

Mecalac

VERSATILE CRAWLER EXCAVATOR **714MC**



> Experience of your worksite

714MC

714MC UNITING PRODUCTIVITY AND THE KNOW-HOW OF MECALAC

3

35 years of experience, working alongside our clients, has enabled us to develop original solutions...

- Threepiece boom operated with two asymmetric cylinders (patented system).
- Pre-selected modes to adapt driving to your preferences and experience.
- X chassis giving self cleaning in muddy conditions.

... and continually innovative solutions:

- > **ACTIVE LOCK**, hydraulic quick-release coupling *
- > **ACTIVE CONTROL**, load sensing, flow sharing, cylinders coupling **

* details page 5

** details page 9

Extremely powerful engine
for this category.

**88 kW / 119 BHP
at 2,100 rpm**

13 t

**Traction force
9 500 daN**

Spacious and
comfortable cab.

Total rotation of the bucket
with the boom in 3720 mm.

Wide choice of options
and equipment.



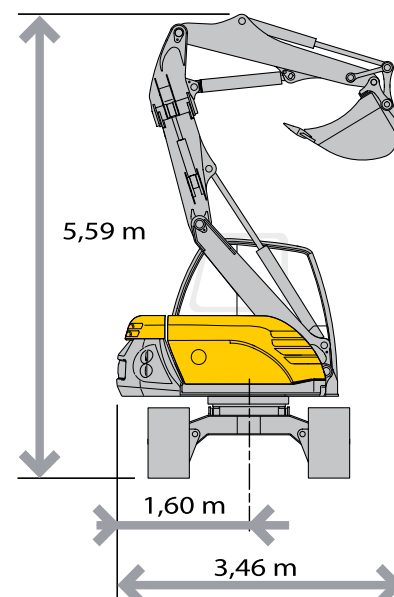
WHEN STABILITY GOES HAND-IN-HAND WITH PRODUCTIVITY...



Road, drainage and earth-moving professionals, on sites where space is limited the 714MC fulfills your compactness, performance and profit expectations.

COMPACTNESS AND STABILITY

With a short radius of 1,600 mm, the 714MC works in a single lane. Furthermore, the kinematics of its equipment render it effective even in extremely restricted working zones (total excavator rotation in 3,720 mm). To meet the requirements of the user, the 714MC may be equipped with a steel plate (500, 600 or 750 mm) or rubber plate (500 mm) crawler for work in urban areas. Giving priority to performance and stability, Mecalac has developed an anchoring blade to optimise ground contact.



PERFORMANCE

Thanks to its boom based on Mecalac know-how, the 714MC is efficient under all circumstances. The lifting arm system with two asymmetric cylinders guarantees a homogenous lifting force over the entire lifting range. The 2 travel speeds, 5.5 and 3 km/h, minimize the transfer time on site. The electronic system controls all vital components via the BUSCAN, optimises excavator operation and indicates essential information to the operator for precise machine operation.



Efficiency and kinematics, quick coupling and compactness render the 714MC flexible and adapted to all situation. A key factor in the profitability of your work sites.

VERSATILITY = PROFITABILITY

The 714MC digs, loads, handles and may be equipped with numerous attachments. Thanks to Mecalac **ACTIVE LOCK**, hydraulic quick-release coupling, the operator may change tools in only a few seconds. The specific kinematics of the equipment, based on Mecalac know-how, guarantee the efficiency of the excavator regardless of the attachment used.





EXPERTISE

For your drainage channel installation work, the 714MC meets all your needs for compactness and power.

The offset* to the right or the left of boom facilitates trench work: the bucket may be offset by 2,300 mm from the machine axis. This offset is used during surfacing to level, grade and create a right/left incline.

Thanks to the X crawler chassis, the machine remains stable and efficient during rotation. In order to adapt the machine to all surfaces, the crawler is available with rubber or steel plates.

* Option.



