



Leading Through Innovation

Engine
Model Cummins QSL12, Tier 4 Final
Net Power 364 HP (268 kW)

Operating Weight
M/rubber tired 206,132 lb (93,500 kg)

Reach
standard 59'1" (18 m)
optional 75'5" (23 m)

Magnet System
rating 25 kW

GREEN HYBRID
860E_M

SENNEBOGEN

Technical Specifications 860 M “E” *GREEN HYBRID*

ENGINE	
model	Cummins QSL12, Tier 4 Final
type	direct injection, turbocharged, fuel preheating
emission	EPA Tier 4 Final
net power	364 HP (268 kW) @ 1,500 rpm
injection	high pressure common-rail
fuel tank	264 gal (1,000 L)
air filtration	direct flow filtration system dual stage filter with pre-filter
control	integrated ECM, eco mode, auto-stop
ELECTRICAL	
alternator	24 V
starter	24 V
battery	12 V, 180 Ah
HYDRAULIC SYSTEM	
system type	load sensing hydraulic pilot-controlled work functions load limit sensing control
pump type	variable-displacement axial-piston pump
max. pump flow	250 gpm (850 l / m)
max. pressure	4,930 psi (340 bar)
hydraulic tank	238 gal (900 L)
hydraulic system	304 gal (1,150 L)
filtration	high-performance filtration 3 micron (HydroClean)
COOLING	
cooling type	side-by-side coolers cool-on-demand
hydraulic / water	hydraulic fan drive axial piston pump, reversible fan thermostatically controlled, closed loop system
charge air	direct fan drive
WEIGHT	
operating weight	206,132 lb (93,500 kg)

SWING SYSTEM	
swing speed	0 - 5.5 rpm
swing hydraulic	closed loop
drive	2-axial piston motors compact planetary gear with slant-axis hydraulic motor integrated brake valves
swing brake	multidisc brake, spring loaded
swing bearing	external teeth, sealed ball bearing
TRAVEL / UNDERCARRIAGE	
type	rubber tired MP71E
drive system	all-wheel drive variable displacement hydraulic motor, direct mounted automatic brake valve 2-gear power shift transmission
tires	8 x 14.00-24 (solid rubber)
steering	joystick steering
front axle	hydraulic locking pendulum steering axle
rear axle	fixed
service brake	disc brake
parking brake	spring loaded, multidisc brake
safety	travel alarm
REFILL CAPACITIES	
fuel tank	264 gal (1,000 L)
engine cooling system	15.85 gal (60 L)
engine oil w / filter	7.24 gal (27.4 L)
hydraulic tank	237.75 gal (900 L)
hydraulic system	180 gal (680 L)
swing box	1.45 gal (5.5 L)
axle hub (front axle)	1.24 gal (4.7 L) each
axle hub (rear axle)	1.24 gal (4.7 L) each
axle differential (front axle)	11.76 gal (44.5 L)
axle differential (rear axle)	10.65 gal (40.3 L)
axle drop box (front axle)	0.4 gal (1.5 L)
axle drop box (rear axle)	0.4 gal (1.5 L)
parking brake	0.16 gal (0.6 L)
swing ring lubrication reservoir	0.26 gal (1.0 L)
central lubrication reservoir	8.8 lb (4 kg)
diesel exhaust fluid	26.4 gal (100 L)
MAGNET SYSTEM	
rating	25 kW
voltage (magnetized)	230 V
controller	Hubbell
generator	Baldor
drive	hydraulic

Subject to technical modification.

Standard / Optional Equipment 860 M “E” *GREEN HYBRID*

ENGINE	
Water separator in fuel line	●
Automatic idle / engine stop control	●
Eco mode	●
Visual fuel tank check	●
Engine block & water separator 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	●
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	●
Electrical hydraulic tank pre-heater	○
Biodegradable hydraulic oil	○
Hydraulic circuit for scrap shear	○
Hydraulic circuit for hammer, breaker	○
Hydraulic circuit for circuit slasher	○
Additional hydraulic circuits	○
Attachment return filtration filters (60 µm)	○
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 belly panels	●
Additional light package	○
Custom colors	○
Seawater paint coating	○
SWING SYSTEM	
360° protection cover, removable	●
Electrical driven swing gear pinion lubrication pump	●
OPERATOR'S CAB (Maxcab)	
Hydraulic elevating cab system E270	●
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	●
Door window as sliding window	●
AM / FM Radio with CD player & speakers	●
Removable floor mat	●
SenCon diagnostic system	●
Multicolor Monitor	●
Tilt out front window	●
Halogen light package on cab roof	○
Mechanical hour meter	●
Sliding door	●
Catwalk w / handrail	●
12 V / 24 V power outlet	●
Windshield wiper and washers	●

