







#### **LATTICE BOOM CRAWLER CRANE**

#### A new model

The SC-120 crawler mounted crane has been designed meeting the advantage of being dedicated and multifunctional at the same time. It can be used to work with hydromills, crane attachments, vibrators, hydraulic and mechanical grabs, etc.

#### Main features:

- Multi element lattice boom
- Boom hoist by multiple reeving winch
- Engine CAT 18
- Comfortable operator cab
- Mechanical and hydraulic fittings for casing oscillator
- Removable and self-assembling tracks
- Controlled descent or free fall type winches Multi element self-lifting counterweight
- Wide range of optionals

Counterweight

The shown weights may vary in different outfittings

#### Notes

- The rated loads are based on machine at firm level ground and without travelling.
- The rated loads are in metric tons valid for 360° degree swing.
- The rated loads are calculated to comply DIN 15018, DIN 15019 and do not exceed 75% of tipping load.
- The rated loads include the weight of all lifting attachments.
- The users 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.
- 6 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.
- 7 Lifting chart values must be applied in complete optimum boom assembly and head with plastic sheaves.

Engine				
Make and model		CATERPILLAR C18		
Rated Power SAE J 1995	kW	522 @ 1800 rpm		
Cylinders	n°	6 - in line		
Power supply		Turbocharged aftercooler air toair		
Hydraulic System				
Max flow	l/min (MPa)	2 X 475 (30)		
Controls		proportional		
Winches free fall				
Line pull	kN	350		
Rope diameter	mm	36		
•				
Winches controlled descent				
Line pull	kN	350		
Rope diameter	mm	36		
T				
Turret		2500 (1050 0		
Max width	mm	3500 (4350 Counterweight)		
Rotation speed	rpm	3		
Undercarriage				
Туре		Fixed gauge / removable sides		
Shoes width	mm	900 / 1000		
Center of wheels	mm	6000		
Max track length	mm	7172		
Max travelling speed	km/h	2.0		
Tracks removable				
Conord Footunes				
General Features		5750		
Tailswing	mm	5750		
Max transport width	mm	3500		
Max transport height	mm	3560		
Boom				
Tubular boom	mm	1520 x 1520		
Weights				
Base machine (w/o sides count.)	t	71		
In working conditions	t	130		
C	4	20		

30



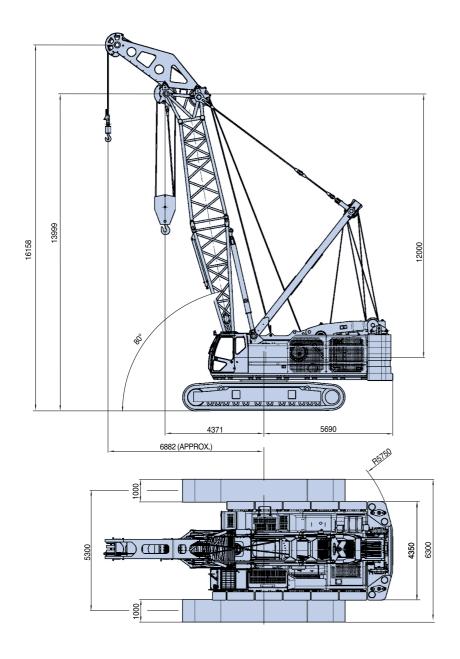
#### **LATTICE BOOM CRAWLER CRANE**

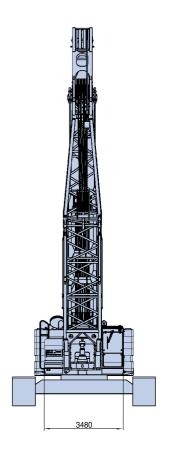
Winch 300 kN Crane SM120 (without Jib)								
Boom Length (m)								
Boom	12m	15m	18m	21m	24m			
Radius (m)			Capacity (t)					
3,7	120.00	_	_	_	_			
4.0	120.00	107.04	_	_	_			
4.5	113.21	106.73	100.25	_	_			
5.0	101.73	100.45	100.25	93.30	_			
5.5	91.68	90.61	90.45	- 01.02	72.44			
6.0 6.5	82.55 75.00	81.58 74.13	81.42 73.97	81.02	72.44			
7.0	68.67	67.85	67.70	67.50	65.66			
7.5	63.26	62.55	62.39	_	60.45			
8.0	58.62	58.01	57.85	57.65	56.02			
8.5	54.48	54.03	53.87	-	52.14			
9.0 9.5	50.20 46.37	50.51 46.83	50.35 46.83	50.15	48.72 45.71			
10.0	40.37	43.36	43.31	43.16	43.71			
10.5	39.43	40.35	40.38	-	40.05			
11.0	36.47	37.70	37.65	37.50	37.39			
11.5	33.72	35.40	35.23	ı	_			
12.0	29.13	33.31	33.21	33.06	32.95			
12.5 13.0	24.43 19.28	31.40 29.74	31.22 29.64	 29.48	29.38			
13.5	19.20	29.74		29.40 —	29.58 —			
14.0	_	26.78	26.73	26.58	26.42			
14.5	-	24.98	_	25.02	_			
15.0		22.18	24.23	24.13	23.97			
15.5		18.92	-	22.92	-			
16.0 16.5		-	22.14	22.04 20.98	21.88			
17.0			20.35	20.98	19.94			
17.5	_	_	-	19.36	-			
18.0	-	-	16.98	18.67	18.52			
18.5	_	_	14.54	17.63	_			
19.0 19.5		_	_	17.29 16.45	17.02			
20.0		_		15.96	15.96			
20.5		_	_	14.36	-			
21.0	_	-	_	12.95	14.64			
21.5		_	_	_	_			
22.0		-	_	_	13.72			
22.5 23.0			_	_	12.00			
23.5		_	_	_	12.90 _			
24.0	-	-	-	-	10.20			
24.5	-	-	_	-	-			
25.0		_	-	-	_			
25.5	-	_	_	_	-			
26.0 26.5		_	_	_				
27.0	_	-	_	_	_			
27.5	-	_	-	_	-			
28.0	_	_	_	_	_			
28.5	-	-	_	_	_			
29.0		_	_	_	-			
Line	8	8	-	6	4			
Parts	12	15	-					
	12	15		21	24			
	Boom Length (m)							

