

# SENEBOGEN

## 735E

**> ELECTRIC DRIVE**

# TIMBER PICK & CARRY MACHINE

WITH UP TO  
10 m STACKING HEIGHT



237 kW



43.9 t



11.3 m



MAX CAB

Stage V



# 735 E The High Stacker.

The expert for Pick & Carry applications ensures efficient processes at the log yard. Even stacking heights of up to 10 m pose no problem for the 735 E - this creates space and ensures efficient log logistics in your company.

## Optimal performance

A powerful drive enables high driving and handling performance – even with superimposed movements. Considerable loads can still be moved despite a low operating weight of just 44 t.

## Efficiency

The Pick & Carry machine is designed for driving and stacking under high loads. This optimizes your internal transport routes and saves fuel costs in the right place.

## Cost efficiency

EcoMode, automatic idling and automatic start-stop – this machine enables you to achieve significant savings potential in your business.

## Occupational safety

Sturdy all-round protective grating, non-slip treads and sturdy handles ensure the highest standard of work safety.

## Optimal use of space

The combination of the 360-degree rotating uppercarriage, a small swing radius and the automatic steering and direction of travel detection make it easier to maneuver even in narrow spaces between stacks. This allows you to use your space even more efficiently.

# THE CONCEPT.

We rely on tried-and-tested concepts and intelligent solutions: the 735 E impresses with its sophisticated concept, which makes it a specialist in timber handling.



## EFFECTIVE CONSTRUCTION

The center of gravity of the material handler is near the center of the slewing ring. The boom linkage is mounted behind the machine in the middle, meaning that the weight of the machine is distributed perfectly and a small rear ballast is sufficient as compensation.

## CLEAR CAB VIEW

The rear-linked boom arm gives the driver a clear view on all sides. The rigid cab elevation ensures an optimal view from the cab – even when working on high stacks.

## STABILITY

The 735 E moves safely even on challenging terrain, uphill gradients or on difficult ground thanks to its eight tires. Front and rear support plates offer additional stability when handling large loads.

## ROBUST

The 735 E is equipped with a robust mobile undercarriage, strong special axles and an all-wheel travel drive. The ideal prerequisite for Pick & Carry operation, including hydraulically braked trailers.

# THE SAWMILL THEIR HOME

01 DELIVERY



02 SUPPLYING THE PLANT



04 LOG YARD



03 PICKING AT THE SORTING LINE



The **PICK & CARRY TIMBER MACHINE** offers the ideal solution **FOR EVERY PROCESS STEP** at the log yard



**01** **LOADING AND UNLOADING TRAILERS**

High load capacities – for more efficient loading and unloading of trailers and wagons.



**02** **FEEDING THE DEBARKER**

Fast work cycles enable rapid supply of the feed table.



**03** **BOX REMOVAL AT THE SORTING LINE**

Thanks to the slewing uppercarriage and automatic direction of travel switching, turning maneuvers are no longer necessary.



**04** **STACKING AT THE LOG YARD**

Clear cab view, 360° endlessly rotatable uppercarriage and compact dimensions – also suitable for narrow spaces between stacks

# AN INVESTMENT THAT PAYS OFF.

The durability and reliability of the SENNEBOGEN Green Line is based on decades of experience in the design of high-quality crane and material handling technology. Thanks to their robust design and state-of-the-art technical standards, our timber machines offer product life cycles that set new standards on the market.

**>25,000**

operating hours have been completed by this 735 E at Ziegler Logistik in Wiesau



Durable and robust in extreme weather and harsh operating conditions, in sub-zero temperatures in Russia or in extreme heat in South Africa



Manageable and service-friendly technology for maximum availability



Consistent performance thanks to robust steel construction, and high-quality drive and control components from renowned manufacturers



The intelligent design ensures a low dead weight of the machine, resulting in reduced diesel consumption



With good maintenance, more than 25,000 operating hours possible in demanding continuous operation

FIND OUT MORE



**ELECTRIC DRIVE**

Optional: Discover the benefits of the electric travel drive

# IMPRESSIVE EXPERIENCE WITH THE ELECTRIC DRIVE

## Low operating and service costs

Whilst giving the same performance, the 735 GED saves up to 30% in energy, reducing operating and service costs on a large scale over the entire product life cycle.

## Impressive handling

Thanks to the electric drive engines, the system responds optimally when starting up and positioning the machine – more dynamic and precise.

## Valuable emission reductions

The small engine size and the resulting low fuel consumption ensure impressive emission savings, which reduces operating costs and protects the environment.