OPERATOR'S CAB (Maxcab)	
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	●
Maxcab industry	●
Windshield protection guard	○
Skylight protection guard	○
Skylight FOPS protection guard	○
Bullet proof windshield	●
Bullet proof skylight	●
Polycarbonate side windows	○
Additional light package	○
Fixed cab elevation	○
Hydraulic elevating up and out cab E300/260	○
Steering column instead of joystick steering	○
Steering column in combination with joystick steering	○
Additional cameras	○

UNDERCARRIAGE	
Robust designed material handling undercarriage	●
Heavy duty axles	●
Solid rubber tires 8 x 14.00-24	●
Front axle automatic oscillating w/axle unlock (travel position)	●
Drive train protection guards	●
Travel alarm	●
Centralized lubrication points	●
2 circuit servo brake system	●
4-point outriggers w/integrated safety check valves in outrigger cylinders	●
Tool and storage compartments, lockable	●
Individual outrigger control	●

WORKING EQUIPMENT	
Purpose built material handling boom	●
Purpose built material handling stick	●
Attachment hydraulic line connections with ball valves	●
Boom position 1	●
Safety check valves for stick cylinders	●
Safety check valves for boom cylinders	●
Cylinder end position dumping	●
Boom hoist limitation	●
Bronze bushings connected to automatic lubrication system	●
Stick & boom limiters	●
Halogen light package boom	○
Purpose built material handling stick with reversing linkage	○
Purpose built material handling boom for scrap shears	○
Boom position 2	○

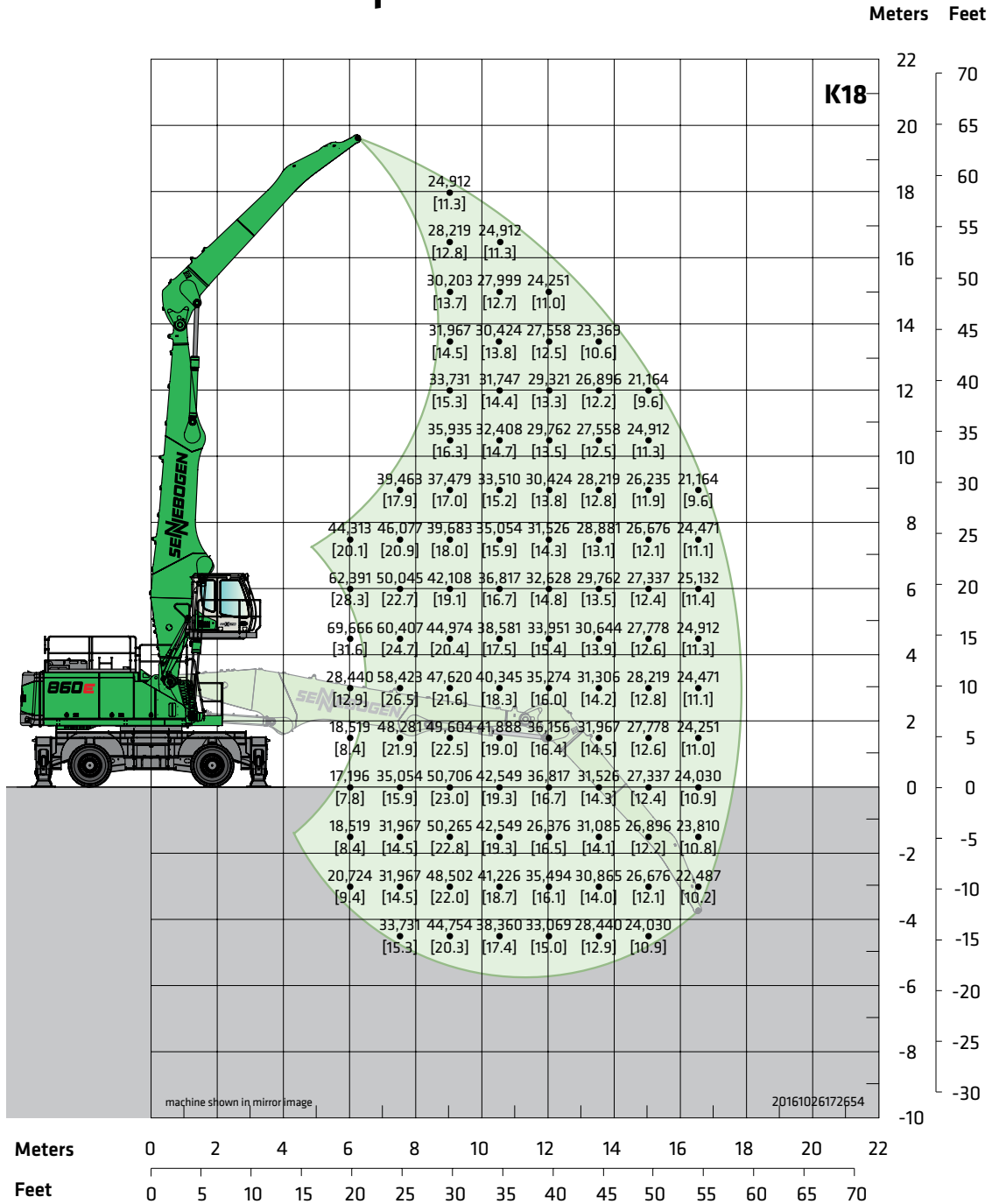
MAGNET SYSTEM	
Hydraulic driven generator	●
Magnet controller	●
Magnet suspension link	○

