

SM-35F

LATTICE BOOM CRAWLER CRANE



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A new model

Fully self-erecting crawler mounted crane designed to meet features and standards of lifting units adding characteristics of the cranes for foundations jobs. Thanks to its foldable lattice boom and new design, it results to be ideal for small-medium size jobs sites. Its dimensions allow an easy transport and reduced set-up time.

Main features

- Fully self erecting unit.
- Three-part foldable lattice boom.
- Internal hydraulic jacks allowing self-erection of boom.
- Fast boom hoist by a single hydraulic piston.
- No special transport permits thanks to standard dimensions.
- Extendable undercarriage.
- Cummins QSB 5.9 diesel engine.
- Controlled descent or free fall type winches.
- Comfortable operator's cab.
- Mechanical and hydraulic fittings for casing oscillator.
- Wide range of optionals.

Notes

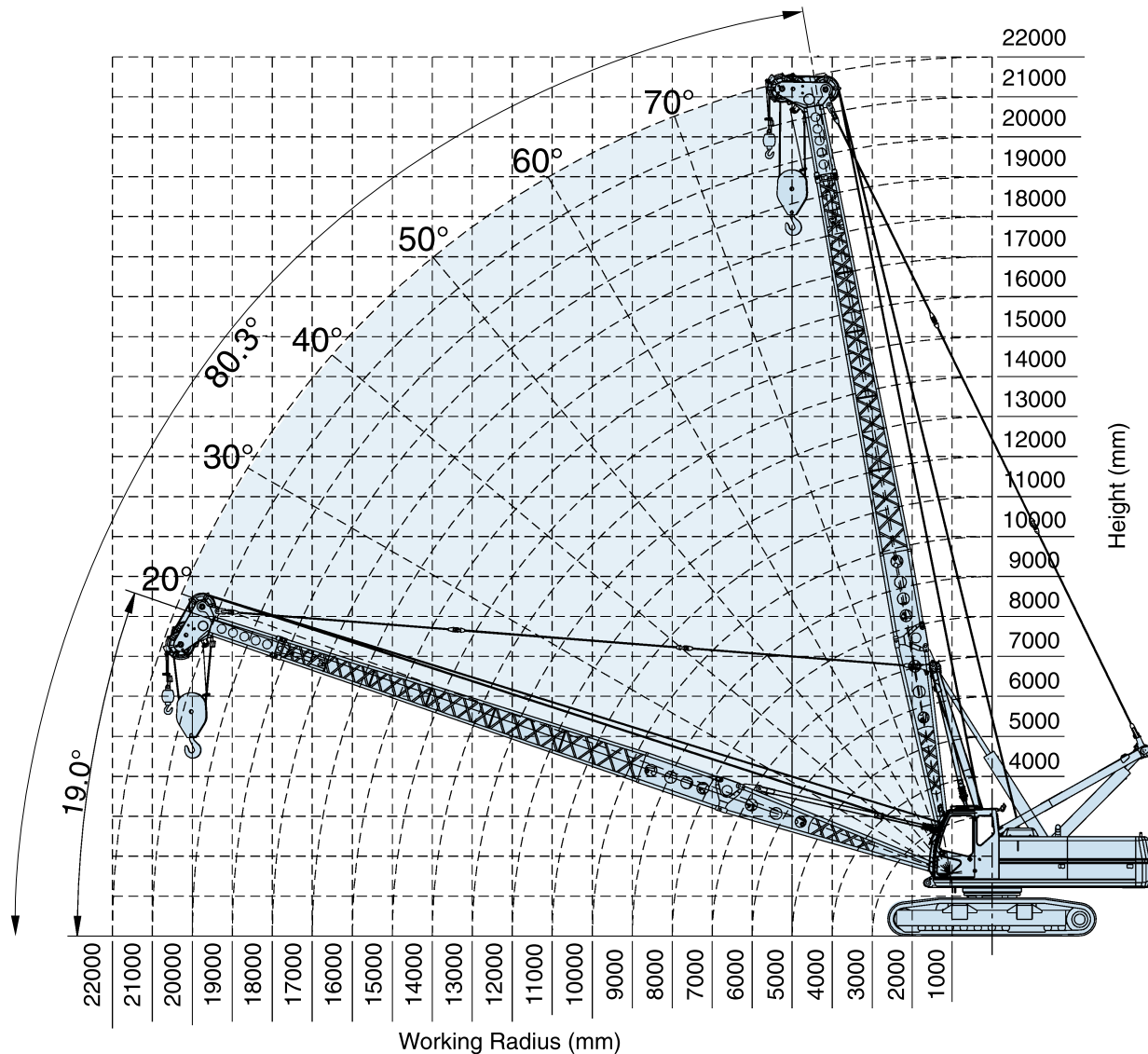
- 1 - The rated loads are based on machine at firm level ground and without travelling.
- 2 - The rated loads are in metric tons valid for 360° degree swing.
- 3 - The rated loads are calculated to comply DIN 15018, DIN 15019 and do not exceed 75% of tipping load.
- 4 - The rated loads include the weight of all lifting attachments.
- 5 - Crawlers must be extended at max track gauge during operations.
- 6 - The users must derate or limit the lifted loads to allow for adverse conditions such as: soft or uneven ground, out of level, wind, side loads, pendulum action, jerking or sudden stopping of load, inexperience of personnel, and possible travelling with a load.
- 7 - The max line pull for crane operation is only approximate. It must be referred to used rope with end terminations, in accordance to CEE directive.
- 8 - Lifting chart values must be applied in complete optimum boom assembly and head with plastic sheaves.

