



870 Demolition

SENEBOGEN



298 kW (Stage V)



268 kW (Stage IIIa)



114 - 117 t



33 m / 36 m

MAXCAB

870E

Long-front demolition material handler

Stage V

870E Advanced. The E-Series

What makes up the E-Series



1980: SR 26, selective demolition

- More than 65 years of experience in designing and constructing hydraulic material handling machines
- Uncompromisingly high performance in all areas: Focus on material handling
- Technology that can be mastered: High-quality components without over-engineering
- Long product service life and high value retention

Your top benefits

1

Green Efficiency

Save fuel - reduce operating costs
Work quietly - protect operator and environment



2

Top-level performance

Durable mechanical systems - stressed parts optimized
High speeds - high load capacities

3

Maximum usability

Maxcab comfort cab - work in comfort
SENCON - work program selection made easy



4

Maximum safety

Safe entry and exit - no-slip steps
State-of-the-art cameras - entire work area in view

5

Maintenance and service made easy

SENNEBOGEN control system - easy error diagnostics
Simple maintenance - clear labeling

6

Consultation and support in your area

3 production sites - 2 subsidiaries
150 sales partners - over 350 service stations





870E The E-Series. At a glance.



Four ways to save fuel

- Up to 20% savings: working in Eco Mode with reduced engine speed
- Idle automation reduces speed to 40% of operating speed
- Stop automation switches the engine off when not needed
- Optimized settings of engine and hydraulics reduces fuel consumption



Quiet operation 3

- Consistently quiet operation thanks to decoupled engine mounts and soundproofing in the doors
- Soundpower level according to 2000/14/EC up to 2 dB lower than required

High-capacity cooling 4

- Constant, reliable performance thanks to large-dimensioned and robust fans and coolers
- Water and oil coolers with top-notch efficiency thanks to axial-piston pump and motor control and ondemand thermostatic control
- Fan reversal for cleaning in series

**simple counter-
weight mounting
system**

1

30° tiltable cab

Maximum safety

- Maxcab cab with sliding door
- No-slip work surfaces
- Hand rails* 1
- 2 cameras to the right and rear
- Step grid with railing next to cab sliding door
 - Protective front and roof grating
 - Safe ascent to the upper carriage

Powerful hydraulic system 5

- Strong pumps with power reserves
- Top efficiency thanks to large-dimensioned hydraulic valves and lines
- Extra-long change intervals of 4,000 operating hours through initial fill-up with special oil with extended service life when using SENNEBOGEN HydroClean*

**3,5 m - 4,8 m
telescopic
crawler undercarriage**



The premium cab.

Panoramic view

Features

- optimum cab climate with automatic air conditioning system, partial tinted glass
- pleasant and equal temperature dispersion by means of 9 nozzles
- panoramic view
- comfort seat with air suspension
- very quiet through optimized noise insulation
- Highest safety & comfort with sliding door, wide door opening
- ergonomically arranged operating controls for fatigue-free and relaxed working
- 12 V, 24 V, and USB charging sockets
hands-free telephone preparation,
document box
- various options: electric cooler behind driver's seat, protective covers, seat air conditioning

Our SENNEBOGEN joysticks

- consoles and ergonomic joysticks that move with the seat
- pleasant grip through ergonomic design
- precise control of all movements through direct and sensitive function activation
- quick access to all operating controls through optimized design of all push-buttons and switches



B70E Maintenance and service made easy.



Optimized for maintenance

- Fast and easy diagnosis thanks to straightforward and clearly labeled electrical distributor
- Easy access to all service points on the machine
- Automatic central lubrication for equipment and slewing gear raceway



SENNEBOGEN HydroClean*

- Optimal protection of hydraulic components thanks to 3 µm micro-filter
- Cleaner hydraulic oil, longer service life



Central measuring points

- Easily accessible
- Quickly inspect entire hydraulic system

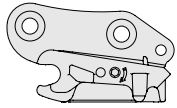


Clear labeling

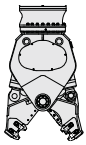
- All parts labeled with a unique part number
- Easy and reliable spare parts ordering

