	197 217									
80	Ot B BV	166 217 218	167 200 201	168 187 187	167 175						
90	Ot B BV	140 215 217	141 198 200	142 185 186	142 173 174						
100	Ot B BV	118 212 215	120 196 198	121 183 184	120 171 172	153	144	137	129		
110	Ot B BV	100 209 212	101 193 195	102 180 182	102 168 170	151	142	133	126	83.1	79.2
120	Ot B BV	84.4 206 209	85.4 190 193	86.8 177 179	86.6 165 167	149	137	128	121	80.4	76.5
130	Ot B BV	70.7 203 206	71.7 187 190	73.1 174 176	73.1 162 164	144	132	123	117	77.7	73.9
140	Ot B BV	58.7 199 203	59.7 184 187	61 171 173	61.1 160 161	139	128	119	112	75.1	71.3
150	Ot B BV	48 195 199	49.1 180 183	50.4 168 170	50.5 157 158	135	123	115	108	72.8	68.9
160	Ot B BV	38.5 192 196	39.6 177 180	40.9 165 167	41.1 153 155	130	119	111	104	70.6	66.7
170	Ot B BV	30 188 192	31.1 174 177	32.3 161 164	32.6 150 152	126	115	107	100	68.4	64.5
180	Ot B BV	22.4 183 188	23.4 170 174	24.7 158 160	24.9 147 148	123	111	103	96.3	66.3	62.5
190	Ot B BV	15.5 179 184	16.5 166 170	18 154 157	18 144 145	119	108	99.7	92.9	64.4	60.5
200	Ot B BV	175 181	163 166	151 153	139 141	116	104	96.6	89.9	62.6	58.6
220	Ot B BV	167 174	155 160	143 146	132 133	109	98.5	90.9	84.1	59.3	55.3
240	Ot B BV	160 167	147 153	134 138	125 126	104	93.2	85.7	79	56.2	52.3
260	Ot B BV	152 159	139 146	127 131	116 119	98.9	88.5	81	74.5	53.5	49.5
280	Ot B BV	139 150	133 139	119 125	110 113	94.6	84.4	76.9	70.6	51.1	47
300	Ot B BV	123 137	122 132	114 119	104 108	90.7	80.6	73.2	67	49	44.8
320	Ot B BV	110 125	110 124	108 113	99.1 103	87.1	77.2	70	63.8	47	42.8
340	Ot B BV	96.9 114	97.4 113	97.7 108	93 98.9	84	74.2	67	60.9	45.2	41
360	Ot B BV	85.9 103	86.2 103	87 102	85.9 94.8	81.2	71.5	64.4	58.3	43.6	39.5
380	Ot B BV	75.6 92.1	76.1 92.5	77.1 93.2	77.2 89.3	78.6	69	61.9	56	42.2	38
400	Ot B BV	66.6 82.5	67 83	67.8 83.6	67.8 83.2	76.4	66.8	59.8	53.8	41	36.8
420	Ot B BV	58.2 72.9	58.5 73.7	59.6 74.5	59.8 74.7	72.7	64.7	57.9	51.9	39.8	35.6
440	Ot B BV	50.5 63.3	50.9 64.3	51.9 65.5	52 65.9	66.6	62.5	56.1	50.2	38.9	34.6
460	Ot B BV		43.5 54.9	44.6 56.7	44.8 57.5	59.2	59.3	54.5	48.7	38.1	33.7
480	Ot B BV				38 48.7	51	51.5	50.7	46.9	37.5	33
500	Ot B BV					43.3	45.5	44.4	37	32.5	
520	Ot B BV								36.2	32	
540	Ot B BV								30.7		

