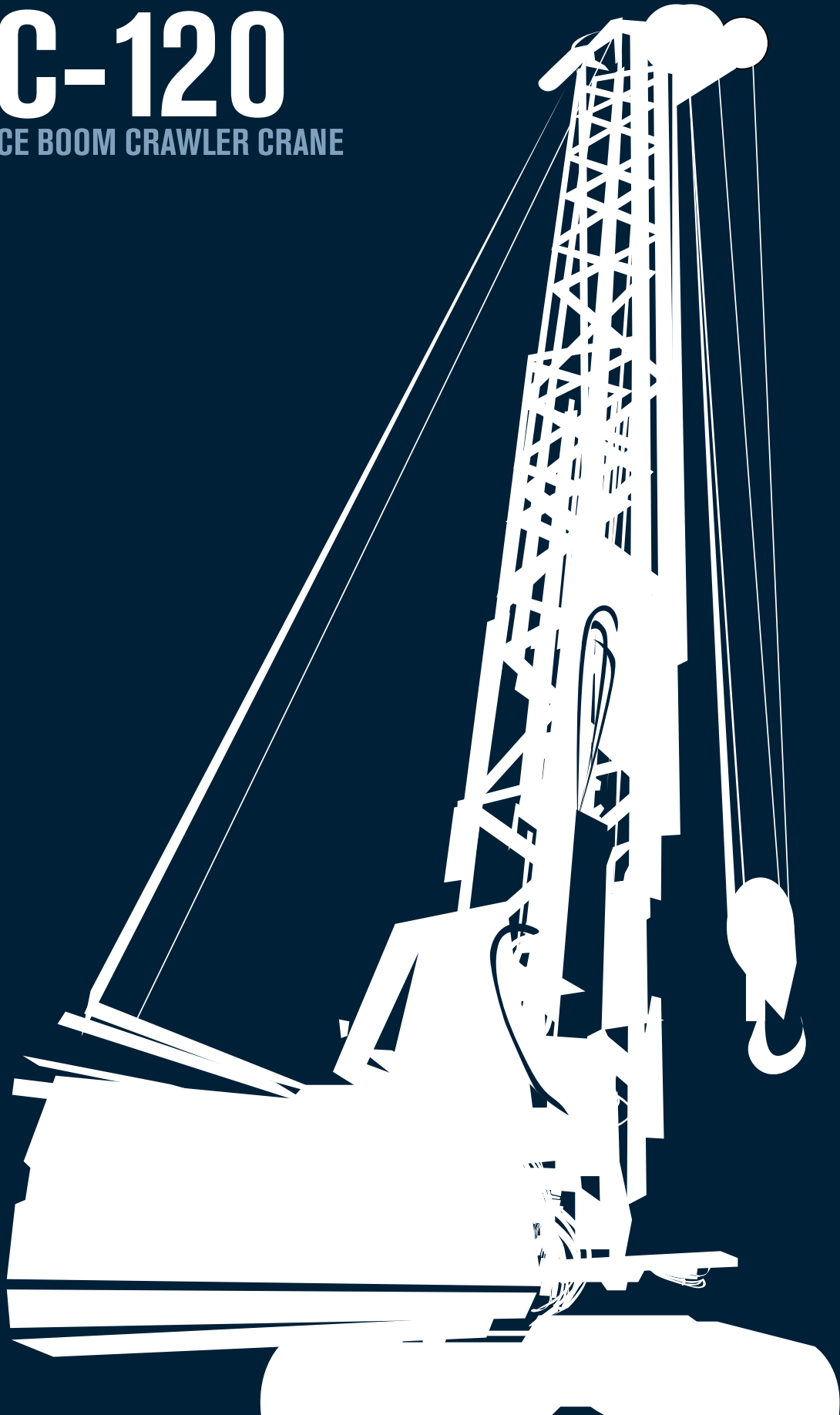


# SC-120

LATTICE BOOM CRAWLER CRANE



# SC-120

## 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

### 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 - 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                        |    |                                    |
|-------------------------------|----|------------------------------------|
| <b>Make and model</b>         |    | CATERPILLAR C18                    |
| <b>Rated Power SAE J 1995</b> | kW | 522 @ 1800 rpm                     |
| <b>Cylinders</b>              | n° | 6 - in line                        |
| <b>Power supply</b>           |    | Turbocharged aftercooler air toair |