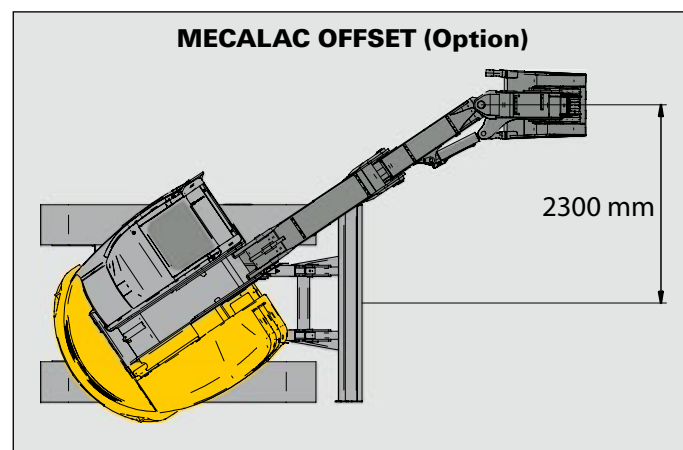
EFFICIENCY

Thanks to the original kinematics of the equipment and the lifting arm system with two asymmetric cylinders, the 714MC smooths and digs with a high level of precision and performance. Furthermore, the spacious and ergonomically designed driver's cab guarantees optimum working conditions for the operator all day long. Excavator and loader bucket for use as earth mover, pallet loader, vibrating plate... are all tools used regularly.

The short turret radius does not exceed 1,600 mm which leaves the other lane free and therefore does not hinder road traffic. The operator may therefore concentrate his attention entirely on the working zone.

LIFTING CAPACITIES

Equipped with a handling hook, used to install concrete pipes or screening, you will appreciate the lifting capacity of the 714MC. Furthermore, its hydraulic operated crawler track driven by two piston motors and equipment configuration provide it with exceptional stability and a large load handling capacity. Its DEUTZ engine, with latest technology, 88 kW/119 BHP delivers the power required for the most demanding operations.





COMFORT

- A very spacious cab for a machine of this category: length 2m.
- A panoramic view over the entire working zone, in particular thanks to the position of the lifting arm cylinders.
- Numerous storage spaces adapted to today's needs.
- The seat and arm rests may be adjusted independently to adapt the seating to the morphology of the user.
- A totally fold-away windscreen: the bottom section folds over the top section which is then folded under the roof. Ceiling skylight with sunscreen
- Reduced noise in the cab thanks to improved noise insulation in the engine compartment.
- Stereo radio CD player.



The operating simplicity, unparalleled level of safety and comfort all contribute to the well-being and efficiency of the driver throughout the day. Furthermore, the user-friendly controls and hydraulic functions render the 714MC extremely efficient under all working conditions.

EASY AND INTELLIGENT OPERATION



Encourage intuitive operation of the controls by the user.

- **Several pre-set operating modes** adapted to the working habits and experience of the operator.
- **Several power levels:** Heavy, Standard, Economy enable the user to adapt the power to the work required.
- **«Auto idle»** - Automatic return to idle if the controls are not touched for a pre-defined time.
- **«Fine» button:** for particularly precise and fine work with maximum power.



A high-definition **digital LCD screen**, visible even in strong sunlight, enables immediate viewing of all vital data for optimum machine operation.



COUPLING OF CYLINDER: Control of the 2 piece boom without using the foot pedals thanks to the cylinder coupling system (Mecalac patent).

ACCESSIBILITY

Intuitive and robust, the sliding hinged door may be opened and closed, even close to a wall.

WEIGHT

- Empty, operational, without bucket, with levelling blade 13500 kg
- Ground pressure (mm) 500 600 750
- Shoes width (kg/cm²) 0,47 0,39 0,31
- Machine Width (mm) 2450 2550 2700

ENGINE

- Intercooled turbocharged engine (compliant with standard TIER 3)
- Type..... DEUTZ TCD 2012 L04-2V
- Diesel 4 in-line cylinders
- Power 88 kW (119 BHP) at 2,100 rpm
- Max. torque 495 N.m at 1,600 rpm
- Cubic capacity..... 4,038 cm³
- Cooling water
- Air filter dry, cartridge with clogging indicator in the cabin
- Diesel consumption 8 to 14 l/h (depending on operating conditions)
- Exterior noise level: 101 dB(A)

TRANSMISSION

- Open-circuit hydraulic transmission.
- Hydraulic foot control.
- Automatic brakes.

