870 M

C Series

426 HP

165,400 lbs.

***green line* Material Handling Machine**

SENNEBOGEN®

Leading Through Innovation

SENNEBOGEN green line

870 M

- **Working radius up to 68'11"**
- **No computers required to control hydraulic system**
- **Ultra fine hydraulic oil filtration system reduces maintenance cost and down time of machine**
- **Central lubrication system standard**
- **State-of-the-art load-sensing hydraulic system**
- **Powerful maintenance-friendly design**
- **Low noise emission**

Specifications

Engine

- 6 cylinder, water cooled, turbo Caterpillar C11 Acert diesel engine, with direct injection
- Output as per DIN/ISO: 426 HP at 1900 rpm

- Radiator fan is hydraulically driven and is reversible to clean out debris from radiator
- Equipped with engine intercooler
- Dry air filter with cyclone prefilter, safety element and pollution indicator

- Fuel tank capacity: 250 gallons
- Electrical system: 24 volt, 2 x 12 volt high performance batteries

Hydraulic System

- Computer free load-sensing hydraulic system with energy saving flow on demand control and pressure cut off function
- All working functions can be operated simultaneously and be individually controlled very precisely due to the independent and proportional split of the oil feed from the variable displacement pumps
- Hydraulic system designed for low pressure losses and heat generation by large diameter piping and hoses as well as large control valves
- Pilot operated joy sticks control all working and auxiliary functions

- Flow rate 1 x 250 gpm
- Working pressure 5075 psi
- Hydraulic tank capacity 254 gallons

- Special ultra fine filtration system (99.95% efficiency at 2 micron) designed to protect the hydraulic system, extending the life of all components and reducing the down time of the machine as well as the maintenance and repair costs

- Full flow return oil filters with extended change intervals

- Oversized hydraulic oil cooler, mounted completely separated from the water radiator, maintaining the oil temperature at an ideal level. The fan is hydraulically driven and thermostatically controlled

- Centralized pressure test ports, easily accessible from ground level, mounted and well protected on the left side of the machine, enable fast trouble shooting of all machine functions without any electronic support

Certification according to CE regulations

Subject to technical modification

Swing System

- Axial piston motors, spring-loaded hydraulically releasable multiple disk brake, planetary gears and pinion shaft
- Large dimensioned swing bearing
- Swing speed: 0 - 6,2 rpm, infinitely controllable
- Hydraulic motors with integrated hydraulic brake valves keep wear and tear of braking system to a minimum

Undercarriage

- Undercarriage welded as rigid, torsion-free box-type design
- 4-point outriggers with individual control
- Lockable storage compartment
- Tires: 8 x 16.00-25 solid rubber tires with intermediate protector ring

- All wheel drive via 2 variable hydraulic motors with directly mounted automatic brake valve

- 2-circuit servo brake system with additional safety brake as parking brake
- Special design, heavy duty, extra wide, 70 t axles
- Steering axle as hydraulically controllable oscillating axle
- Oscillating axle cylinders with safety check valves
- Travel speed: 6.8 mph

Uppercarriage

- Torsion-free upper frame with continuous bearing-plates for optimal power introduction, precision machined
- Steel bushings for the boom pivot
- Low noise emission

Working Equipment

- Box-type design with large dimensioned sealed bearings for long working life
- Grapple open-close and rotate circuits installed on the machine
- Working cylinders with hydraulic end position damping.
- Optimized design for high lifting capacities
- Equipped standard with safety check valves (load holding valves) for boom and stick cylinders
- The 870 M C Series material handling equipment has been specially designed for the increased demands of high-performance operation, increased productivity and output

Magnet System

- 33 kW Baldor generator, belt driven for easy operation and maintenance, combined with a Hubbell controller

Grapple

- 2.5 - 5.0 cu. yds. scrap grapple with rotation, 4 or 5 tine, open, semi-closed or closed, depending on the weight of the grapple and operating reach
- 2.0 - 7.0 cu. yds. clamshell grapple with rotation, depending on the material density, weight of the grapple and operating reach
- Log grapple available in different sizes and configurations depending on material being handled
- Contact Sennebogen for approval of the attachment before operating the machine
- Always refer to the lifting capacities on the chart before installing any attachment