| Hydraulic System |             |              |
|------------------|-------------|--------------|
| <b>Max flow</b>  | l/min (MPa) | 2 X 475 (30) |
| <b>Controls</b>  |             | proportional |

| Winches free fall    |    |     |
|----------------------|----|-----|
| <b>Line pull</b>     | kN | 350 |
| <b>Rope diameter</b> | mm | 36  |

| Winches controlled descent |    |     |
|----------------------------|----|-----|
| <b>Line pull</b>           | kN | 350 |
| <b>Rope diameter</b>       | mm | 36  |

| Turret                |     |                           |
|-----------------------|-----|---------------------------|
| <b>Max width</b>      | mm  | 3500 (4350 Counterweight) |
| <b>Rotation speed</b> | rpm | 3                         |

| Undercarriage               |      |                               |
|-----------------------------|------|-------------------------------|
| <b>Type</b>                 |      | Fixed gauge / removable sides |
| <b>Shoes width</b>          | mm   | 900 / 1000                    |
| <b>Center of wheels</b>     | mm   | 6000                          |
| <b>Max track length</b>     | mm   | 7172                          |
| <b>Max travelling speed</b> | km/h | 2.0                           |
| <b>Tracks removable</b>     |      |                               |

| General Features            |    |      |
|-----------------------------|----|------|
| <b>Tailswing</b>            | mm | 5750 |
| <b>Max transport width</b>  | mm | 3500 |
| <b>Max transport height</b> | mm | 3560 |

| Boom                |    |             |
|---------------------|----|-------------|
| <b>Tubular boom</b> | mm | 1520 x 1520 |

| Weights   |   |     |
|---|---|-----|
| <b>Base machine (w/o sides count.)</b>                    | t | 71  |
| <b>In working conditions</b>                              | t | 130 |
| <b>Counterweight</b>                                      | t | 30  |
| <b>The shown weights may vary in different outfitings</b> |   |     |

# SC-120

## LATTICE BOOM CRAWLER CRANE

Winch 300 kN Crane SM120 (without Jib)

