

PURPOSE-BUILT FROM THE GROUND UP



# 718E MATERIAL HANDLER



Cummins QSB 4.5 Tier 4F  
160 HP (119 kW)



Rubber Tired (M)  
47,180 lb (21,400 kg)

# SENEBOGEN®

# Purpose-Built – To Suit **Your Purpose**

By building simply, we can build flexibly.

The design and manufacture of every SENNEBOGEN forestry and arborist machine begins with you, our customer, and the challenges you face every day. Our singular focus leads us to the simplest, most efficient engineering solutions.

To meet our commitment to customer needs, the ideal solution is to engineer machines that adapt easily to their intended purpose:

- Industry-standard service parts
- Intelligent hydraulics in place of complex electronics
- Robust structures matched to heavy loads and stresses
- Interchangeable attachments
- Operational safety
- Fuel efficiency

When you purchase a SENNEBOGEN machine, you'll know it was purpose-built for you, **from the ground up.**



## SENNEBOGEN 718 E Custom-engineered tree care handler

The compact size of the 718 allows easy transport and efficient maneuvering in tight urban work sites.

| QUICK SPECS             | 718 M<br>RUBBER TIRED |
|-------------------------|-----------------------|
| Net power               | 160 HP (119 kW)       |
| Operating weight        | 47,180 lb (21,400 kg) |
| Max reach               | 43' (13 m)            |
| Max load (@ full reach) | 3,700 lb (1700 kg)    |

# Designed and Manufactured To Give You Total Confidence



## Adaptability

The high-reach boom & stick of the 718 can quickly switch between a full range of grapple saws and attachments to complete all tree care applications with one machine and one operator.

## PG6



## Safety First

SENNEBOGEN's safety-first engineering leads the industry with ground-to-cab guarding, 360° visibility and safe service access.

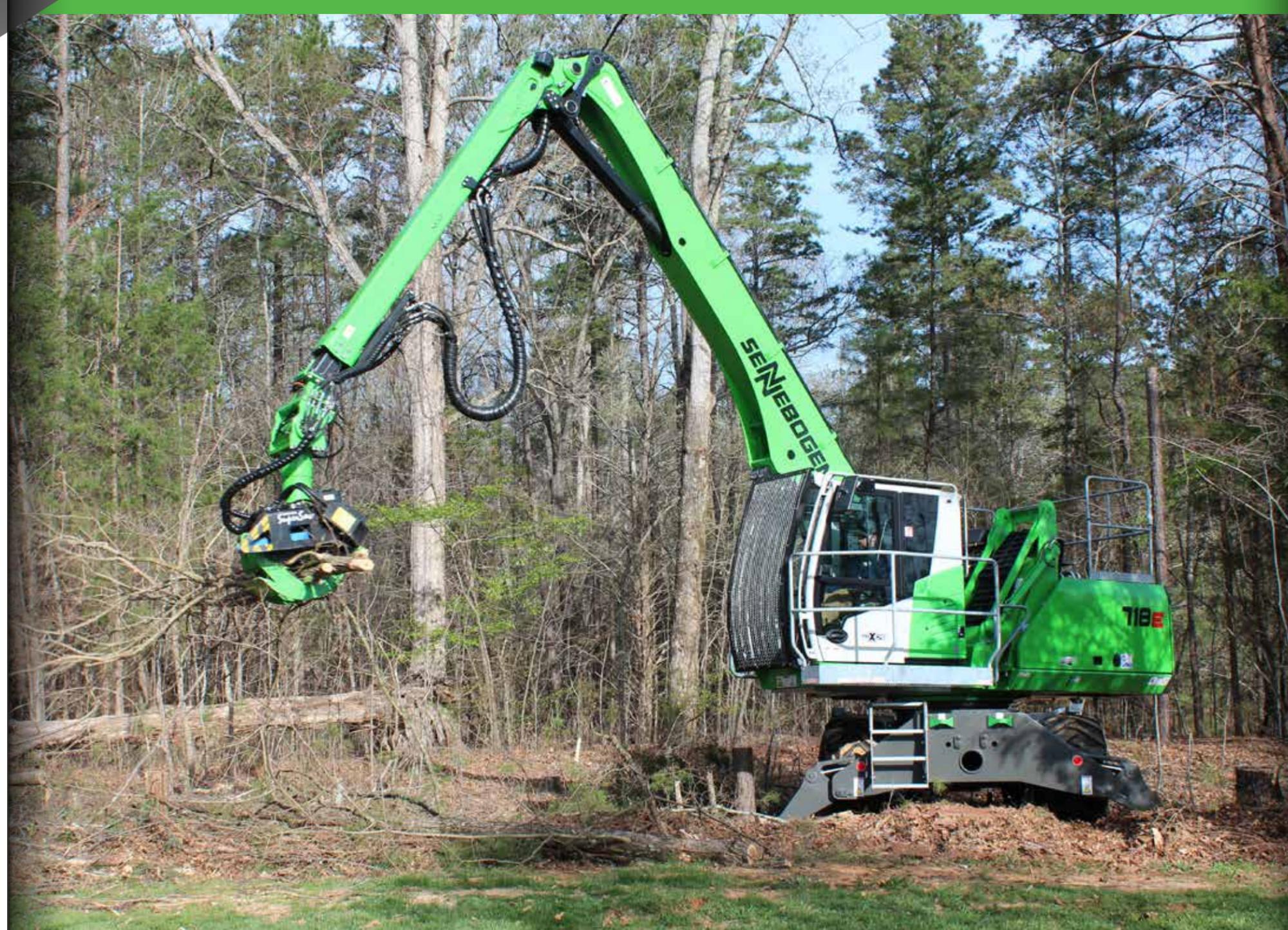
## PG8



## Operator Comfort

The industry standard Maxcab puts you in the driver's seat.

