

**LONGFRONT Equipment
for Demolition Applications**

RH 16.5

with universal demolition equipment

RH 23.5

with combined demolition equipment



**Service weight with
demolition equipment**

RH 16.5
with UA 20 **43,0 t**

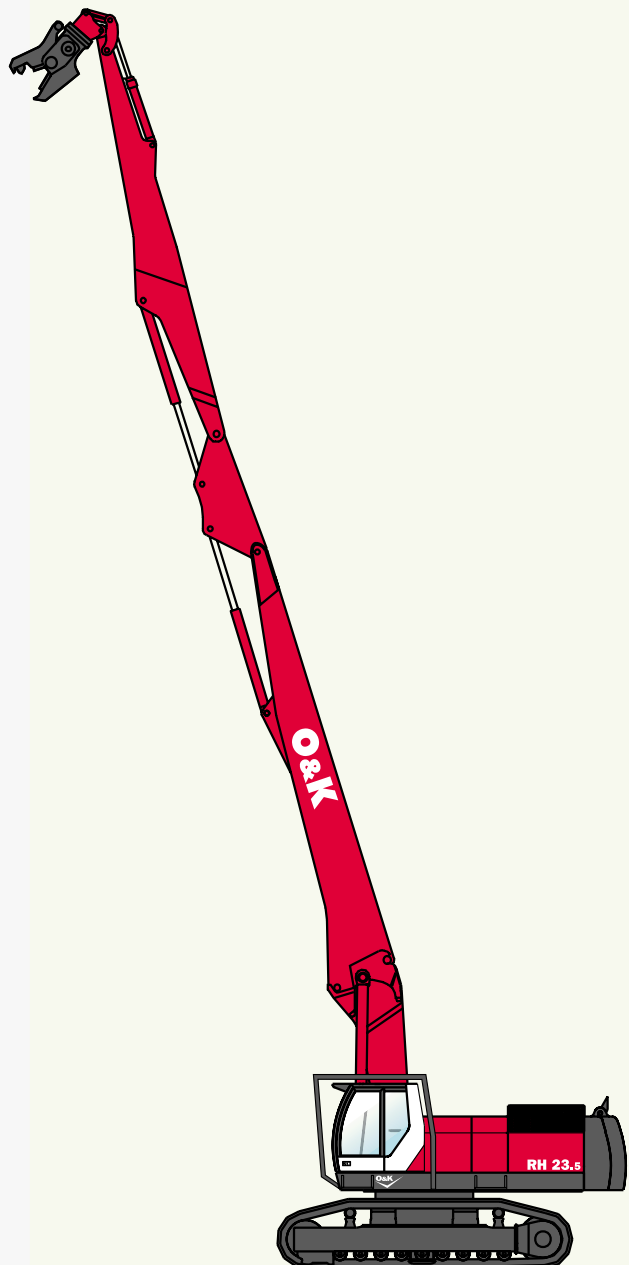
RH 23.5
with KA 24 **54,0 t**



O&K excavators with combined demolition equipment

The four parts O&K combined demoliton equipment consists of:

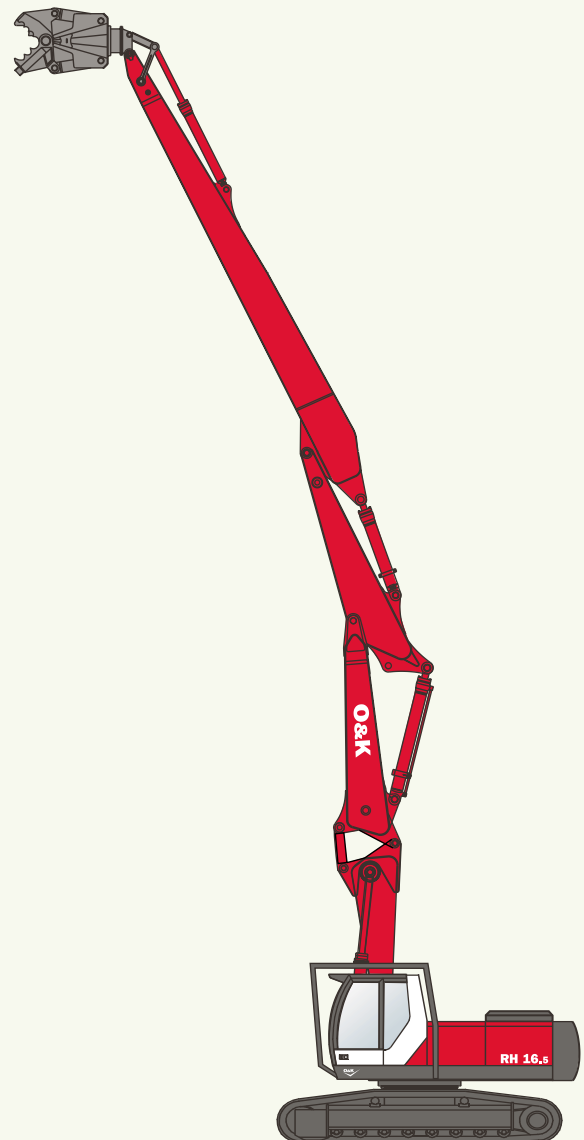
- **Boom, lower section with *Kombi Lock* - quick coupling system**
 - **Demolition equipment**
 - **Backhoe equipment**
 - **Additional counterweight, removable**
-
- **Boom, lower section**
 - Anti drop valves for boom cylinder
 - *Kombi Lock* quick coupling system
 - Quick-release couplings for high pressure pipes and control lines
 - Central lubrication of bearings over the base unit
-
- **Demolition equipment**
 - Upper section with quick hitch system
 - Trapezoidal section
 - Bucket stick
 - Quick-release couplings for high pressure pipes and control lines
 - Trapezoidal and stick cylinder anti drop valve
 - Bucket cylinder with toggle and linkage
 - Central lubrication of bearings from the lubrication vail in the middle section
 - Sturdy support for transportation and storage
-
- **Backhoe equipment**
 - Upper section with quick coupling system for monobloc boom
 - Bucket arm
 - Bucket cylinder with toggle and linkage
 - Mono boom
 - Quick-release couplings for high pressure pipes and control lines
-
- **Additional counterweight**
 - Counterweight for demolition applications (removable)