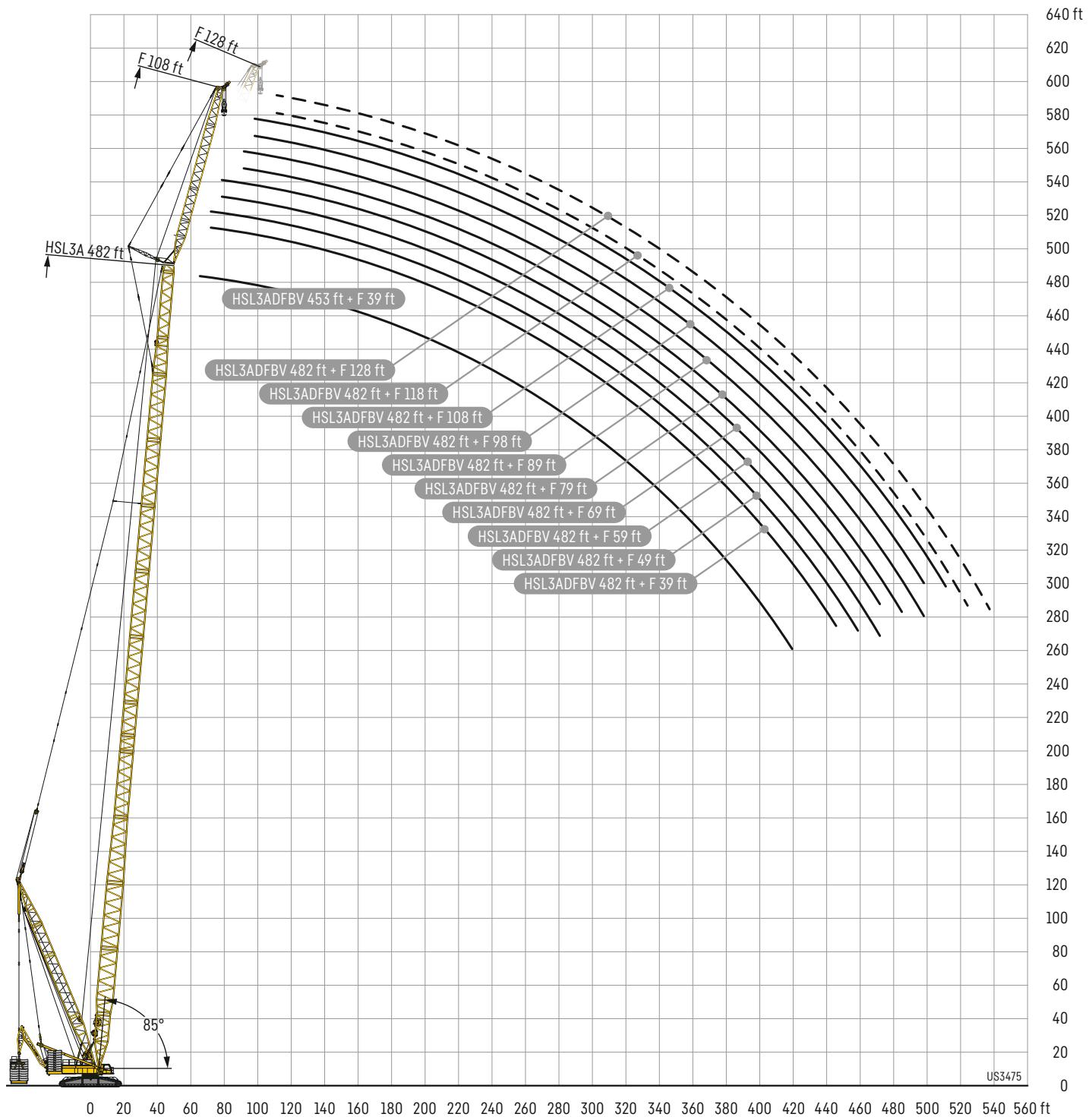


US3441

Lifting heights

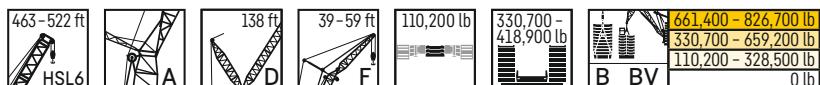
Hauteurs de levage

HSL3ADFB/BV



HSL6ADFB/BV

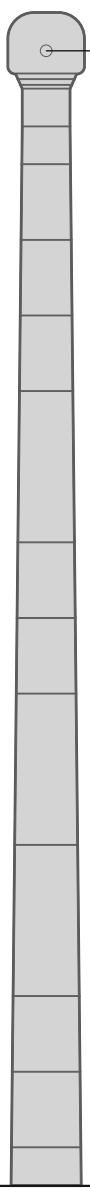
HSL6A 463 – 522



ft	HSL6A 463 ft			HSL6A 472 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°					
65	Ot B BV	179 281				
70	Ot B BV	195 281 254	197 254		191 271	170 246
80	Ot B BV	164 280 283	165 254 256	169 233 234	160 269 272	161 245 247
90	Ot B BV	137 278 282	138 253 256	143 232 234	134 267 272	135 244 247
100	Ot B BV	115 276 281	116 251 255	121 231 233	112 263 270	113 241 246
110	Ot B BV	96.8 272 280	97.9 248 254	102 229 232	93.8 259 267	94.8 237 244
120	Ot B BV	80.7 268 278	82 245 252	86.2 226 230	77.9 254 264	79 233 240
130	Ot B BV	66.8 263 275	68.1 241 249	72.3 221 222	64.1 249 260	65.4 228 237
140	Ot B BV	54.7 258 271	55.9 236 246	60.2 214 215	52.1 244 256	53.3 223 233
150	Ot B BV	44.1 252 268	45.2 231 239	49.5 207 207	41.4 239 252	42.7 218 229
160	Ot B BV	34.5 244 263	35.6 225 230	40 199 200	32 233 247	33.2 194 224
170	Ot B BV	26 235 259	27.1 218 223	31.4 192 193	23.6 226 243	24.7 209 218
180	Ot B BV	18.3 225 254	19.4 211 215	23.6 185 186	17 233 218	21.3 197 185
190	Ot B BV	12.4 216 249	16.6 205 208	16.6 178 180	198 210 233	177 177 206
200	Ot B BV	205 241	198 202	173 174	201 228	192 200
220	Ot B BV	180 222	179 190	162 164	177 216	176 189
240	Ot B BV	157 197	158 180	153 155	155 194	155 179
260	Ot B BV	138 175	138 169	140 147	135 172	136 168
280	Ot B BV	121 155	121 156	124 140	118 153	119 153
300	Ot B BV	106 139	106 139	109 133	104 137	104 137
320	Ot B BV	92.5 124	93.1 124	96.2 124	90.4 122	90.8 122
340	Ot B BV	80.4 110	80.9 111	83.7 113	78.1 108	78.5 109
360	Ot B BV	69.3 98.4	70 98.9	73.1 102	67.4 96.5	67.9 97
380	Ot B BV	59.3 87.6	59.9 88	62.8 90.5	57.3 85.6	57.8 85.9
400	Ot B BV	49.8 77.4	50.6 78	53.7 80.8	48 75.7	48.8 76.4
420	Ot B BV	41.5 68.1	42.2 68.9	45 71.5	39.7 66.6	40.3 67.3
440	Ot B BV		34.6 60.4	37.2 63	32.3 58.2	32.8 58.8
460	Ot B BV					28.9 53.7