870E Modular design

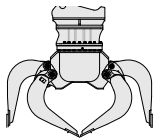
Attachments



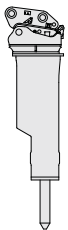
Mechanical quick changing system



Crusher



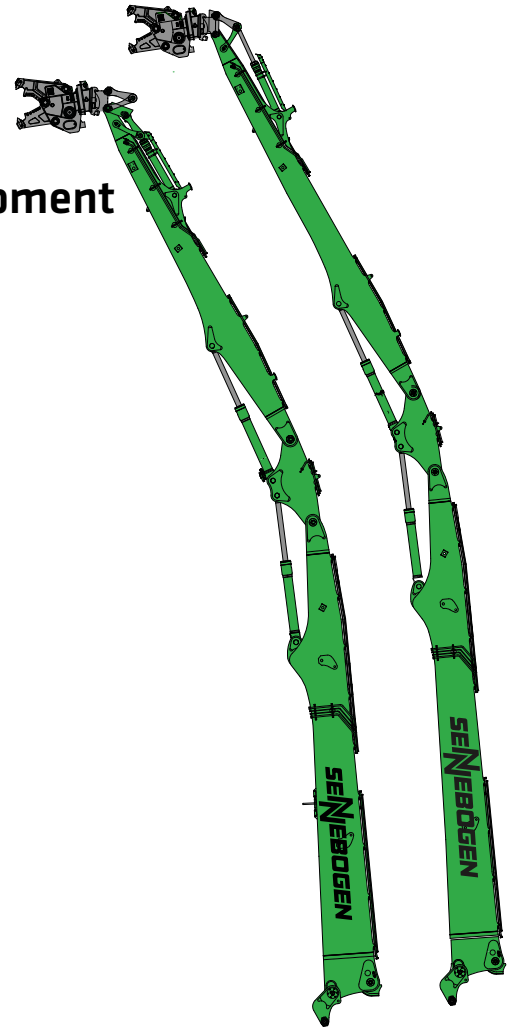
Demolition grab



Demolition hammer

Long-front demolition equipment

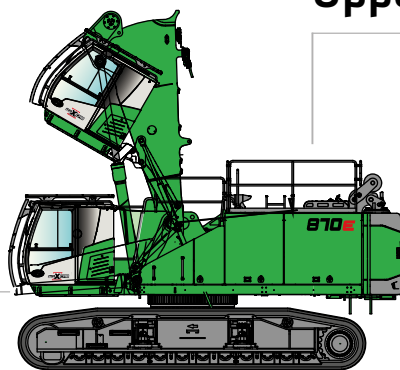
AB 33 with 33 m reach
AB 36 with 36 m reach



Uppercarriage

Cab **MAX CAB**

30° tiltable
2,70 m elevatable



Diesel-hydraulic drive
Elektro-hydraulic drive (option)

Undercarriage

telescopic

Advantages at a glance

Various attachments
available (page 14)

Extensive
LED lighting concept

Ideal overview and safe
working height thanks
to robust cab elevation,
tiltable 30°

Safe entry and exit through
railings, handles and
no-slipping steps

Counterweight
self-mounting system

High stability

Telescopic crawler
undercarriage

870E Technical data, equipment

MACHINE TYPE

Model (type) **870**

ENGINE

Power	Stage V: 298 kW at 1800 rpm Stage IIIa: 268 kW at 1800 rpm
Model	Cummins X12 - C400 (Stage V) Cummins 11 (Stage IIIa) Direct injection, turbocharged, charge-air cooler, reduced emissions, EcoMode, automatic idle, auto-stop, fuel preheating
Cooling	Water-cooled, cooler fan reversal
Diesel filter	With water separator and heating system
Air filter	Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator
Fuel tank	1000 l
DEF tank	100 l
Electr. system	24 V
Batteries	2 x 180 Ah , battery disconnect switch
Options	<ul style="list-style-type: none"> ■ Engine block heater ■ Electric fuel pump ■ Jump-start terminals

UPPERCARRIAGE

Design	Torsion-resistant box design, precision crafted, steel boom bushings Very service-friendly design, longitudinal engine
Central lubrication	Automatic central lubrication for equipment and slewing gear
Electrical system	Central electrical distributor, battery disconnect switch
Cooling system	3-circuit cooling system with high cooling output, thermostatically regulated fan drive for oil cooler and water cooler, fan reversal for cleaning
Options	<ul style="list-style-type: none"> ■ Slewing gear brake via foot pedal ■ LED lighting package ■ Fire extinguisher ■ Electric heater for hydraulic tank ■ Low-temperature package ■ Generator with 24 kW ■ Telematicsystem SENtrack DS

