

Crawler Crane

# SC-80



**soilmec**   
Drilling and Foundation Equipment

# SC-80 Crawler Crane

## MAIN BOOM EQUIPMENT



# SC-80 TECHNICAL DATA SHEET

<b>Operating weight (approx.)</b>	<b>74000 kg</b>	<b>163142 kg</b>
<b>Diesel engine</b>	<b>CAT C7 with ACERT™ Technology</b>	<b>CAT C7 with ACERT™ Technology</b>
- Max Rated Power	<b>205 kW @ 1800 rpm</b>	<b>275 kW @ 1800 rpm</b>
- Engine conforms to exhaust emissions standard	<b>EU Stage IIIA - EPA Tier III / EU Stage IIIB- EPA Tier 4i</b>	<b>EU Stage IIIA - EPA Tier III / EU Stage IIIB- EPA Tier 4i</b>
- Displacement	<b>7,2 l</b>	<b>1,9 US gal</b>
- Aspiration	<b>Turbocharged</b>	<b>Turbocharged</b>
- Cooling	<b>Water-cooled</b>	<b>Water-cooled</b>
<b>Hydraulic system</b>		
- Max working pressure	<b>32 MPa</b>	<b>4641 psi</b>
- Main pums max oil flow	<b>2x 252 l/min</b>	<b>2x 66 US gal</b>
- Cooling	<b>Oil-to-air heat exchanger</b>	<b>Oil-to-air heat exchanger</b>
<b>Service refill capacity</b>		
- Fuel Tank	<b>400 l</b>	<b>106 US gal</b>
- Hydraulic Oil Tank	<b>495 l</b>	<b>131 US gal</b>
<b>Main winches</b>	<b>Lebus</b>	<b>Lebus</b>
- Type	<b>Free fall</b>	<b>Free fall</b>
- 1st layer line pull (nominal/effective line pull)	<b>178/150 kN</b>	<b>40015 lbf</b>
- Rope diameter	<b>26 mm</b>	<b>1,02 in</b>
- Rope speed	<b>122 m/min</b>	<b>400 ft/min</b>
<b>Boom</b>		
- Length min-max	<b>12 - 51 m</b>	<b>39,4-167.3 ft</b>
- Tubolar (horizontal x vertical)	<b>1200 x 1100 mm</b>	<b>47,2 x 19,7</b>
- Boom extension length	<b>3 - 6 m</b>	<b>9,8 - 19,7 ft</b>
<b>Upperframe</b>		
- Tail swing radius	<b>4690 mm</b>	<b>184,65 in</b>
- Slewing speed	<b>3 rpm</b>	<b>3 rpm</b>
- Slew bearing type	<b>Double-row ball bearing</b>	<b>Double-row ball bearing</b>
- Counterweight	<b>19500 kg</b>	<b>42990 lb</b>
- Additional counterweight	<b>3010 kg</b>	<b>6636 lb</b>
<b>Undercarriage</b>	<b>variable gauge</b>	<b>variable gauge</b>
- Overall width (retracted side frames)	<b>3400 mm</b>	<b>133,86 in</b>
- Overall width (extended side frames)	<b>5050 mm</b>	<b>198,82 in</b>
- Overall length of crawler	<b>6331 mm</b>	<b>249,25 in</b>
- Track shoe width - <i>Triple grouser or flat</i>	<b>800 mm</b>	<b>31,50 in</b>
- Travel speed	<b>1,72 Km/h</b>	<b>1,07 mph</b>

## STANDARD EQUIPMENT

### BASE MACHINE

- 2 x 225 Ah capacity batteries for low temperature
- Two front working lights
- Rear view mirror
- Steps for crawlers
- Counterweight self-removal
- Tracks with chain tensioning device
- Swivel for main rope
- Grease lubricated tracks
- Hydro-clean micro filtration with water separation
- Electric refuelling pumps for diesel and hydraulic oil with automatic stop system.

### CAB/CONTROL

- Air conditioner, heater and defroster with automatic climate control
- Retracted seat belt
- Beverage/Cup holder
- Stationary skylight
- Radio and CD player
- Sunshade for windshield
- High brightness led internal to the cab
- Travel control pedals with removable hand levers
- Courtesy lights in the cab
- Parallelogram wiper including a washer nozzle mounted below the cab windshield
- Signal/warning horn
- Warning in cab of hydraulic oil contamination

- Floor mat
- Tempered safety glass panel
- Lockable glove compartment
- Armrests

### SAFETY DEVICE

- Load Moment Indicator (with boom lowering slow stop function)
- Fire extinguisher
- State-of-the-art safety load indicator with graphic display
- Cab top guard
- Rope and Load limit switch.
- Catwalk (on side and in front of operator's cab)
- Hoist limit switch on both main winches