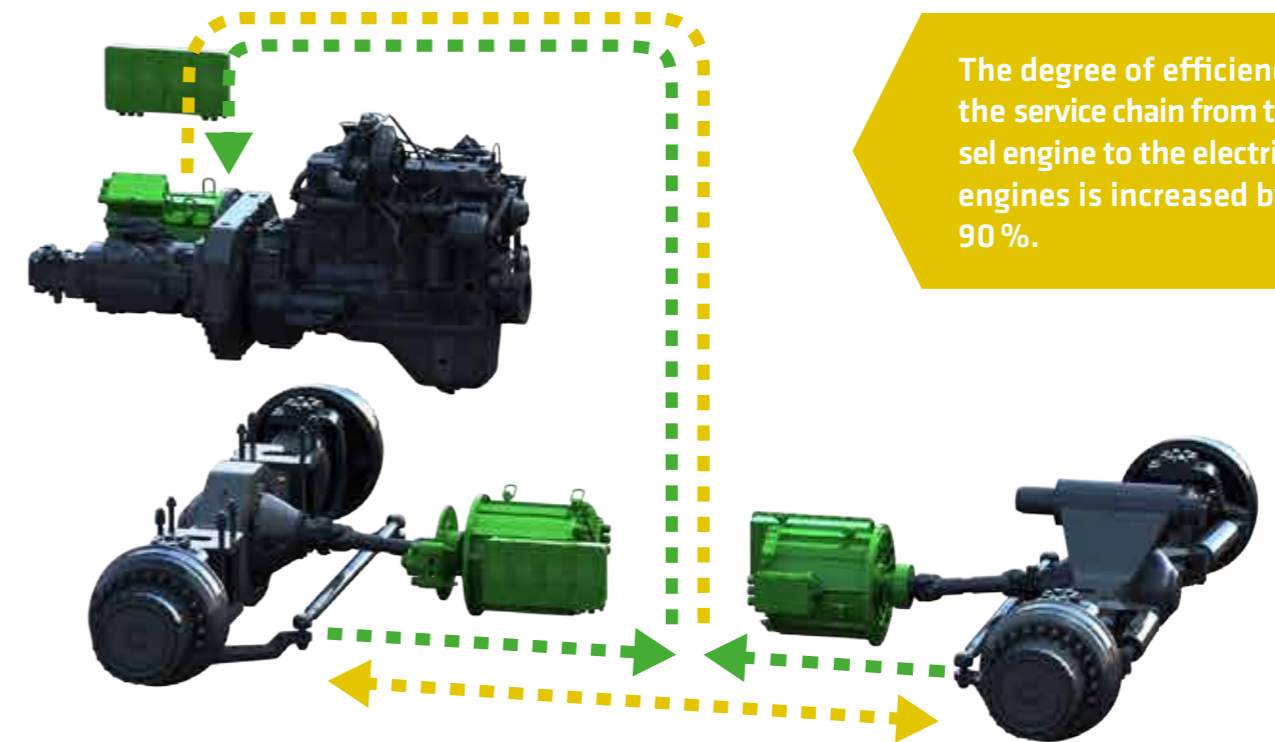
## Quiet operation

The electric drive reduces vibrations and noise in the cab – for pleasant and quiet operation in noise-sensitive areas.



INNOVATION

# ENERGY RECOVERY VIA ELECTRIC TRAVEL DRIVE



The degree of efficiency in the service chain from the diesel engine to the electric travel engines is increased by up to 90%.

## EFFECTIVE WHEN ACCELERATING AND DRIVING

The high efficiency of the system with its optimum conversion of the drive energy reduces the required power of the diesel engine. Furthermore, the modern system components generate significantly less heat, which also reduces the cooling capacity required. In total, when accelerating and driving with a smaller diesel engine combined with the electric travel drives, even higher working dynamics can be achieved compared to the hydrostatic system.

## OPTIMUM USE OF BRAKE ENERGY THROUGH RECUPERATION

During deceleration, the electric drive engines act as generators so that the machine brakes. The energy generated is fed back and used to drive the generators. This relieves the diesel engine and supplies all auxiliary equipment with the energy they require. The recuperated energy can also be stored for a short time, thus increasing the drive power.

# Advanced. The E Series



## LONG SERVICE LIFE, HIGH VALUE RETENTION

- Reliable and powerful thanks to its robust construction and high-quality components.
- Temperature-controlled cooling system, designed and tested for heavy-duty applications and high ambient temperature

## SOPHISTICATED, STATE-OF-THE-ART TECHNOLOGY

- In the 5th generation – decades of experience in designing and constructing material handlers

## SIMPLE TO MAINTAIN AND SERVICE

- Technology that can be mastered and no over-engineering
- easy accessibility to all components

## ENVIRONMENTALLY-FRIENDLY DRIVE TECHNOLOGY

- State-of-the-art engine, drive and emission systems in line with the latest technology standards (stage V)
- Large-scale pipes and valves for maximum efficiency

# SAFETY FIRST.

Special features ensure safe machine use in dynamic timber handling – to protect the operator and your business.