HYDRAULIC SYSTEM

Load sensing/LUDV hydraulic system, hydraulic pilot-controlled work functions, load limit sensing control	
Pump type	Swashplate-type variable-displacement piston pump, load pressure-independent flow distribution for simultaneous, independent control of work functions
Pump control	Zero-stroke control, on-demand flow control – the pumps only pump as much oil as will actually be used, pressure purging, load limit sensing control
Delivery rate	2x 475 l/min and 1x 274 l/min for rotary drive in the closed circuit
Operating pressure	max. 350 bar
Filtration	High-performance filtration with long change interval
Hydraulic tank	900 l
Control system	Proportional, precision hydraulic actuation of work movements, 2 hydraulic servo joysticks for the work functions, additional functions via switches and foot pedals
Safety	Hydraulic circuits with safety valves, secured emergency lowering of the equipment at engine standstill, pipe fracture safety valves for lift cylinder and stick cylinder
Options	<ul style="list-style-type: none"> ■ Bio-oil – environmentally friendly ■ ToolControl for programming the pressure/rate for up to 10 tools ■ Additional hydraulic circuit for shear attachment ■ 3 µm hydraulic micro-filter - SENNEBOGEN HydroClean

SLEWING DRIVE

Gearbox	Compact planetary gear with slant-axis hydraulic motor, integrated brake valves
Parking brake	Spring-loaded multi-disk brake
Slewing ring	External gear slewing ring with 360° protection and pinion gear lubrication
Slewing speed	0-5 rpm, variable

870E Technical data, equipment



CAB



Cab type	Hydraulically elevating cab E270
Cab equipment	Sliding door incl. sliding pane, vibration damped, tinted safety glass, front pane can be opened, roof window, windscreen wiper for front pane, radio preparation, airsuspended comfort seat, joystick steering, SENNEBOGEN control & diagnosis system
Options	<ul style="list-style-type: none"> ■ active seat air conditioning ■ Auxiliary heating system with timer ■ Cabs with active carbon filter ■ Armored-glass windshield ■ Armored-glass sunroof ■ Safety side window and rear window ■ Rolling shade for roof window and windshield ■ Protective roof guard ■ FOPS protective roof guard ■ Protective front guard ■ Radio ■ 30° tiltable cab ■ Electrical cooler



EQUIPMENT

Design	Decades of experience, state-of-the-art computer simulation, highest level of stability, longest service life, large-dimensioned and low-maintenance bearing points, sealed special bearing bushes, precision-crafted, quick-release couplings on the connections - open/close/rotate grab
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points
Safety	electronic work area monitoring with overload warning
Options	<ul style="list-style-type: none"> ■ Ball valves in the hydraulic lines for quick and easy grab switching ■ Adjustable hoisting limiter/stick limiter ■ Additional LED lights ■ Camera on a stick ■ electronic work area monitoring



UNDERCARRIAGE

Design	Hydraulically telescopic crawler undercarriage with stable, torsion-resistant box construction
Drive	Hydraulic traction drive for each crawler integrated in the chassis and connected by a compact planetary gear to an axial piston motor.
Parking brake	Spring-loaded, hydraulically ventilated disk brakes. Hydraulic brake valves protect the traction motors when going downhill.
Traveling gear	Telescopic crawler undercarriage with maintenance-free crawler track with canted 600 mm triple grouser shoes
Speed	0 - 1.6 km/h Level I: 0 - 3 km/h Level II