## PG9



## Efficiency & Economy

Designed for responsive, agile cutting and loading, the 718 achieves the most rigorous environmental goals while reducing operational costs for energy, downtime and service parts.

## PG10

## Serviceability

Virtually all daily maintenance on the 718 can be completed from ground level, with service components conveniently grouped and labeled for easy servicing.

## PG12

## Service & Support

America's largest inventory of material handler service components and the best-trained dealer network ensures ready access to the parts and skills to keep your 718 up and running.

## PG14

## 718 Specifications

Get all the details, specifications, dimensions, lifting chart and available options for the 718 unit.

## PG16



Telescoping stick adds precision and control with total horizontal reach up to 43 ft. (13 m) and a vertical reach up to 45 ft. (13.7 m)



For use in environmentally sensitive areas with biodegradable fluids

- Quiet operation**  
Consistently quiet operation due to decoupled engine mounts and soundproofing in the doors
- High-capacity cooling**  
Constant, reliable performance due to powerful fans and coolers
- OSHA-compliant**  
Continuous 3-point contact access to upper deck with handrails and guarding from ground to cab

Highest safety and ideal overview - elevating cab with 18 ft. (5.5 m) eye-level, with a 30° tiltable cab as a standard feature

Interchangeable saws, grapples for multiple tree care applications

Easy to transport without special permits

Additional hydraulics for high flow attachments with extra performance filtration

Stability built into undercarriage design; high ground clearance; low ground pressure



## UNDERCARRIAGE

- Stable footprint**  
The centered point of rotation for the swing bearing allows for 360° equal lift capacity when equipped with either outriggers or a combination of outriggers and a stabilizer blade
- Swing system**  
The large-diameter slewing ring provides excellent cycle times and swing torque for large loads

## CAB

- Elevating & tilting Maxcab**  
Various cab configurations maximize safety, loading accuracy and stability with hydraulic elevation up to a height of 20 ft. (6.1 m)
- Entry/exit**  
Maxcab sliding door with permanent catwalk for safe, easy entry and exit
- Joystick steering**  
Unobstructed view for operator with highly responsive control
- Superior visibility**  
No steering wheel, open front window and large side windows supplemented by 2-camera system as standard; also available with skylight
- SENCON**  
Advanced diagnostic system with user-friendly multi-colored interface, available in multiple languages

## HYDRAULIC SYSTEM

- Purpose-built design**  
Fully hydraulic controls require no special software to troubleshoot
- HydroClean filtration**  
3-micron oil filtering with 99.95% efficiency absorbs water, prevents acid generation
- Convenient servicing**  
All test ports are easily accessible in one place

## UPPER CHASSIS

- Upper carriage**  
Guarding surrounds upper deck to enhance safety for service technicians
- One-piece center frame**  
Optimizes distribution of stresses and machine balance from boom pivot to counterweight
- Reversible fan**  
Closed circuit drive with axial displacement pump allows fast change between normal and reverse
- OSHA-compliant**  
Continuous 3-point contact access to upper deck with handrails and guarding from ground to cab
- Longitudinal engine mount**  
Allows improved balance, strength, service access and cooling efficiency
- Automatic lubrication**  
Extend component life with no waste, no spill hazards

## BOOM/STICK

- Limit switches**  
Limit switches on the boom and stick cylinders prevent high pressure peaks to provide a cushion for rod movement and prevent attachments from colliding with the cab
- Boom pivot**  
Purpose-designed boom mounting point on the chassis for enhanced balance and lifting capacity

## SAFETY

- Safety rails**  
Full guarding on upper decks provide safety for technicians on North Americans models
- Sliding door**  
The door slides open for safe ease of entry and exit from the cab
- Fuses and relays**  
All fuses and relays are clearly labeled and easily accessible in a centrally located terminal box

# The Tree Care Specialist

- Landscape conservation, gardening and landscaping companies
- Urban forestry and tree care specialists
- Arboriculture
- Land clearing
- Municipalities
- Storm cleanup
- Roadside clearing maintenance
- Woodlot maintenance
- Golf course development