ELECTRICAL CIRCUIT

- 2 x 110 Ah / 720A-
- Voltage 24 V
- Batteries 2
- Alternator 55 A
- Starter motor 4 kW

CHASSIS

- Central X chassis
- Traction force: 9,500 daN
- Speed: range I : 3 km/h
range II : 5.5 km/h
- Double cc engine: 87 cm³ et 50 cm³
- Gear ratio: 40
- Steel plates, width: 500/600/750 mm
- Rubber plates, width: 500 mm
- Rollers / load-bearing rollers: 7/1
- Track tension: grease jack and compensation spring
- Levelling blade controlled with two cylinders
- Width: 2500 mm
- Height: 503 mm
- Lift height/ground: 477 mm
- Max. depth attained/ground: 318 mm

HYDRAULICS

- **Boom circuit**
 - Variable capacity pump with electronic power control.
 - Max. pressure. 350 bars
 - Max.-flow-rate. 205 l/min (95 cm³/tr)
 - Attachment circuit (Standard)
Pressure. 180 bar
Flow rate 130 l/min
- **REXROTH distributor type LUDV** « Load Sensing Flow Sharing » proportionality of functions respected regardless of the load on each element.

TURRET

- Total rotation 360°.
- Internal crown wheel drive mechanism.
- Swivel with hydraulic motor with brake
- Rotation-speed: 10 rpm
- Hydraulic motor: 1,260 cm³
- Max. pressure : 260 bar
- Rotation-torque: 3,800 m.daN
- Shock absorber for progressive turret rotation, start and stop.

Tanks

- Hydraulic oil, capacity 140 l
- Fuel, capacity. 150 l

CAB

- Monoblock fastened to 4 noise insulated spring posts, windscreen totally folded under the cabin ceiling, sliding swing door sliding windows in door, ceiling skylight with sunscreen.
- Controls incorporated into the consoles on both sides of the seat and adjustable according to seat position.
- Seat on suspension struts, lateral and height adjustment to suit the driver's build, seat belt.
- Electronic control panel with LCD display directly in the driver's line of view and comprising all safety and operation monitoring data, visual and audible alarms.
- Water heating, high-speed blower, high anti-mist capacity, defrost via 5 air jets.
- Stereo radio CD player.
- Optional air conditioning.
- FOPS approved with fan guard (optional).

BOOM

- Composed of 3 parts: jib, jib end and arm.
- Jib control with a patented system composed of two asymmetric cylinders enabling a swing of 140°.
- Standard right and left off-set with a hydraulic cylinder option on multipurpose equipment: 2.30 m/machine axis.
- End bearings equipped with sealing rings and greasing via the rings.
- Jib cylinders with end of travel shock absorbers.
- Quick coupling system ACTIVE LOCK:
 - Mecalac quick attach with automatic mechanical locking and hydraulic over-locking.
 - Unlatching controlled hydraulically.

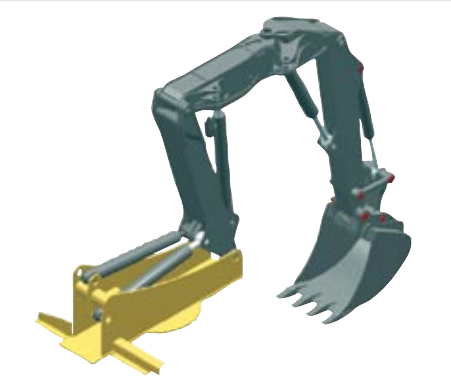
Boom performance (machine equipped with a quick coupling):

	BOOM	
	Multipurpose Excavator	
•-Excavator		
Max. penetration force daN	5,500	6,200
Max. digging force daN	8,400	8,400

•-Loader	
Max. digging force daN	5,900

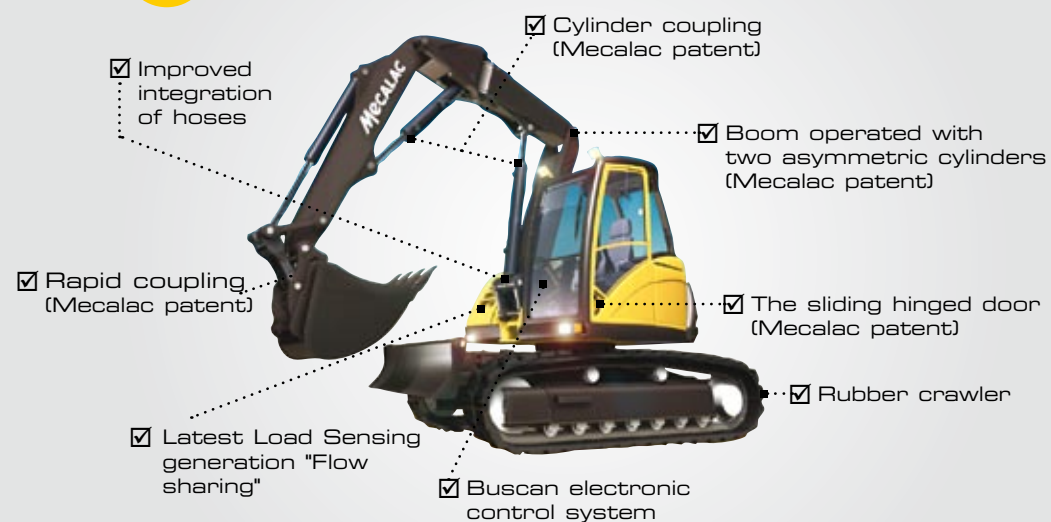
- **-Handling**
 - For lifting and handling work, the excavator must be equipped with a safety valve.

