

Hydraulic Crawler Crane

SC-80



soilmec 
Drilling and Foundation Equipment

SC-80 Hydraulic Crawler Crane

MAIN BOOM EQUIPMENT



Boom configuration															
Type	Length		N° of boom extensions (*)												
Boom foot	6 m	19.7 ft	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom insert	3 m	9.8 ft	1	-	1	-	1	-	1	-	1	-	1	-	1
Boom insert	6 m	19.7 ft	-	1	1	2	2	3	3	4	4	5	5	6	6
Boom head	6 m	19.7 ft	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length (m)			15	18	21	24	27	30	33	36	39	42	45	48	51
Boom length (ft)			49.2	59.1	68.9	78.7	88.6	98.4	108.3	118.1	128	137.8	147.6	157.5	167.3

SC-80 Hydraulic Crawler Crane

TECHNICAL DATA SHEET

Operating weight (approx.)	74000 kg	163142 kg
Diesel engine	CAT C7 with ACERT™ Technology	CAT C7 with ACERT™ Technology
- Max Rated Power	205 kW @ 1800 rpm	275 kW @ 1800 rpm
- Engine conforms to exhaust emissions standard	EU Stage IIIA - EPA Tier III / EU Stage IIIB- EPA Tier 4i	EU Stage IIIA - EPA Tier III / EU Stage IIIB- EPA Tier 4i
- Displacement	7,2 l	1.9 US gal
- Aspiration	Turbocharged	Turbocharged
- Cooling	Water-cooled	Water-cooled
Hydraulic system		
- Max working pressure	32 MPa	4641 psi
- Main pums max oil flow	2x 252 l/min	2x 66 US gal
- Cooling	Oil-to-air heat exchanger	Oil-to-air heat exchanger
Service refill capacity		
- Fuel Tank	400 l	106 US gal
- Hydraulic Oil Tank	495 l	131 US gal
Main winches	Lebus	Lebus
- Type	Free fall	Free fall
- 1st layer line pull (nominal/effective line pull)	178/150 kN	40015 lbf
- Rope diameter	26 mm	1.02 in
- Rope speed	122 m/min	400 ft/min
Boom		
- Length min-max	12 - 51 m	39.4-167.3 ft
- Tubular (horizontal x vertical)	1200 x 1100 mm	47.2 x 19.7
- Boom extension length	3 - 6 m	9.8 - 19.7 ft
Upperframe		
- Tail swing radius	4690 mm	184.65 in
- Slewing speed	3 rpm	3 rpm
- Slew bearing type	Double-row ball bearing	Double-row ball bearing
- Counterweight	19500 kg	42990 lb
- Additional counterweight	3010 kg	6636 lb
Undercarriage	variable gauge	variable gauge
- Overall width (retracted side frames)	3400 mm	133.86 in
- Overall width (extended side frames)	5050 mm	198.82 in
- Overall length of crawler	6331 mm	249.25 in
- Track shoe width - Triple grouser or flat	800 mm	31.50 in
- Travel speed	1,72 Km/h	1.07 mph