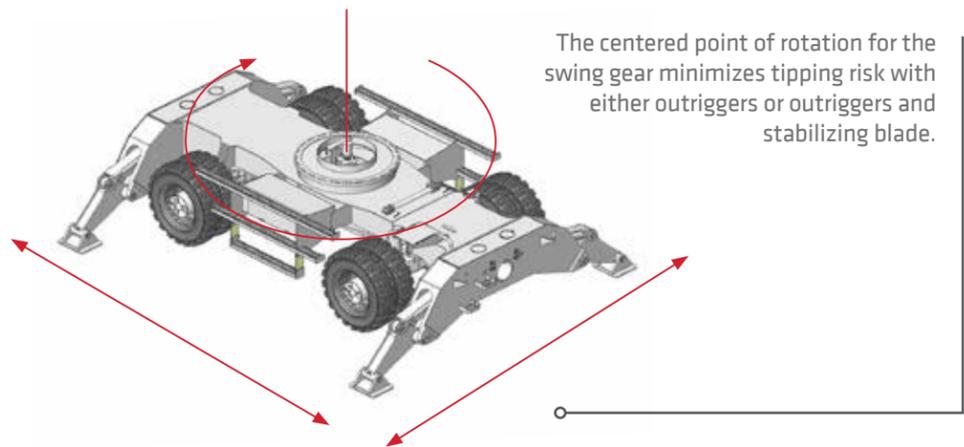


# Health & Safety: The First Step To Productivity

The SENNEBOGEN 718 E brings a new standard of safety to urban forestry, arboriculture, storm clean-up, and woodlot maintenance. The 718's 43 ft. (13 m) boom and simple, intuitive controls extend the arborist's reach to perform a full range of cutting, pruning and handling tasks while working from the safety and comfort of the enclosed cab.

## SENNEBOGEN is renowned as the industry leader in preventing downtime, and in protecting people.

SENNEBOGEN works closely with the operators and technicians who know our equipment best, and we listen to their ideas to make our machines the safest on any jobsite.



The centered point of rotation for the swing gear minimizes tipping risk with either outriggers or outriggers and stabilizing blade.

All daily service is completed at ground level with easy access to all maintenance points.

Accessible safety switches including emergency shut-off, battery disconnect and travel alarm.



Safe access to the upper deck is achieved with a permanent 3-point contact ladder with railings.

Handrails around the upper deck and anti-slip walking surfaces provide a safe working environment for service and maintenance crews.

Interchangeable attachments provide a complete toolkit for every specialized need.



The fully enclosed, elevated Maxcab provides protection for operators plus a wide-angle view of the work zone and the complete job site.



Dual cameras with views to the rear and to the right side are standard equipment.



Various optional guarding packages available to meet industry safety requirements.

## SENNEBOGEN's Maxcab puts you in the driver's seat for jobsite safety.

The Maxcab's sliding door provides the safest entry and exit in the industry.

Intuitive joystick controls connect the operator seamlessly to the industry's most responsive hydraulic system for precise, easy handling.

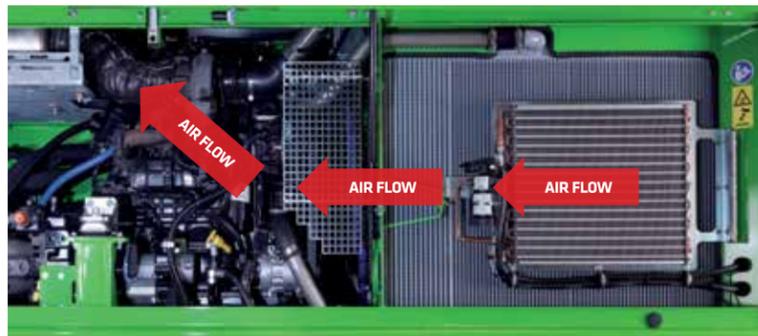
Ergonomic comfort and climate control features keep operators alert, adapting to individual preferences to fight fatigue through long shifts.

# Good For The Environment. Easy On The Budget.

SENNEBOGEN 718 E Series material handlers lead a new generation of machines that are both cost-saving and environmentally-friendly.

Creating a truly “green” machine takes more than a new energy-saving device. Our “Green Efficiency” solution is built on layers of smart engineering and system innovations aimed at doing more with less. The 718 E Series material handlers reduce your costs and environmental footprint with multiple SENNEBOGEN initiatives.

Eco-mode engine control automatically reduces engine speed to 1800 rpm.



Longitudinally mounted engines provide natural, flow-through cooling, while adding structural strength to the upper carriage from boom pin point to counterweight.

| Operating ECO mode            | Automatic Idle            |                          | Stop                   |
|-------------------------------|---------------------------|--------------------------|------------------------|
|                               |                           |                          |                        |
| 1800 ECO<br>min <sup>-1</sup> | 1400<br>min <sup>-1</sup> | 800<br>min <sup>-1</sup> | 0<br>min <sup>-1</sup> |
| 0 s                           | 5 s                       | 8 s                      | 5 min                  |



The large reversing fan provides up to 45% more of the cooling surface than comparable machines.



## 3 WAYS TO SAVE ON DIESEL

The 718 E Series includes an automatic idling mode that reduces engine speed to 40% of working speed. The automatic stop function switches the engine off completely if no power is required in a specified time. With the new ECO mode switch turned on, the 718 operates normally but engine speed is reduced from 2200 rpm down to 1800 rpm.