## All-round protective grating on the cab

Additional safety thanks to a robust all-round protective grating especially for use with timber



## Clear cab view

Rear-hinged boom provides clear cab view on both sides



## Safe ascent and robust handles

Specially developed handles and non-slip treads ensure a high level of occupational safety



## Powerful LED spotlights

for optimal illumination of the work area



## Side sliding door

Easier access to the cab thanks to simple operation of the side cabin doors



## Optimal camera monitoring

of all safety-relevant areas\*

\* Cameras are installed as standard on the righthand side and to monitor the rear area. Additional cameras, e.g. on the stick, are available on request.



# MAXIMUM COMFORT.



## Everything in view

The spacious cab provides an all-round view, allowing you to comfortably see your entire working area. The windshield of the cab runs right through to the floor panel so that the view to the front is unrestricted. Together with the two large side windows, a panoramic view of the entire working environment is created.

## Easy control

The intelligent SENCON control system gives you quick and easy feedback on the machine's condition. Thanks to the intuitive user interface, it has never been easier to monitor energy consumption and utilization, control the desired working modes and contribute towards reducing operating costs.

## For your health

Operators spend many hours in their working position. The back-friendly comfort seat, adjustable armrests, joysticks that sit comfortably in the hand, and the optimally arranged controls make daily work as easy as possible.

## Pleasant indoor climate

Whether in warmer areas or in sub-zero temperatures: Thanks to automatic heating/air conditioning, you can enter a comfortable, temperature-controlled workplace every day and concentrate on what's important at work.

**“Particularly in dynamic timber handling, it is important to have an unobstructed view and to keep a cool head.”**

MATTHIAS ÜBELACKER,  
Director of Business Unit  
Wood & Paper



STANDARD EQUIPMENT

# PROFESSIONAL FLEET MANAGEMENT

**SENtrack**

## 1. Reduce service costs

The dashboard is used to monitor the machine and its main operating parameters (temperatures, consumption). If key figures deviate significantly from the target value, preventive maintenance can be arranged.

## 2. Reduce consumption

You will receive daily updated insights into your fleet processes: Easily identify and optimize times when machines are idle or change set parameters when machines are underloaded to reduce consumption.

## 3. Improve productivity

With just a few clicks, you can identify and optimize machine capacity, analyze routes if required and thus make your log yard processes more profitable.

## 4. Safeguard your investment

Practical alarm messages inform you about critical machine conditions. In the event of irregular movements, the machine can also easily be deactivated remotely.



**"What if you could receive real-time data from all your machines with just one click and so increase your productivity? SENNEBOGEN's SENtrack telematic system makes this possible."**

## MAINTENANCE AND SERVICE.

KEEP IT SIMPLE. WITH MANAGEABLE TECHNOLOGY.



Reliable and practical technology makes life easier. Where electronics add no value, we rely on hydraulics and electrical systems.



We make you happy, not reliant. With cost-effective components and fewer process steps, you can take care of your own machine.



The most important components, such as the accumulator module or the electrical distributor, are all easily accessible from a central point for straightforward checking and troubleshooting.



The SENCON control system supports you with diagnostics and makes troubleshooting easier. So your machine is back in action more quickly.



All maintenance and service points are arranged clearly and easily accessible. The clear labeling of components makes finding your way around easy.

# TECHNICAL DATA, EQUIPMENT

MACHINE TYPE		
MODEL (TYPE)	735	
ENGINE		
TYPE	735 E DIESEL	735 E ELECTRIC DRIVE
	<p><b>Stage V:</b> Cummins L9 FR95764 Rated power: 231kW/2100 rpm Operating point standard: 237kW/2000 rpm Operating point ECO: 242kW/1800 rpm</p> <p><b>Stage IIIa:</b> Cummins QSL9 FR95764 Rated power: 227kW/2000 rpm Operating point standard: 227kW/2000 rpm Operating point ECO: 254kW/1800 rpm</p> <p>Direct injection, turbocharged, intercooling, reduced emissions, Eco mode (1800 rpm), automatic idling, automatic stop after 5 minutes, fuel pre-heating</p>	<p><b>Stage V:</b> Cummins B 6.7 FR95884 Rated power: 194kW/2200 rpm Operating point standard: 209kW/1750 rpm Operating point ECO: 206kW/1600 rpm</p>
COOLING	water-cooled, radiator fan with automatic rotation direction switching in the interval	
FUEL FILTER	including electric (24V) heated water separator	
AIR FILTER	Dry filter with integrated pre-separator, automatic dust discharge, contamination indicator	
FUEL	560 l	
ADBLUE	75 l	
ELECTRICAL SYSTEM	24 V	
BATTERIES	2 x 150 Ah	