ft	HSL6A 502 ft			HSL6A 512 ft			HSL6A 522 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°			10°			15°		
70	Ot B BV	184 233							
80	Ot B BV	154 235	217	224	209		213	199	
90	Ot B BV	128 235	216	200	224	208	192	183	185
100	Ot B BV	107 233	214	199	222	206	191	182	183
110	Ot B BV	89.3 225	212	197	221	204	189	181	180
120	Ot B BV	73.7 222	209	194	219	202	187	179	178
130	Ot B BV	60.3 218	206	191	216	199	185	177	176
140	Ot B BV	48.6 214	204	189	214	196	182	175	174
150	Ot B BV	38.2 210	201	186	211	194	180	172	171
160	Ot B BV	28.9 206	216	197	182	208	191	177	170
170	Ot B BV	20.5 201	212	194	179	205	188	174	168
180	Ot B BV	195 182	209	175	202	185	171	164	162
190	Ot B BV	188 187	205	172	199	182	169	160	159
200	Ot B BV	182 201	201	183	168	196	179	165	156
220	Ot B BV	167 193	176	161	189	173	159	149	150
240	Ot B BV	150 184	169	154	182	167	153	142	143
260	Ot B BV	131 167	162	146	164	159	147	136	150
280	Ot B BV	114 149	150	140	147	147	140	130	143
300	Ot B BV	99.2 133	133	133	130	131	130	125	127
320	Ot B BV	86.1 118	119	120	116	116	117	117	114
340	Ot B BV	74.5 105	106	107	103	103	104	105	101
360	Ot B BV	63.7 93.3	93.7	94.8	91.2	91.4	92.7	93.5	88.1
380	Ot B BV	54.1 82.7	83.2	84	80.6	80.9	81.9	82.7	77.7
400	Ot B BV	45.1 72.9	73.1	74.3	70.7	71.2	72.3	73	69.5
420	Ot B BV	36.7 64.1	64.7	65.6	62.2	62.5	63.3	64	59.4
440	Ot B BV	29.6 55.7	56.4	57.5	53.9	54.4	55.4	56.1	51.3
460	Ot B BV	23.5 47.9	48.6	49.8	46.1	46.8	47.9	48.5	43.7
480	Ot B BV	41.5 41	42.5		39.7	40.8	41.2	36.6	38.4
500	Ot B BV								32.1

