CONSTRUCTION & TRANSPORT MANAGEMENT PLAN
RevA

SUPPORTING APPROVED APPLICATION
REF: 20/00266/FUL

AT

Land To The East Of The Cottage Badgers Road Badgers Mount
KENT TN14 7AY

FOR

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Project:	Land to The East of The Cottage Badgers Road Badgers Mount KENT TN14 7AY
Client:	Mr Steve Pullman
Document:	Construction & Transport Management Plan
Ref:	7864/COND

Issue	Date	Status
A	September 2021	Planning
B	November 2021	Planning

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SITE BACKGROUND AND PROPOSALS

The existing site for 'The Cottage' is to be split, forming two separate curtilages. The proposed new dwelling is a single storey, detached, 4 bedroom dwelling with a basement. This is as per planning approval ref: 20/00266/FUL.

VEHICULAR ACCESS AND SIZE

Access to the site is from Badgers Road which is a single-track rural road. An existing site entrance will provide access onto the site. This will however be widened as part of the works to approximately 7.5m in width by removing some existing fence panels. A small section of verge to the south, which is currently a narrow area of scrub & brambles, is to be made good at the end of the works.

The Principal Contractor will ensure that only appropriate size vehicles will access the site. Refer to Appendix B for indicative vehicles/ plant to be used.

Other vehicles including grab / concrete / delivery lorries etc are likely to be 6-wheel vehicles of approximately 10-12 tonnes.

PARKING AND TURNING AREAS FOR CONSTRUCTION SITE PERSONNEL

Provisions for on-site parking and vehicle turning within the site has been allocated as shown on planning drawing 7864-PD-01 RevA.

DELIVERY/ UNLOADING OF PLANT AND MATERIALS – TRAFFIC MANAGEMENT

As shown on planning drawing 7864-PD-01 RevA, there is adequate space to parking a large delivery/ grab lorry etc entirely within the permitter of the site and off the adjacent Public Right of Way. When large deliveries are undertaken or when excavated material is collected from site, facilitating the need for larger vehicles, a site foreman / banksman will be utilisied to direct traffic and protect pedestrians from construction traffic. They will ensure that the road is clear of vehicles and pedestrians before allowing deliveries onto site. The site entrance will clearly display a temporary sign informing the public of the hours of delivery.

Larger vehicles will access the site from the west before returning back up Badgers Road in the same direction, as shown on planning drawing 7864-PD-01 RevA.

Where possible larger deliveries will be undertaken outside of peak hours (10am – 2pm) and programmed so that they do not clash with domestic refuse collection days.

The Principal Contractor will ensure that the site entrance is kept clear of obstructions at all times. When deliveries are expected the drop off area within the site is to be kept clear to allow vehicles to turn immediately onto the site.

PEDESTRIANS / PUBLIC RIGHT OF WAY

The works will only affect pedestrians during deliver drop offs/ collections. As discussed above measures are being put in place to ensure that large vehicles can directly access the site avoiding the need to stop for any period of time on the public highway. All lorries are to be fitted with hazard reversing alarms and the road kept clear of obstacles at all times. Pedestrians and other road users are to be prioritised by banksmen / foreman who will supervise large vehicle movements onto and out of the site.

STORAGE OF PLANT AND MATERIALS

Provisions for storage of plant and materials within the site has been allocated as shown on planning drawing 7864-PD-01 RevA.

By removing some existing fence panels, the site entrance will be temporarily widened to 7.5m providing plenty of space for grab lorries etc to enter and exit site. As shown in the site photograph on page 10 the verge in this area is an area of scrub land with a limited amount of bramble planting. Once construction works are completed this area will be made good. This is however only a very limited amount of verge that does not impede the use of the Public Right of Way.

CONTROL OF EMISSIONS OF DUST AND DIRT

The Principal Contractor will ensure that all reasonable precautions are taken to avoid dirt/dust etc escaping from the site. In cases where there is a British Standard or ISO Standard, the recommendations should be followed. As part of this they will:

- Burning of materials on site shall not be permitted.
- The contractor shall ensure that the area around the site, including the public highway is regularly and adequately swept to prevent the accumulation of dust and dirt.
- Where possible skips and removal vehicles shall be properly sheeted when leaving the site.
- Dust suppression system should be operated where necessary to minimise dust transfer into neighbouring premises.
- Stockpiles of earth shall be damped down (if required) or otherwise suitably treated to prevent emission of dust from site. Stockpiles should be planned and sited to minimise the potential for dust generation. The handling of spoil should be kept to a minimum and when materials are deposited on to a stockpile should be from a minimum possible height.
- The contractor should take all necessary precautions to prevent smoke emissions or fumes from plant or stored fuel oils. In particular, measures should be taken to ensure that all plant is well maintained and not left running for long periods when not in use.

Wheel washing facilities are to be provided close to the site entrance allowing vehicle tyres etc to be jet washed to remove mud before leaving site. Temporary unmade hardstanding (clean crushed concrete) is to be laid to the front of the site for construction vehicle parking/ materials storage during the construction phase. Refer to planning drawing 7864-PD-01 RevA. Due to the porous nature of the material water will simply soak into the ground rather than draining off site and onto the public right of way.

To intercept any remaining water runoff from the wheel washing a drainage channel will be constructed across the site entrance and back filled with crushed concrete. This will redirect any water back into the site.

RECYCLING/DISPOSING OF WASTE

The Principal Contractor will ensure the reduction of waste where possible and recycle in accordance with the Site Waste Management construction waste Regulations 2008.

HOURS OF OPERATION

Work hours between 8am and 6pm Monday – Friday and 8am – 1pm on Saturdays unless otherwise stated in the planning approval notice.

PROGRAMME OF WORKS

Approximate Date and Time of Works (Starting Week of:)
Excavations: **17th January 2021 (2 weeks)**
Foundations/ Basement & Retaining Structures: **31st January 2021 (6 weeks)**
Walls & Roof Construction to watertight: **14th March 2021(10 weeks)**
Internal Works: **23rd May 2021 (8 weeks)**
Decorating& Finishing: **18th July 2021 (6 weeks)**
Landscaping: **18th July 2021 (3 weeks)**

SITE OFFICES AND WELFARE FACILITIES

The management of the construction of this project will require a site set-up comprising changing facilities, toilets, and offices. These offices and other facilities will be housed in double stacked 20ft modular portable units in the northeast corner of the site. These will be removed from site once no longer required.

PROP PANEL SYSTEM FOR RETAINING ELEMENTS

Further to discussions with structural engineer Trevor Cossey, it is proposed to utilise a temporary propping system that retains the ground rather than using more disruptive sheet piling. Formwork will then be constructed for the pouring of the permanent retaining structure. These props are then removed once this process is complete. A system such as that provided by Maybe hire is to be used.