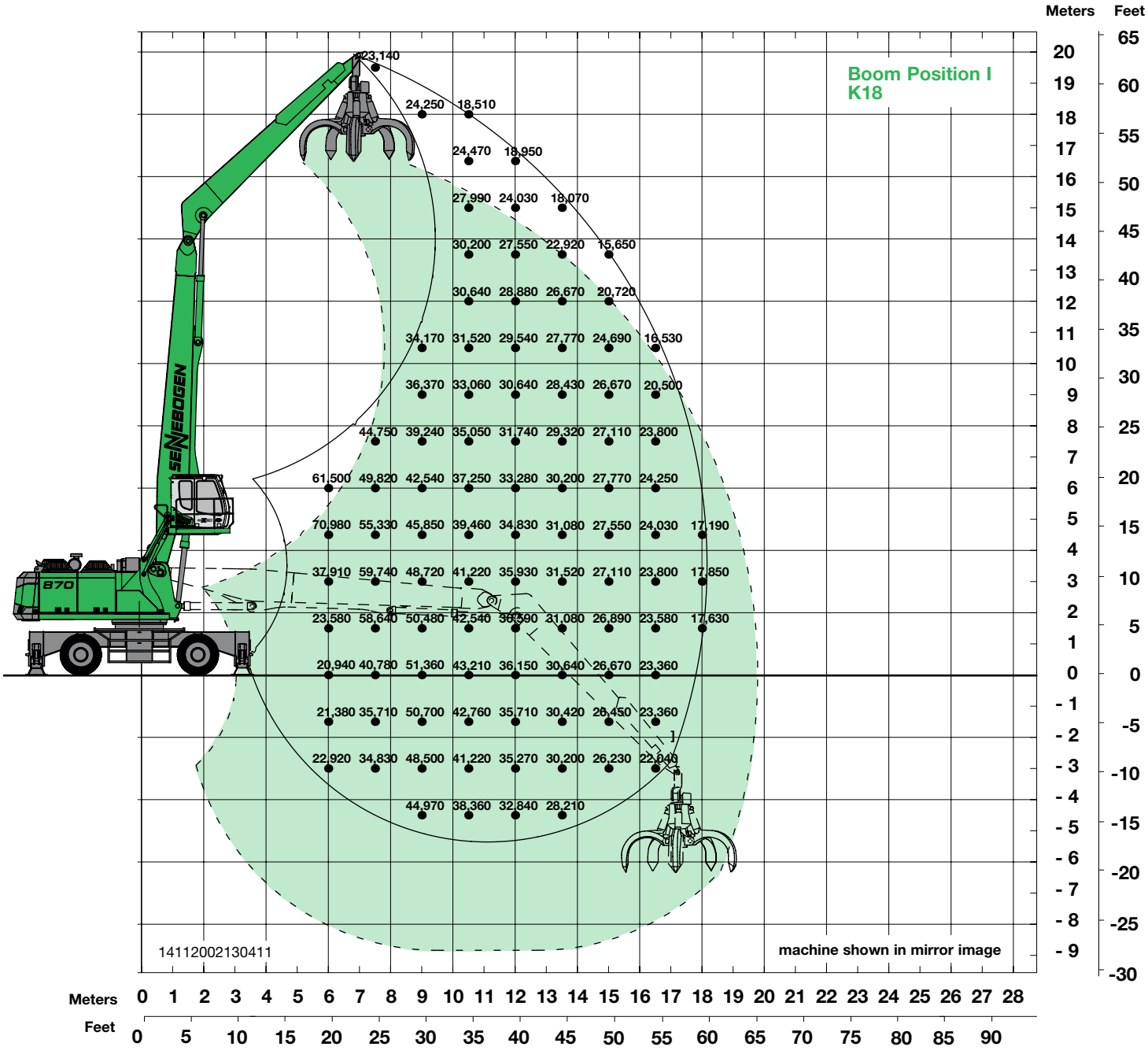
Operating Weight

- Basic 870 with 4 point outriggers, material handling boom 34'5", stick 26'3" and scrap grapple 4 cu. yds.