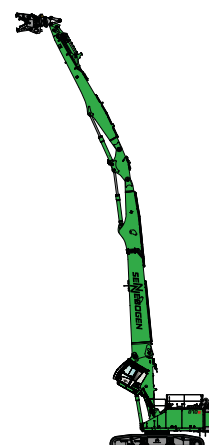
ELECTRIC DRIVE

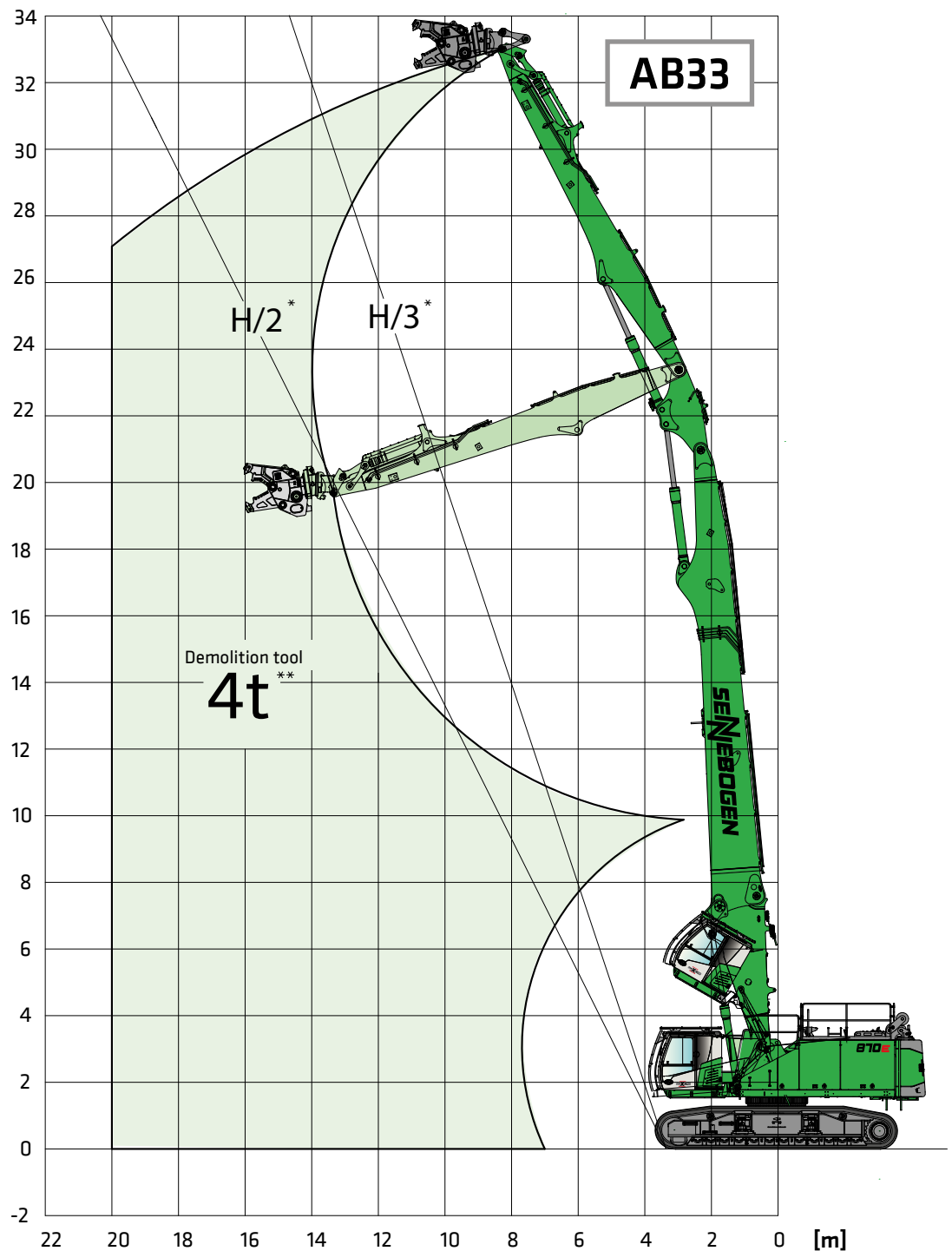
Option	<ul style="list-style-type: none"> ■ Power: 250 kW / 400 V / 50 Hz Total connected load 410 kVA, machine fusing 500 A (alternatively 630 A with magnet system) for 400 V - via star-delta circuit ■ Advantages: lowest operating costs, low-noise and virtually vibration-free work, long service life of the hydraulic components
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OPERATING WEIGHT

Mass	114 t - 117 t basic machine 870 R
Notice	Operating weight varies by design.