# Uptime By Design

To find out how to make SENNEBOGEN machines easier to maintain than any other material handler, we ask the experts...

...we talk to the technicians who actually service our equipment.

Our own support team, our instructors, our dealers and customers are all in constant contact to troubleshoot problems and find permanent solutions. Even our senior management and the Sennebogen family take a hands-on approach to product improvement, meeting customer mechanics and operators in their own shops and yards.

Their innovative ideas help us to deliver machines that spend more time on the job, and less time in the shop.



SENNEBOGEN Uptime Kits, matched to specific service tasks and machines. Hundred of assorted parts, connectors, fittings, electrical components are easy to locate and access.

In the shop or in the field, these fully stocked kits bring together all the parts and material required for a specific service need, conveniently sorted and organized in one place.



## SENtrack

SENtrack telematics allow detailed monitoring of the 718's location, operating status and performance metrics from the shop or on the road.



Solid steel top-opening compartment doors on the sides and top of the upper deck maintain a secure fit, even after repeated opening for service access.



## SENCON

The advanced SENCON diagnostic and reporting system presents a multi-colored, user-friendly interface, now available in multiple languages.

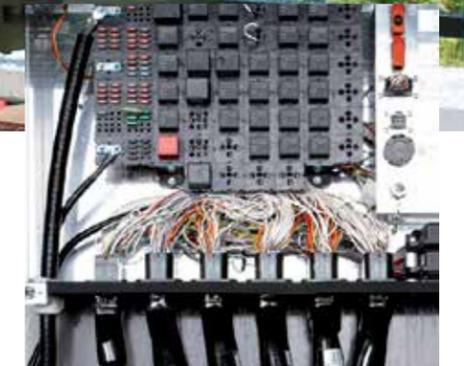


Natural airflow through the engine compartment, uninterrupted from front to back, plus a large reversing cooling fan, lets your 718 start reliably and keep on running through any extremes of heat, cold or dusty conditions.

Test ports and service points are conveniently arranged together and within easy reach from ground level.



With hydraulic controls instead of electronics, the 718 requires no special software or "black box" components to troubleshoot your machine.



All the fuses and relays are grouped together in a centrally located box for easy access.

# Our Commitment To Your Business

SENNEBOGEN's investment in service support is unmatched in the industry, providing the capabilities and resources to build success for our customers.

- Our headquarters in Stanley, NC is a 100,000 sq. ft. (9,300 m<sup>2</sup>) multi-purpose facility dedicated to supporting SENNEBOGEN material handlers throughout the Americas.
- Our large parts warehouse maintains inventories of service parts and replacement components for all of our fielded machines, from O-rings to engines and complete boom assemblies.
- Our coast-to-coast network of factory-trained distributors and technicians sets the industry standard for outstanding field service.
- SENNEBOGEN application specialists provide customers and dealer sales staff with expert insight into the unique challenges.
- Our in-house engineering services respond quickly to customer needs for unique solutions.



Modular components used across multiple products allow SENNEBOGEN to deliver purpose-built machines competitively. Shared systems also streamline aftersale parts inventories for customers and their local SENNEBOGEN distributors.

## Training Center of Excellence

The dedicated Training Center in our North American head office complex provides primary and advanced courses. Offered free of charge for our dealers and their customers, the Training Center has working units, demonstration modules and is staffed with professional trainers each with many years of in-field experience and hands-on knowledge.

Visit us online at [www.sennebogen-na.com/training](http://www.sennebogen-na.com/training)

## Purpose-built for America's Best-Trained Technicians

The main demonstration bay allows hands-on access to machines while the meeting rooms and classrooms are all equipped with the technology required for today's interactive instruction methods.

Truly a Center for developing excellence in service and support for dealer and customer personnel, the SENNEBOGEN Training Center has earned accolades for the quality of the instructors, facilities and materials.



SENNEBOGEN's 100,000 sq. ft. (9,300 m<sup>2</sup>) North American headquarters in Stanley, North Carolina **1** include a massive parts warehouse **2** and a dedicated training center **3**

Our factories in Europe support the full range of capabilities for SENNEBOGEN to machine, fabricate and assemble all major components to our own standards, in-house. Pictured here is our main plant in Wackersdorf, Germany. **4**

## Purpose-Built Facilities

With our four manufacturing facilities in Europe, every step of production at SENNEBOGEN is planned to serve individual customer needs. Every critical component and process is completed in-house to assure quality, efficiency and flexibility on the production line.