Approximate weight 165,400 lbs.
Given weights may vary with different equipment

Operator's Cab

- Comfortable maXCab operator's cab resiliently mounted
- Sound absorbing insulation
- Roomy compartment with excellent all-round visibility
- All weather design with tinted safety glass
- Door window as sliding window
- Windshield can be pushed up under cab roof
- Large skylight
- Windshield wiper/washer on both windshield and skylight
- Sun visor
- Large capacity storage bin
- Ergonomically designed, air suspension and heated seat with adjustable armrests and lumbar support
- Well laid out instrument panel with ergonomically shaped joy sticks
- Infinitely variable cab heating system, outside air and circulating air stages with particle filter
- Five adjustable air vents for optimum work environment
- New Sennebogen Diagnostic System (SDS) for monitoring all essential machine and engine functions with visual and audible warning system
- 12 and 24 volt power supply
- Air conditioning
- AM/FM radio with CD player



870 M

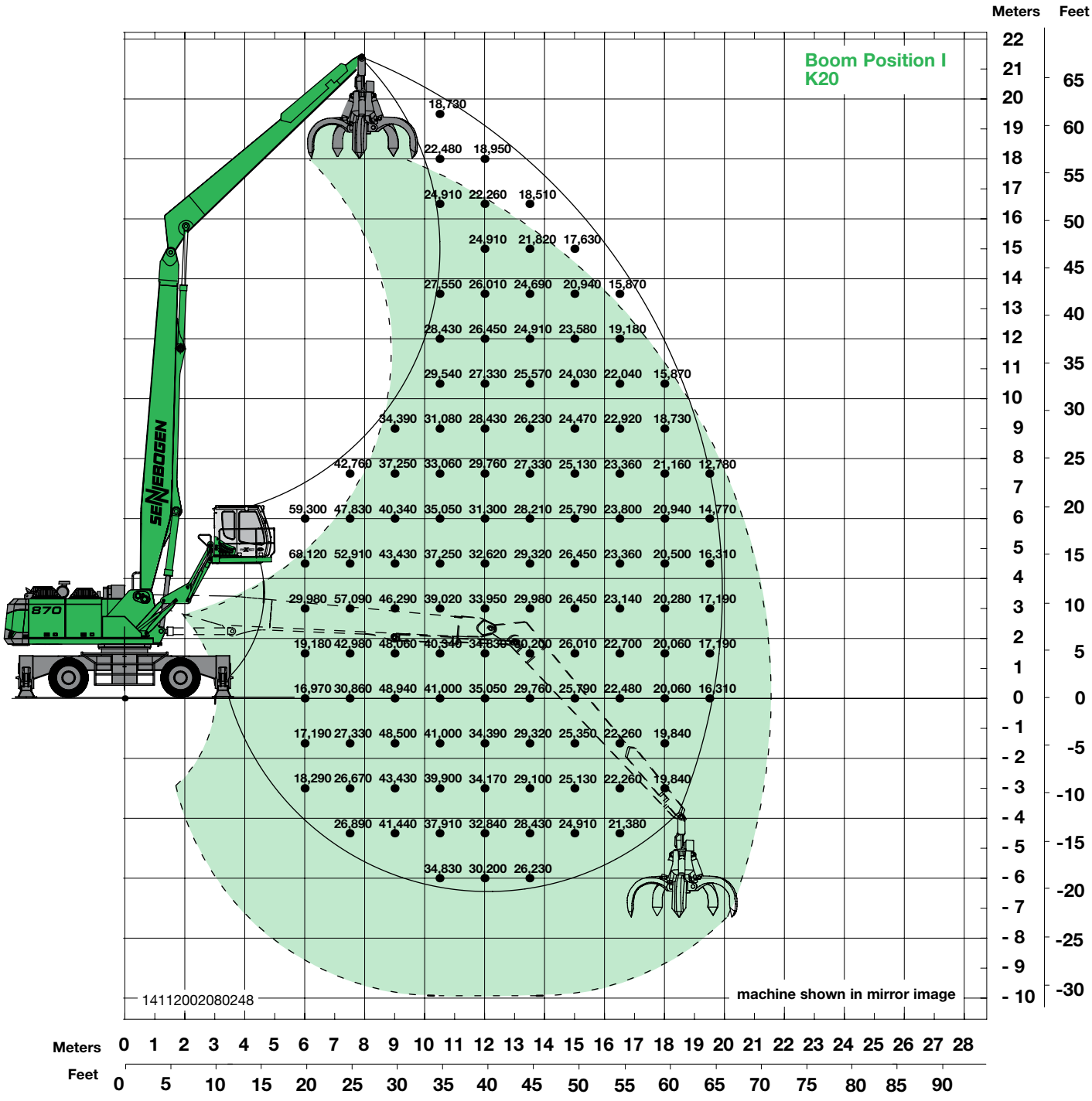
- **Undercarriage:** MP70, 4-point outriggers tires 8 x 16.00-25
- **Boom:** 34'5"
- **Stick:** 26'3"
- **Boom position:** I
- **Cab:** D 270 maXCab hydraulic elevating cab with operator's eye level 20'2"