Appendix A

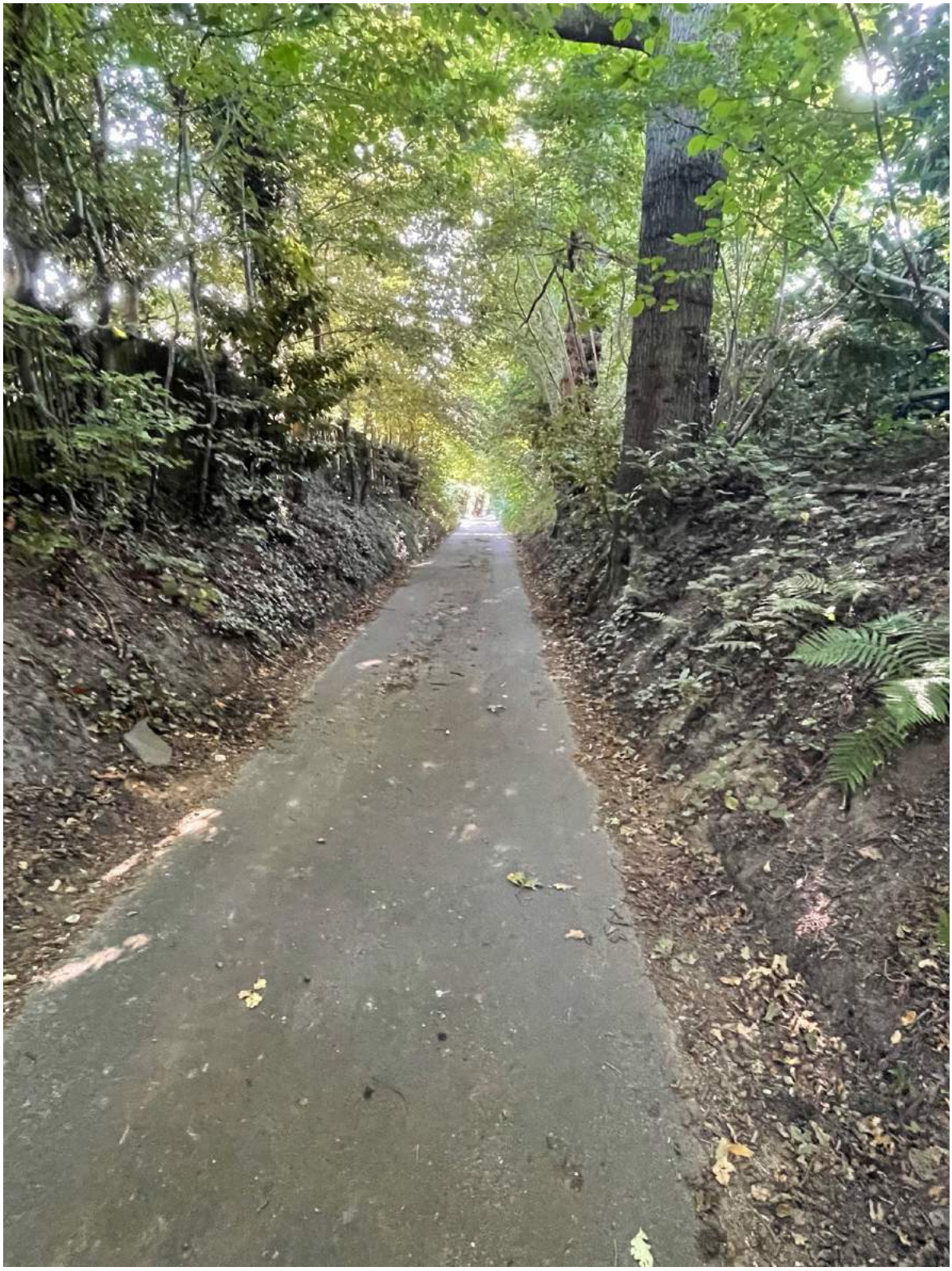
Photographic Survey:

Picture taken from the Badgers Road Junction with Highlands Road, looking down towards the site entrance

Picture taken from the Badgers Road Junction with Highlands Road, looking to the right.

Picture taken from the Badgers Road Junction with Highlands Road, looking to the Left.

Picture taken from Badgers Road Junction looking back to the junction with Highlands Road.



Picture taken facing down Badgers Road, past ‘The Cottage’ towards the existing site entrance.

Picture highlighting the existing site entrance (left-hand-side).

Picture highlighting the existing double gated site entrance.

Picture taken facing up Badgers Road. The existing site entrance can be seen on the right.

Appendix B

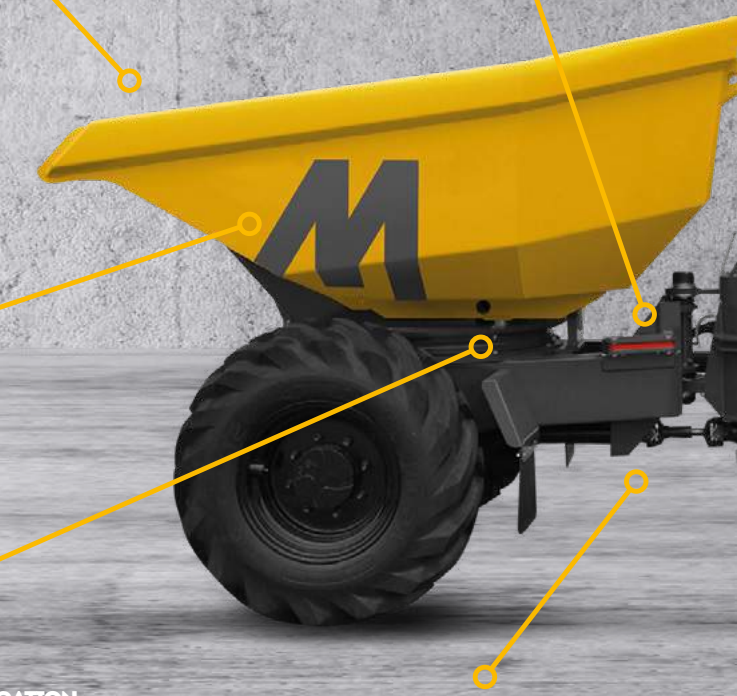
Vehicle Types:

MECALAC

SITE DUMPER

MECALAC

SETTING THE STANDARDS IN SITE DUMPER INNOVATION



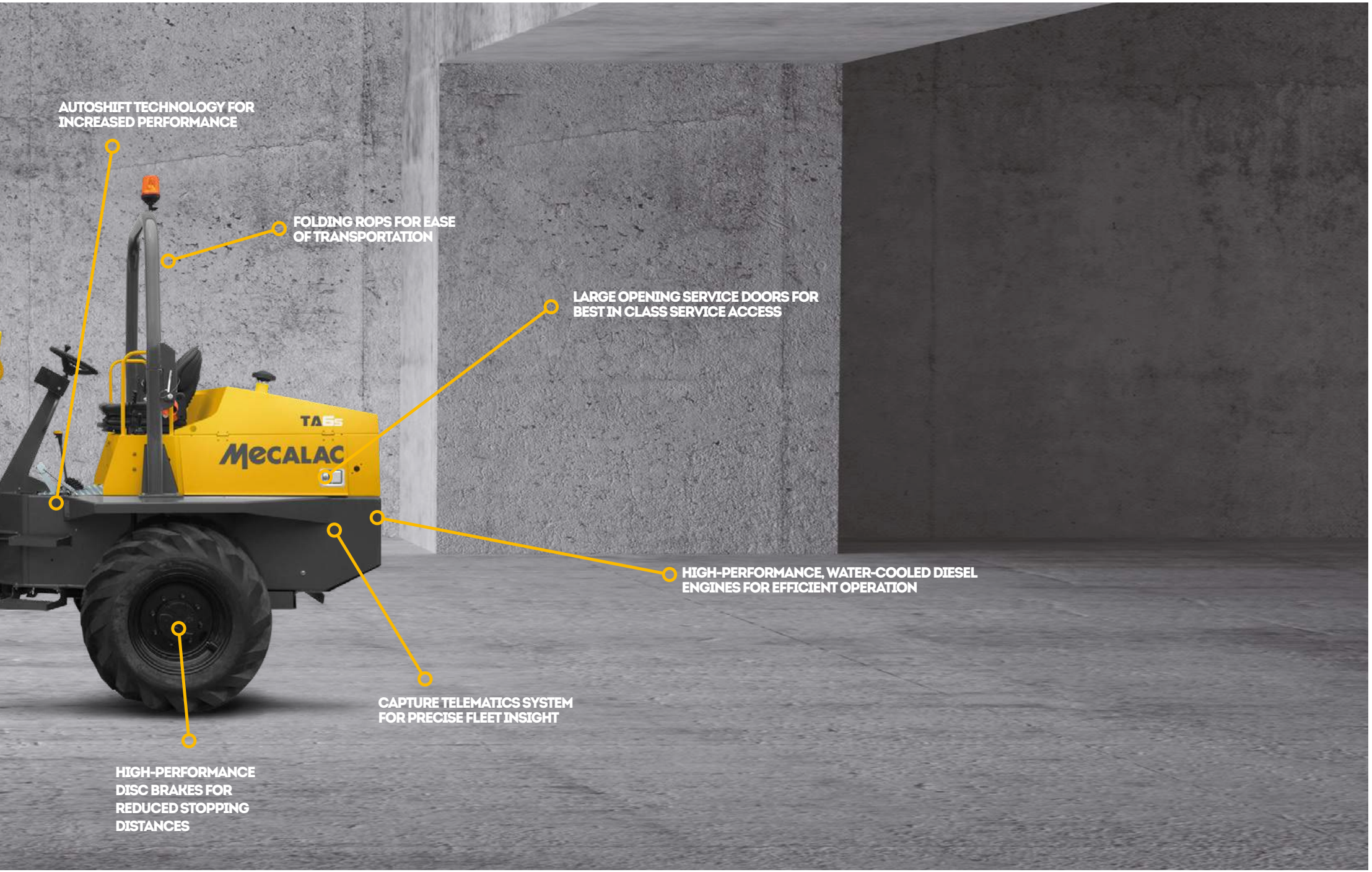
HAZARD DETECTION CAPABILITY TO FURTHER IMPROVE ON-SITE SAFETY

STOP/START CONTROL FOR IMPROVED FUEL EFFICIENCY AND INCREASED SERVICE INTERVALS

RENTAL TOUGH SKIP DESIGN AND CHASSIS FABRICATIONS FOR UNRIVALLED RELIABILITY

FORWARD AND SWIVEL TIPPING MECHANISMS TO SUIT EVERY APPLICATION

MARKET-LEADING GROUND CLEARANCE FOR SUPERIOR OFF-ROAD PERFORMANCE


AUTOSHIFT TECHNOLOGY FOR INCREASED PERFORMANCE
FOLDING ROPS FOR EASE OF TRANSPORTATION
LARGE OPENING SERVICE DOORS FOR BEST IN CLASS SERVICE ACCESS
HIGH-PERFORMANCE, WATER-COOLED DIESEL ENGINES FOR EFFICIENT OPERATION
CAPTURE TELEMATICS SYSTEM FOR PRECISE FLEET INSIGHT
HIGH-PERFORMANCE DISC BRAKES FOR REDUCED STOPPING DISTANCES
TA6s
MECALAC

INNOVATION AS STANDARD

Robust, reliable and rental tough, Mecalac site dumpers have been developed using more than 60 years' design and manufacturing expertise.

Featuring state-of-the-art engine technology to meet the latest emissions compliance, each model delivers power, torque and exceptional performance for greater operator productivity and profitability.

Designed with the user in mind, Mecalac site dumpers boast class-leading skip strengths, heavy-duty chassis designs and user-friendly controls. It's easy to see why each model leads its class in on-site earthmoving and tipping.

First-to-market technology additions – including Autoshift transmission, Stop/Start Control, Hazard Detection and Capture telematics – complete the package. From one to ten-tonne payloads, Mecalac's extensive model line-up has the perfect unit for every application.

CONTACT US

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ROBUST AND RELIABLE

POWER TIP SITE DUMPERS

Mecalac Power Tip site dumpers are designed to move material quickly and effectively. From one to ten-tonne payloads, each unit delivers outstanding power and performance.

Featuring state-of-the-art operator technologies, including Start/Stop Control, Autoshift, Capture and Hazard Detection, Power Tip site dumpers set the standards for equipment innovation and performance.

All models are equipped with Tier 4-Final engines, ensuring they meet the highest global emissions standards without the need for exhaust after-treatment.

SPEED AND POWER

With an industry-leading skip wall thickness, heavy-duty steel plates and rental-tough tipping mechanisms, Mecalac site dumpers are designed with reliability in mind. Clever design and the latest technologies ensure smooth and accurate material placement.

Key model benefits:

- Efficient operation
- Improved performance
- Simple operation
- Unrivalled reliability
- Longer service intervals
- Outstanding fuel economy

CREATIVE THINKING

POWER SWIVEL SITE DUMPERS

Mecalac Power Swivel site dumpers are the ideal solution for more challenging jobs. Allowing the load to be rotated before being tipped, Power Swivel technology allows the operator to work within a confined site area.

With payload options ranging between two to six-tonnes, there's a perfect Power Swivel model for every application. High quality slew ring bearings deliver smooth and effective operation – ensuring precise placement of loads.

Featuring state-of-the-art operator technologies, including Start/Stop Control, Autoshift, Capture and Hazard Detection, Power Swivel site dumpers set the standards for equipment innovation and performance.

All models are equipped with Tier 4-Final engines, ensuring they meet the highest global emissions standards without the need for exhaust after-treatment.

MEETING OUTSTANDING SAFETY STANDARDS

All Power Swivel site dumpers feature a heavy-duty locking device, which keeps the skip facing forward while on the move – just one of the many features that ensure each model meets the highest level of on-site health and safety compliance.

Intelligent design means hose routings and hydraulics are protected from damage, without compromising on routine maintenance access.