O&K excavators with universal demolition equipment

The four parts O&K universal demoliton equipment consists of:

- **Boom, lower section with divided bottom part**
 - **Demolition equipment**
 - **Backhoe equipment**
 - **Additional counterweight, removable**
-
- **Boom, lower section**
 - Anti drop valve device for boom cylinder
 - *Universal Lock* quick coupling system
 - Quick-release couplings for high pressure pipes and control lines
 - Central lubrication over the base unit
 - **Demolition equipment**
 - Upper section with quick coupling system
 - Support bolck for the extension of the upper part
 - Bucketstick
 - Demoliton arm
 - Quick-release couplings for high pressure and conrol lines
 - Arm cylinder pipeburst saftey device
 - Bucket cylinder for demolition arm
 - Bucket cylinder with toggle and linkage for demoliton tools
 - Central lubrication of bearings from the lubrication vail in the middle section
 - **Backhoe equipment**
 - Upper section with quick hitch system
 - Bucket arm
 - Bucket cylinder with toggle and linkage
 - **Additional counter weight**
 - Counterweight for demolition applications (removable)



Technical specifications RH 16.5

■ Engine

Cummins-diesel 6 CTA 8.3

Water-cooled • Turbo charged • Integrated charge-air cooler • Electric revolution adjustment • Electric engine stop at key switch.

Engine output ISO 9249	186 kW / 1800 min ⁻¹
Cylinders / displacement	6 / 8300 cm ³
Bore / stroke	114 mm / 135 mm
Voltage	24 V
2 batteries each	12 V / 92 Ah
Alternator	70 A
Starter	7,7 kW
Exhaust emissions to statutory regulations.	

■ Hydraulics

PMS three-pump hydraulics with two working pumps and separate slewing pump • Individual control for each pump • Flow on demand • Double flow • Parallel bucket circuit allows 4 functions simultaneously • Hydraulic oil cooler with hydrostatic fan drive • High-pressure lines with flanged fittings • Micro filtration for return flow, servo- and slewing circuit.

Maximum delivery, main pumps	2 x 285 l/min
Maximum delivery, swing pump	195 l/min
Maximum pressure without booster	320 bar
Maximum pressure with booster	350 bar
Maximum pressure, swing gear	390 bar
With powerbooster cylinder forces are increased by 12,5 % and traction by 10 %.	

■ Control and monitoring system

Engine and pump monitoring with electronic load-limit control (PMS III) • Controlled heat-up phase • Temperature monitoring for engine and hydraulic system with output lowering to protect engine pumps • Automatic engine speed lowering.

3 selectable output levels:

	Heavy	Eco	Lift
RPM	1800	1700	1600
Pump output	100%	90%	65%

■ Slewing gear

Slewing pump and motor in sealed circuit for no-loss start-up and braking of superstructure • Slew gear with integrated wear-proof multi-disc brake • Encapsulated ball-bearing mounting with longtime lubrication.

Effective braking moment	113 kNm
Maximum slew rpm	9,0 min ⁻¹

■ Cab

Tinted safety glass • Front top pane retracts, lower section can be tilted and removed • Sliding window in the door • Roof window • Rain-protection roof • Three-speed blower • Defroster nozzles for leg area and front window • Central display for all control and monitoring functions • Deluxe operator's seat • Control functions acc. to ISO recommendation • Individually adjustable side consoles • Ergonomic servo-control levers.

■ Drive

Separate hydraulic drive for each crawler • Stone guard for variable-displacement motor, transmission and brake valve all within the crawler profile • Crawler brake • Track guard • Lowmaintenance crawlers with track tensioning • Sealed track pin bearings, life-time-lubricated main and upper rollers.