ATTACHMENTS	
Orange peel grapple	○
Mag grapple	○
Clamshell	○
Magnet	○
Scrap shear	○
Power attachment	○
Pipe handler	○

Subject to technical modification.

Standard Equipment ●
Optional Equipment ○

860 M "E" Lift Capacities *GREEN HYBRID*



Working Equipment K18

reach	59'1" (18.0 m)
boom	35'5" (10.8 m)
stick	25'7" (7.8 m)

Operator's Cab

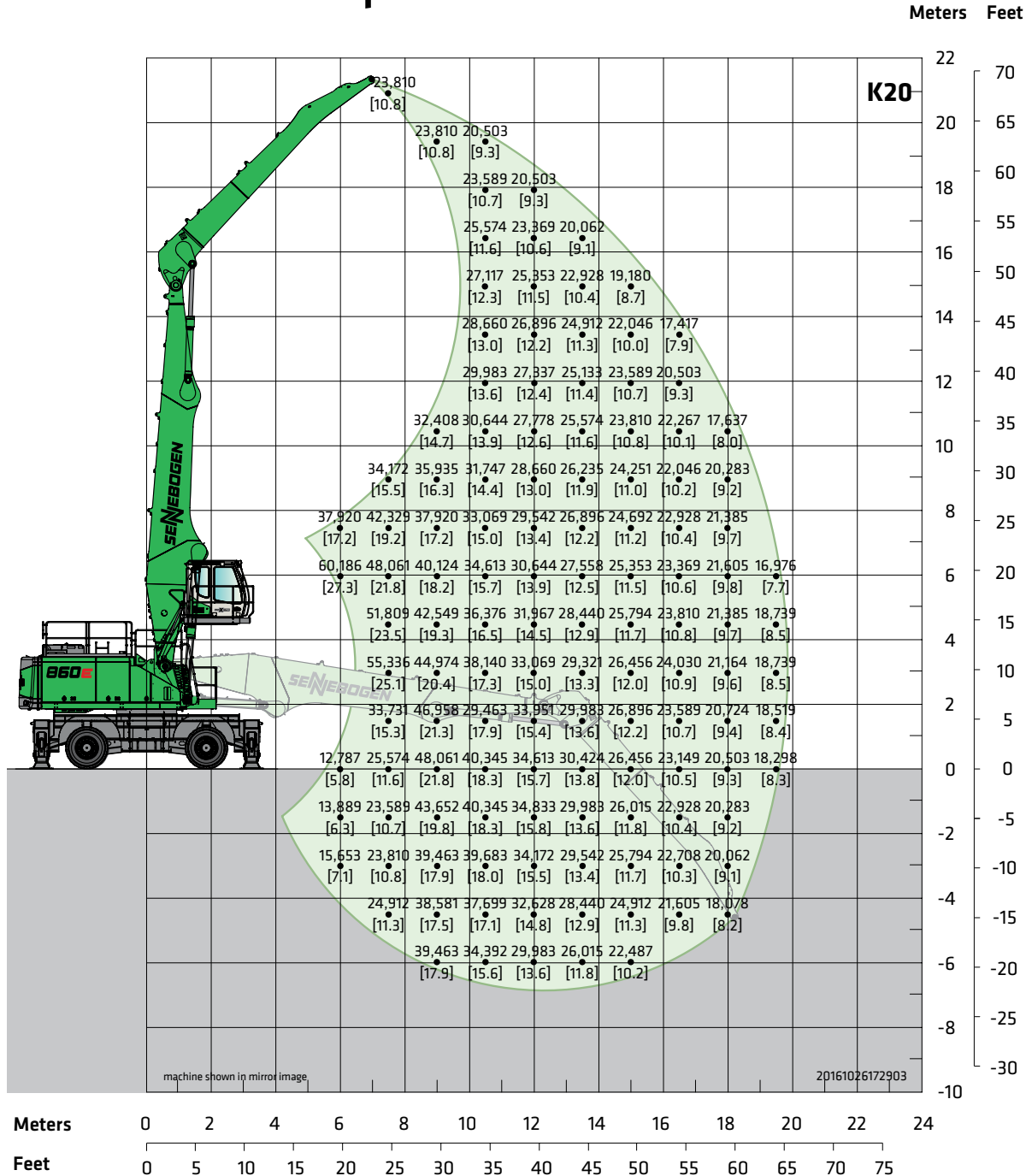
model	E270 Maxcab
	hydraulic elevating
eye level	approx. 19'9" (6.1 m)