	mm	dm³	dm³		kg
	500	260	215	3	286
	600	330	265	3	310
	850	530	385	4	386
	1000	630	455	4	422
	1200	740	555	5	487





TECHNOLOGICAL CLOSE UP



BUSCAN ELECTRONIC CONTROL SYSTEM

This system provides a communication interface between the various machine elements (engine, hydraulics, controls). This offers the following advantages:

- Optimisation of performance

Electronic regulation system for the machine pump enabling interaction of the hydraulic and combustion power sources in order to optimise machine operation.

- Limit pollution and reduce noise

Electronic control system for engine fuel injection in order to optimise the working range and reduce noise and pollutant emission.

- Simplified driving

Modes: in addition to the pre-selected driving modes, it is also possible :

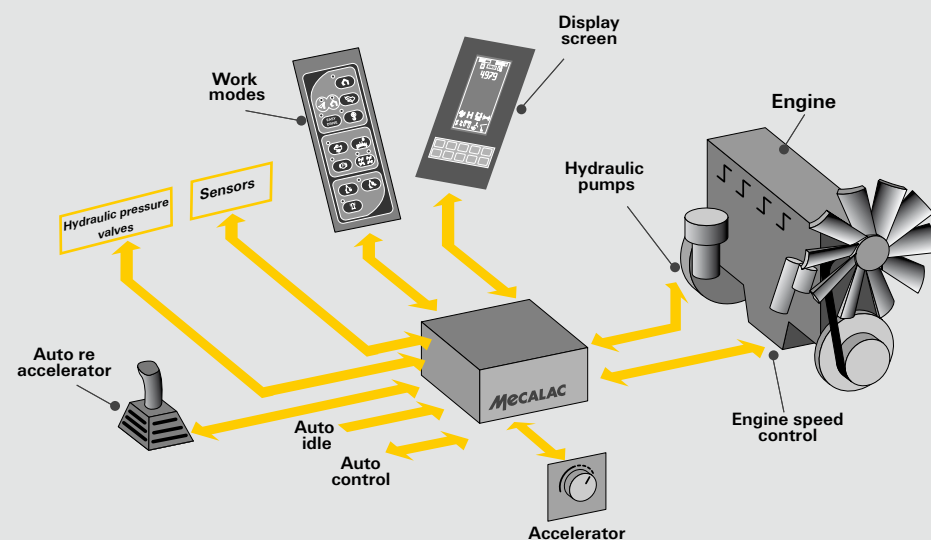
- to work at various power levels.
- to fine-tune machine operation of precision work.
- to work at all engine speeds.