Load chart

Notes:

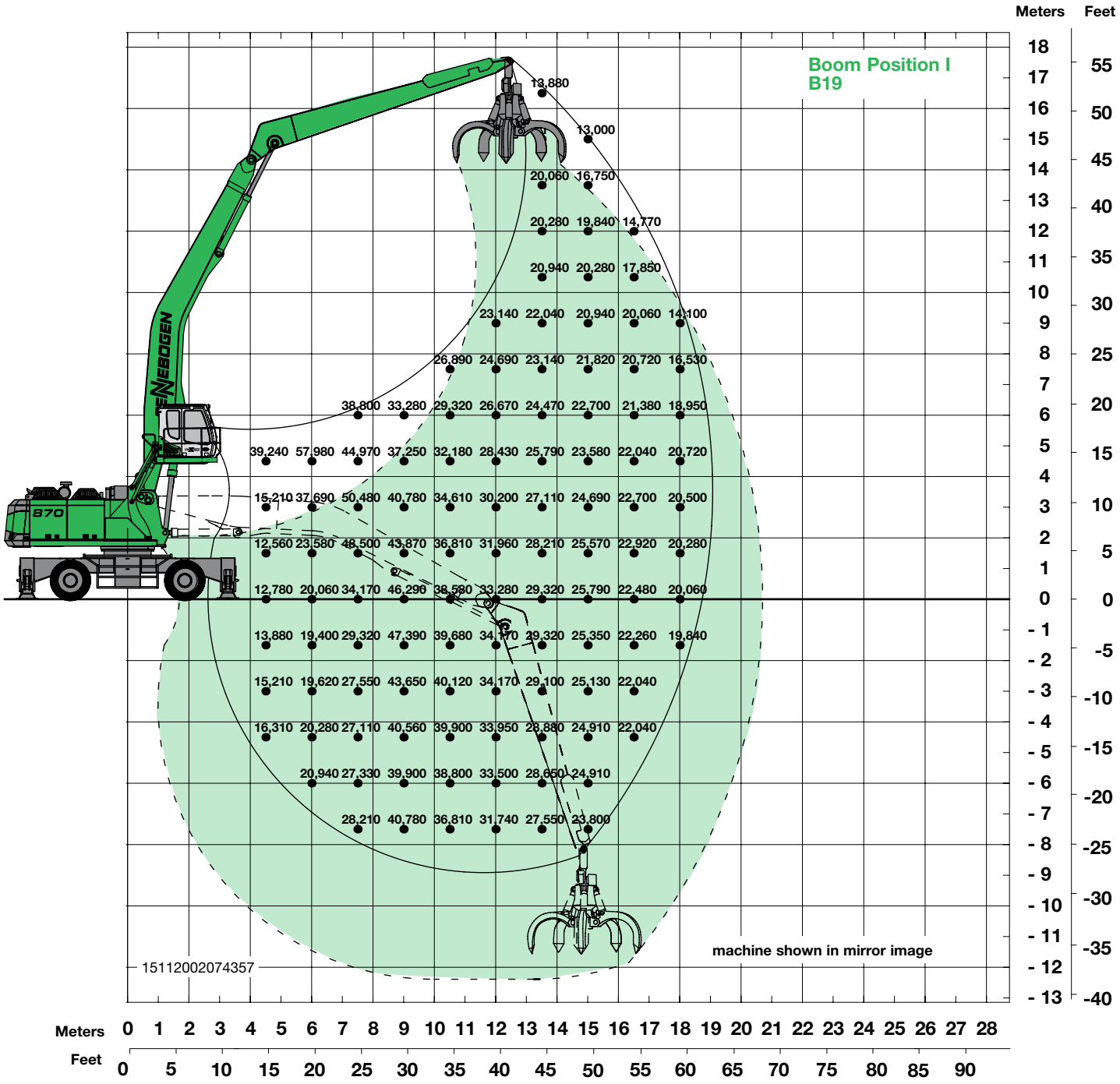
Lift capacities are stated in pounds. Indicated loads are based on ISO 10567 and do not exceed 75% of tipping and 87% of hydraulic capacity. Machine on firm, level supporting surface. Loads valid for 360° on outriggers supported.