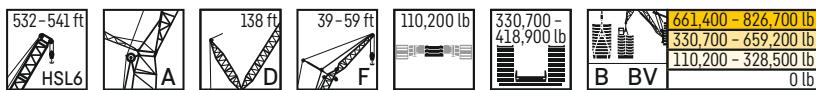
US3441



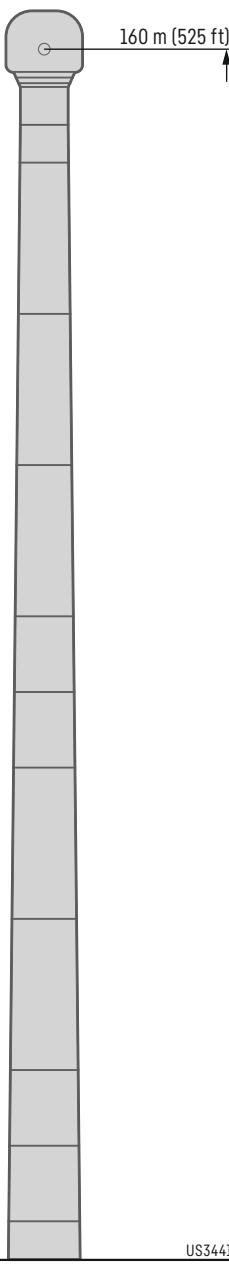
US3441

HSL6ADFB/BV

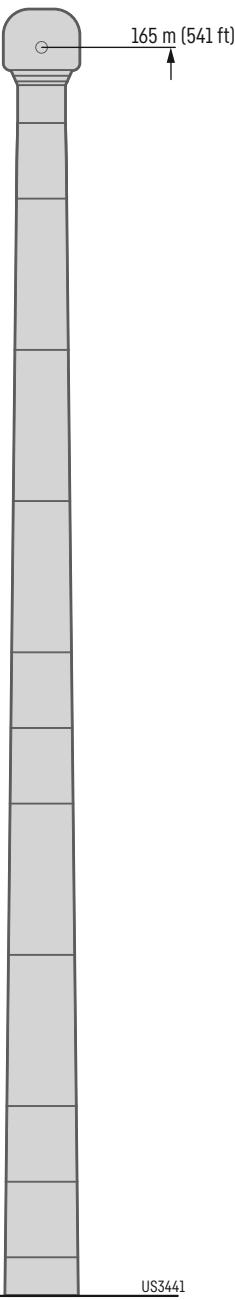
HSL6A 532 – 541



	HSL6A 532 ft			
	F39ft	F49ft	F59ft	
10°				
80	Ot			
	B			
	BV	205		
90	Ot			
	B			
	BV	205	190	177
100	Ot			
	B			
	BV	203	188	175
110	Ot			
	B			
	BV	201	186	173
120	Ot			
	B			
	BV	198	183	170
130	Ot			
	B			
	BV	195	181	168
140	Ot			
	B			
	BV	192	178	165
150	Ot			
	B			
	BV	189	175	162
160	Ot			
	B			
	BV	186	172	159
170	Ot			
	B			
	BV	182	169	156
180	Ot			
	B			
	BV	179	165	153
190	Ot			
	B			
	BV	175	162	149
200	Ot			
	B			
	BV	172	159	145
220	Ot			
	B			
	BV	165	150	136
240	Ot			
	B			
	BV	158	142	128
260	Ot			
	B			
	BV	151	134	121
280	Ot			
	B			
	BV	141	127	115
300	Ot			
	B			
	BV	126	121	109
320	Ot			
	B			
	BV	112	111	104
340	Ot			
	B			
	BV	99	99.2	97.8
360	Ot			
	B			
	BV	87.4	87.9	88.7
380	Ot			
	B			
	BV	76.7	77.2	78.1
400	Ot			
	B			
	BV	67.2	67.8	68.6
420	Ot			
	B			
	BV	58.4	58.8	59.9
440	Ot			
	B			
	BV	50.4	51	51.9
460	Ot			
	B			
	BV	43	43.4	44.6
480	Ot			
	B			
	BV	35.8	36.7	37.7
500	Ot			
	B			
	BV	29.5	31.2	



	HSL6A 541 ft			
	F39ft	F49ft	F59ft	
10°				
80	Ot			
	B			
	BV	196		
90	Ot			
	B			
	BV	195	181	168
100	Ot			
	B			
	BV	193	179	166
110	Ot			
	B			
	BV	190	176	164
120	Ot			
	B			
	BV	188	174	161
130	Ot			
	B			
	BV	185	171	159
140	Ot			
	B			
	BV	182	168	155
150	Ot			
	B			
	BV	178	165	151
160	Ot			
	B			
	BV	175	161	147
170	Ot			
	B			
	BV	171	156	142
180	Ot			
	B			
	BV	168	152	138
190	Ot			
	B			
	BV	164	147	134
200	Ot			
	B			
	BV	160	143	129
220	Ot			
	B			
	BV	151	134	121
240	Ot			
	B			
	BV	142	126	114
260	Ot			
	B			
	BV	134	119	108
280	Ot			
	B			
	BV	127	113	102
300	Ot			
	B			
	BV	120	107	96.6
320	Ot			
	B			
	BV	108	101	92
340	Ot			
	B			
	BV	95.7	94.6	87.6
360	Ot			
	B			
	BV	84.5	85.1	81.6
380	Ot			
	B			
	BV	73.9	74.3	73.7
400	Ot			
	B			
	BV	64.5	64.9	65.6
420	Ot			
	B			
	BV	54.7	56.1	57.2
440	Ot			
	B			
	BV	40.2	44.5	47.9
460	Ot			
	B			
	BV	27.2	31.6	36.3
480	Ot			
	B			
	BV	18.5	21.5	25.5
500	Ot			
	B			
	BV	11.1	13.2	16.2



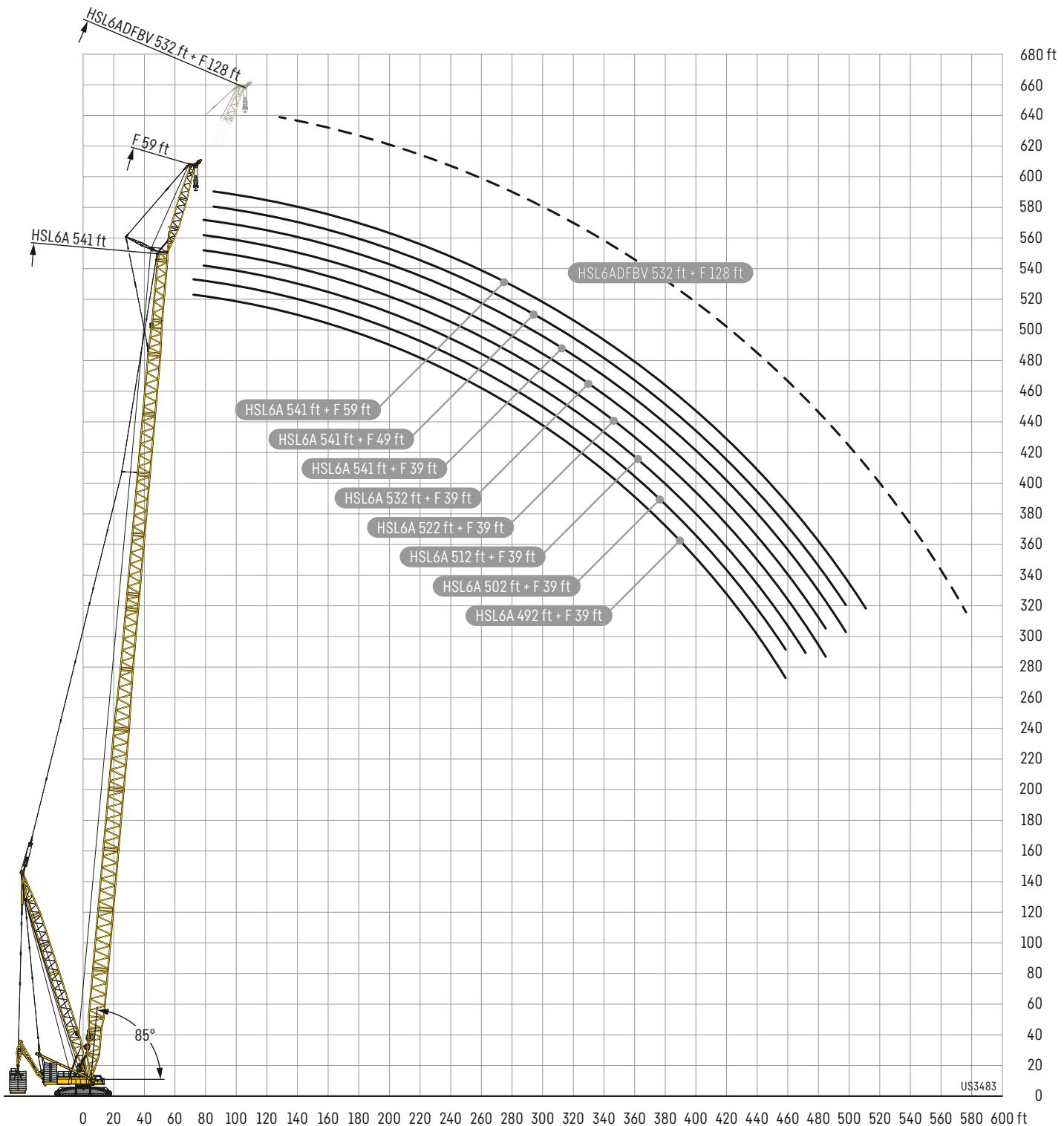
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Lifting heights