- We fabricate our own booms and sticks
- Our line-up is based on a full line of interchangeable platforms
- Our plants are designed to customize each machine, built-to-order
- Your machine is fully inspected and live-tested before it leaves the factory

## 718 M “E” Technical Specifications

### ENGINE

|                |   |
|----------------|---|
| model          | Cummins QSB 4.5   |
| type           | inline 4 cylinder, direct injection                             |
| emission       | EPA Tier 4 Final  |
| net power      | 160 HP (119 kW) @ 2200 rpm                                      |
| displacement   | 4.5 L (272 cu.in.)  |
| bore           | 4.21 in (107 mm)  |
| stroke         | 4.88 in (124 mm)  |
| aspiration     | turbo charged, charge air cooled                                |
| fuel tank      | 87 gal (330 L)  |
| DEF tank       | 7.9 gal (30 L)  |
| air filtration | direct flow filtration system dual stage filter with pre-filter |
| control        | integrated ECM automatic idle - stop eco mode                   |

### SWING SYSTEM

|                 |   |
|-----------------|---|
| swing speed     | 0 - 8 rpm   |
| swing hydraulic | open loop   |
| drive           | planetary gearbox with axial piston motor and integrated brake valves |
| swing bearing   | oversized slewing ring; hydraulic brake valves                        |
| parking brake   | spring-loaded, hydraulically vented safety multidisc brake            |

### COOLING

|                   |   |
|-------------------|---|
| cooling type      | cool-on-demand, suction-type fan system   |
| hydraulic / water | hydraulic fan drive, axial piston pump, reversible fan, thermostatically controlled |
| charge air        | direct fan drive  |

### UPPER CARRIAGE

|        |   |
|--------|---|
| design | torsion-free upper frame with continuous bearing plates from boom linkage to counterweight, lockable storage compartment, sound attenuation for reduced in-cab noise emission |
|--------|---|

### TRAVEL / UNDERCARRIAGE

|              |   |
|--------------|---|
| type         | rubber tired  |
| drive system | all-wheel drive, variable displacement motor with 2-stage power shift transmission                                  |
| travel speed | 1st 0-3.4 mph (0-5.5 km/h)<br>2nd 0-12.4 mph (0-20 km/h)  |
| steering     | joystick steering   |
| design       | robust undercarriage with 4-point outrigger or combination of stabilizer blade and outrigger, independent actuation |
| front axle   | fixed   |
| rear axle    | disc brake  |
| tires        | pneumatic 600/50x22.5   |

### HYDRAULIC SYSTEM

|                    |  |
|--------------------|--|
| system type        | load-sensing/LUDV hydraulic system for work and travel functions   |
| pump type          | swashplate-type, variable-displacement piston pump. load pressure is independent from flow distribution. provides independent control of work functions. |
| pump control       | zero-stroke control with on-demand flow control. provides load limit sensing control.  |
| operating pressure | 5076 psi (350 bar)   |
| filtration system  | high performance filtration with long intervals between changes.   |
| hydraulic tank     | 68 gals (260 l)  |
| control system     | proportional, precision hydraulic actuation of work movements using 2 hydraulic servo joysticks. Additional function with switches and pedals.           |

### WEIGHT

|                  |                       |
|------------------|-----------------------|
| operating weight | 47,180 lb (21,400 kg) |
|------------------|-----------------------|

## 718 M “E” Standard / Optional Equipment

### ENGINE

|                                      |   |
|--------------------------------------|---|
| Water separator in fuel line         | ● |
| Automatic idle / engine stop control | ● |
| Eco mode                             | ● |
| Air Filter Pre-cleaner               | ● |
| Visual fuel tank check               | ● |
| Heated water separator               | ● |
| Engine block pre-heater              | ○ |

### ELECTRIC

|   |   |
|---|---|
| Battery disconnect switch                       | ● |
| Centralized fuse box                            | ● |
| Battery jump start connection from ground level | ● |

### HYDRAULIC

|  |   |
|--|---|
| Pilot pressure controlled variable displacement pump | ● |
| Thermostatically controlled cooling system           | ● |
| Centralized hydraulic test ports                     | ● |
| Protection covers for pilot pressure control valves  | ● |
| 3 micron dual filtration system (HydroClean)         | ● |
| Load sensing, flow on demand hydraulic system        | ● |
| Optimized hydraulic pump regulation (GLR)            | ● |
| Visual hydraulic tank check from ground level        | ● |
| Attachments open, close & rotation hydraulics        | ● |
| Hydraulic tank shut off valve                        | ● |
| Dedicated hydraulic pump for high flow attachments   | ● |
| Biodegradable hydraulic oil                          | ● |
| Electrical hydraulic tank pre-heater                 | ○ |
| Additional hydraulic circuits                        | ○ |

### UPPER CARRIAGE

|   |   |
|---|---|
| Rearview & right side view camera system      | ● |
| Automatic lubrication system                  | ● |
| Anti-slip mats on walking area                | ● |
| Lockable side doors                           | ● |
| Handrails on top of upper carriage            | ● |
| Mirror left side                              | ● |
| Turning signal lights in upper carriage frame | ● |
| Removable panels                              | ● |
| Additional light package                      | ○ |