OPTIONS	
	Engine coolant pre-heating
	Electric fuel pump
	Jump start pole
	Fire extinguishing system
	Batteries with increased capacity
	Battery pre-heating
	Additional cyclone pre-separator during increased dust load

UPPERCARRIAGE	
DESIGN	Torsion-resistant box design, precision crafted, steel bushings for boom mountings. Service-friendly design, engine installed in the longitudinal direction
CENTRAL LUBRICATION	Automatic central lubrication for work equipment and live ring track
ELECTRICAL SYSTEM	Central electrical distributor, battery disconnect switch
COOLING SYSTEM	3-circuit cooling system with high cooling output, thermostatically controlled fan drive for oil and water cooler, automatic rotation reversal of the cooler fan for cleaning the cooler
SAFETY	Peripheral uppercarriage railing, screw-on, for transport height 1100 mm  Emergency control to ensure machine availability in restricted operation by bypassing the main functions
OPTIONS	Slew brake via foot pedal LED lighting package Electrical hydraulic tank preheating Low temperature packages Steering wheel steering

# TECHNICAL DATA, EQUIPMENT

HYDRAULIC SYSTEM / HYDRAULICS		
Load-sensing/ LDUV hydraulic system, hydraulic pilot-controlled work functions, load limit control		
DELIVERY RATE	<b>735 E DIESEL</b> max. 660 l / min	<b>735 E ELECTRIC DRIVE</b> max. 615 l / min
OPERATING PRESSURE	up to 350 bar	
FILTRATION	High-performance filtration with long change interval	
HYDRAULIC TANK	390 l	
CONTROL SYSTEM	Proportional, precision hydraulic control of the movements, 2 servo joysticks for work functions, additional functions via switches and foot pedals	
SAFETY	Hydraulic circuits safeguarded with safety valves  Secured emergency lowering of the equipment when the engine is at a standstill	
OPTIONS	Bio-oil filling SENNEBOGEN HydroClean micro-filter system (3 µm) with water separator ToolControl for programming pressure/ quantity for up to 10 tools Ball valves for the hydraulic lines instead of quick change couplings	

SLEWING DRIVE	
GEARBOX	Compact planetary gear with bent-axis hydraulic engine, integrated brake valves
PARKING BRAKE	Spring-loaded multi-disk brake
SLEWING RING	Externally geared slewing ring with 360° protection and pinion lubrication
SLEWING SPEED	0-7 rpm, variable


CAB	
CAB TYPE	Rigid 1 m cab elevation
CAB FEATURES	Automatic heating/air conditioning with central control unit, SENNEBOGEN SENCON control and diagnostic system, sliding door, excellent ergonomics, seat heating, air-sprung comfort seat, fresh air/ recirculated air filter, joystick steering, 12 V / 24 V connections, SENCON
OPTIONS	Rigid 1.50 m cab elevation Rigid 2.00 m cab elevation E270 cab adjustment Hydraulically folding rigid cab elevation Platform next to the cab Auxiliary heating system with timer Activated carbon filter Steering wheel steering, height-adjustable Active seat climate control Bullet proof windshield Bullet proof skylight Side and rear windows made of safety glass Sunblind for skylight and windshield Windscreen wipers for skylights and lower windshield Radio with USB port, MP3 and Bluetooth® functions Cover for cab seat Special assignment of joysticks and pedals




Optional: Lighting packages with LEDs; example of lighting on the stick


# TECHNICAL DATA, EQUIPMENT

TECHNICAL DATA, EQUIPMENT

EQUIPMENT 	
MAXIMUM RANGE	Standard: K11 (11m)   Optional: K12 (12m)
CYLINDERS	Hydraulic cylinders with high-quality sealing and guide elements, end position damping, sealed bearing points, pipe fracture safety valves for lift and stick cylinders
CENTRAL LUBRICATION	Automatic central lubrication system
OPTIONS	<ul style="list-style-type: none"> <li>Ball valves in the hydraulic lines</li> <li>K12 handling equipment</li> <li>Load stabilizer to dampen the load/equipment vibrations</li> <li>Bar graph pressure display (lift cylinder) in SENCON</li> </ul>