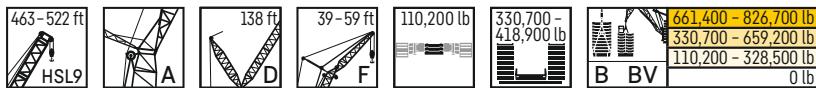
Hauteurs de levage

HSL6ADFB/BV



HSL9ADFB/BV

HSL9A 463 – 522



ft	HSL9A 463 ft			HSL9A 472 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°					
65	Ot	173				
	B	304				
	BV	307				
70	Ot	190	191		186	188
	B	304	275		294	267
	BV	307	277		297	269
80	Ot	158	159	160	154	156
	B	303	274	251	294	266
	BV	307	277	253	297	269
90	Ot	132	133	134	128	130
	B	302	273	249	293	266
	BV	306	277	251	297	269
100	Ot	109	111	112	107	108
	B	301	272	241	291	264
	BV	306	276	242	297	268
110	Ot	90.8	92.1	93.6	88.2	89.4
	B	297	269	232	288	261
	BV	305	275	233	295	268
120	Ot	74.7	76.2	77.5	72.3	73.6
	B	292	264	224	284	259
	BV	303	268	224	293	265
130	Ot	60.7	62.3	63.6	58.4	59.9
	B	285	257	215	280	255
	BV	301	258	216	291	260
140	Ot	48.6	50	51.5	46.3	47.8
	B	279	247	208	270	249
	BV	295	249	208	284	251
150	Ot	37.9	39.2	40.8	35.6	37.1
	B	269	238	200	260	241
	BV	284	240	200	273	243
160	Ot	28.3	29.6	31.2	26.2	27.5
	B	257	229	193	248	232
	BV	273	231	193	263	235
170	Ot	19.8	21	22.6	17.7	18.9
	B	245	221	186	238	224
	BV	264	223	187	253	227
180	Ot			14.9		
	B	230	213	180	225	216
	BV	254	216	180	245	220
190	Ot					
	B	215	206	174	211	206
	BV	245	209	175	236	213
200	Ot					
	B	201	197	168	197	195
	BV	236	203	169	228	206
220	Ot					
	B	174	175	158	171	172
	BV	216	191	159	210	194
240	Ot					
	B	152	152	148	149	150
	BV	191	181	151	188	182
260	Ot					
	B	132	132	133	129	130
	BV	169	168	143	166	166
280	Ot					
	B	114	115	116	112	112
	BV	149	150	136	147	147
300	Ot					
	B	99.6	100	101	97	97.5
	BV	133	134	130	130	129
320	Ot					
	B	86.1	87	87.9	83.8	84.4
	BV	118	119	119	116	116
340	Ot					
	B	74	74.7	75.6	71.6	72
	BV	105	105	106	102	103
360	Ot					
	B	62.9	63.8	65	60.9	61.6
	BV	92.5	93.4	94.4	90.6	91.2
380	Ot					
	B	52.9	53.7	54.8	50.9	51.5
	BV	81.7	82.4	83.2	79.8	80.2
400	Ot					
	B	43.4	44.3	45.7	41.6	42.5
	BV	71.5	72.4	73.6	69.9	70.6
420	Ot					
	B	35.2	36	37.2	33.5	34.2
	BV	62.4	63.2	64.4	60.8	61.5
440	Ot					
	B	28.8	29.8	26.6	27.2	28.5
	BV	54.8	56	52.4	53	54.3
460	Ot					
	B				22.6	46.7
	BV					