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

- 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

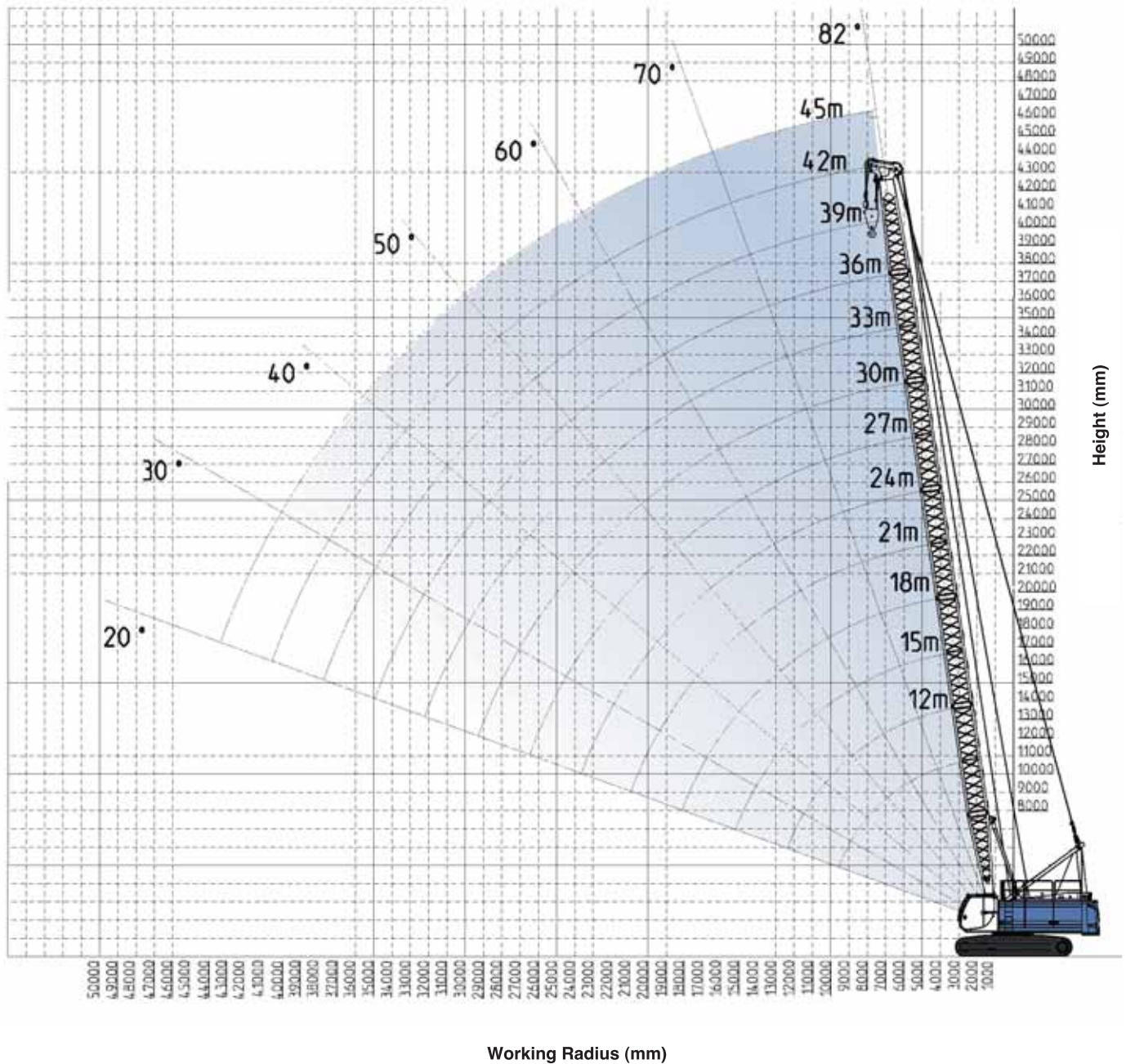
- with the same speed)
- "CAT BIO HYD ADVANCED" hydraulic bio-oil (compliant with European directive 2005/360/EC).
- Potentiometer to tune the load between main winches during 2-rope grab operation
- GSM modem
- 3-color percentage indicator
- Hydraulic arrangement for Casing oscillator attachment

- 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
- Swing limitation system

SC-80 Hydraulic Crawler Crane

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	1,4
39,0										2,5	2,2	2,1	1,4	1,0
40,0											2,2	2,1	1,1	1,0
41,0											1,9	1,9	1,1	1,0
42,0											1,9	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