Key model benefits:

- Efficient operation
- Improved performance
- Simple operation
- Unrivalled reliability
- Longer service intervals
- Outstanding fuel economy

MARKET-LEADING SOLUTIONS

HIGH DISCHARGE SITE DUMPERS

Mecalac High Discharge site dumpers are designed to deliver superior versatility and performance when tipping over obstacles and into skips.

From 1,000-2,000kg payloads, each model has been developed for use in smaller sites – such as housing developments and landscaping projects. All models deliver an impressive height clearance of over 1.5 metres, providing impressive results in confined spaces.

A robust chassis and skip design ensures that the unit remains well balanced and secure while tipping, assuring safe and effective operation.

OUTSTANDING ACCESSABILITY

All Mecalac High Discharge site dumpers feature a folding ROPS to enable easy access into tight spaces. The smallest model in the range, the TA1EH, is capable of passing through a standard one-metre-wide doorway when fitted with optional narrow-width wheels and tyres.

With optional 'narrow-width' designs available for each model in the range, users can specify a customised unit to further increase on-site access and manoeuvrability, as well as increase their range of transportation options.

What this means for you:

- Superior performance
- Suitability for every scenario
- Efficient operation
- Improved performance
- Simple operation
- Unrivalled reliability
- Longer service intervals
- Outstanding fuel economy

LEADING THE WAY IN EQUIPMENT CAPABILITY

MAKING MAINTENANCE EASY

Alongside boasting state-of-the-art product design and first-to-market technology innovation, all Mecalac site dumpers feature superb service access from ground level to ensure simple and time-efficient routine equipment maintenance.

The chassis and engine canopies are designed to give maximum access to all service areas, while engine panels are mounted on heavy-duty, lockable hinges for added safety benefits.

MEETING OUTSTANDING SAFETY STANDARDS

On models with payloads from six-tonnes upwards, Mecalac site dumpers feature a suite of state-of-the-art technologies to deliver outstanding results.

Stop/Start Control has been designed to improve on-site safety, minimise fuel consumption and increase service intervals. The new system will automatically start and stop the engine in predetermined conditions. Tested duty cycles have shown hundreds of pounds of fuel savings per year, as well as extending service intervals by 24 weeks (on a typical 500-hour maintenance schedule).

Developed in-house by Mecalac's engineering department, **Autoshift** uses torque demand to guide gear changes. In challenging and demanding conditions – such as steep gradients and high payloads – Autoshift enables the transmission to hold lower gears for longer, providing torque, power and drive when it's needed most.

Bringing award-winning automotive technology to the construction site, Mecalac's **Hazard Detection** solution uses a microwave radar to provide flawless obstacle detection.

Capture is Mecalac's innovative telematics solution, allowing hire firms and site managers to monitor unit location, distance travelled and hours completed each day. Integration with the ECU offers access to real-time fuel consumption data logs, service planning functionality and geo-fencing reporting to within three metres.


TA9SP
MECALAC

TECHNICAL SPECIFICATIONS

Model	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	*NEW* TA9P	*NEW* TA9S	*NEW* TA9SP	*NEW* TA10P
Payload kg (lbs)	1000 (2205)	2000 (4410)	2000 (4410)	2000 (4409)	3000 (6614)	3000 (6614)	3000 (6614)	3000 (7716)	3500 (6614)	6000 (13228)	6000 (13228)	9000 (19842)	9000 (19842)	9000 (19842)	9000 (19842)	10000 (22046)
Power kW (hp)	15.5 (21)	24.5 (32.6)	24.5 (32.6)	24.5 (32.6)	32.4 (43.4)	32.4 (43.4)	32.4 (43.4)	32.4 (43.4)	32.4 (43.4)	55 (74)	55 (74)	55 (74)	55 (74)	55 (74)	55 (74)	55 (74)
Heaped Capacity litres	540	1200	1200	1200	1950	1880	1950	1880	1880	3780	3530	4587	4587	4150	4150	5046

TECHNICAL DATA

PERFORMANCE	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Payload kg (lbs)	1000 (2205)	2000 (4410)	2000 (4410)	2000 (4409)	3000 (6610)	3000 (6614)	3000 (6614)	3000 (6614)	3500 (7716)	6000 (13228)	6000 (13228)	9000 (19842)	9000 (19842)	10000 (22046)
Unladen Weight kg (lbs)	1340 (2954)	1980 (4365)	2120 (4674)	2320 (5115)	2300 (5071)	2360 (5202)	2320 (5115)	2380 (5247)	2380 (5247)	434 0(9568)	4500 (9921)	4920 (10848)	5260 (11596)	5060 (11155)
Tipping Type	Forward Tip – High Discharge	Forward Tip	Swivel Tip	Swivel Tip – High Discharge	Forward Tip	Swivel Tip	Forward Tip	Swivel Tip	Swivel Tip	Forward Tip	Swivel Tip	Forward Tip	Swivel Tip	Forward Tip
Skip Capacity – Water litres	320	750	750	750	1250	1000	1250	1000	1000	1950	1600	2064	1910	2446)
Skip Capacity – Struck litres	450	1000	1000	1000	1600	1520	1600	1520	1520	2750	2440	3899	3340	4128
Skip Capacity – Heaped litres	540	1200	1200	1200	1950	1880	1950	1880	1880	3780	3200	4587	4150	5046

ENGINE	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Engine	Kubota D905	Kubota D1703M	Kubota D1703M	Kubota D1703M	Kubota V2203M	Kubota V2203M	Kubota V2203M	Kubota V2203M	Kubota V2203M	JCB EcoMax	JCB EcoMax	JCB EcoMax	JCB EcoMax	JCB EcoMax
Number of Cylinders	3	3	3	3	4	4	4	4	4	4	4	4	4	4
Gross Power – kW (hp)	15.5 (21)	24.5 (32.6)	24.5 (32.6)	24.5 (32.6)	32.4 (43.4)	32.4 (43.4)	32.4 (43.4)	32.4 (43.4)	32.4 (43.4)	55 (74)	55 (74)	55 (74)	55 (74)	55 (74)
Displacement cc (in³)	898 (54.8)	1647 (100.5)	1647 (100.5)	1647 (100.5)	2197 (134)	2197 (134)	2197 (134)	2197 (134)	2197 (134)	4400 (268.5)	4400 (268.5)	4400 (268.5)	4400 (268.5)	4400 (268.5)
Maximum Torque Nm (lbf.ft)	56 (41)	105 (77.4)	105 (77.4)	105 (77.4)	147 (108.4)	147 (108.4)	147 (108.4)	147 (108.4)	147 (108.4)	400 (295)	400 (295)	400 (295)	400 (295)	400 (295)
Aspiration	Naturally Aspirated									Turbocharged				
Emission Compliance	EU Stage 3A (Tier 3)									EU Stage IIIB / Tier 4 Final				