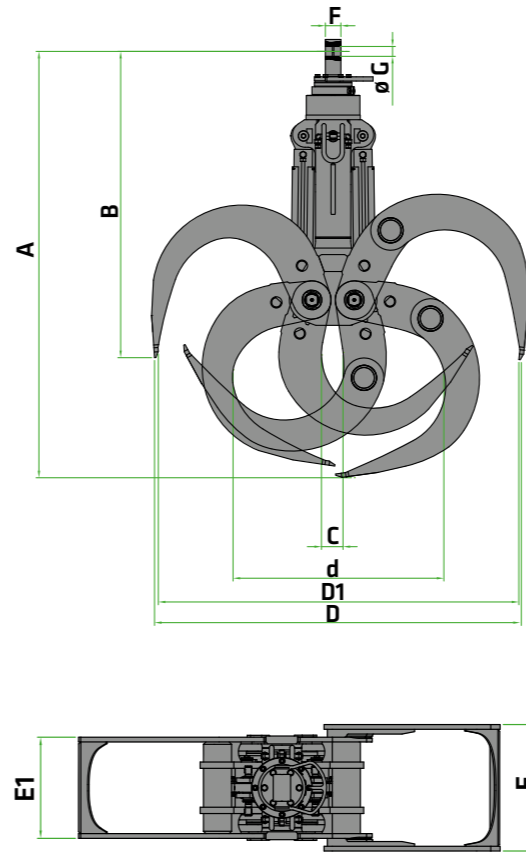
OPERATING WEIGHT 	
MASS	Approx. 43,900 kg basic model 735 M with sliding door, including 3 m <sup>2</sup> grab
NOTE	Operating weight varies by model and equipment. Subject to technical changes!



UNDERCARRIAGE 		
DESIGN	Sturdy welded construction in box design, type MF37E without support	
DRIVE CONCEPT	<b>735 E DIESEL</b>	<b>735 E ELECTRIC DRIVE</b>
	All-wheel drive powered by two direct-mounted variable-displacement hydraulic engines incl. automatically operated brake valve.	All-wheel drive powered by two direct-mounted variable-displacement hydraulic engines incl. automatically operated brake valve.
BRAKE	Strong planetary axles with integrated steering cylinders in the front and rear axles, drum brakes in the 2-circuit system, automatic driving/steering direction switching via area sensor and additionally selectable via button on joystick with visual display	
TIRES	Speed-monitored disc brake with hill start assistance	
SPEED	14.00-24, 8 air, Trelleborg T-900	
OPTIONS	0 - 20 km/h variable	