Max. effective tractive force	358 kN
Max. travel speed	4,4 km/h
Track pads per crawler	51 Stück

■ Capacities

Fuel tank	600 l
Cooling system	42 l
Engine oil, incl. filter	23 l
Slewing gear	8,5 l
Hydraulic tank	370 l
Hydraulic system	560 l

■ Working attachment

Reduced maintenance due to hardened and corrosion-protected pins, low-wear bushings, sealed bearings and easily accessible grease distributor for boom • Hydraulic cylinders with plain bearings • Spotlight mounted on boom.

■ Options

Air conditioning • Environmental-friendly hydraulic oil • Heater • Electrical refuelling • Pressure booster with power boost operation • Antiburst device and overload warning device • Additional headlamp • Mid-mounted track guide • TCG track cleaning guide • Stone guard • Deluxe cap • Fittings for radio/cassette recorder.

Technical specifications RH 23.5

■ Engine

Cummins-diesel M 11

Water-cooled • Turbo charged • Integrated charge-air cooler • Dry-air filter with safty element and impurifications display • Electric revolution adjustment • Electric engine stop at key switch. • Combi-cooler for coolant and hydraulic oil.

Engine output ISO 9249	226 kW / 1800 min ⁻¹
Cylinders / displacement	6 / 10800 cm ³
Bore / stroke	125 mm / 147 mm
Voltage	24V
2 batteries each	12 V / 135 Ah
Alternator	70 A
Starter	7,7 kW
Exhaust emissions to statutory regulations.	

■ Hydraulics

PMS three-pump hydraulics with two working pumps and seperate slewing pump • Individual control for each pump • Flow on demand • Pressurebooster with power boost-function • Double flow • Parallel bucket circuitry allows 4 funktions simultaneosly • Hydraulic oil cooler with controlled fan drive • High-pressure lines with flanged fittings • Micro filtration for return flow, servo- and slewing circuit.

Maximum delivery, main pumps	2 x 285 l/min
Maximum delivery, swing pump	195 l/min
Maximum pressure without booster	320 bar
Maximum pressure with booster	350 bar
Maximum pressure, swing gear	390 bar
With powerbooster cylinder forces are increased by 12,5 % and traction by 10 %.	

■ Control and monitoring system

Engine and pump monitoring with electronic load-limit control (PMS III) • Controlled heat-up phase • Temperature monitoring for engine and hydraulic system with output lowering to protect engine pumps • Automatic engine speed lowering.

3 selectable output levels:

	Heavy	Eco	Lift
RPM	1800	1700	1600
Pump output	100%	90%	65%

■ Slewing gear

Slewing pump and motor in sealed circuit for no-loss start-up and braking of superstructure • Slew gear with integrated wear-proof multi-disc brake • Encapsulated ball-bearing mounting with longtime lubrication.

Effective braking moment	134 kNm
Macimum slew rpm	7,3 min ⁻¹

■ Cab

Tinted safety glass • Front topp pane retracts, lower section can be tilted and removed • Sliding window in the door • Roof window • Rain-protection roof • Three-speed blower • Defroster nozzles for leg area and front window • Central display for all control and monitoring functions • Deluxe operator's seat • Control functions acc. to ISO recommendation • Individually adjustable side consoles • Ergonomic servo-control levers.

■ Drive

Seperate hydraulic drive for each crawler • Stone guard for variable-displacement motor, transmission and brake valve all within the crawler profile • Track guard • Lowmaintenance crawlers with track tensioning • Sealed track pin mounting, life-time-lubricated main and upper rollers • VLC Undercarriage: TCG – O&K-track cleaning guide.

Max. effective tractive force	HD 425 kN VLC 405 kN
Max. travel speed	HD 2,2 km/h VLC 4,5 km/h
Track pads per crawler	HD 47 VLC 53

■ Capacities

Fuel tank	650 l
Cooling system	42 l
Engine oil, incl. filter	38 l
Slewing gear	8,5 l
Hydraulic tank	400 l
Hydraulic system	730 l