TRANSMISSION/DRIVE	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Transmission Type	Hydrostatic Pump (Poclain Twinlock) to 4 Hydraulic Wheel Motors	Hydrostatic Motor via Transfer Box to Front & Rear Axles			Manual – 3 Forward / 1 Reverse		Hydrostatic Motor via Transfer Box to Front & Rear Axles			Powershuttle via Transfer Box to Front & Rear Axles		Powershuttle via Transfer Box to Front & Rear Axles – Powershift as option		Powershift via Transfer Box to Front & Rear Axles
Tyre Size	255 / 75 x 15.2 x 8 ply (option 7 x 12 narrow tyre)	10 / 75 x 15.3 (10 ply)			295/80 x 15.3 x 10 ply		295/80 x 15.3 x 10 ply			405–70–20 14PR		500–60–22.5 16PR		
Drive	Hydrostatic 1/1	2 / 2 (High & Low Range – Forward & Reverse) Hydrostatic – Permanent 4WD			3 / 1 Forward and Reverse – Permanent 4WD		2 / 2 (High & Low Range – Forward & Reverse) Hydrostatic – Permanent 4WD			4 / 4 Forward and Reverse – Permanent 4WD				
Maximum Travel Speed – mph (kph)	7 (11)	10 (16)	10 (16)	10 (16)	11.8 (19)	11.8 (19)	11.8 (19)	11.8 (19)	11.8 (19)	16.3 (26.2)	16.3 (26.2)	15.4 (24.8)	15.4 (24.8)	15.4 (24.8)
Gradeability (Maximum Slope Gradient)	20% (1 in 5)	19.5% (1 in 5)	19.5% (1 in 5)	19.5% (1 in 5)	25% (1 in 4)	25% (1 in 4)	25% (1 in 4)	25% (1 in 4)	25% (1 in 4)	25% (1 in 4)	25% (1 in 4)	20% (1 in 5)	20% (1 in 5)	20% (1 in 5)

CAPACITIES	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Fuel Tank Capacity (litres)	35	23	23	23	37	37	37	37	37	65	65	65	65	65
Hydraulic Tank Capacity (litres)	25	25	25	25	37	37	37	37	37	50	50	50	50	–

Note: Metric measurements are the critical values
Dimensions are taken from T152021
- 1 litre = 0.26417 Us liquid gallons
- 1 litre = 0.21997 Imperial liquid gallons

TECHNICAL DATA

ENVIRONMENTAL	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Noise Emission (to ISO 4871) – Sound Pressure (LpAd)	83 dB	86.1 dB	86.1 dB	86.1 dB	84 dB	84 dB	84 dB	84 dB	84 dB	81 dB	81 dB	81 dB	81 dB	81 dB
Sound Power Level (LWAd)	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB	101 dB
Noise Compliance	Noise – Equipment Used Outdoors Directive 2000/14/EC													
Vibration – Hand Arm (as defined in EN474–1 all operations)	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²	‹2.5 m/s²
Vibration – Whole Body (as defined in ISO/TR 25398 – Work Cycle)	0.529 rms (0.264 m/s² Uncertainty)													

HYDRAULIC SYSTEM	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Pump Type	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear	Gear
Flow Rate l/min	29	21	21	21	30	30	30	30	30	60	60	60	60	60
Operating Pressure bar (PSI)	152 (2204)	210 (3050)	210 (3050)	210 (3045.7)	210 (3045.7)	210 (3045.7)	210 (3045.7)	210 (3045.7)	210 (3045.7)	172 (2494.6)	172 (2494.6)	210 (3045.7)	210 (3045.7)	210 (3045.7)
Steering System	Orbitrol hydrostaticsteering unit powering central hydraulic steering ram													

Note: Metric measurements are the critical values
Dimensions are taken from t152021
- 1 litre = 0.26417 Us liquid gallons
- 1 litre = 0.21997 Imperial liquid gallons

BRAKING SYSTEM	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Working Brake	Hydrostatic Dynamic Braking on Rear Wheel Motors	Multi-Plate In-Board Oil Immersed Discs on Front Axle								Foot Brake – Oil immersed discs on front/rear				
Parking Brake	Hydrostatic Dynamic Braking on Rear Wheel Motors	Over Centre Handbrake – Oil Immersed Discs on Front Axle								Over Centre parking brake – Dry disc in gearbox				

ELECTRICAL SYSTEM	TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Voltage	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V
Battery	74Ah	74Ah	74Ah	74Ah	74Ah	74Ah	74Ah	74Ah	74Ah	100Ah	100Ah	100Ah	100Ah	100Ah
Alternator	30A	55A	55A	55A	55A	55A	55A	55A	55A	95A	95A	95A	95A	95A

DIMENSIONS		TA1EH	TA2H	TA2SH	TA2SEH	TA3	TA3S	TA3H	TA3SH	TA3.5SH	TA6	TA6S	TA9	TA9S	TA10P
Total Length	mm (ft in)	2980 (9' 9")	3550 (11' 8")	3570 (11' 9")	3550 (11' 8")	3734 (12' 3")	3952 (13')	3734 (12' 3")	3952 (13')	3952 (13')	4405 (14' 5")	4539 (14' 11")	4484 (18' 9")	4666 (15' 4")	4530 (14' 10")
Total Width	mm (ft in)	984 (3' 3")* / 1110 (3' 8")	1473 (4' 10")	1473 (4' 10")	1473 (4' 10")	1957 (6' 5")	1846 (6' 1")	1957 (6' 5")	1846 (6' 1")	1846 (6' 1")	2300 (7' 7")	2207 (7' 3")	2500 (8' 3")	2380 (7' 10")	2550 (8' 4")
Wheelbase	mm (ft in)	1440 (4' 9")	1900 (6' 3")	1900 (6' 3")	1900 (6' 3")	1939 (6' 4")	1939 (6' 4")	1939 (6' 4")	1939 (6' 4")	1939 (6' 4")	2450 (8' 1")	2450 (8' 1")	2450 (8' 1")	2450 (8' 1")	2450 (8' 1")
Ground Clearance	mm (ft in)	207 (8")* / 284 (11")	184 (7")	184 (7")	184 (7")	279 (11")	279 (11")	279 (11")	279 (11")	279 (11")	385 (1' 3")	385 (1' 3")	374 (1' 3")	374 (1' 3")	374 (1' 3")
Height to Front Lip of Skip (Untipped)	mm (ft in)	1620 (5' 4") (Raised)	1055 (3' 6") (Lowered) / 1644 (5' 5") (Raised)	916 (3')	983 (3' 3")	263 (10")	853 (2' 10")	263 (10")	853 (2' 10")	853 (2' 10")	504 (1' 8")	1258 (4' 3")	490 (1' 7")	1215 (4')	490 (1' 7")
Turning Radius to Outside of Skip	mm (ft in)	2326 (7' 8")	3610 (11' 10")	3610 (11' 10")	3610 (11' 10")	4711 (15' 6")	4553 (14' 11")	4711 (15' 6")	4553 (14' 11")	4553 (14' 11")	5863 (19' 3")	5726 (18' 10")	5994 (19' 8")	5816 (19' 1")	6011 (19' 9")
Steering Angle		+/- 45°	+/- 30.6°	+/- 30.6°	+/- 30.6°	+/- 30°	+/- 30°	+/- 30°	+/- 30°	+/- 30°	+/- 30°	+/- 30°	+/- 30°	+/- 30°	+/- 30°
Oscillation		+/- 14°	+/- 10.5°	+/- 10.5°	+/- 10.5°	+/- 10.5°	+/- 10.5°	+/- 10.5°	+/- 10.5°	+/- 10.5°	+/- 10°	+/- 10°	+/- 10°	+/- 10°	+/- 10°
Height to Top of ROPS (Raised with beacon)	mm (ft in)	2837 (9' 4")	2940 (9' 8")	2940 (9' 8")	2940 (9' 8")	2920 (9' 7")	2920 (9' 7")	2920 (9' 7")	2920 (9' 7")	2920 (9' 7")	3306 (10' 10")	3306 (10' 10")	3668 (12' 1")	3668 (12' 1")	3668 (12' 1")