Undercarriage

model	MP71 with
	4-point outriggers
tires	8 x 14.00-24
	solid rubber

Lift capacities are stated in pounds. Values in brackets [] are stated in metric tons. Indicated figures are based on ISO 10567 and do not exceed 75% or tipping and 87% of hydraulic capacity and machine standing on firm, level supporting surface. Loads are valid for 360° with machine support on outriggers. Lifting capacities do not include working equipment such as orange peel grapples, magnets, clamshells, etc. The load point is the center line of the attachment pivot mounting pin on the stick. Their weights must be deducted from the numbers indicated in the lifting charts. Please contact SENNEBOGEN or your local dealer for optimum attachment selection. The operator / user of the machine should be fully acquainted with the operator's & safety manual provided by Sennebogen. Capacities apply only to the machine as originally manufactured and equipped by SENNEBOGEN.

860 M "E" Lift Capacities *GREEN HYBRID*



reach	65'7" (20.0 m)
boom	38'8" (11.8 m)
stick	28'10" (8.8 m)

Operator's Cab

model	E270 Maxcab
hydraulic elevating	
eye level	approx. 19'9" (6.1 m)

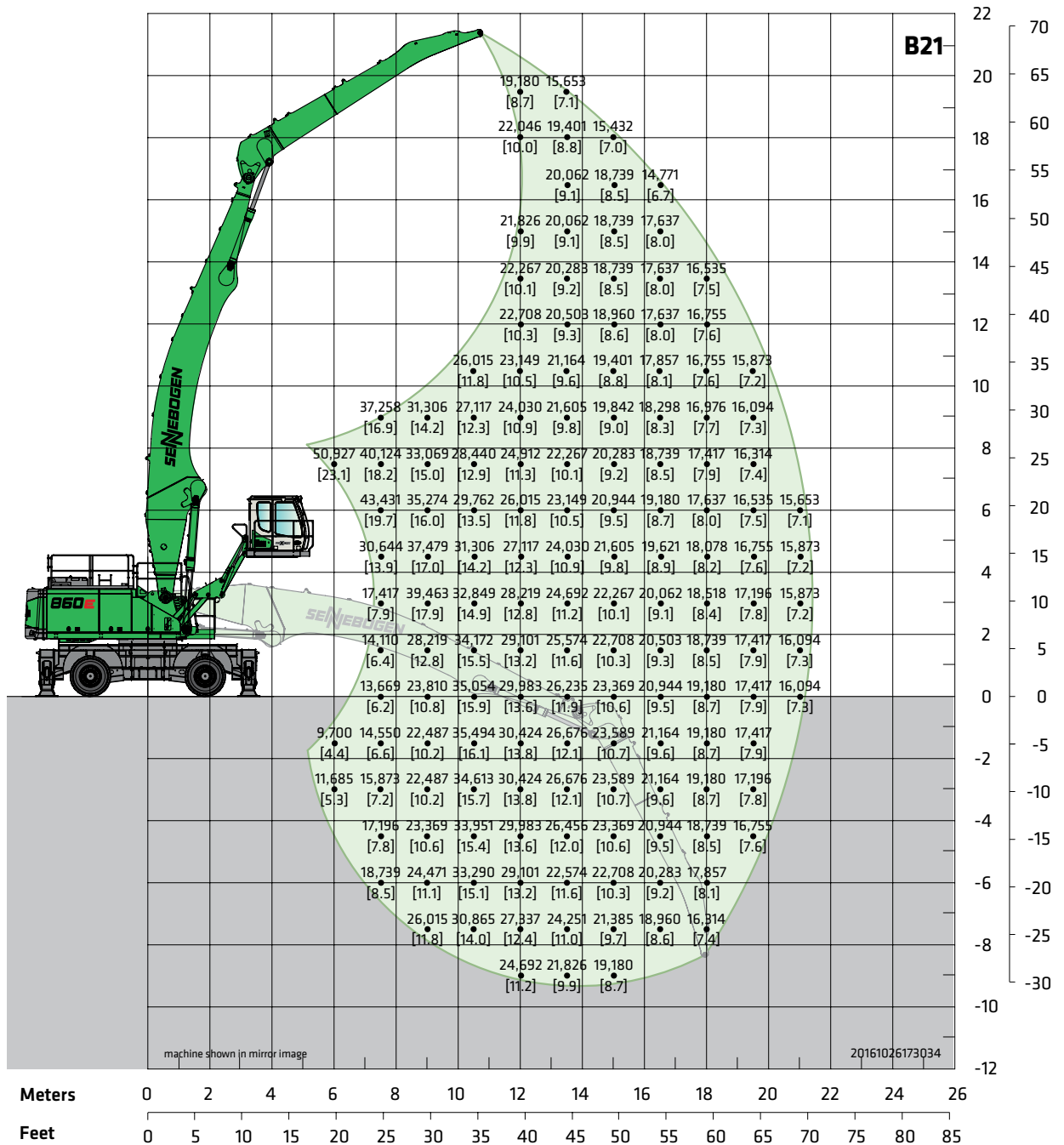
Undercarriage

model	MP71 with
	4-point outriggers
tires	8 x 14.00-24
	solid rubber

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860 M "E" Lift Capacities *GREEN HYBRID*

Meters Feet



Working Equipment B21

reach	68'10" (21.0 m)
boom	45'3" (13.8 m)
stick	28'10" (8.8 m)