- Fault detection

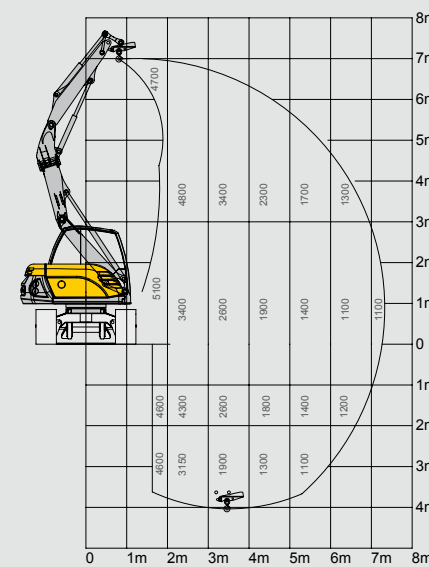
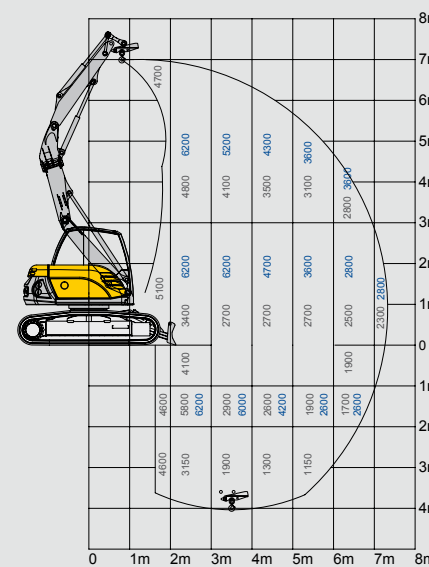
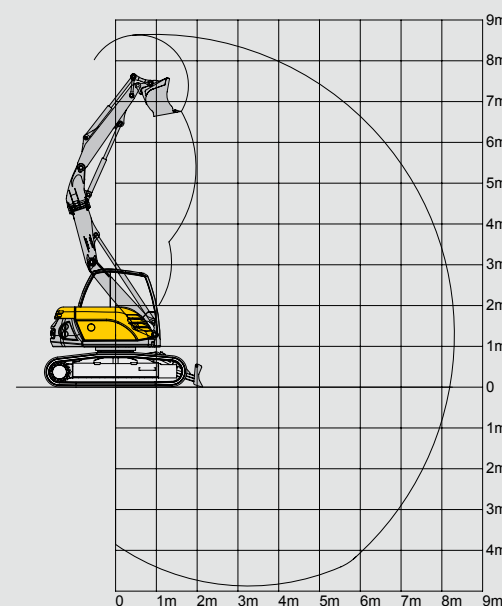
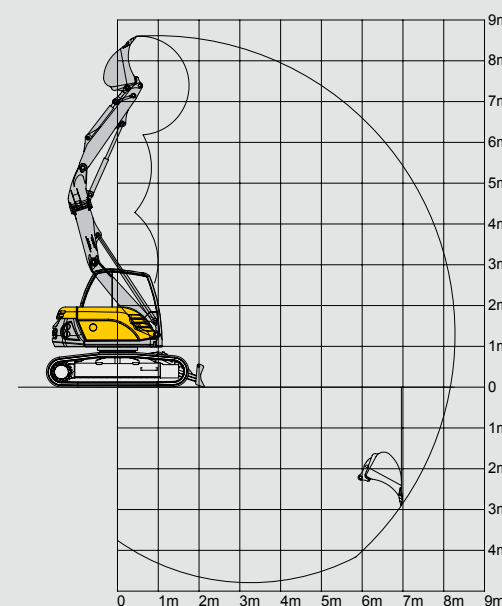
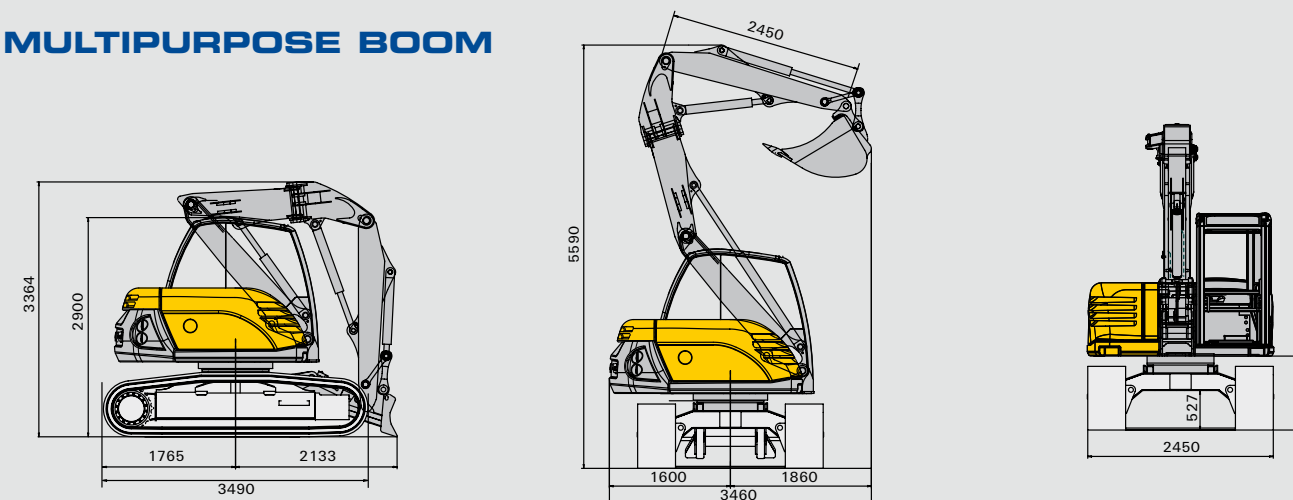
A fault code is displayed on the control monitor to facilitate fault finding.