STANDARD AND OPTIONAL EQUIPMENT

TA1EH STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock
- Wide Tyres (255 / 75 x 15.2 8ply)

TA1EH OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors
- CESAR Datatag Security
- Spare Wheel
- Special Paint
- Narrow Tyres (7 x 12)
- High Visibility Safety Decals for Steps & Handrails
- German / Swiss Road Homologtation Kit

TA2H TA2SH TA2SEH STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Leg Guard
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock

TA2H TA2SH TA2SEH OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors (standard in some markets - check with your local Mecalac dealer)
- CESAR Datatag Security
- Fan Guard (standard in some markets - check with your local Mecalac dealer)
- Spare Wheel
- Special Paint (standard in some markets - check with your local Mecalac dealer)
- High Visibility Safety Decals for Steps & Handrails
- German / Swiss Road Homologtation Kit

TA3 TA3S STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Leg Guard
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock

TA3 TA3S OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors (standard in some markets - check with your local Mecalac dealer)
- CESAR Datatag Security
- Fan Guard (standard in some markets - check with your local Mecalac dealer)
- Spare Wheel
- Special Paint (standard in some markets - check with your local Mecalac dealer)
- High Visibility Safety Decals for Steps & Handrails

TA3H TA3SH TA3.5SH STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Leg Guard
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock

TA3H TA3SH TA3.5SH OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors (standard in some markets - check with your local Mecalac dealer)
- CESAR Datatag Security
- Fan Guard (standard in some markets - check with your local Mecalac dealer)
- Spare Wheel
- Special Paint (standard in some markets - check with your local Mecalac dealer)
- High Visibility Safety Decals for Steps & Handrails
- German / Swiss Road Homologtation Kit

TA6 TA6S STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock
- Water in Fuel Monitoring

TA6 TAS OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors (standard in some markets - check with your local Mecalac dealer)
- CESAR Datatag Security
- Fan Guard
- Spare Wheel
- Special Paint
- High Visibility Safety Decals for Steps & Handrails
- German / Swiss Road Homologtation Kit
- Biodegradable Hydraulic Oil
- Leg Guard

TA9 STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock
- Wide Tyres (255 / 75 x 15.2 8ply)
- Water in Fuel Monitoring
- Coolant Level Monitoring

TA9 OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors
- CESAR Datatag Security
- Fan Guard
- Spare Wheel
- Special Paint
- Narrow Tyres (7 x 12)
- High Visibility Safety Decals for Steps & Handrails
- Biodegradable Hydraulic Oil
- Leg Guard

TA9S STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock
- Water in Fuel Monitoring

TA9S OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors (standard in some markets - check with your local Mecalac dealer)
- CESAR Datatag Security
- Fan Guard
- Spare Wheel
- Special Paint
- High Visibility Safety Decals for Steps & Handrails
- Biodegradable Hydraulic Oil
- Leg Guard

TA10P STANDARD

- Folding ROPS Frame
- Reversing Alarm
- Flashing Beacon
- Towing/Recovery Bracket
- Hour Metre
- Seat Belt (High Visibility Orange)
- Seat (adjustable fore/aft, operator weight and back angle)
- Heavy Duty Articulation Lock
- Wide Tyres (255 / 75 x 15.2 8ply)
- Water in Fuel Monitoring
- Coolant Level Monitoring

TA10P OPTIONS

- LED Flashing Beacon
- Road Lights (RTA) including Front Light Guards
- L/H & R/H Rear View Mirrors
- CESAR Datatag Security
- Fan Guard
- Spare Wheel
- Special Paint
- Narrow Tyres (7 x 12)
- High Visibility Safety Decals for Steps & Handrails
- Biodegradable Hydraulic Oil
- Leg Guard

SITE DUMPER/FR 03/18 Non-binding document

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ZAXIS-5 series Short-tail-swing version

HITACHI

Reliable solutions

ZAXIS 85USB

HYDRAULIC EXCAVATOR

Model Code : ZX85USB-5A
Engine Rated Power : 34.1 kW (46 HP)
Operating Weight : 8 430 - 9 060 kg
Backhoe Bucket ISO Heaped : 0.13 - 0.33 m³

WALK AROUND

CONTENTS

Faster front movement
The hydraulic system has been modified to minimise pressure loss, resulting in higher speeds for the front attachment in forward motion.

User-friendly functionality
The monitor and ergonomically designed switches have been grouped together within easy reach, providing a wide range of useful technical information and several settings with multi-lingual support.

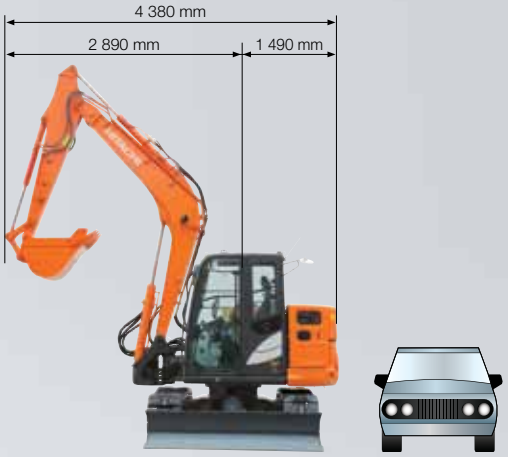
Added durability
The enlarged D-section frame skirt on the mainframe has increased the machine's durability.

Improved swing performance
With an additional counterweight, the excavator's slant angle when swinging is increased.

ZAXIS Empower your Vision.

Our engineers designed the new ZAXIS 85USB with one ultimate aim – to empower your vision. They carefully assessed it in terms of performance, productivity, comfort, durability and reliability to ensure that it would meet your expectations. Whether you're a fleet owner or an operator, the new ZAXIS 85USB delivers on every level. It is a high-quality, efficient machine that can cope with challenging conditions. It provides a safe and comfortable working environment, and operates smoothly and precisely. Its optimum performance and availability are achieved with easy maintenance features and the Hitachi Support Chain after-sales programme.

Expanded leg room
The seat and console can slide further back on the new ZAXIS, providing a more comfortable working environment for the operator. The rightside console has been ergonomically re-designed.



Ultimate comfort
The heated air suspension seat is ideal in cold climates and absorbs vibration during operation minimising operator fatigue.