Lifting capacities do not include working attachments such as scrap grapples, magnets, etc. Their weights must be deducted from the numbers indicated in the lifting charts.



870 M

- **Undercarriage:** MP70, 4-point outriggers
  tires 8 x 16.00-25
- **Boom:** 37'9"
- **Stick:** 29'6"
- **Boom position:** I
- **Cab:** D 300/260 maXCab hydraulic elevating and forward moving cab with operator's eye level 21'6"

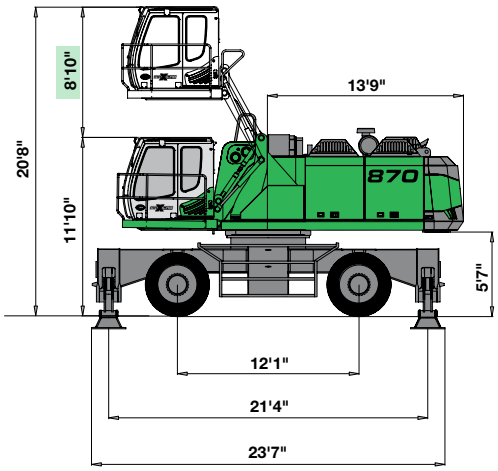


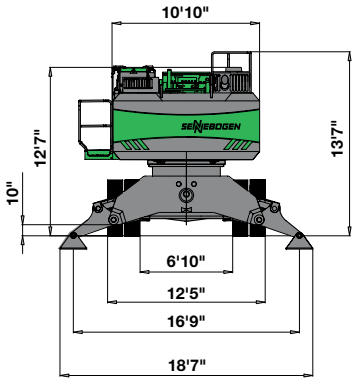
870 M

- **Undercarriage:** MP70, 4-point outriggers
  tires 8 x 16.00-25
- **Boom:** 37'9" banana type
- **Stick:** 29'6"
- **Boom position:** I
- **Cab:** D 270 maXCab hydraulic elevating cab
  with operator's eye level 20'2"