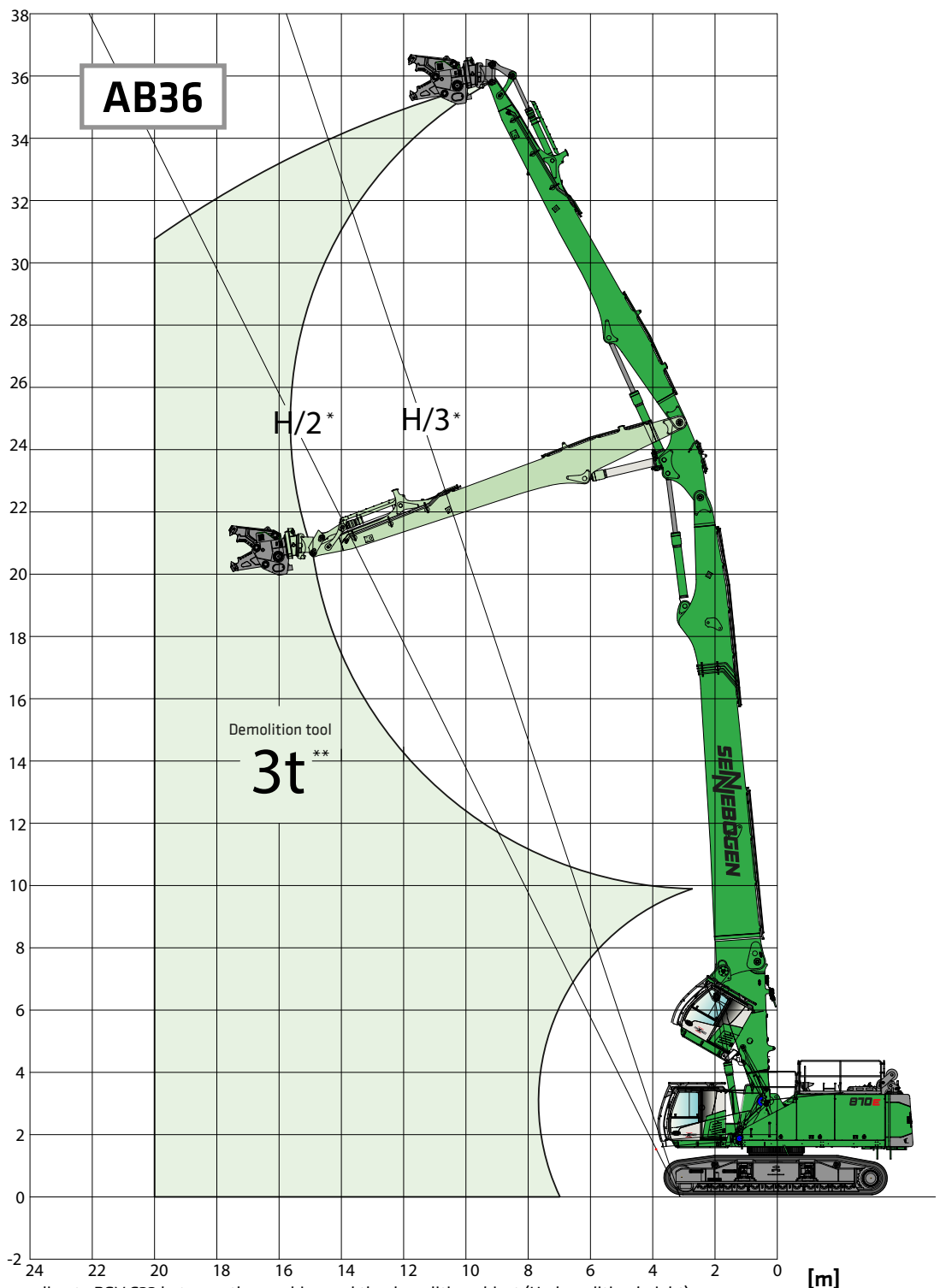


* Please note the safety distance according to BGV C22 between the machine and the demolition object (H=demolition height).

** Demolition tool up to max. 4 t weight plus quick coupling system with a weight up to max. 650 kg.

Undercarriage	T102/420	Compact boom	18 m	Cab	Maxcab E270,
		Grab stick	11 m		hydraulically elevating, tiltable 30°

All load ratings are given in tons (t) brought to bear at the end of the stick, without tools on firm level ground in the work area of 34° on both sides of the undercarriage axis. Working tools such as grab, magnet, load hook etc. are included in the specified load ratings. The stated values are 75% of the static tipping load and 87% of the hydraulic lifting force according to ISO10567. According to the EU standard EN 474/5, material handling equipment used for hoisting must be equipped with a pipe fracture safety device on the lifting cylinder and an overload warning device.

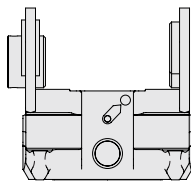
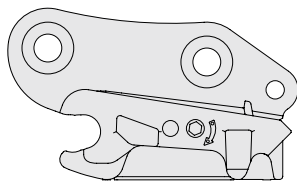


* Please note the safety distance according to BGV C22 between the machine and the demolition object (H=demolition height).

** Demolition tool up to max. 3 t weight plus quick coupling system with a weight up to max. 650 kg.

Undercarriage	T102/420	Compact boom	19,5m	Cab	Maxcab E270,
		Grab stick	12,5m		hydraulically elevating, tilttable 30°

All load ratings are given in tons (t) brought to bear at the end of the stick, without tools on firm level ground in the work area of 34° on both sides of the undercarriage axis. Working tools such as grab, magnet, load hook etc. are included in the specified load ratings. The stated values are 75% of the static tipping load and 87% of the hydraulic lifting force according to ISO10567. According to the EU standard EN 474/5, material handling equipment used for hoisting must be equipped with a pipe fracture safety device on the lifting cylinder and an overload warning device.