Short-tail swing radius
This allows the new ZAXIS to work in confined spaces, particularly in urban areas, for road construction and forestry, anywhere with limited work space.

Easily accessible information
The large multi-function LCD monitor screen is easy to view in bright sunlight or darkness and provides technical data.

Quick and easy service access
With the new easy-to-use locking mechanism the Dust-Proof indoor filter can be attached and detached quickly.

PERFORMANCE

Designed to deliver an outstanding level of performance on a wide variety of projects, the new ZAXIS 85USB offers excellent versatility and greater fuel efficiency than the previous model. With a short-tail swing radius, it is ideal for working in confined spaces on a range of job sites, such as urban and road construction sites, as well as forestry and demolition applications.

Versatile and efficient, the new ZAXIS 85USB stands out from the competition

A wide range of applications

More compact than conventional models, the short-tail ZAXIS 85USB is suitable for working on a wide variety of job sites, especially where space is limited, namely on urban and road construction projects, and for forestry and demolition applications.

It delivers increased operating efficiency in confined areas thanks to minimal protrusions at both the front and rear of the machine. In addition, the excavator can be used for earthmoving and digging close to walls and guard rails. The rear-view monitor allows the operator to work safely at all times.

Hitachi has further enhanced the performance of the new ZAXIS 85USB. The diameters and resistance of the hoses in the new hydraulic system have been reduced to minimise pressure loss. The result is higher speeds for the front attachment in forward motion.

Hitachi engineers have also enhanced the swing performance of the machine. It has the capability to swing further when working on an incline, thanks to the optional additional counterweight.

Lower fuel costs

We realise that the productivity and efficiency of your construction machinery has a direct impact on the profitability of your business. The new ZAXIS 85USB has been developed to operate with high levels of productivity and greater fuel efficiency than previous models. This ensures that the excavator not only meets the latest EU regulations on emission standards*, but can also reduce your fuel costs significantly. This is the most effective way to save on the total cost of ownership.

Thanks to the new hydraulic system and its reliable engine, the PWR mode of the ZAXIS 85USB can reduce fuel consumption by 9% (compared to the conventional ZAXIS P mode). Further reductions in fuel consumption up to 22% can be achieved using the ECO mode.

** The engine of the new ZX85USB-5A is outside the scope of EU stage IIIB emission regulation.*

Key features

- Short-tail swing radius
- 9% reduction in fuel consumption (PWR mode vs ZX-3 P-mode)*
- 22% reduction in fuel consumption (ECO mode vs ZX-3 P-mode)*
- Improved swing performance
- High-efficient hydraulics system

PRODUCTIVITY

The ZAXIS 85USB has been designed to operate efficiently, using less fuel than previous models, but maintaining the same high productivity levels that our customers expect from Hitachi excavators. With several powerful and innovative features, the new ZAXIS is capable of operating in a sustainable way, having a reduced impact on the environment and also contributing to the profitability of your business by saving money on fuel costs.

High productivity levels with a lower environmental impact

Sustainable efficiency

We are committed to the sustainable development of Hitachi excavators, particularly for use on urban job sites. The new ZAXIS 85USB has been built with a number of features that contribute to a significant reduction in fuel consumption, so it releases fewer emissions and has a smaller impact on the environment.

The excavator's auto idle system automatically reduces the engine to idling speed if all control levers have been left in neutral for more than four seconds. When the levers are moved again, the engine speed instantly resumes to the dial-set speed. This helps to reduce exhaust emissions, as well as noise levels, and contributes to lower fuel costs.

The new ZAXIS 85USB is also fitted with ECO mode and an ECO control system as standard. The ECO control system ensures that while the engine speed is set over 1 800 min^{-1}, as soon as all control levers are returned to the neutral position, the engine speed drops to 100 min^{-1}.

A further fuel-efficient feature is the auto shut-down system. This automatically drops the engine revolutions speed into low idle and stops the engine after the pilot control shut-off lever has been raised and the time specified on the multi-function monitor has been reached. This not only prevents fuel wastage, but also decreases noise levels, emissions and CO_2.

Powerful efficiency

Hitachi ZAXIS excavators are renowned for their reliable and powerful performance, and the new ZAXIS 85USB is no exception. For example, it has greater lifting power than the previous model, which will help to boost productivity levels on any job site.

With developments such as these, the new ZAXIS excavator is ideal for working on busy job sites, where there are daily targets and ultimate deadlines to be met. It can be relied upon to deliver a highly productive and efficient performance, without burdening the environment through its sustainable operation.

Key features

- Powerfull and sustainable
- Auto idle system
- ECO mode and ECO control system
- Larger lifting capacity
- Auto Shut-down – fuel saving for carbon dioxide reduction
- Environmentally friendly design

COMFORT

After listening to the needs of operators and customers all around the world, Hitachi has made several significant improvements to the cab of its new ZAXIS excavators. Our ultimate aim was to create a safe and spacious working environment, making long shifts on the job site easier and more enjoyable. With user-friendly controls, excellent all-round visibility and more leg room, the new ZAXIS 85USB will exceed your expectations.

Enjoy your working day in the cab of the ZAXIS 85USB

From the comfort of the cab

After a long shift on a road construction site or in the quarry, you need to feel ready to enjoy the rest of your day. Hitachi has taken the lead in operator comfort with the new ZAXIS 85USB, so that you can do just that.

The fully adjustable air-suspension seat features a new sliding mechanism with the capacity to be moved back further than ever before. The space underneath the monitor has also been expanded to allow for more leg room. The pressurized cab keeps dust and particles from entering.

All-round visibility

Busy construction sites demand your full attention to avoid unnecessary damage or health and safety issues. The enhanced visibility – especially down the right-hand side of the new ZAXIS – will also save you time (and money), thanks to the latest innovations from Hitachi. The glass door provides a high level of visibility, which is particularly beneficial when the boom is in the offset position.

The repositioning of the monitor and door enhances your view, as well as making access to and from the cab much easier. The latest rear-view camera offers a closer view of the counterweight to minimise the blind spot.

User-friendly functionality

Hitachi has invested heavily in the advanced technology inherent within the new ZAXIS. The power remains firmly at your fingertips thanks to the functionality of the colour monitor and ergonomic controls.

The new multi-function LCD monitor has a large seven-inch screen that is easy to view. It provides a wide range of useful technical information, including a clear indication of the machine's status and settings with multi-lingual support in up to 32 languages. The monitor and ergonomically designed switches have been grouped together within easy reach of your right hand. The proportional switch in the new, optional, auxiliary function lever allows easy control of the front attachment.

Enjoy your work

Time flies when you're having fun, but we also realise that a happy operator is also a more productive one. That's why we have renewed our focus on providing a relaxed and enjoyable working environment within the cab. The controls for the AM/FM stereo radio are now fully adjustable from the colour monitor. An auxiliary terminal is also available, so that you can work efficiently and smoothly to your favourite music via devices such as MP3 players and the inclusion of storage for an MP3 player.