## OPTIONAL EQUIPMENT

- Track triple grouser: 900 mm
- Electric hand throttle
- Flat track shoes
- Auxiliary winch
- Windshield guards
- Reversible cooling fan including protective screen
- Automatic lubrication system
- Bio lubrication engine oil

- Winch synchronisation (both winches work with the same speed)
- "CAT BIO HYD ADVANCED" hydraulic bio-oil (compliant with European directive 2005/360/EC).
- Potentiometer to tune the load between main winches during 2-rope grab operation
- GSM modem
- 3-color percentage indicator

- Hydraulic arrangement for Casing oscillator attachment
- Swing and travel alarm
- Positive or negative free fall controls
- Lights for overall dimensions
- Satellite system for remote transmission of operating data
- LCD cameras monitor multi-display
- Removable sides

# SC-80 Crawler Crane TECHNICAL LOAD CHART

Capacity (t)														
Boom Length (m)														
Radius (m)	12	15	18	21	24	27	30	33	36	39	42	45	48	51
3,5	80,0													
4,0	67,4	67,0												
5,0	56,2	52,6	49,5	46,8										
6,0	44,3	42,3	39,8	38,2	36,4	34,6								
7,0	36,5	34,8	33,3	31,9	30,5	29,2	25,3	25,3	25,3					
8,0	30,8	29,4	28,4	27,2	26,0	24,8	23,9	23,1	22,3	21,4	20,6			
9,0	26,7	25,6	24,6	23,7	22,7	21,9	21,1	20,4	19,5	18,9	18,2	17,3	15,1	15,5
10,0	23,3	22,3	21,5	20,7	20,0	19,3	18,6	18,0	17,2	16,6	16,0	15,6	14,2	13,6
11,0	20,6	19,9	19,1	18,8	18,1	17,5	16,9	16,3	15,7	15,2	14,7	14,1	12,9	12,4
12,0	18,2	18,2	17,5	17,0	16,5	15,9	15,4	14,8	14,3	13,8	13,3	12,8	111,6	11,2
14,0		14,8	14,7	14,2	13,6	13,2	12,6	12,2	11,8	11,3	10,9	10,5	9,6	9,2
15,0		13,4	13,4	12,9	12,8	12,4	11,9	11,5	11,1	10,7	10,4	9,9	8,7	8,3
16,0			12,1	12,3	11,6	11,2	10,8	10,4	10,1	9,7	9,4	9,0	8,2	7,9
18,0			10,4	10,5	10,4	10,0	9,7	9,3	9,0	8,7	8,4	7,8	7,0	6,7
19,0				9,5	9,4	9,4	9,1	8,5	8,2	7,9	7,6	7,4	7,0	6,1
21,0				8,2	8,4	8,3	8,0	7,7	7,4	7,0	6,7	6,5	6,3	5,2
22,0					7,6	7,5	7,6	7,3	7,0	6,6	6,2	6,1	5,5	4,8
23,0					7,1	7,0	7,1	6,8	6,5	6,2	5,9	5,7	5,2	4,5
24,0					6,7	6,6	6,7	6,4	6,1	5,8	5,5	5,4	4,7	4,2
25,0						6,2	6,2	6,0	5,8	5,4	5,1	5,0	4,4	3,8
26,0						5,8	5,9	5,6	5,4	5,1	4,8	4,7	4,1	3,6
27,0						5,4	5,5	5,3	5,1	4,8	4,8	4,4	3,9	3,2
28,0							5,1	4,9	4,7	4,8	4,5	4,2	3,6	3,2
29,0							4,8	4,6	4,7	4,5	4,2	3,9	3,2	2,8
30,0							4,5	4,3	4,4	4,2	4,0	3,9	2,8	2,4
31,0								4,1	4,2	3,9	3,7	3,6	2,4	2,4
32,0								4,1	3,9	3,7	3,7	3,2	2,4	2,1
33,0								3,8	3,7	3,2	3,3	3,2	2,1	2,1
34,0									3,2	3,2	3,3	2,8	2,1	1,9
35,0									3,2	3,2	2,9	2,8	1,9	1,9
36,0									2,8	2,8	2,9	2,8	1,9	1,4
37,0										2,8	2,5	2,4	1,4	1,4
38,0											2,5	2,5	2,4	1,4
39,0											2,5	2,2	1,4	1,0
40,0												2,2	1,1	1,0
41,0												1,9	1,1	1,0
42,0												1,9	1,1	0,8
44,0													1,4	0,8
Part Line	6	6	6	4	4	4	2	2	2	2	2	2	2	2

All technical data are purely indicative and subject to change without notice

Technical data sheet SC80-001 3/2013

## SC-80 Crawler Crane TRANSPORT DIMENSIONS AND WEIGHTS

### Main machine



Weight c/w crawlers

**49000 kg**      108026 lb

Weight w/o crawlers

**30000 kg**      66139 lb

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