■ Working attachment

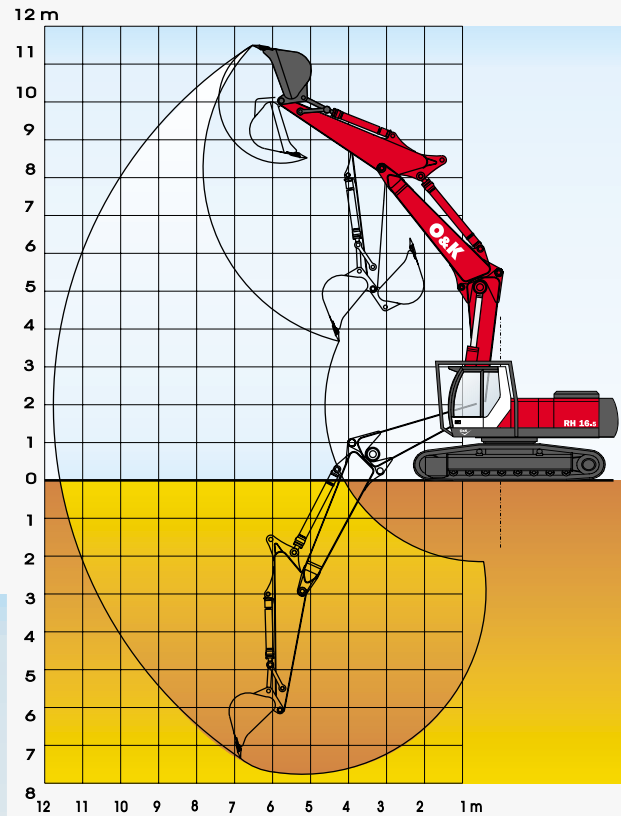
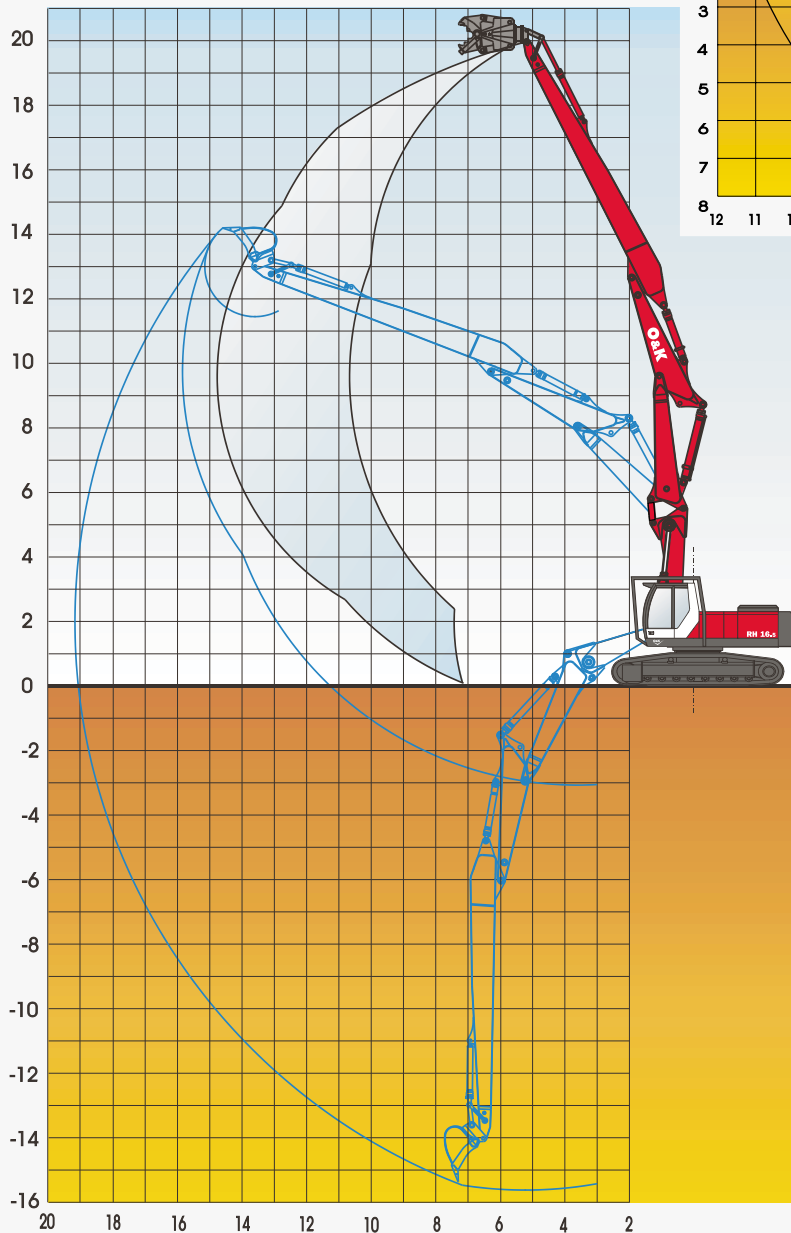
Automatic central-lubrication-system • Reduced maintenance due to hardened and corrosion-protected pins, low-wear bushings, sealed bearings • Hydraulikzylinder beidseitig mit Gelenklagern • Spotlight mountend on tank and on counter weight • progressive end-of-stroke damper • Pipe burst safety device for boom.

■ Options

Air conditioning • Environmently-friendly hydraulic oil • Heater • Electical refuelling device • Pipe burst safety device and Safe Load Indicator • Additional headlamp • Mid-mounted track guide • Grab swivel device with hydraulic reversing valve on the bucket cylinder • Fittings for radio/cassette recorder.