Operator's Cab

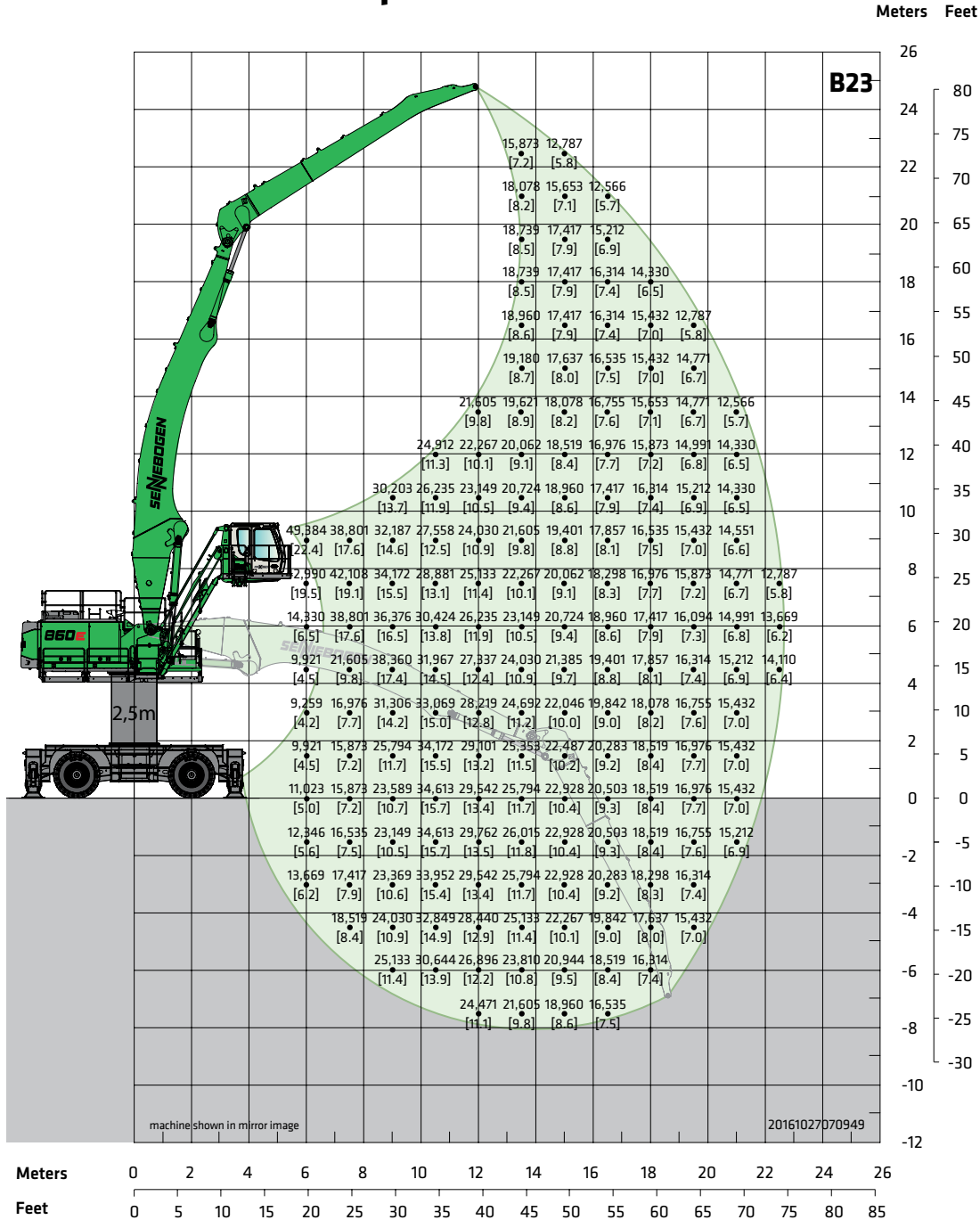
model	Maxcab E300/260, hydraulic elevating and tilt feature
eye level	approx. 20'11" (6.1 m)

Undercarriage

model	MP71 with 4-point outriggers
tires	8 x 14.00-24 solid rubber

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860 M "E" Lift Capacities *GREEN HYBRID*



Working Equipment B23

reach	75'5" (23.0 m)
boom	45'3" (13.8 m)
stick	33'5" (10.2 m)
pylon	8'2" (2.5 m)

Operator's Cab

model	Maxcab Skylift 700
hydraulic elevating	
eye level	approx. 20'11" (6.1 m)

Undercarriage

model	MP80 with
	4-point outriggers
tires	8 x 14.00-24
	solid rubber

Lift capacities are stated in pounds. Values in brackets [] are stated in metric tons. Indicated figures are based on ISO 10567 and do not exceed 75% or tipping and 87% of hydraulic capacity and machine standing on firm, level supporting surface. Loads are valid for 360° with machine support on outriggers. Lifting capacities do not include working equipment such as orange peel grapples, magnets, clamshells, etc. The load point is the center line of the attachment pivot mounting pin on the stick. Their weights must be deducted from the numbers indicated in the lifting charts. Please contact SENNEBOGEN or your local dealer for optimum attachment selection. The operator / user of the machine should be fully acquainted with the operator's & safety manual provided by Sennebogen. Capacities apply only to the machine as originally manufactured and equipped by SENNEBOGEN.

GREEN HYBRID
860EM

PRELIMINARY

"Under our policy of continuous improvements we reserve the right to change specifications, materials and design without prior notice. The illustrations shown may include optional equipment. Always refer to the appropriate Operation and maintenance manual for specific product information. See your local SENNEBOGEN dealer for further information."

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**EXPERIENCE
THE GREEN
HYBRID SYSTEM**

**SCAN TO WATCH
AN ONLINE VIDEO
DEMONSTRATION**

SENNEBOGEN

SENNEBOGEN LLC
1957 Sennebogen Trail
Stanley, NC 28078, USA

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

860EM-0418

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 www.sennebogen-na.com