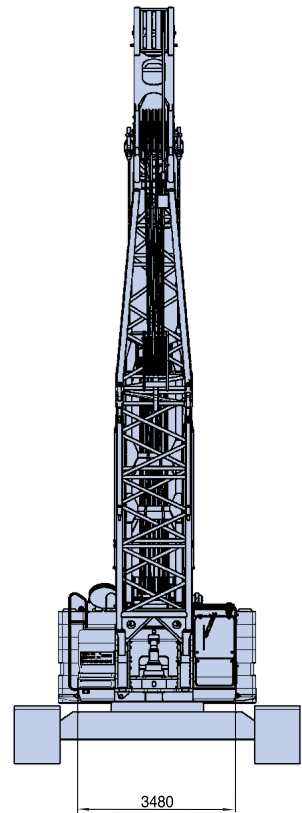
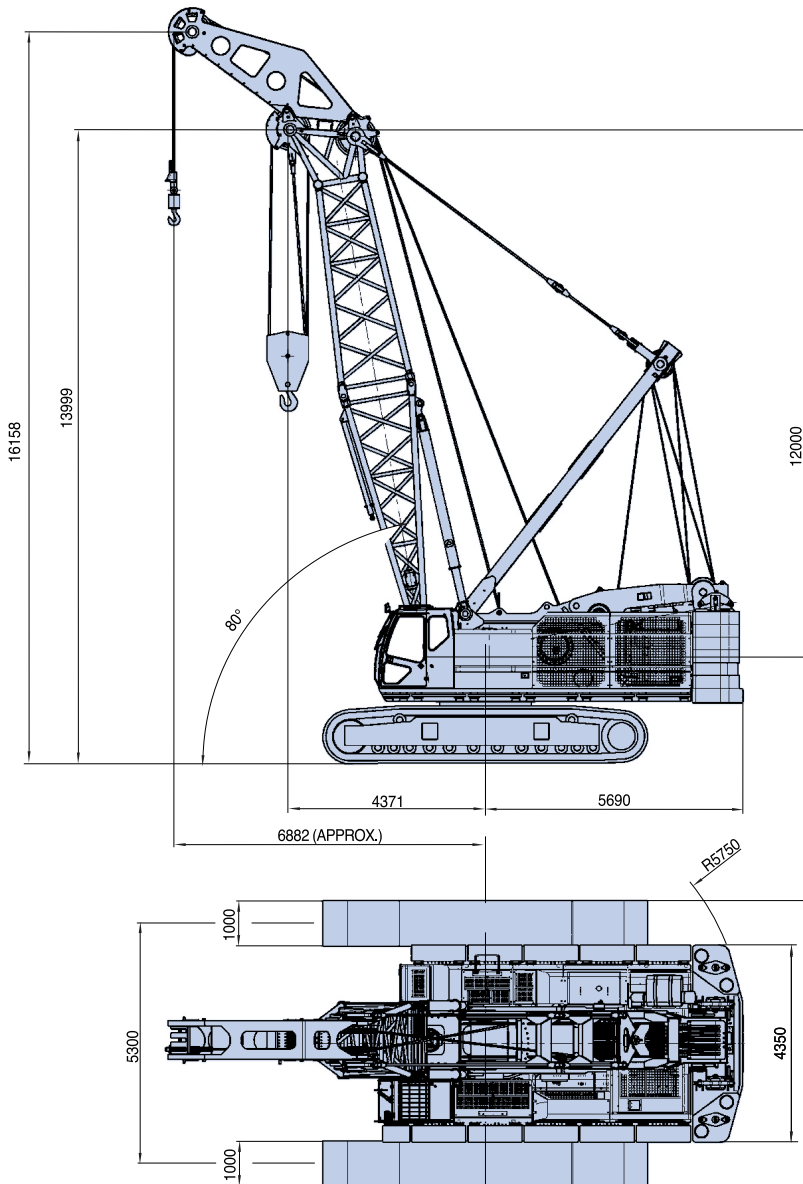
| Boom Length (m) |                 |        |        |       |       |
|-----------------|-----------------|--------|--------|-------|-------|
| Boom            | 12m             | 15m    | 18m    | 21m   | 24m   |
| Radius (m)      | Capacity (t)    |        |        |       |       |
| 3.7             | 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  | —     | 72.44 |
| 6.0             | 82.55           | 81.58  | 81.42  | 81.02 | 72.44 |
| 6.5             | 75.00           | 74.13  | 73.97  | —     | —     |
| 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             | 50.20           | 50.51  | 50.35  | 50.15 | 48.72 |
| 9.5             | 46.37           | 46.83  | 46.83  | —     | 45.71 |
| 10.0            | 42.75           | 43.36  | 43.31  | 43.16 | 43.01 |
| 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  | —     | —     |
| 12.0            | 29.13           | 33.31  | 33.21  | 33.06 | 32.95 |
| 12.5            | 24.43           | 31.40  | 31.22  | —     | —     |
| 13.0            | 19.28           | 29.74  | 29.64  | 29.48 | 29.38 |
| 13.5            | —               | 28.14  | —      | —     | —     |
| 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            | —               | —      | 22.14  | 22.04 | 21.88 |
| 16.5            | —               | —      | —      | 20.98 | —     |
| 17.0            | —               | —      | 20.35  | 20.20 | 19.94 |
| 17.5            | —               | —      | —      | 19.36 | —     |
| 18.0            | —               | —      | 16.98  | 18.67 | 18.52 |
| 18.5            | —               | —      | 14.54  | 17.63 | —     |
| 19.0            | —               | —      | —      | 17.29 | 17.02 |
| 19.5            | —               | —      | —      | 16.45 | —     |
| 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            | —               | —      | —      | —     | 12.90 |
| 23.5            | —               | —      | —      | —     | —     |
| 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 Parts      | 8               | 8      | —      | 6     | 4     |
|                 | 12              | 15     | —      | 21    | 24    |
|                 | Boom Length (m) |        |        |       |       |