Boom configuration

- Rated loads are in metric tons valid for 360 degrees working area.
- Lifting capacities are in compliance with DIN 15019/part 2/chart 1 and ISO 4305 and do not exceed 75% of tipping load
- Working radius are measured from the swing center of the machine.
- Rated loads are calculated with the machine on firm and level ground, without travelling
- Weights of lifting attachments (e.g.: hook, ropes, bucket, etc.) are included in the rated load: therefore their weights must be subtracted from rated load to obtain net lifting value.
- This load chart is valid if crawler frames are extended.
- Lifting capacities are based on freely suspended loads. Operator must reduce lifted loads and operating speeds in case of adverse conditions (e.g.: wind, soft ground, out-of-level, pendulum action, sudden load stopping, operating speeds, etc.)
- This load chart are only for reference. For actual lifting capacities please refer to load chart in operator's manual.
- Instruction in the "Operator's Manual" must be strictly observed during machine operations.
- Operations are not approved for working radius and boom lengths that have no ratings associated on load chart

SC-80 Hydraulic Crawler Crane

ROTARY APPLICATIONS



Mechanical rotary head - RT-3ST

Max Diameter	2500 mm	98.4 in
Max Depth	78 (120*) m	255,9 (394*) ft
Diesel Engine type	Cummins 6BTAA 5.9-C	Cummins 6BTAA 5.9-C
Rated Power	128 kW	172 HP

Rotary Drive-Shifting Gear Type

Max Torque	206 kNm	151935 lbf·ft
Max Drilling Speed	160 rpm	160 rpm

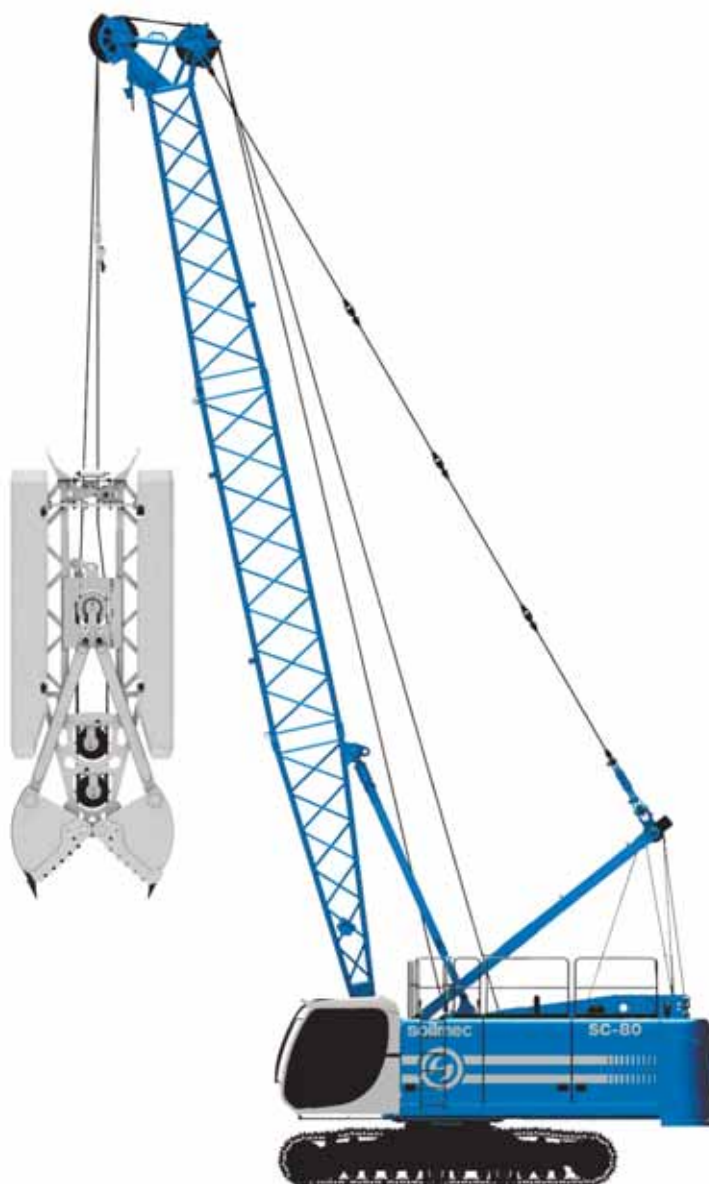
Crowd System

Max Crowd Force	157 kN	35294 lbf
Stroke (kelly sistem)	760 mm	29.9 in

*Special kit required

SC-80 Hydraulic Crawler Crane

MECHANICAL GRAB APPLICATIONS



Mechanical grab

Max chisel weight	9000 kg	19842 lb
Max rope speed (1° layer)	122 m/min	400 ft/min