Engine				
Make and model		CUMMINS QSB5.9		
Rated Power SAE J 1995		BHP (kW)	240 (179) @ 2000 rpm	
Cylinders		n°	6 - in line	
Power supply		turbocharged aftercooler air to air		
Hydraulic System				
Max flow		l/min (MPa)	214 + 214 (30)	
Controls		proportional		
Winches free fall				
Model		LFF130		
Line pull*		kN	130,8	
Rope diameter		mm	26,0	
Variable displacement motor		Optional		
Winches controlled descent				
Model		LW130		
Line pull*		kN	129,6	
Rope diameter		mm	26,0	
Variable displacement motor		Optional		
Turret				
Max width		mm	2550	
Rotation speed		rpm	3,5-0	
Undercarriage				
Type		Extending gauge - Coaxial beams		
Shoes width		mm	700	800 (option)
Center of wheels		mm	4380	
Max track length		mm	5210	
Track gauge retracted (track gauge extended)		mm	1850 (3250)	
Retracted tracks width (extended tracks width)		mm	2550 (4000)	2750 (4050)
Max travelling speed		km/h	1,9	
Casing oscillator coupling		Optional		
General Features				
Tails wing		mm	4000	
Max transport width		mm	2550	2750
Max transport height		mm	3330	
Boom				
Tubular boom		mm	B x H	900 x 700 L=20.000
Weights				
Max in working conditions		t	42,7	
Transport configuration		t	42 (w/o counterweight)	
The shown weights may vary in different outfittings				

* The declared line pull is the real one on 1st Layer

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WORKING RADIUS



Version with standard fixed lattice boom 20 mt and 1,6 ton additional counterweight

Boom angle

Winch = 130 kN Boom length= 20 m

Boom Angle	Working Radius	Lifting Capacity
80,31°	5.000 mm	17.463 kg
78,83°	5.500 mm	14.919 kg
77,34°	6.000 mm	12.968 kg
75,83°	6.500 mm	11.425 kg
74,32°	7.000 mm	10.174 kg
72,79°	7.500 mm	9.139 kg
71,25°	8.000 mm	8.268 kg
69,69°	8.500 mm	7.526 kg
68,12°	9.000 mm	6.885 kg
66,53°	9.500 mm	6.326 kg
64,92°	10.000 mm	5.835 kg
63,28°	10.500 mm	5.400 kg
61,62°	11.000 mm	5.011 kg
59,93°	11.500 mm	4.662 kg
58,21°	12.000 mm	4.347 kg