Winch 300 kN Crane SM120 (without Jib)

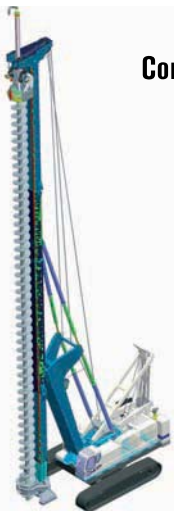
| Boom Length (m) |                 |       |       |       |       |
|-----------------|-----------------|-------|-------|-------|-------|
| Boom            | 27m             | 30m   | 33m   | 36m   | 39m   |
| Radius (m)      | Capacity (t)    |       |       |       |       |
| 6.0             | 66.24           | —     | —     | —     | —     |
| 6.5             | —               | 65.98 | 61.42 | —     | —     |
| 7.0             | 65.44           | 65.25 | 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             | —               | —     | —     | —     | —     |
| 10.0            | 42.60           | 42.55 | 42.48 | 37.70 | 37.70 |
| 10.5            | —               | —     | —     | —     | —     |
| 11.0            | 37.56           | 37.14 | 36.88 | 36.45 | 36.38 |
| 11.5            | —               | —     | —     | —     | —     |
| 12.0            | 32.84           | 32.70 | 32.52 | 32.44 | 32.28 |
| 12.5            | 31.02           | —     | —     | —     | —     |
| 13.0            | 29.29           | 29.13 | 28.96 | 28.79 | 28.56 |
| 13.5            | 27.89           | —     | —     | —     | —     |
| 14.0            | 26.54           | 26.17 | 25.94 | 25.87 | 25.78 |
| 14.5            | 25.11           | —     | —     | —     | —     |
| 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            | —               | —     | —     | —     | —     |
| 17.0            | 19.81           | 19.79 | 19.75 | 19.65 | 19.57 |
| 17.5            | —               | —     | —     | —     | —     |
| 18.0            | 18.36           | 18.21 | 18.18 | 18.12 | 18.00 |
| 18.5            | —               | —     | —     | —     | —     |
| 19.0            | 16.91           | 16.83 | 16.72 | 16.63 | 16.51 |
| 19.5            | —               | —     | —     | —     | —     |
| 20.0            | 15.77           | 15.66 | 15.55 | 15.47 | 15.29 |
| 20.5            | —               | —     | —     | —     | —     |
| 21.0            | 14.44           | 14.40 | 14.31 | 14.22 | 14.14 |
| 21.5            | —               | —     | —     | —     | —     |
| 22.0            | 13.70           | 13.57 | 13.48 | 13.39 | 13.18 |
| 22.5            | —               | —     | —     | —     | —     |
| 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            | 11.02           | 11.00 | 10.97 | —     | —     |
| 25.5            | —               | —     | —     | —     | —     |
| 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  | —     | —     | —     |
| 30.0            | —               | —     | 7.54  | 7.50  | 7.01  |
| 31.0            | —               | —     | 6.70  | —     | —     |
| 32.0            | —               | —     | —     | 6.45  | 6.10  |
| 33.0            | —               | —     | —     | 6.02  | —     |
| 34.0            | —               | —     | —     | 5.24  | 5.11  |
| 35.0            | —               | —     | —     | —     | —     |
| 36.0            | —               | —     | —     | —     | 4.47  |
| 37.0            | —               | —     | —     | —     | 3.73  |
| Line Parts      | 4               | 4     | 4     | 2     | 2     |
|                 | 27              | 30    | 33    | 36    | 39    |
|                 | Boom Length (m) |       |       |       |       |