ft	HSL9A 502 ft			HSL9A 512 ft			HSL9A 522 ft		
	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft	F 39 ft	F 49 ft	F 59 ft
	10°								
70	Ot								
	B	266			253			241	
	BV								
80	Ot								
	B	266	244	224	254	235	217	241	227
	BV								
90	Ot								
	B	267	243	224	254	235	216	242	227
	BV								
100	Ot								
	B	266	243	223	253	235	216	240	225
	BV								
110	Ot								
	B	264	241	222	252	233	215	239	223
	BV								
120	Ot								
	B	261	238	221	249	230	213	237	220
	BV								
130	Ot								
	B	257	235	219	246	227	210	235	217
	BV								
140	Ot								
	B	254	232	215	243	224	207	232	214
	BV								
150	Ot								
	B	250	228	210	239	221	204	229	211
	BV								
160	Ot								
	B	242	225	202	235	217	200	225	208
	BV								
170	Ot								
	B	233	220	196	226	213	195	219	204
	BV								
180	Ot								
	B	225	216	190	218	209	189	211	201
	BV								
190	Ot								
	B	217	211	183	211	205	183	204	197
	BV								
200	Ot								
	B	210	204	178	204	200	178	197	193
	BV								
220	Ot								
	B	195	191	168	190	189	168	184	183
	BV								
240	Ot								
	B	179	178	159	176	176	159	170	171
	BV								
260	Ot								
	B	158	158	151	155	159	150	152	155
	BV								
280	Ot								
	B	139	140	141	137	140	139	133	137
	BV								
300	Ot								
	B	122	123	126	120	123	124	117	120
	BV								
320	Ot								
	B	108	109	112	106	109	110	103	106
	BV								
340	Ot								
	B	95.5	96.1	99.4	93.4	96.3	97.2	90.2	93
	BV								
360	Ot								
	B	83.7	84.1	87.5	81.5	84.3	85.7	78.2	81.4
	BV								
380	Ot								
	B	73.2	73.9	76.9	71.2	73.9	75.1	68	70.8
	BV								
400	Ot								
	B	63.6	64.1	67.2	61.4	64.2	65.5	58.4	61.3
	BV								
420	Ot								
	B	55	55.6	58.5	53.2	55.6	56.6	50.1	52.5
	BV								
440	Ot								
	B	46.8	47.5	50.3	45.2	47.5	48.7	42.2	44.7
	BV								
460	Ot								
	B	39.2	39.8	42.7	37.6	39.9	41.2	34.9	37.3
	BV								
480	Ot								
	B	33	35.6			33	34.1	28.4	30.3
	BV								
500	Ot								
	B							25.7	
	BV								

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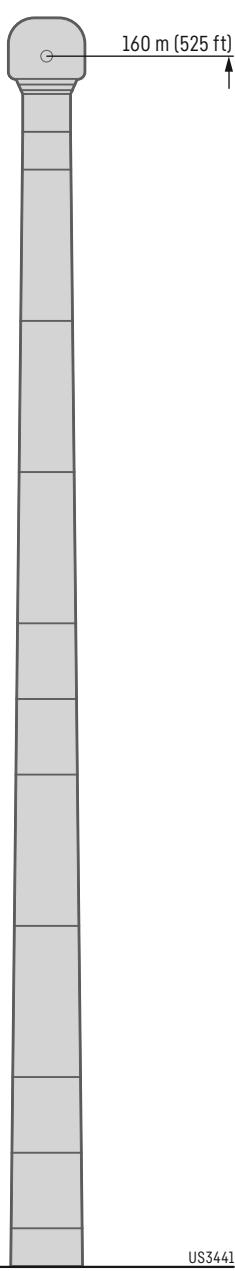
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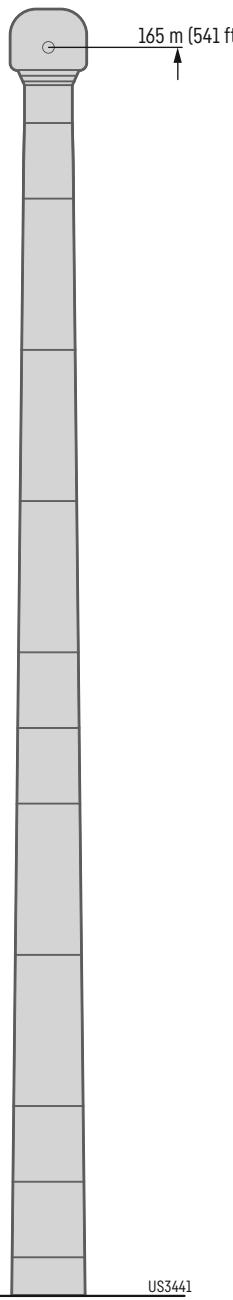
HSL9A 532 – 541

532-541 ft		138 ft	39-59 ft	110,200 lb	330,700 - 418,900 lb	661,400 - 826,700 lb
	HSL9	A	D	F	330,700 - 659,200 lb 110,200 - 328,500 lb	0 lb

ft	HSL9A 532 ft		
	F39 ft	F49 ft	F59 ft
	10°		
75	Ot		
75	B	231	218
75	BV		
80	Ot		
80	B	231	218
80	BV		201
90	Ot		
90	B	231	217
90	BV		201
100	Ot		
100	B	230	215
100	BV		200
110	Ot		
110	B	229	212
110	BV		197
120	Ot		
120	B	227	210
120	BV		195
130	Ot		
130	B	225	207
130	BV		192
140	Ot		
140	B	222	204
140	BV		190
150	Ot		
150	B	219	201
150	BV		187
160	Ot		
160	B	216	198
160	BV		183
170	Ot		
170	B	213	195
170	BV		180
180	Ot		
180	B	208	192
180	BV		177
190	Ot		
190	B	203	188
190	BV		173
200	Ot		
200	B	197	185
200	BV		170
220	Ot		
220	B	184	177
220	BV		163
240	Ot		
240	B	171	168
240	BV		155
260	Ot		
260	B	154	154
260	BV		148
280	Ot		
280	B	136	136
280	BV		135
300	Ot		
300	B	119	120
300	BV		121
320	Ot		
320	B	105	106
320	BV		107
340	Ot		
340	B	92.6	93
340	BV		94.1
360	Ot		
360	B	81	81.7
360	BV		82.8
380	Ot		
380	B	70.4	70.9
380	BV		72
400	Ot		
400	B	61	61.6
400	BV		62.7
420	Ot		
420	B	52.3	52.7
420	BV		54.1
440	Ot		
440	B	44.5	45.1
440	BV		46.2
460	Ot		
460	B	37.1	37.7
460	BV		38.9
480	Ot		
480	B	30.3	31.1
480	BV		32.3
500	Ot		
500	B		25.2
500	BV		26.3