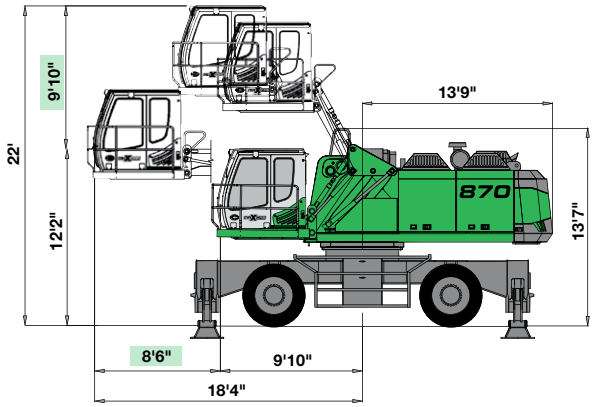
Machine Specifications

870 M with 8'10" hydraulic elevating Cab Type - maXCab D 270





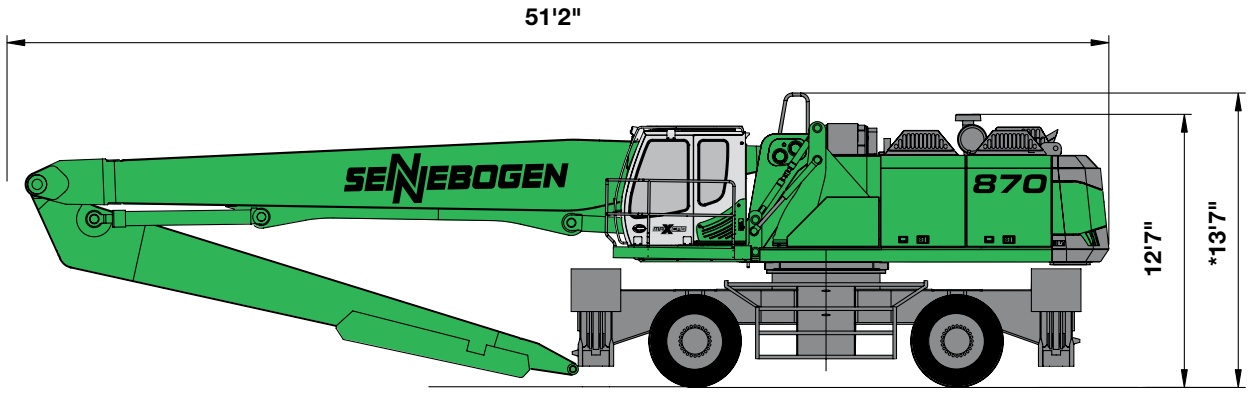
870 M with hydraulic elevating and forward moving Cab Type - maXCab D 300/260



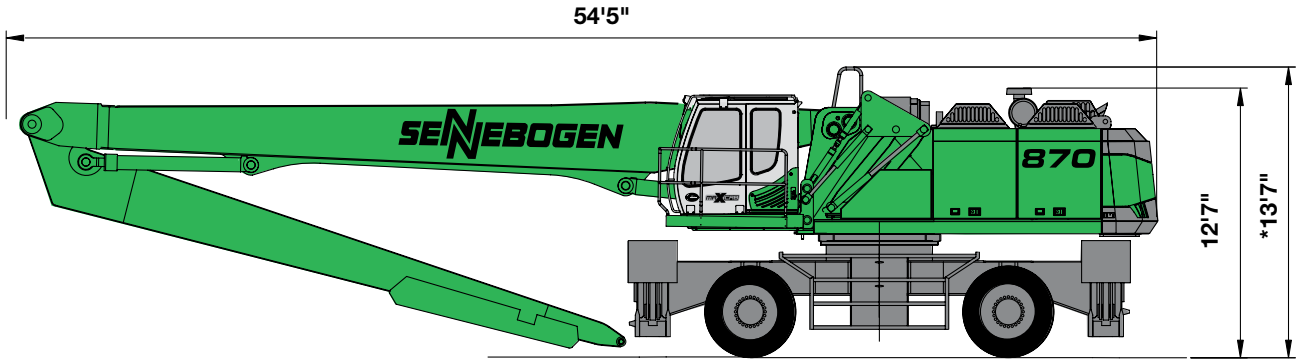
870 M with fixed cab height 4'11"

Depending upon tolerances, measurements may vary.