	<ul style="list-style-type: none"> <li>Hydraulic trailer preparation</li> <li>Fenders, galvanized</li> <li>Sliding door to the front/rear</li> <li>Tire pressure monitoring system</li> </ul>	



# THE RIGHT TIMBER GRAB FOR EVERY REQUIREMENT



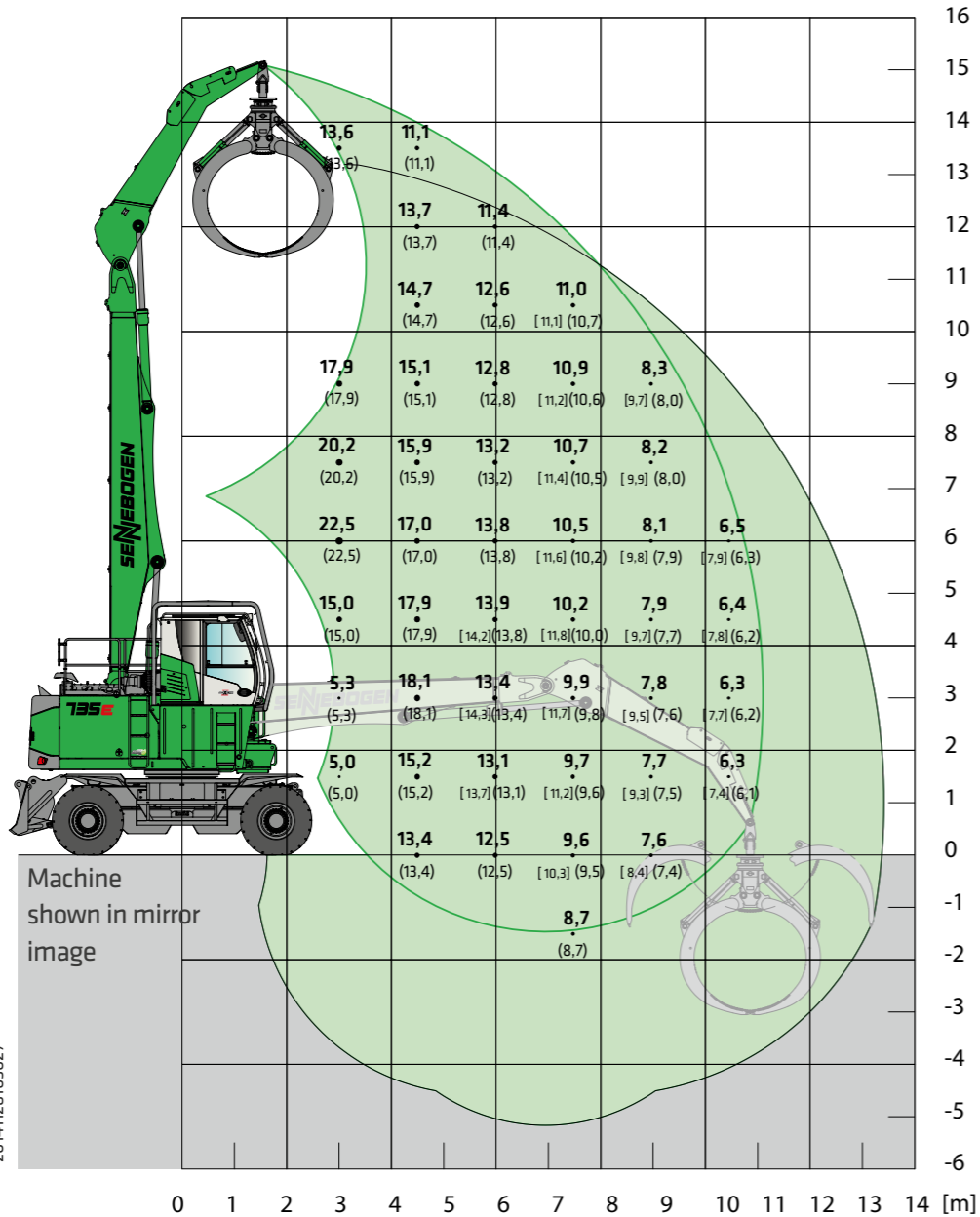
TYPE / SIZE	GRAB CAPACITY	WEIGHT <sup>1)</sup>	DIMENSIONS (mm)										LOG LENGTH	
			A	B	C	D	D1	d	E	E1	F	G		
SGH	m <sup>2</sup>	kg												m
1250.33	1.25	2315	3190	2365	130	2795	2600	1610	800	640	145	80	8.0	
1500.33	1.50	2390	3310	2380	120	3030	2850	1690	800	640	145	80	8.0	
1750.33	1.75	2440	3430	2425	110	3260	3080	1725	800	640	145	80	7.0	
2000.33	2.00	2430	3530	2450	110	3450	3275	1800	800	640	145	80	6.0	
2500.33	2.50	2570	3830	2530	110	4040	3850	1935	800	640	145	80	6.0	
2500.34-K*	2.50	2550	2905	1485		4060		1965	800		145	80	6.0	
3000.34-K*	3.00	2560	3145	1535		4525		2080	800		145	80	5.5	
3200.34-K*	3.20	2685	3225	1555		4720		2140	800		145	80	5.0	
3500.34-K*	3.50	2830	3385	1615		4880		2185	800		145	80	4.5	
4000.34-K*	4.00	3065	3420	1680		5000		2325	800		145	80	4.0	