### OPERATOR'S CAB (Maxcab)

|  |   |
|--|---|
| Hydraulic elevating cab system E270                                  | ● |
| 30° tilting cab system   | ● |
| Multi adjustable, air suspended operator's seat 3" (76 mm) seat belt | ● |
| Seat heater  | ● |
| Automatic climate control (heater / AC)                              | ● |
| Air outlets w / defroster  | ● |
| Storage area for lunch box   | ● |
| Large cup holder   | ● |
| Fire extinguisher  | ● |
| Tinted windows with safety glass                                     | ● |
| Door window as sliding window  | ● |
| AM / FM Radio with Bluetooth & speakers                              | ● |
| Removable floor mat  | ● |
| SenCon diagnostic system   | ● |
| Multicolor Monitor   | ● |
| Halogen light package on cab roof                                    | ● |
| Sliding door   | ● |
| Catwalk w / handrail   | ● |
| 12 V / 24 V power outlet   | ● |
| Windshield wiper and washers   | ● |
| Emergency exit hammer  | ● |
| Safety lever   | ● |
| Sun shades   | ● |
| Interior lighting  | ● |
| Rain cover front window  | ● |
| Outside mirror   | ● |
| Optical and acoustic warning system                                  | ● |
| Positive filtered ventilation (pressurized cab)                      | ● |
| Safety check valves for elevating cab cylinder                       | ● |
| Foot rest  | ● |
| Windshield protection guard  | ○ |
| Skylight protection guard  | ○ |
| Skylight FOPS guard  | ○ |
| Bullet proof windshield  | ○ |
| Bullet proof skylight  | ○ |
| Polycarbonate side windows   | ○ |
| Additional light package   | ○ |
| Additional cameras   | ○ |

### ATTACHMENTS

|  |   |
|--|---|
| Tilt Rotator (Tilting +/- 90°   Rotating +/- 140°) | ● |
| Heavy duty grapple saw .47 yd³ (.36 m³)            | ● |
| Mulcher  | ○ |
| Mower  | ○ |

### SWING SYSTEM

|                              |   |
|------------------------------|---|
| Automatic lubrication system | ● |
|------------------------------|---|

### UNDERCARRIAGE

|  |   |
|--|---|
| Robust designed material handling under carriage               | ● |
| Heavy duty axles   | ● |
| Front axle automatic oscillating axle unlock (travel position) | ● |
| Dual stage power shift transmission                            | ● |
| Drive train protection guards                                  | ● |
| Travel alarm   | ● |
| Centralized lubrication points                                 | ● |
| 2 circuit servo brake system                                   | ● |
| 4-point outriggers   | ● |
| Integrated safety check valves in outrigger cylinders          | ● |
| Individual outrigger control                                   | ● |
| Towing hitch package   | ○ |
| Supporting blade and 2 point outriggers                        | ○ |

### WORKING EQUIPMENT

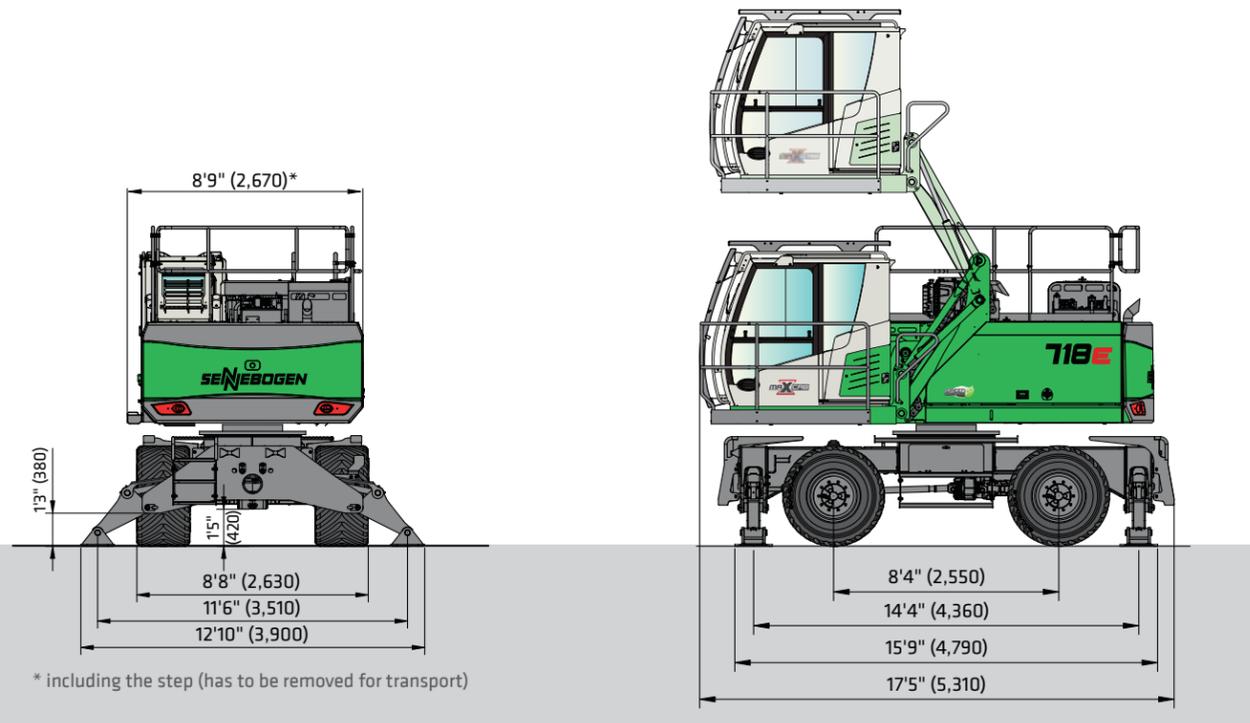
|   |   |
|---|---|
| Attachment hydraulic line connections                     | ● |
| Safety check valves for boom cylinders                    | ● |
| Cylinder end position dumping                             | ● |
| Bronze bushings connected to automatic lubrication system | ● |
| Stick limiters  | ● |
| Boom limiters   | ○ |
| LED light package boom                                    | ○ |
| LED light package stick                                   | ○ |