Quick coupling systems

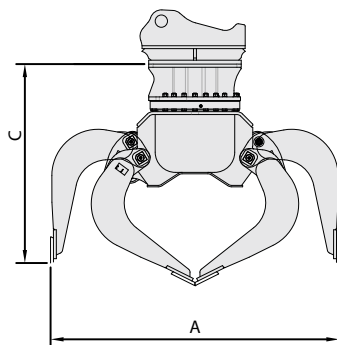
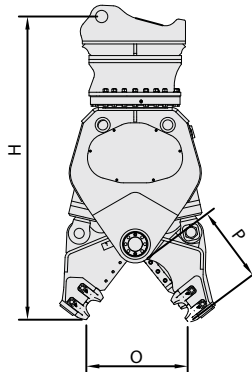
Type	Weight (kg)
QA62M	ca. 430

Example

Crushers

Type	Weight (kg)	H (mm)	Ø (mm)	P (mm)
CD031BB	ca. 2920	ca. 2550	ca. 900	ca. 700

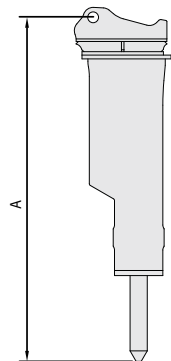
Example



Demolition grabs

Type	Weight (kg)	Width (mm)	A (mm)	C (mm)
S2301B	ca. 2100	ca. 1100-1200	ca. 2270	ca. 1270

Example



Demolition hammer

Type	Weight (kg)	A (mm)	Ø (mm)
AB 2453	ca. 2450	2993	150

Example

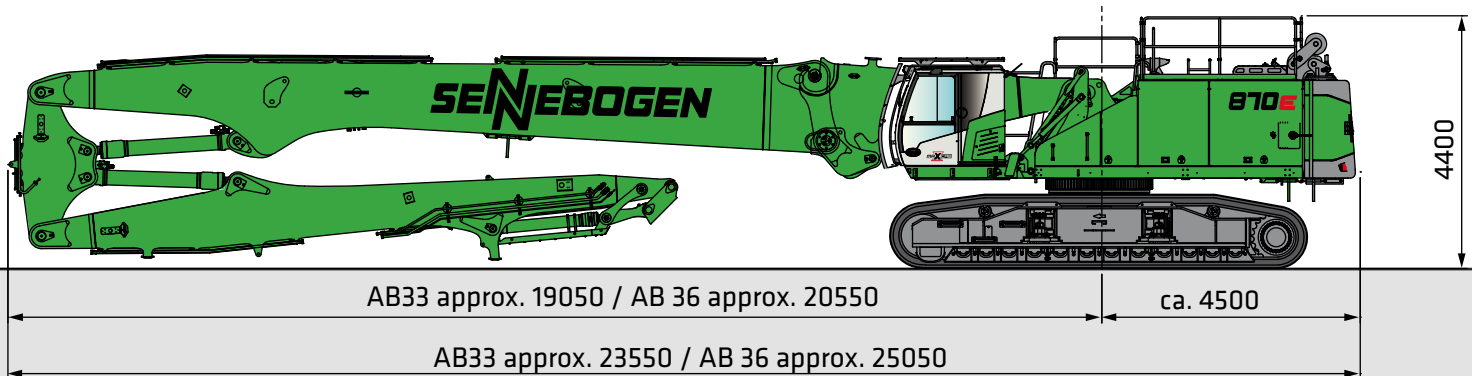
Hydraulic power data at the stick

- Tool OPEN/CLOSE up to 385 lt./min./ 350 bar
- Volume and pressure setting via Tool-Control
- Tool TURNING
- Hammer valve / return line (Option)
- Activation hydr. quick coupling system (Option)

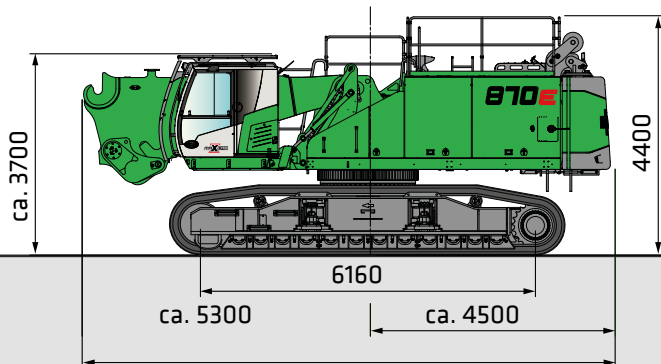
The illustrated tools serve as examples of possible usable sizes.
The selection of tools is made by the customer