- Easy maintenance

All «deviations» from the operating characteristics are memorized in the CPU. This record facilitates maintenance.



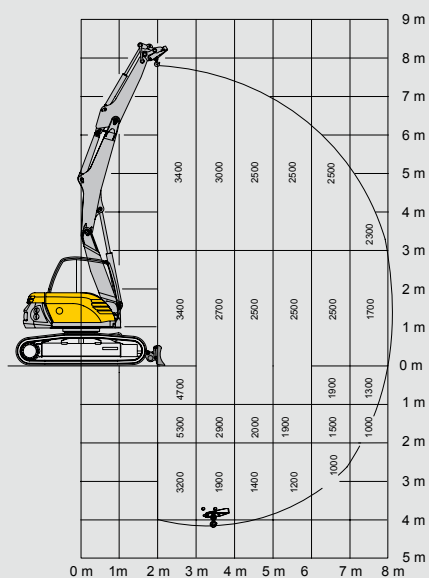
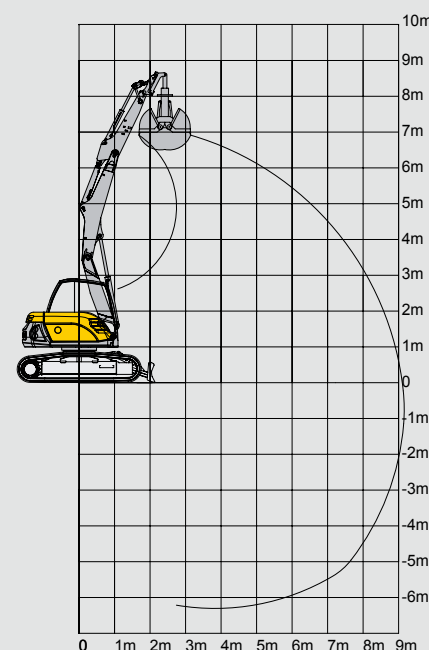
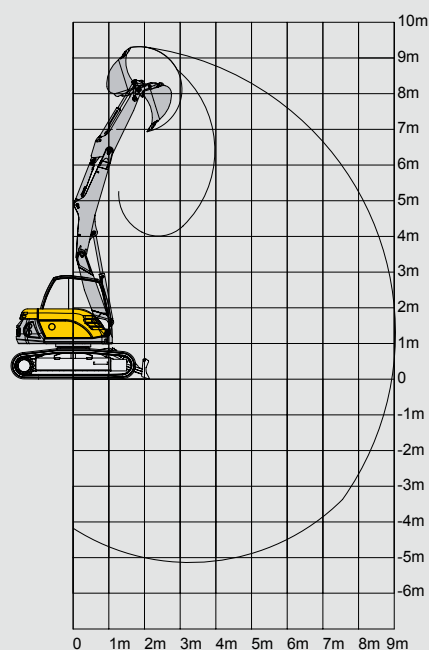
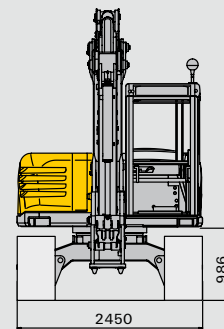
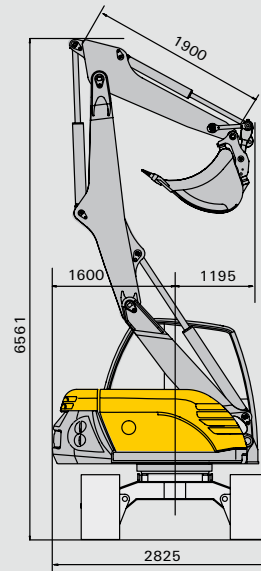
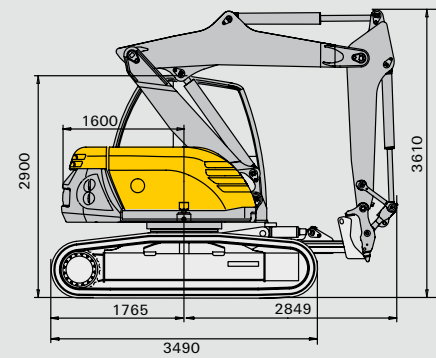
MULTIPURPOSE BOOM