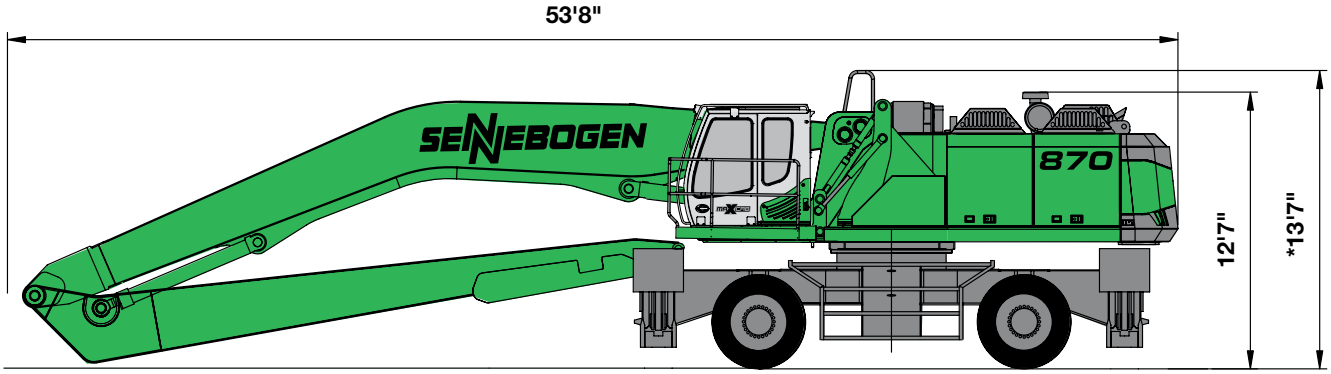
Shipping Specifications



870 M with Boom 34'5" and Stick 26'3"



870 M with Boom 37'9" and Stick 29'6"



870 M with Banana Boom 37'9" and special Stick 29'6"

*Removable for transport

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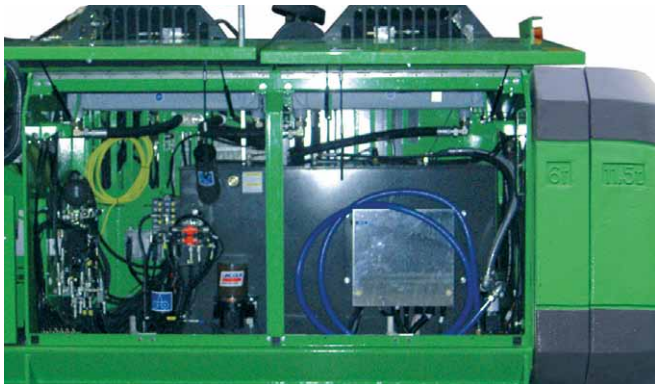
Comfortable maXCab operator's cab
- Sliding door and walkway for increased operator safety
- Advanced design, clear layout
- Low noise and vibration
- Excellent all-round visibility
- Fully adjustable air suspension seat, heated
- Heating and air conditioning with fresh / recirculation airflow and air filter

Serviceability
- The C Series machines offer a coarse particle separator at the front of engine cooler and air filter
- Ease of access for air filter and battery maintenance
- Hydraulic oil cooler separated from radiator, mounted on the left side towards the back of the machine, hydraulically driven and easy to clean
- The radiator fan is reversible and controlled from the cab, allowing the driver to clean out any debris from the radiator compartment

Large engine compartment
- Powerful water-cooled Caterpillar diesel engine longitudinally mounted for ease of access
- Daily service conveniently and easily performed from ground level
- Large access door with gas shocks provide easy access to engine compartment

Left side compartment holds key components
- Diesel tank
- Electrical box with all fuses and relays for easy access and centralized electrical maintenance
- Central lubrication system
- Centralized pressure test ports for trouble shooting of all working functions



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Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations shown may include optional equipment.

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