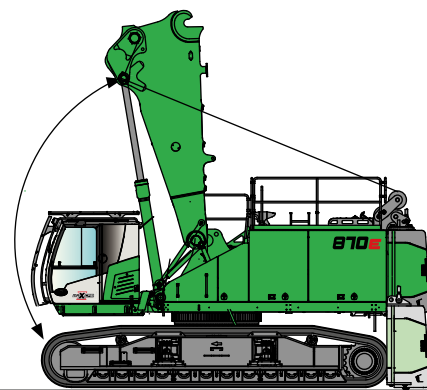
870E Transport dimensions and weights



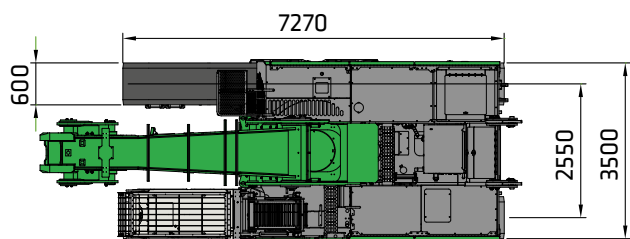
870 R with undercarriage T102/420 and 3-parts demolition equipment, hydraulically elevating cab Maxcab, tiltable 30 °, ULM, **Operating weight:** approx. 114 t - 117 t (without tool)



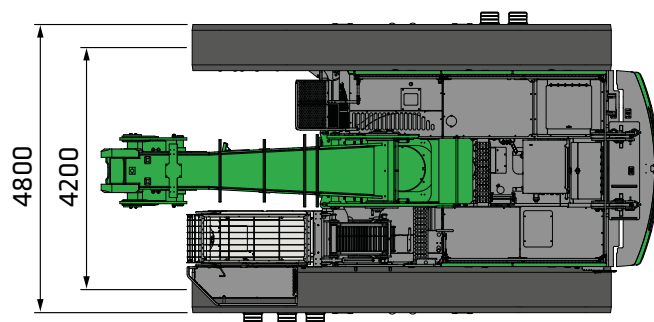
870 R basic machine incl. uppercarriage railing-and counterweight, transport weight approx. 92 t incl. counterweight approx. 26 t



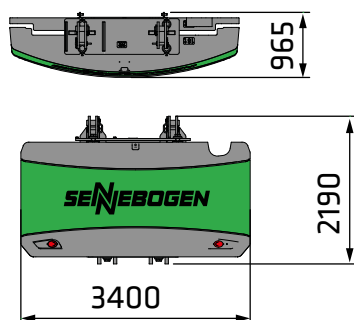
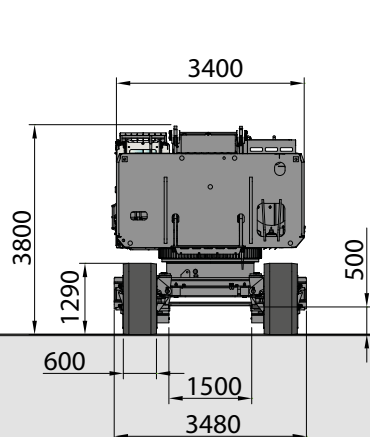
Self-mounting system for counterweight



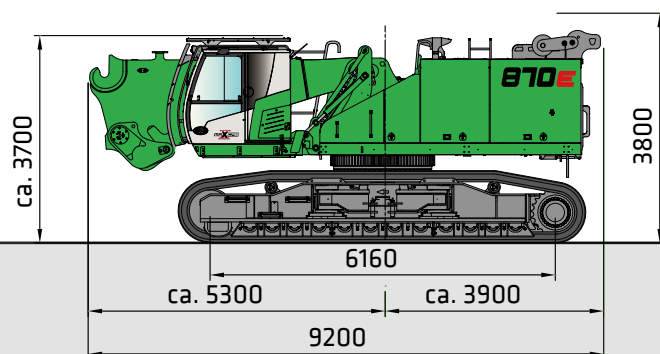
870 R basic machine
undercarriage retracted without counterweight