# SC-120

## LATTICE BOOM CRAWLER CRANE



### Special Applications



**Continuous Flight Auger**



**Hydraulic Grab**

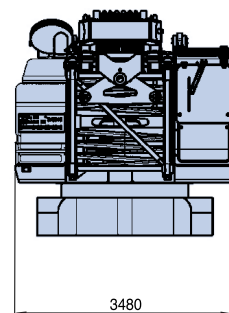
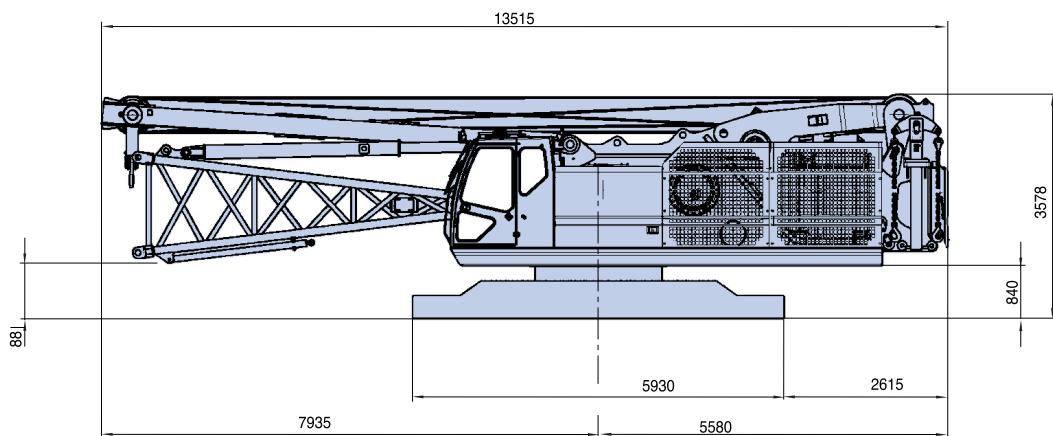
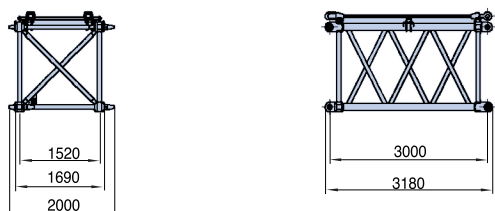
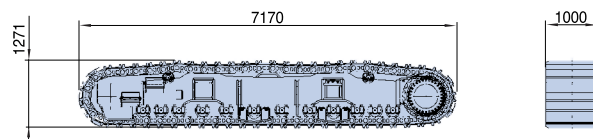
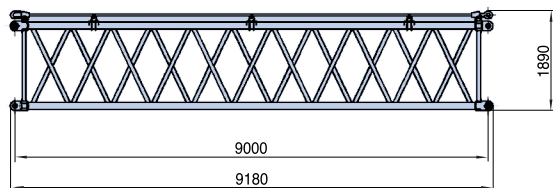
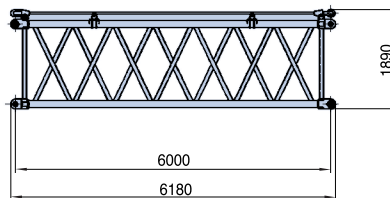
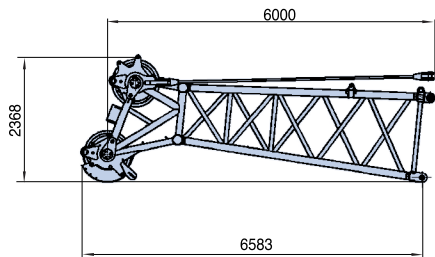
### Figures

- 1 -Self counterweight
- 2 -Self assembling track
- 3 -Transport configuration



# SC-120

## DIMENSIONS & WEIGHTS







SOILMEC distributes machinery and structures all over the world, supported by SOILMEC subsidiary companies and representative offices as:

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