kg
ISO 10567

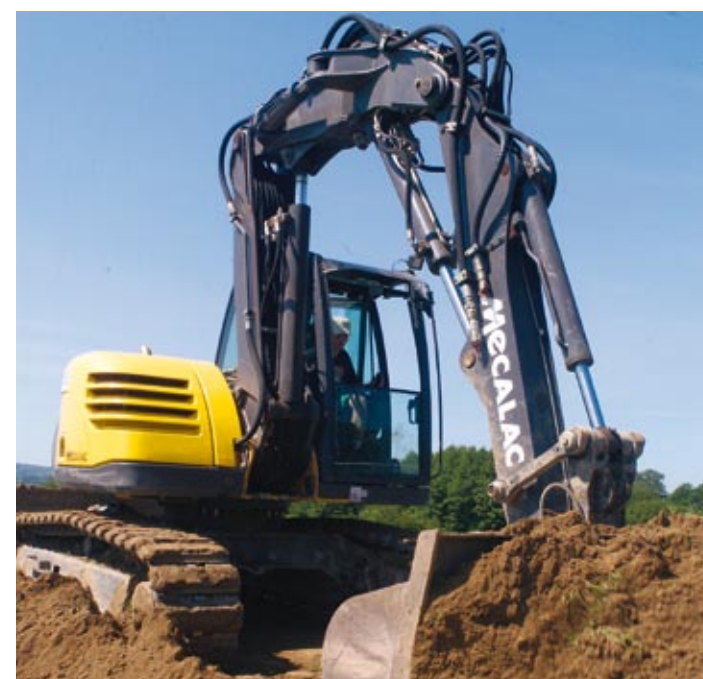
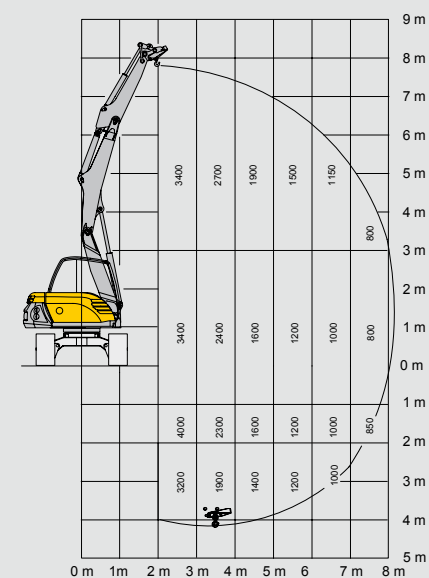
Loads in kg
with optimum
equipment
configuration

EXCAVATOR BOOM



kg
ISO 10567

Loads in kg
with optimum
equipment
configuration



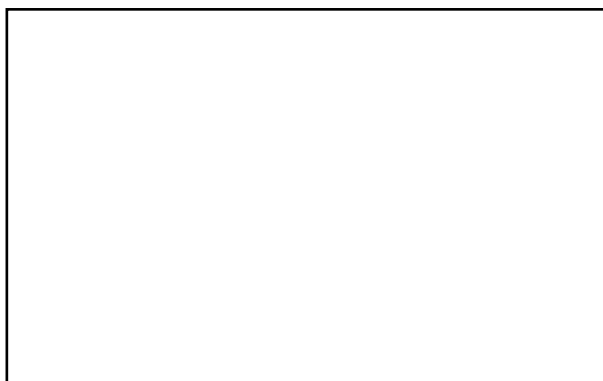


Our trade is the design, development, manufacture and commercialisation of innovative equipment for public road work adapted to a broad quality span to meet the requirements of a wide variety of customers.

The customer is at the heart of our company and we offer the benefit of our know-how with the team spirit which drives us forward.



Your local dealer:



Mecalac

Parc des Glaisins - 2, av. du Pré de Challes - F-74940 Annecy-le-Vieux - Tél. : +33 (0)4 50 64 01 63 - Fax : +33 (0)4 50 64 02 79 - www.mecalac-ahlmann.com

MECALAC and **AHLMANN** are companies from Mecalac Group.