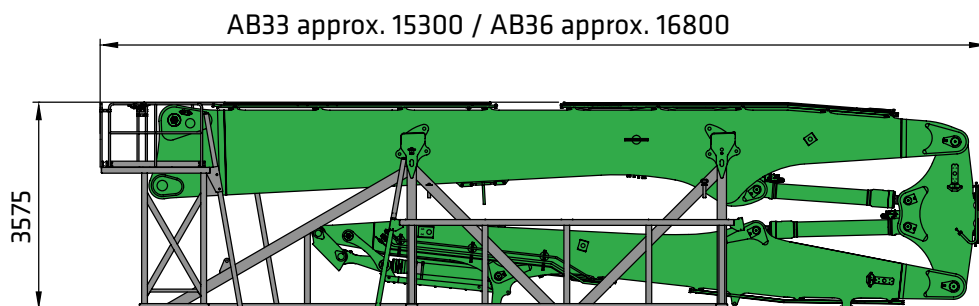
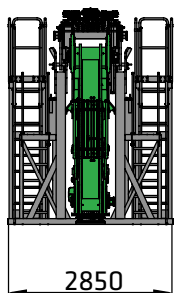
870 R basic machine
undercarriage telescoped incl. counterweight



counterweight: 26 t



870 R basis machine without uppercarriage railing,
without counterweight, transport weight approx. 66 t



3-parts demolition equipment incl. transport frame approx 25 t - 28 t

870E Removable demolition equipment



Storage of demolition equipment in transport frame

Safe and precise mounting of equipment

Extra robust and safe quick coupling boom system



Counterweight mounting system

Simple and fast - for lower transport weight of basic machine

870E Maximum flexibility & simple transportation

Telescopic crawler undercarriage



transport width 3500 mm



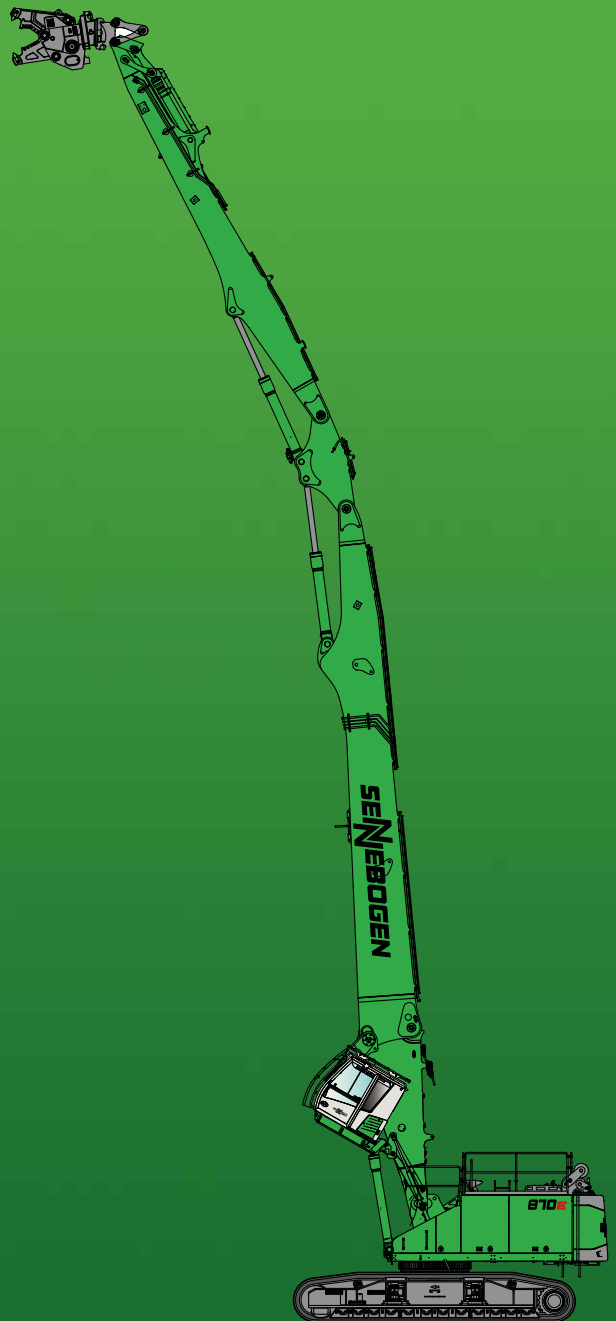
undercarriage width 4800 mm

Simple transportation in 3 units

basic machine - demolition equipment - counterweight



870E



This catalog describes machine models, scopes of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik. Machine illustrations can contain optional equipment and supplemental equipment. Actual equipment may vary in a tolerance range depending on the country to which the machines are delivered, especially in regard to standard and optional equipment

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GO FOR GREEN

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