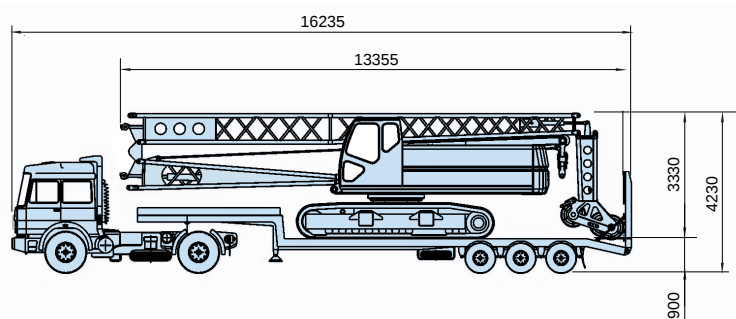
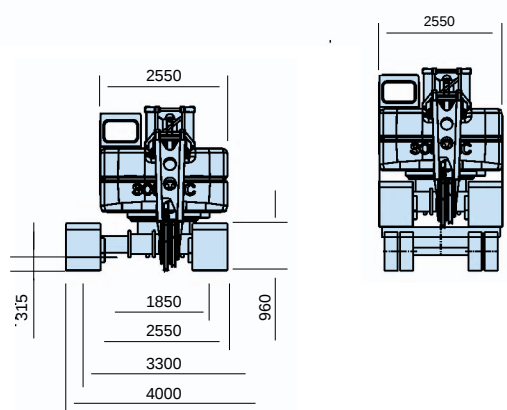
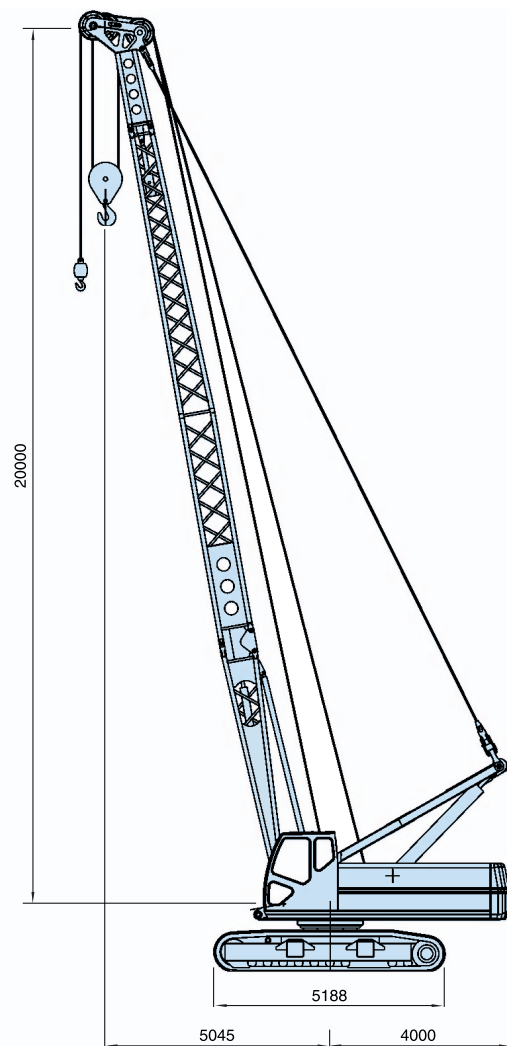
Boom Angle	Working Radius	Lifting Capacity
56,45°	12.500 mm	4.061 kg
54,66°	13.000 mm	3.800 kg
52,83°	13.500 mm	3.562 kg
50,94°	14.000 mm	3.342 kg
49,00°	14.500 mm	3.140 kg
47,00°	15.000 mm	2.952 kg
44,93°	15.500 mm	2.779 kg
42,78°	16.000 mm	2.617 kg
40,53°	16.500 mm	2.466 kg
38,16°	17.000 mm	2.324 kg
35,66°	17.500 mm	2.192 kg
32,99°	18.000 mm	2.067 kg
30,09°	18.500 mm	1.950 kg
26,90°	19.000 mm	1.839 kg
23,28°	19.500 mm	1.733 kg
18,98°	20.000 mm	1.633 kg