SC-80 Hydraulic Crawler Crane

TRANSPORT DIMENSIONS AND WEIGHTS

Main machine

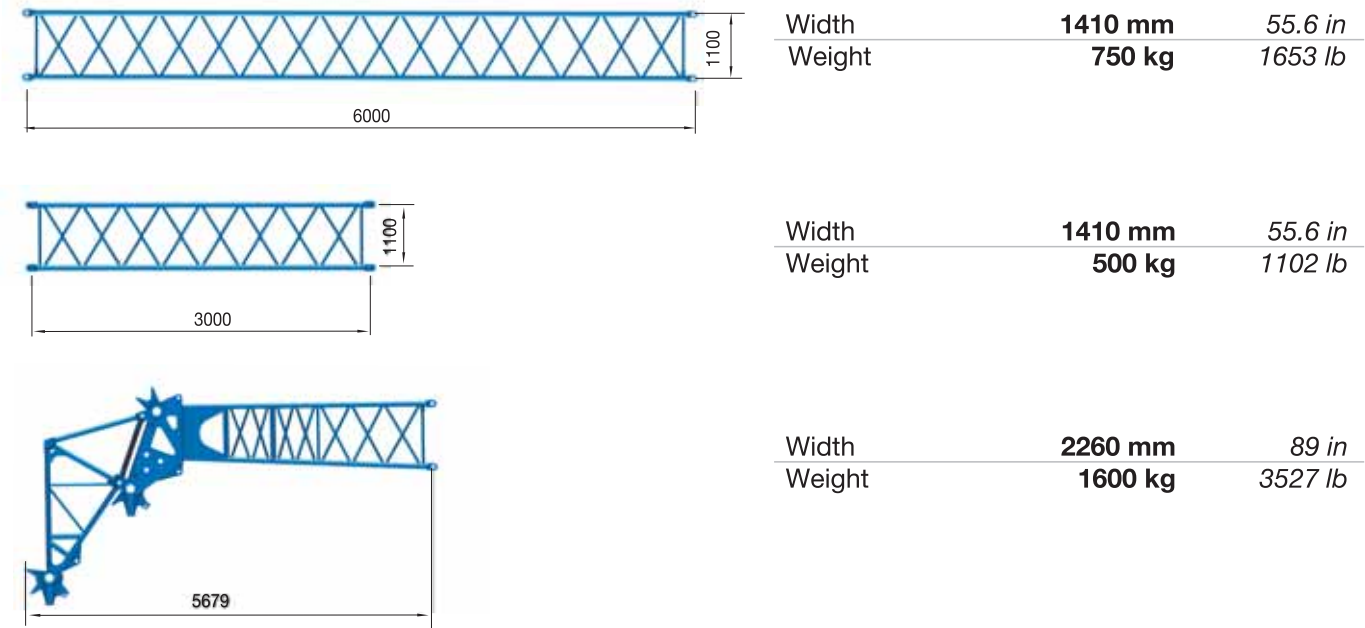


Weight c/w crawlers

49000 kg

108026 lb

Boom



Counterweight



This brochure has been edited and distributed by SOILMEC Spa. The present document cancels and override any previous ones. This brochure shall not be distributed, reproduced or exhibited without SOILMEC Spa. authorization in accordance with to SOILMEC web site disclaimer condition.

SOILMEC Spa distributes machinery and structures all over the world, supported by SOILMEC Spa subsidiary companies and dealers. The complete Soilmec network list is available on the web site www.soilmec.it

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

Technical data sheet SC80-002 05/2014