Subject to technical modification.

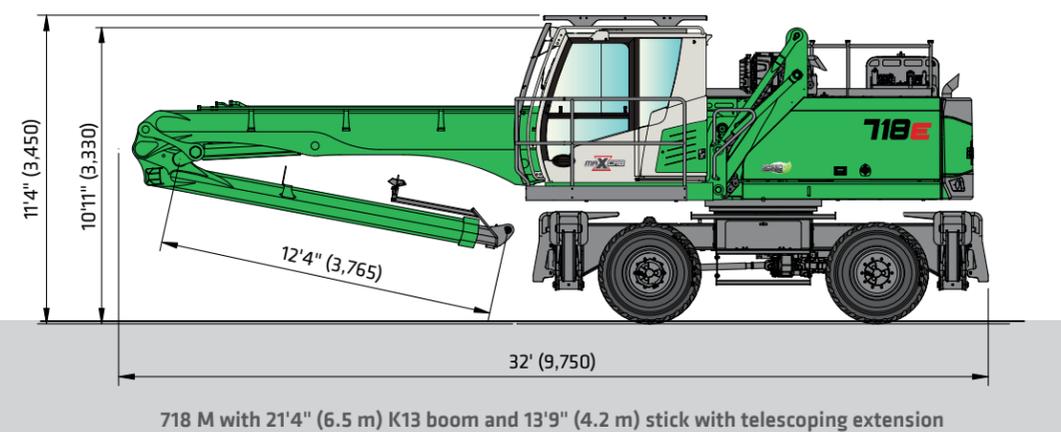
Standard Equipment ● Optional Equipment ○

Subject to technical modification.

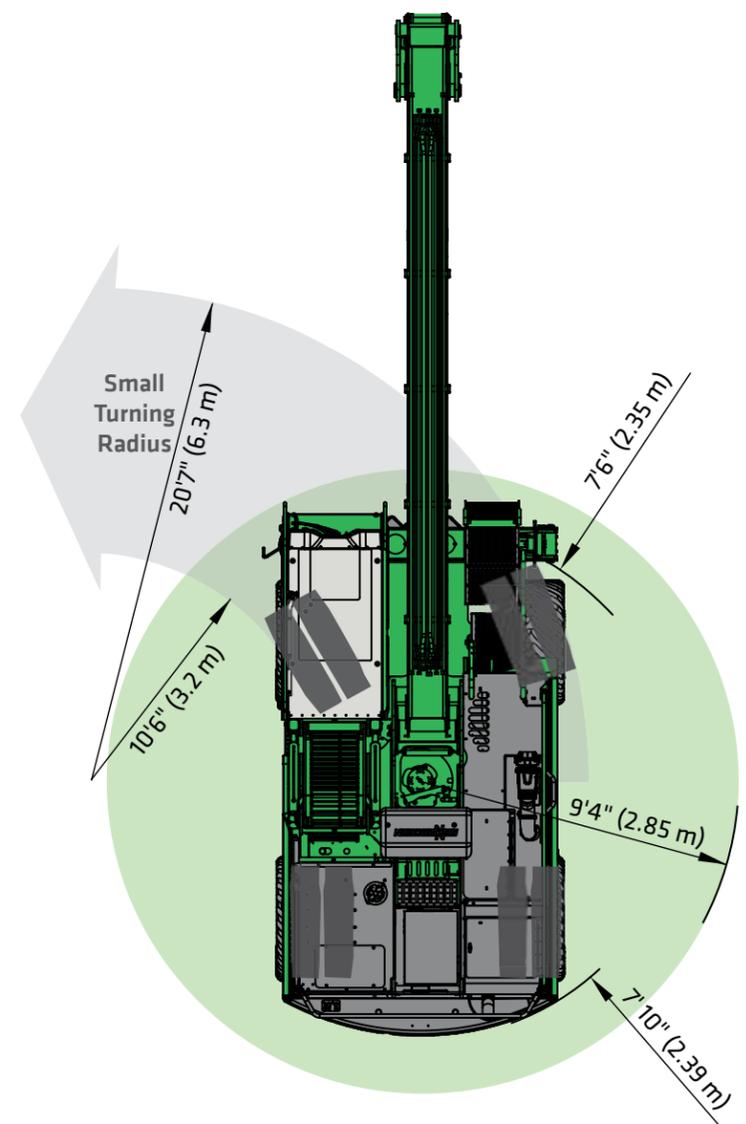
### 718 M "E" Dimensions with 4-point outrigger