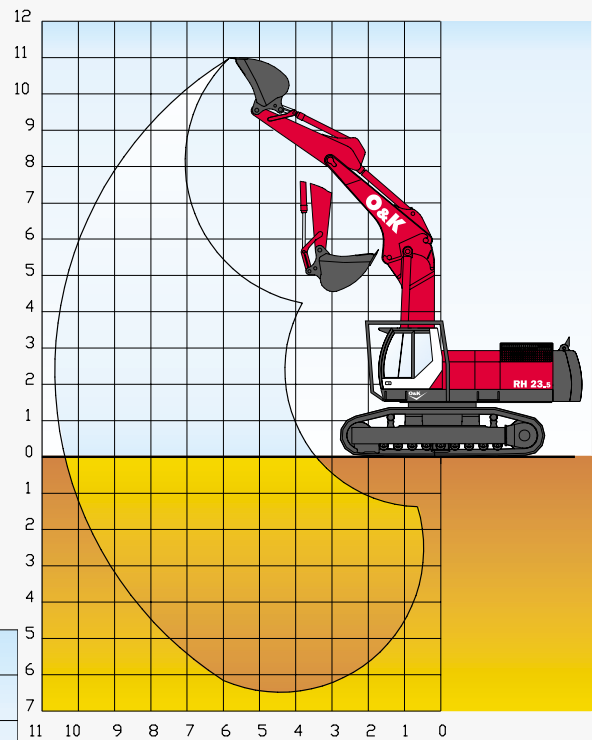
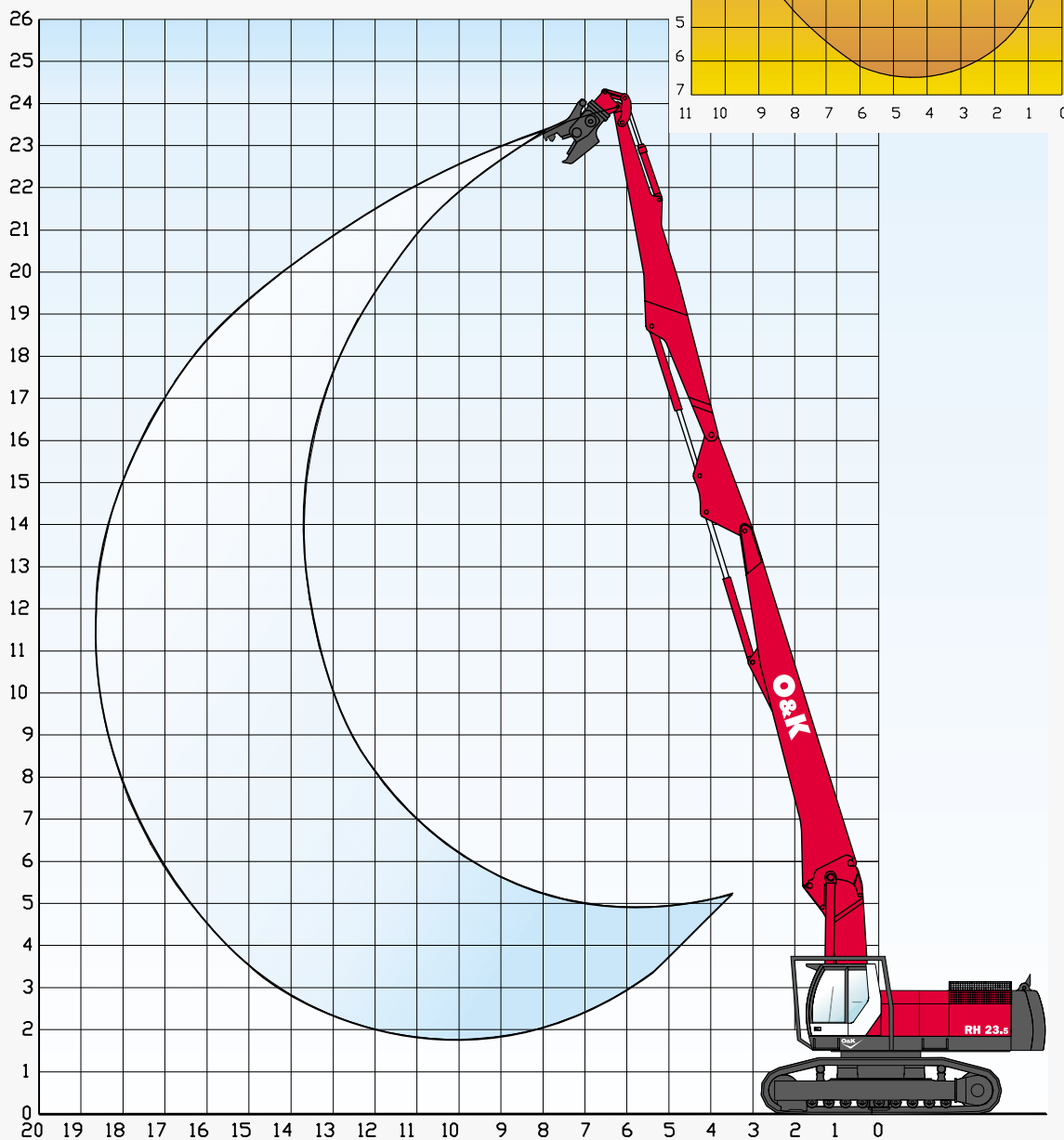
RH 16.5 with universal demolition equipment:

■ Working range



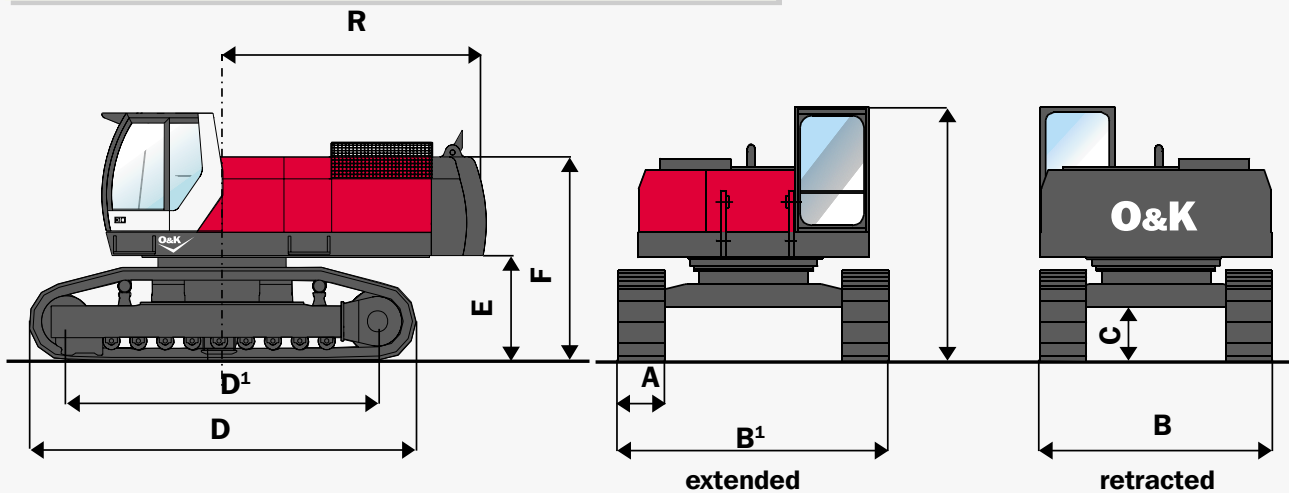
RH 23.5 with combined demolition equipment:

■ Working range



Dimensions and weights

■ Basic machine with VLC undercarriage:

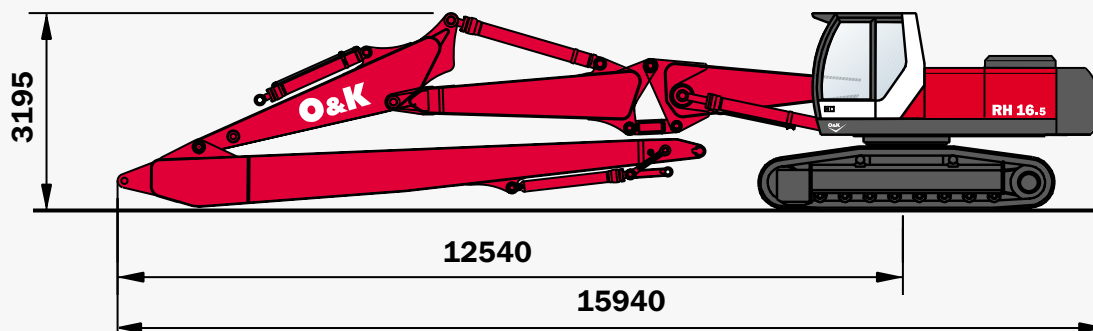


	A	B	B¹	C	D	D¹	E	F	G	R
RH 16.5 VLC 600	600	3 000	3 500	690	5 180	4 255	1 250	2 380	3 200	3400
RH 16.5 VLC 700	700	3 100	3 600	690	5 180	4 255	1 250	2 380	3 200	3 400
RH 23.5 VLC 600	600	3 000	3 500	770	5 430	4 370	1 470	2 820	3 420	3 800
RH 23.5 VLC 700	700	3 100	3 600	770	5 430	4 370	1 470	2 820	3 420	3 800

■ Machine overview

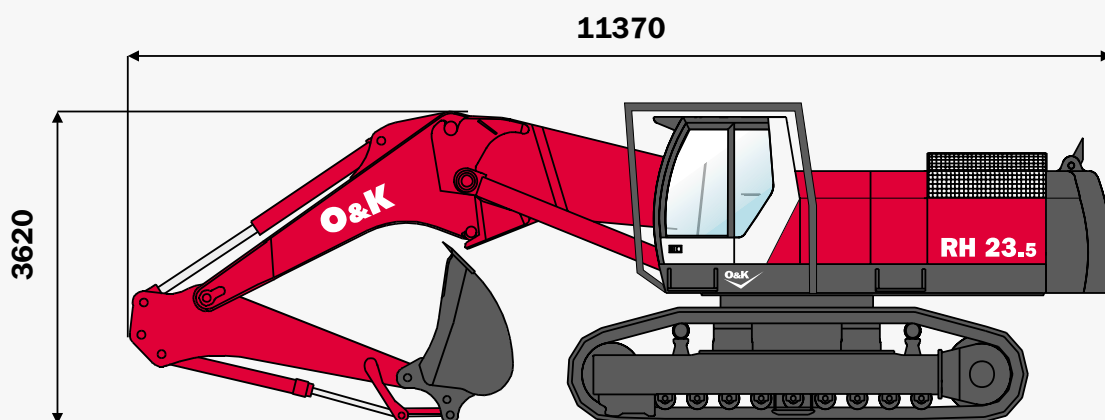
Machine typ	RH 16.5	RH 23.5
Demolition equipment	UA 20	KA 24
Maximum working height	20 m	24 m
Operating weight with demolition equipment	43,0 t	54,0 t
Transport weight basic machine with backhoe equipment	39,0 t	48,0 t
Transport weight of the demolition equipment	–	10,8 t
Additional counterweight	2,5 t	2,5 t