<sup>1)</sup> Weight information without grab mounting bracket, stick bolts, hose system.  
The weight of the grab mounting bracket is 148 kg.  
\* with flyer chain.

# LOAD RATINGS K11



8.2 m compact boom  
4.7 m grab stick



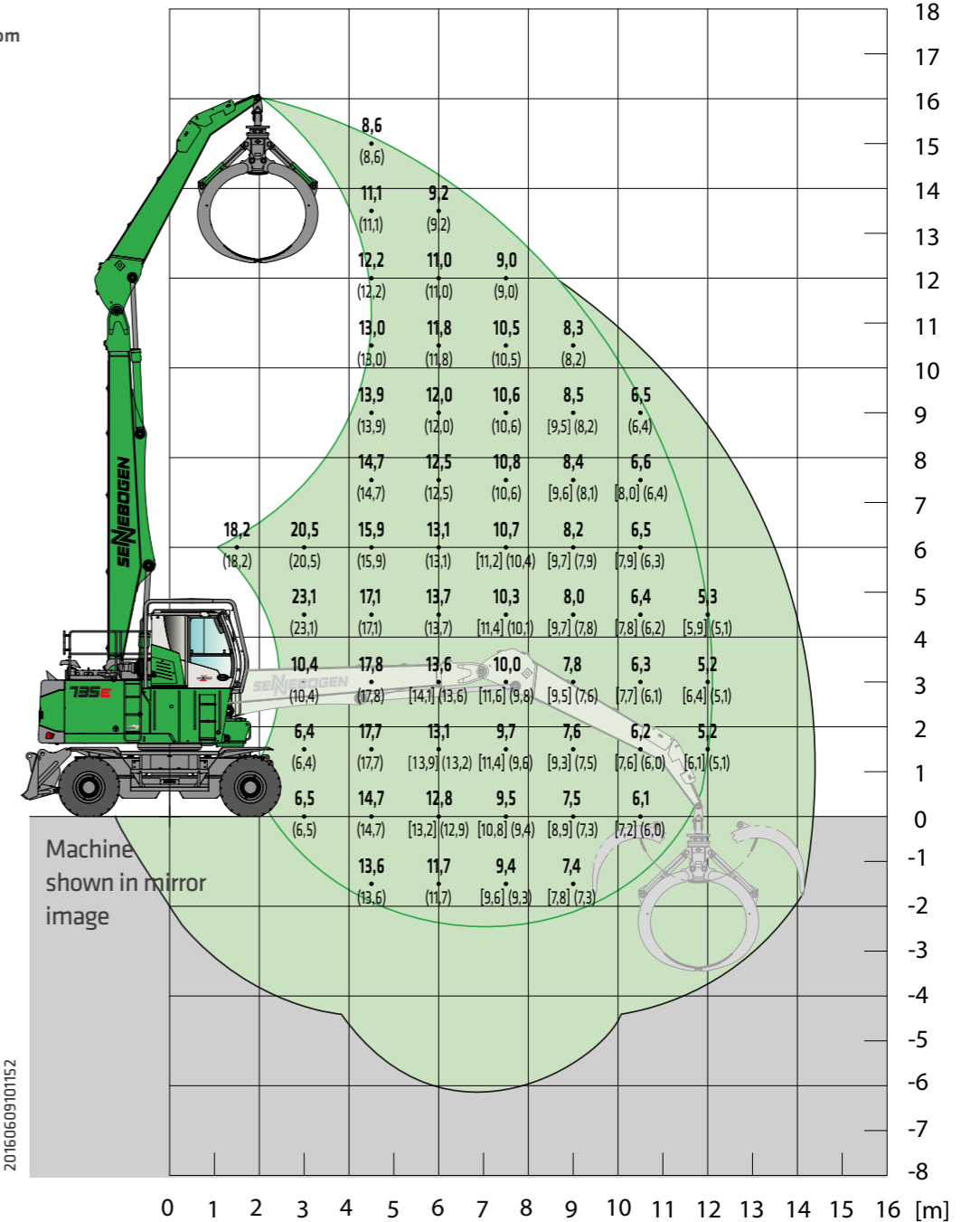
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**Notes:**  
All load ratings are given in tons (t) brought to bear at the end of the stick without equipment on stable, firm and level ground. Equipment such as grippers, load hooks, etc. are part of the specified load ratings. The values given are valid for stationary use with a work area of 360°, on wheels, without support and with blocked pendulum axles. The values in brackets [ ] are valid for stationary use with an uppercarriage as long as the undercarriage, on wheels, without support and with blocked pendulum axles. In line with ISO 10567, they amount to 75 % of the static tipping load or 87 % of the hydraulic lifting force. The values in brackets ( ) are valid for travel drive with an uppercarriage as long as the undercarriage, on wheels, without support, and on wheels with active pendulum axles. In line with DIN EN 474-5, they amount to 60 % of the static tipping load. If the machine is being used in stationary mode for lifting applications, as per DIN EN 474-5, it must be fitted with pipe fracture safety devices on the boom lifting cylinders and an overload warning device.