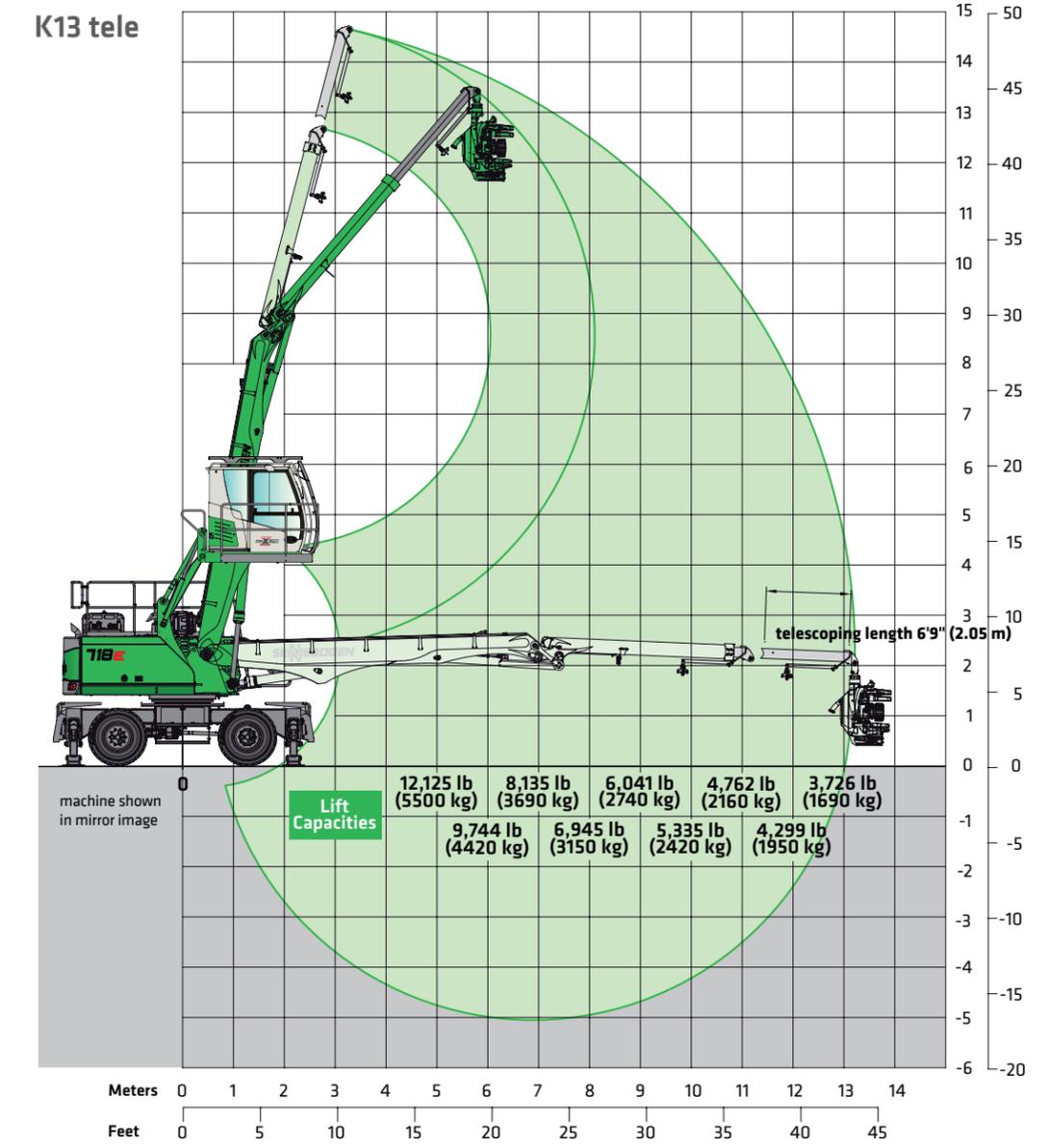
### 718 M "E" Transport Dimensions



### 718 M "E" Slewing Radius / Turning Radius



### 718 M "E" Lift Capacity & Reach



All load ratings are in pounds and values in ( ) are stated in kg. The values apply at the end of the stick, without attachment, on solid, level ground. The specified values are 75% of the static tipping load or 87% of the hydraulic lifting force in accordance with ISO 10567. In accordance with EU standard EN 474/5, material handlers used for hoisting must be equipped with pipe fracture safety devices on the hoist cylinders and an overload warning device. Load ratings apply to a machine with outrigger and for 360° slewing.

# OUR COMPLETE LINE OF **PURPOSE-BUILT MATERIAL HANDLERS**



**SENNEBOGEN LLC**  
1957 Sennebogen Trail  
Stanley, NC 28164 USA

Phone +1 (704) 347-4910  
Fax +1 (704) 347-8894  
Email [sales@sennebogenllc.com](mailto:sales@sennebogenllc.com)