■ RH 16.5 with universal demolition equipment

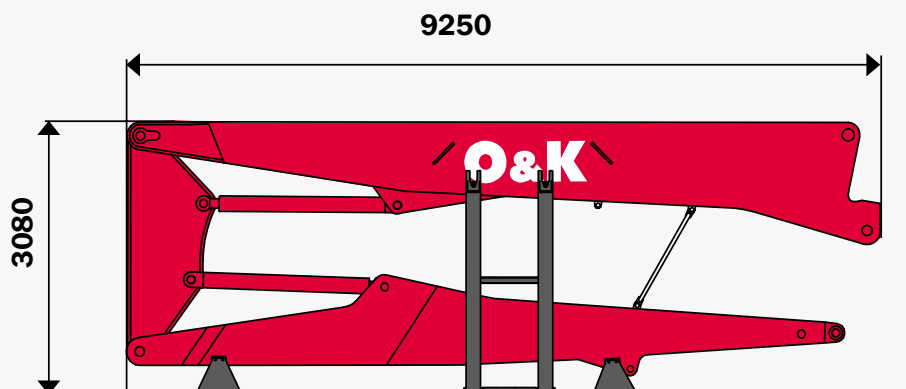


■ RH 23.5 with combined demolition equipment

Transport dimensions with backhoe



with rock guard observe cabine height !



Dimensions in mm

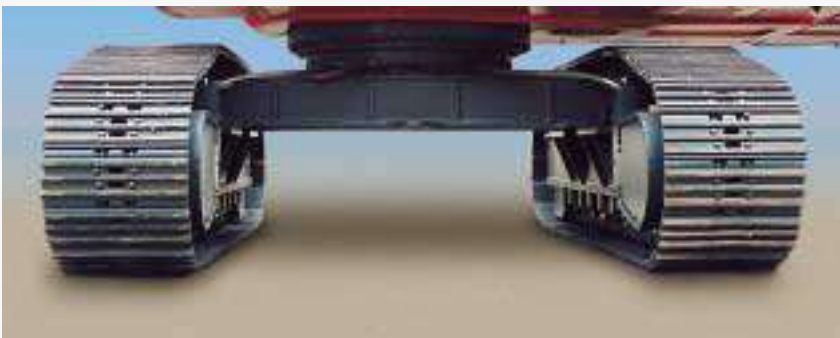
20% more lifting capacity

■ The VLC undercarriage

Considerably higher stability during demolition work through adjusting the width of the undercarriage by 500 mm



The sturdy VLC undercarriage can be extended mechanically an additional 500 mm from the transportation width of 3000 mm. This increases the lifting capacity over the cross section by an impressive 20%. High drawbar pull and high travel speeds ensure superior working results even under the most demanding ground conditions. The steady traction and the optimal layout of the whole machine, assures high stability and strength.



Nearly maintenance free - the entire undercarriage

Crawler gear and travel engine are entirely enclosed and thus protected from damage. The protective coverings are disassembled with only a few hand movements for maintenance work. The oversized crawler feature sealed chain pins and bearings, as with the undercarriage, low maintenance. Support rollers are lifetime lubricated.

The travel drive is securely protected within the undercarriage profile. All hydraulic lines are protected through steel plate covers for demolition applications.