ft	HSL9A 541 ft		
	F39 ft	F49 ft	F59 ft
	10°		
75	Ot		
75	B	220	
75	BV		
80	Ot		
80	B	220	207
80	BV		194
90	Ot		
90	B	219	207
90	BV		193
100	Ot		
100	B	218	205
100	BV		191
110	Ot		
110	B	217	203
110	BV		189
120	Ot		
120	B	215	201
120	BV		187
130	Ot		
130	B	214	198
130	BV		184
140	Ot		
140	B	213	196
140	BV		182
150	Ot		
150	B	210	193
150	BV		179
160	Ot		
160	B	207	190
160	BV		176
170	Ot		
170	B	204	187
170	BV		173
180	Ot		
180	B	200	184
180	BV		170
190	Ot		
190	B	195	181
190	BV		167
200	Ot		
200	B	190	177
200	BV		164
220	Ot		
220	B	178	171
220	BV		157
240	Ot		
240	B	165	162
240	BV		150
260	Ot		
260	B	150	150
260	BV		142
280	Ot		
280	B	132	133
280	BV		131
300	Ot		
300	B	116	117
300	BV		118
320	Ot		
320	B	102	103
320	BV		103
340	Ot		
340	B	89.2	89.9
340	BV		90.9
360	Ot		
360	B	77.9	78.6
360	BV		79.6
380	Ot		
380	B	67.2	67.8
380	BV		69.2
400	Ot		
400	B	58	58.5
400	BV		59.6
420	Ot		
420	B	49.1	49.8
420	BV		51.1
440	Ot		
440	B	41.6	42.1
440	BV		43.1
460	Ot		
460	B	34.4	34.9
460	BV		36
480	Ot		
480	B	27.9	28.4
480	BV		29.4
500	Ot		
500	B	21.9	22.3
500	BV		23.3
520	Ot		
520	B		17.8
520	BV		



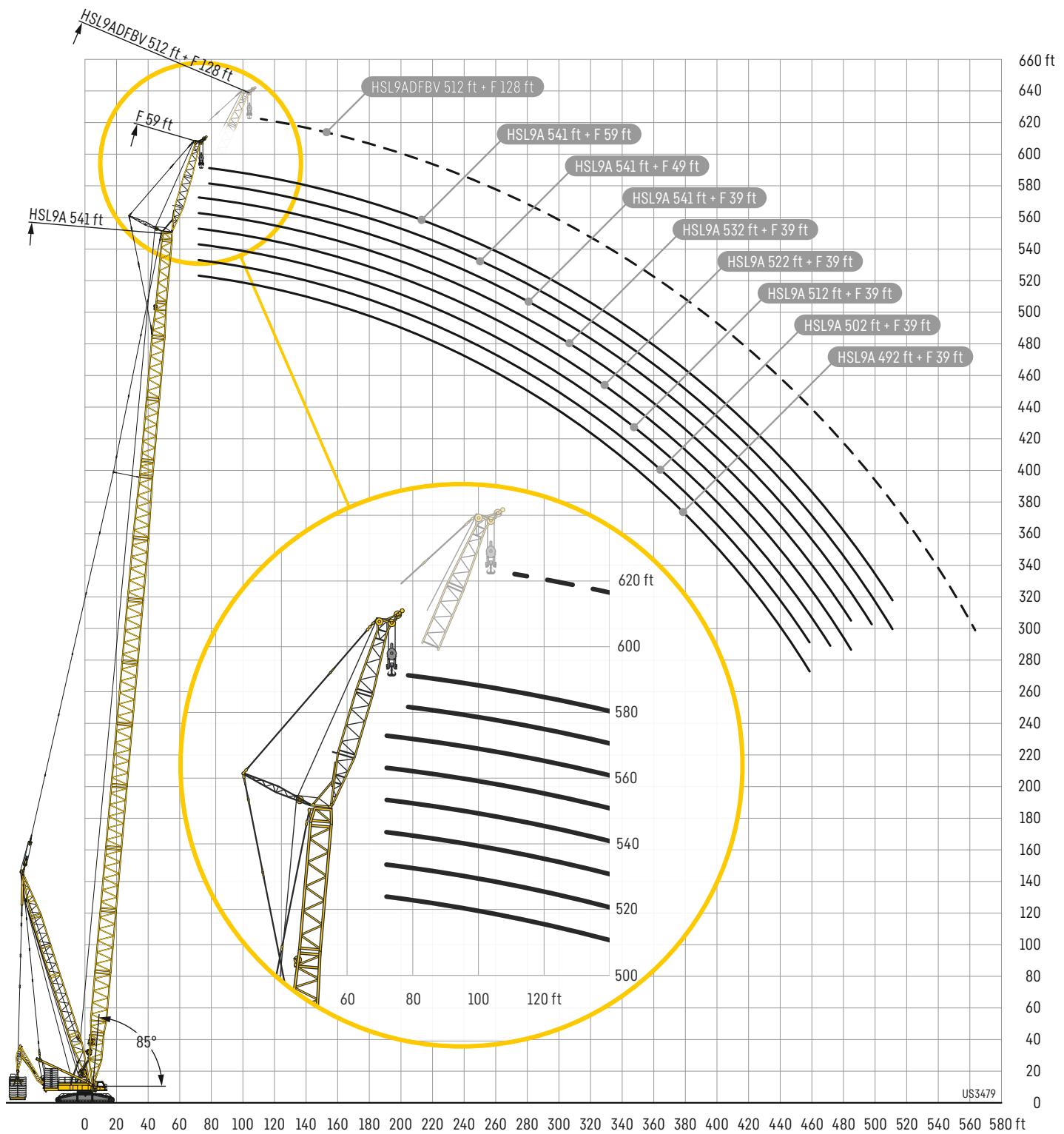
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US3441