Winch 300 kN Crane SM120 (without Jib)								
	Boom Length (m)							
Boom	27m	30m	33m	36m	39m			
Radius (m)			Capacity (t)					
6.0	66.24	-	-	_	_			
6.5 7.0	 65.44	65.98 65.25	61.42 60.91	- 37.70				
7.5	-	-	-	_	37.70			
8.0	55.94	55.61	55.31	37.70	37.70			
8.5 9.0	48.64	48.36	48.06	37.70	37.70			
9.5	_	-	-	1	_			
10.0 10.5	42.60	42.55 _	42.48 _	37.70 –	37.70			
11.0	37.56	37.14	36.88	36.45	36.38			
11.5	22.04	22.70	22.52	22.44	22.20			
12.0 12.5	32.84 31.02	32.70 –	32.52 –	32.44 –	32.28			
13.0	29.29	29.13	28.96	28.79	28.56			
13.5 14.0	27.89 26.54	_ 26.17	 25.94	 25.87	 25.78			
14.5	25.11	-	1	-	_			
15.0	23.74	23.67	23.59	23.49	23.40			
15.5 16.0	21.67	21.58	21.49	21.38	21.29			
16.5	_	1	-	-	_			
17.0 17.5	19.81 –	19.79 –	19.75 –	19.65 –	19.57 —			
18.0	18.36	18.21	18.18	18.12	18.00			
18.5 19.0	 16.91	 16.83	 16.72	 16.63	<u> </u>			
19.5	_	1	1	ı	_			
20.0 20.5	15.77	15.66	15.55	15.47	15.29			
21.0	14.44	14.40	14.31	14.22	14.14			
21.5	- 12.70	- 12 E7	- 12 //0	- 12.20	12.10			
22.0 22.5	13.70	13.57 –	13.48 –	13.39 –	13.18			
23.0	12.71	12.67	12.60	12.52	_			
23.5 24.0	11.69	11.67	 11.60	11.52	11.15			
24.5	_	_	-	_	_			
25.0 25.5	11.02	11.00 –	10.97 –	_	_			
26.0	9.84	9.82	9.79	9.73	9.64			
26.5 27.0	_	- 9.32	_	_				
28.0	_	8.72	8.70	8.63	8.30			
29.0	_	7.70	7.54	7.50	7.01			
30.0 31.0	_	_	7.54 6.70	7.50 –	7.01			
32.0	-	_	_	6.45	6.10			
33.0 34.0	_	_	_	6.02 5.24	<u> </u>			
35.0	_	_	_	_	_			
36.0 37.0	_	_			4.47 3.73			
Line	4	4	4	2	2			
Parts								
	27	30	33  Boom Length (m)	36	39			
	boom Length (m)							



#### **LATTICE BOOM CRAWLER CRANE**





#### **Special Applications**

# **Continuous Flight Auger**



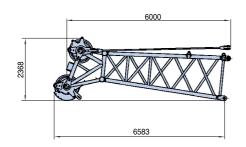
#### **Figures**

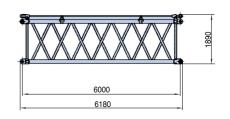
- 1 -Self counterweight
- 2 -Self assembling track3 -Transport configuration

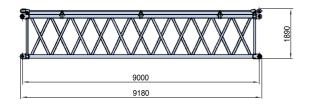


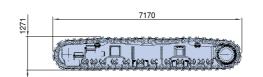


#### **DIMENSIONS & WEIGHTS**





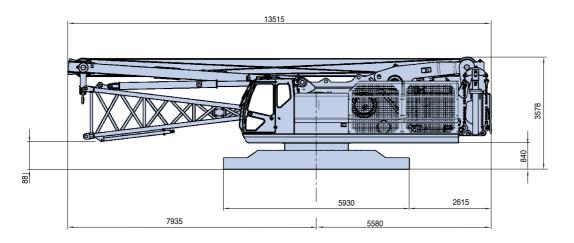


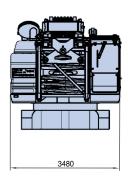




































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In 1990 Soilmec was awarded with the certification of its Quality System complying with ISO 9001/UNI 29001 standards.







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