# LOAD RATINGS K12



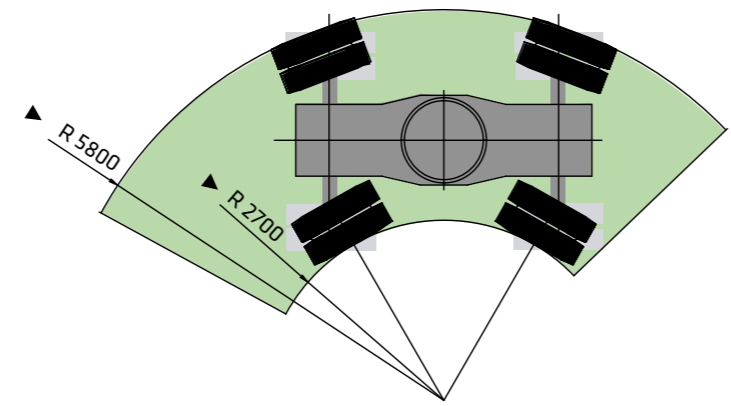
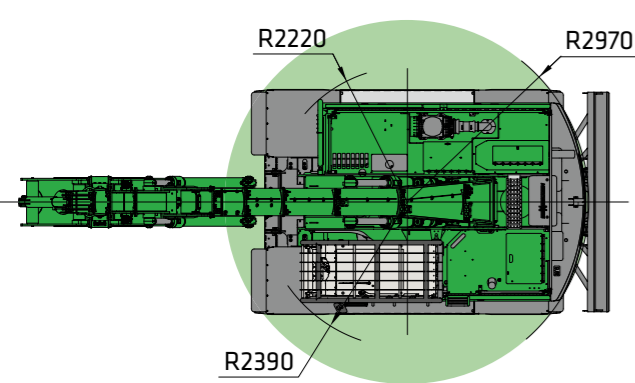
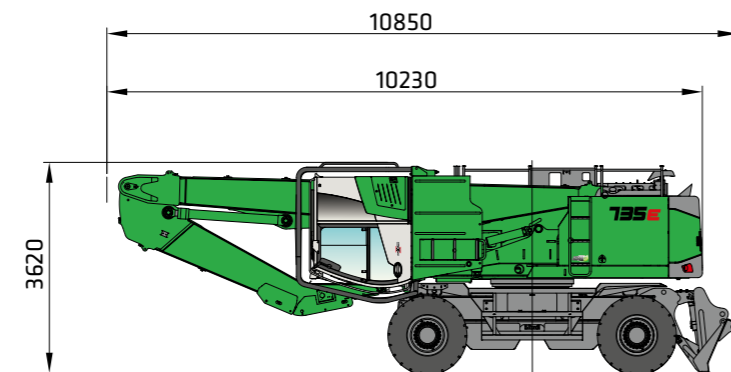
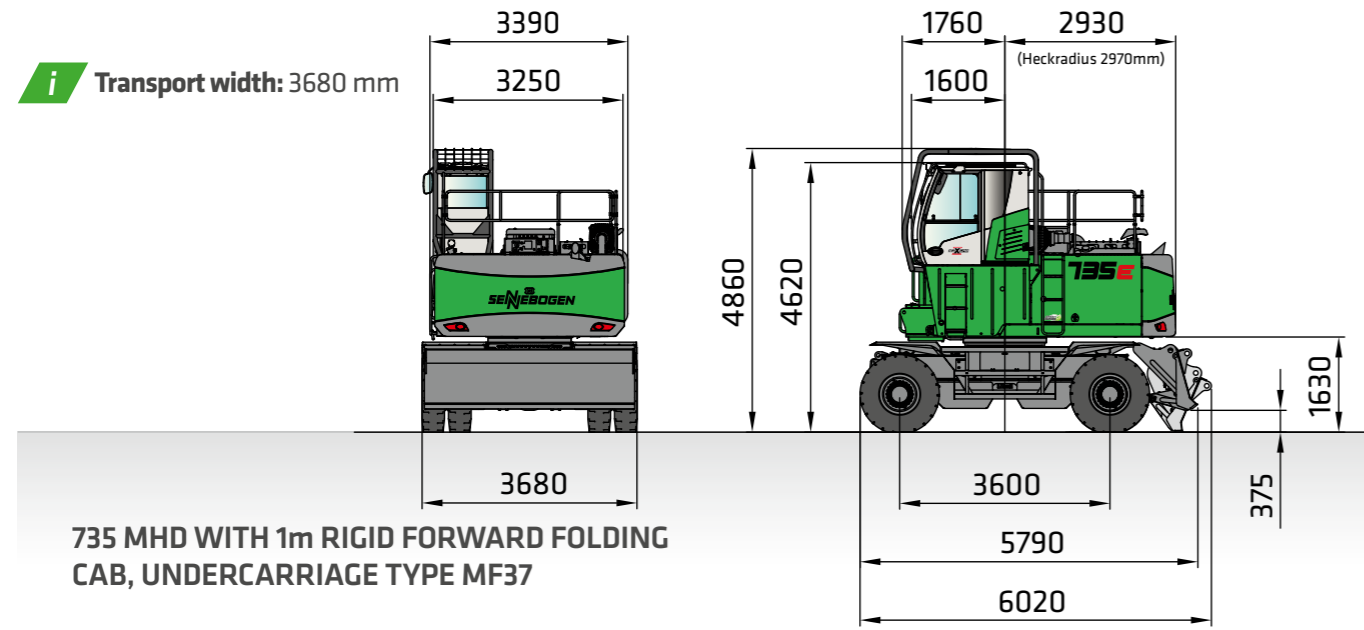
8.2 m compact boom  
5.7 m grab stick



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# DIMENSIONS



DIMENSIONS



735 with and without the Electric Travel Drive in the Sawmill  
Location: Olsberg, Germany



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**MOVE BIG THINGS - WITH US!**



over **72** years of experience

**100%** family company

over **2200** experienced specialists worldwide

**5** production plants in Germany

over **180** sales and service partners worldwide

**27** different material handlers



Telehandler 4-5.5 t	Balancer 130-300 t	Material handler 17-420 t	Duty cycle crane 13.5-300 t	Crawler crane 50-300 t	Telescopic crane 16-130 t	Port crane 300 t
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This catalog describes machine models, the scope of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik GmbH. Machine illustrations may contain optional and supplementary equipment. Actual equipment may vary depending on the country to which the machines are delivered, especially in regard to standard and optional equipment. All product designations used may be trademarks of SENNEBOGEN Maschinenfabrik GmbH or other supplying companies, and any use by third parties for their own purposes may violate the rights of the owners.

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**MOVE BIG THINGS**

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#### AFTER SALES

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