Lifting heights

Hauteurs de levage

HSL9ADFB/BV



Description of symbols

Explication des symboles

	Max. capacity Capacité max.		Weight Poids
	Max. boom length Longueur maxi. de la flèche principale		No. of lines Brins
	Max. boom system length Longueur maxi. du système de flèche		No. of sheaves Poulies
	Counterweight Contrepoids		Radius Portée
	Central ballast Contrepoids central		Main boom, heavy Flèche principale, lourde
	Width crawler chassis Largeur du train de chenilles		Main boom, heavy/light Flèche principale, lourde/légère
	Hoist gear Treuil de levage		Main boom S2 Flèche principale S2
V ft/min	Working speeds Vitesses		Derrick system D Système derrick D
	Max. single line pull Effort au brin maxi.		Luffin fly jib, heavy Flèchette, lourde
	Rope diameter Diamètre		Fixed lattice jib F Flechette à treillis fixe F
	Rope length Longueur du câble		Adapter A Pièce d'adaptateur A
	Slewing speeds Vitesses d'orientation		Counterweight frame B Palette de lest B
	Driving speed Vitesse de translation		Suspended ballast V-frame® V-frame® de contrepoids suspendu
	Load Forces de levage		Counterweight trailer M-Wagon Remorque à contrepoids M-Wagon
	Hookblock/Capacity Moufle à crochet/Capacité de charge		

Remarks

-
1. The lifting capacities do not exceed 75 % of the tipping load according to ASME B 30.5.
The crane's structural steelwork is in accordance with EN 13000 and ASME B 30.5.
 2. For the calculation of the load charts at least a wind speed of 29 ft/s (9 m/s, 20.1 miles/hour) and regarding the load a sail area of 1 m² per ton load and a wind resistance coefficient of 1.2 on the load have been taken into account. For lifting of loads with large sail areas and/or high wind resistance coefficients the maximum wind speed as stated in the load charts has to be reduced.
 3. The lifting capacities stated are valid for lifting operation only (corresponding with crane classification according to ISO 4301-1, crane group A1).
 4. Lifting capacities are given in kips.
 5. The weight of the hook blocks and hooks is part of the load and therefore it must be deducted from the lifting capacities.
 6. The working radii are measured from the slewing centerline.
 7. The subsoil must be even and of good bearing capacity.
 8. Subject to modification of lifting capacities.
 9. The data of this brochure serves only for general information. All information is provided without warranty. Instructions for the correct commissioning of the crane can be found in the operation manual and the load chart book.
 10. The illustrations in this brochure may feature accessories and special equipment not included in the standard scope of delivery.
-

Remarques

-
1. La capacité de charge ne doit pas dépasser 75 % de la charge de basculement conformément à ASME B 30.5. La structure métallique de la grue est conforme à EN 13000 et ASME B 30.5.
 2. Une vitesse de vent de 29 ft/s (9 m/s, 20.1 miles/hour) minimum, une surface de prise au vent de 1 m² par tonne ainsi qu'un coefficient de résistance au vent de la charge 1,2 sont pris en compte pour le calcul des tableaux de charge. Lorsque des charges ayant une surface de prise au vent et/ou un coefficient de résistance au vent plus élevé(s) sont levées, la vitesse de vent maximale indiquée dans les tableaux de charge doit être réduite.
 3. Forces de levage pour application de grue de montage (correspond à la classification de grues selon ISO 4301-1, groupe de grues A1).
 4. Les charges sont indiquées en kips.
 5. Le poids du crochet de levage resp. de la moulle à crochet est une partie de la charge et doit donc être déduit de la capacité de charge.
 6. Les portées sont prises à partir de l'axe de rotation de la partie tournante.
 7. Le sol doit être plat et résistant.
 8. Charges données sous réserve de modification.
 9. Les données de cette brochure sont données à titre informatif. Ces renseignements sont sans garantie. Les consignes relatives à la bonne mise en service de la grue sont disponibles dans le manuel d'utilisation et le manuel de tableaux de charge.
 10. Les figures contiennent également des accessoires et des équipements spéciaux non inclus de série dans la livraison.
-

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Operations

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Maintenance

Spare Parts Catalogue



Planning

LICCON Work Planner



Training

Digital Crane Operator



Maintenance

Parts Shop

Proposition 65



WARNING:

This product can expose you to chemicals, including exhaust emissions, including lead and lead compounds, which are known to the State of California to cause cancer, birth defects or other reproductive harm.

For more information see: www.P65warnings.ca.gov/diesel

Subject to modification - Sous réserve de modifications

Liebherr-Werk Ehingen GmbH · Postfach 1361 · 89582 Ehingen, Germany
Phone +49 73 91 5 02-0 · www.liebherr.com

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Printed in Germany (5)
lwe-to-283-01-us12-2021