Comfortable view even at maximum reach

■ The tiltable cab



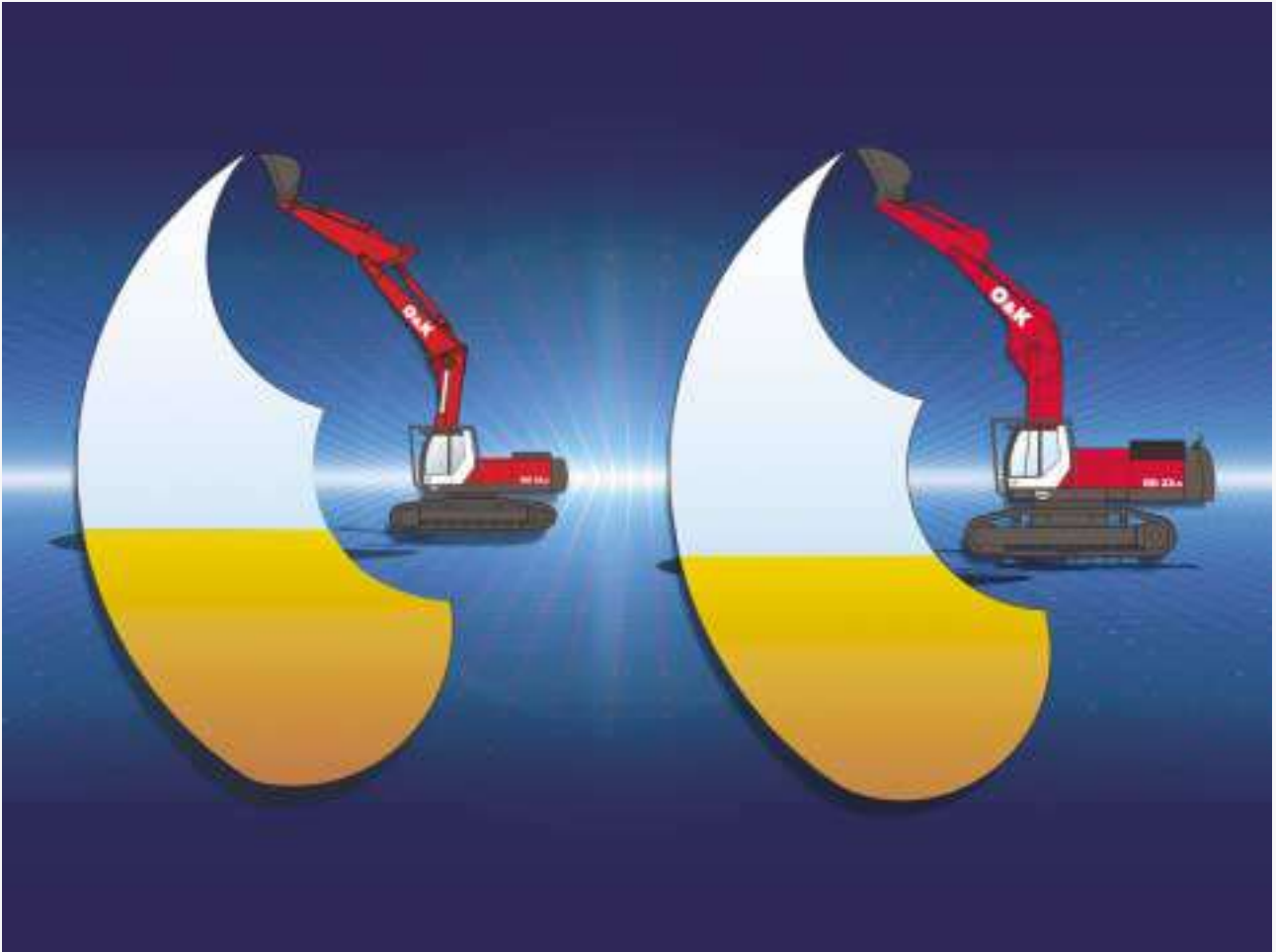
The tiltable cab (available as an option) warrants comfortable working conditions, even when the equipment is extended to the maximum reach. The cab can be tilted hydraulically up to an inclination of 32 degrees. This guarantees a straight view to the attachment. So even demolition jobs in maximum elevations can carry out with precision and without 'situps' on the operators seat.

because of the enclined position the operator can entirely concentrate on his job.

This means not only a surplus of comfort but also a considerable improvement of safety at work and productivity. Therefore the tiltable cab is the ideal complement to the O&K combined or universal demolition equipment.

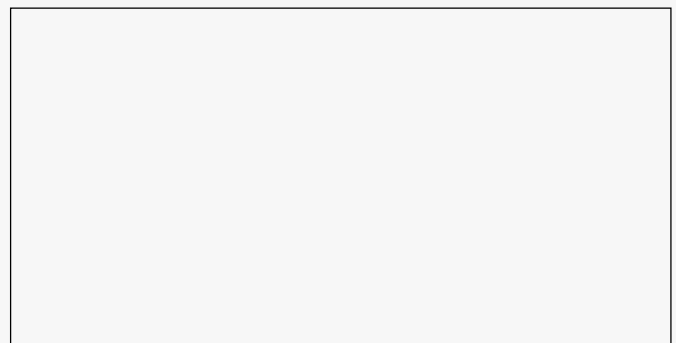
O&K combined and universal demolition equipment

■ Versatility for demoliton and backhoe applications



O&K Orenstein & Koppel AG
Staakener Str. 53-63
D-13581 Berlin

E-Mail: info@orenstein-koppel.com
<http://www.orenstein-koppel.com>



Alternations without prior notice. The illustrations do not necessarily show the standard versions of the machine. Any statement on the quality or use of the products shall be deemed approximate and without obligation and not construed to be an express warranty of quality or merchantability. Performance shall expressly be governed by the contractual agreement.