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Winch 130 kN Crane SM40 (without Jib)

Boom Length (m)								
Boom	9m	12m	15m	18m	21m	24m	27m	30m
Radius (m)	Capacity (t)							
3.05	40.0	-	-	-	-	-	-	-
3.55	34.0	33.6	-	-	-	-	-	-
4.0	30.3	30.2	30.0	-	-	-	-	-
4.5	26.0	26.0	26.0	26.0	-	-	-	-
5.0	21.8	21.8	21.8	21.8	21.7	-	-	-
5.5	18.7	18.7	18.7	18.7	18.7	18.6	-	-
6.0	16.4	16.4	16.4	16.4	16.3	16.2	16.1	-
6.5	14.5	14.5	14.5	14.5	14.4	14.3	14.3	14.1
7.0	13.0	13.0	13.0	13.0	12.9	12.8	12.8	12.6
7.5	11.7	11.7	11.7	11.7	11.6	11.5	11.5	11.3
8.0	10.7	10.7	10.7	10.7	10.6	10.5	10.4	10.3
8.5	9.7	9.7	9.7	9.7	9.7	9.6	9.5	9.3
9.0	8.9	8.9	8.9	8.9	8.9	8.8	8.7	8.6
9.5	8.2	8.2	8.2	8.3	8.2	8.1	8.1	7.9
10.0	-	7.9	7.8	7.7	7.7	7.6	7.4	7.3
10.5	-	7.3	7.2	7.2	7.1	7.0	6.9	6.7
11.0	-	6.8	6.7	6.7	6.6	6.5	6.5	6.3
11.5	-	6.4	6.3	6.3	6.2	6.1	6.0	5.9
12.0	-	6.0	5.9	5.9	5.8	5.7	5.7	5.5
12.5	-	-	5.6	5.6	5.5	5.4	5.3	5.1
13.0	-	-	5.3	5.3	5.2	5.1	5.0	4.8
13.5	-	-	4.9	4.9	4.8	4.7	4.7	4.5
14.0	-	-	4.7	4.6	4.6	4.5	4.4	4.2
14.5	-	-	4.4	4.4	4.3	4.2	4.2	4.0
15.0	-	-	4.2	4.2	4.1	4.0	3.9	3.8
15.5	-	-	4.1	4.0	3.9	3.8	3.7	3.6
16.0	-	-	-	3.8	3.7	3.6	3.5	3.4
16.5	-	-	-	3.6	3.5	3.4	3.4	3.2
17.0	-	-	-	3.4	3.4	3.3	3.2	3.0
17.5	-	-	-	3.2	3.2	3.1	3.0	2.9
18.0	-	-	-	-	3.0	3.0	2.9	2.7
18.5	-	-	-	-	2.9	2.8	2.7	2.6
19.0	-	-	-	-	2.8	2.7	2.6	2.4
19.5	-	-	-	-	2.6	2.6	2.4	2.3
20.0	-	-	-	-	2.5	2.4	2.3	2.2
20.5	-	-	-	-	2.3	2.3	2.2	2.0
21.0	-	-	-	-	-	2.2	2.1	1.9
21.5	-	-	-	-	-	2.1	2.0	1.8
22.0	-	-	-	-	-	2.0	1.9	1.7
22.5	-	-	-	-	-	1.9	1.8	1.6
23.0	-	-	-	-	-	1.8	1.7	1.6
23.5	-	-	-	-	-	1.7	1.6	1.5
24.0	-	-	-	-	-	-	1.5	1.4
24.5	-	-	-	-	-	-	1.5	1.3
25.0	-	-	-	-	-	-	1.4	1.2
25.5	-	-	-	-	-	-	1.3	1.2
26.0	-	-	-	-	-	-	1.3	1.1
26.5	-	-	-	-	-	-	-	1.0
27.0	-	-	-	-	-	-	-	1.0
27.5	-	-	-	-	-	-	-	0.9
28.0	-	-	-	-	-	-	-	0.9
28.5	-	-	-	-	-	-	-	0.8
29.0	-	-	-	-	-	-	-	0.7
Line Parts	4	4	4	4	2	2	2	2





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