Key features

- High-spec ROPS pressurised cab
- Enhanced visibility
- New colour LCD monitor
- Easily accessible real-time information
- Expansive leg room
- Ergonomically designed control panel
- Auxiliary terminal and storage for an MP3 player

DURABILITY

The new ZAXIS 85USB is the result of continuous development by Hitachi and features the latest technological advancements, designed to ensure its reliability and durability. It benefits from several decades of engineering expertise, which has been gained in manufacturing high-quality construction equipment for customers around the world. Hitachi customers can rely on the durability of their machines to keep them working in even the most challenging conditions.

A machine you can rely on in the toughest working conditions

Durable parts

The new ZAXIS 85USB is capable of operating in the most difficult working environments thanks to a variety of durable parts. High levels of availability and productivity are important on challenging job sites and the ZAXIS 85USB can provide you with both. Ultimately, this gives you a lower cost of ownership and the peace of mind that Hitachi excavators are proven to be among the most reliable on the market.

The reinforced handles on the covers are just one example of the enhanced durability of the ZAXIS 85USB. Furthermore, it has a filter-type, high-performance water separator provided as standard. This captures any moisture, even from fuel containing a relatively large proportion of water.

Durable engine

In compliance with the current EU emission regulations, the ZAXIS 85USB has been equipped with a reliable Stage IIIA engine*. It integrates traditional technologies and components, which have been developed using the engineering expertise for which Hitachi is renowned.

Reinforced mainframe

The proven D-section frame skirt has now been added to the right-hand side of the mainframe on the ZAXIS 85USB. On the left-hand side, a highly durable steel bar has been added instead of the D-section frame. This is protected by a steel cover, so that it resembles the D-section frame.

ROPS-compliant cab

The ISO-standard ROPS-compliant CRES II (centre pillar reinforced structure) cab is designed to keep the operator safe on the job site. In the unlikely event of the machine tipping or rolling over, for example, the Roll-over Protective Structure (ROPS) of the cab aims to protect the occupant from potential harm.

** The engine of the new ZX85USB-5A is outside the scope of EU stage IIIB emission regulation.*

Key features

- Proven Hitachi quality
- More than 40 years of expertise
- Reliable fuel system
- Reinforced handles and mainframe

MAINTENANCE

Carrying out routine maintenance is essential for the optimum performance of any Hitachi excavator. After considering the needs of our customers, Hitachi engineers designed the new ZAXIS 85USB with several features that make daily checks, cleaning and servicing easier than ever. Some items have been repositioned for your convenience, and access to others has been improved, so the maintenance process is more simple and faster than ever before. This gives you more time to focus on the work you enjoy.

User-friendly features help you to get the most from your machine

Easy access

The new ZAXIS range of medium excavators has been built with a variety of convenient features designed to make your working day run smoothly. These time-saving improvements will ensure that you can carry out routine maintenance with minimum disruption to daily operations.

For example, a new electric fuel-refilling unit with filter has been installed to enable the excavator to be filled quickly and easily using an electric pump from a drum can. The in-built filter prevents any impurities from the drum entering the machine during refueling.

From ground level, the fuel filters, engine oil filter and air cleaner are all easily accessible for checking and replacing when necessary. The filters and water separator are now conveniently positioned in close proximity to one another. Access to the upper structure of the machine has also improved thanks to the non-slip steps.

Any severe blockages of the radiator can be cleared by blowing air through the convenient openable cover.

Easy cleaning

It's evident that routine maintenance optimises the productivity and availability of our machines – and the easier it is to carry out, the better it is for our customers. That's the reason why we have designed the ZAXIS 85USB with a series of convenient and quick solutions for easy cleaning and servicing.

The dust-proof indoor filter, for example, has been placed on the outside of the air conditioning condenser and fuel cooler, and away from the fan so that dust and particles can be caught evenly without them collecting in one place. The cooling package has been placed in parallel, to allow for easier maintenance.

Key features

- Global e-Service
- Daily checks from ground level
- Electric fuel-refilling unit
- Quick and easy service access
- Easier cleaning of the cooling package
- Dust proof indoor filter

SUPPORT CHAIN

As soon as you become a Hitachi customer, you can rely on first-class after-sales service from your authorised dealer. Hitachi provides extensive support to each of the dealers within the European network, so that they can ensure your ZAXIS 85USB continues to meet your requirements and exceed expectations. To further protect your investment in Hitachi construction machinery, we have introduced the Hitachi Support Chain after-sales programme. This gives you the flexibility to create a tailor-made service plan from the the following key-areas, “links” in the chain of service available from Hitachi via your local dealer.

A flexible after-sales programme created to protect your investment

Global e-Service

The new ZAXIS excavator is equipped with a GPRS communication system*. This sends a wide range of machine data to the Hitachi main server. Via the Global e-Service database, you will have remote access to all of this data. All you need is an internet connection and your Global e-Service log-in details.

Global e-Service enables you and your dealer to download and share this data, helping you to remotely manage your fleet. The online facility also helps your dealer to proactively advise you on preventive maintenance and related special offers.

The latest information on the ZAXIS excavator is available 24/7 and includes operational data, such as the number of working hours, fuel consumption figures, working modes and location. This helps you to reduce running costs, plan jobs efficiently and keep up to date with machine maintenance – to ensure optimum performance and minimal downtime.

Technical support

The professional and highly trained Hitachi service team combines the global expertise and knowledge of Hitachi Construction Machinery with your local language and culture. We take a proactive approach towards customer service by continuously training our dealer personnel, so that the available global knowledge is passed on to each individual technician in our dealer network.

Extended warranty and service contracts

Every new Hitachi model is covered by a full manufacturer's warranty. However, your ZAXIS excavator may require extra protection due to severe working conditions or to minimise equipment repair costs. To meet these demands, our dealers offer the option of a unique extended warranty programme (HELP – Hitachi Extended Life Program) and comprehensive service contracts – the most effective way to optimise the performance of your new ZAXIS excavator.

Parts and Remanufactured Components

Hitachi offers different lines of parts and components to suit your specific needs. In addition to our range of genuine parts, there are other options available:

- If your machines have been working for several years, Hitachi can offer a second line of genuine parts as an attractively priced solution.
- For that highly demanding application or climate, Hitachi provides a line of parts with extra performance.
- When you are looking for an economical solution for preventive replacements, remanufactured components are the best option.

Whatever choice you make, you can be assured of the renowned Hitachi quality and warranty to give you added peace of mind.

Your Hitachi dealer can supply you with more details on each of the above parts lines.

SUPPORT CHAIN

** The GPRS communication system is standard equipment for new ZAXIS excavators, however, the availability of the communication system depends on licensing regulations in your country. Please contact your Hitachi dealer for more information or to apply for a Global e-Service account.*

Key features

- Check each of your machines from your office – 24/7
- Have a remote insight into fuel consumption
- Check the current and previous locations and movements of your machine(s)
- See maintenance status and items due for renewal on each of your machines
- Receive e-mail notifications for any machine alerts, unexpected movements and so on

SPECIFICATIONS

ENGINE

Model ..... Yanmar 4TNV94L
Type ..... 4-cycle water-cooled, direct injection
No. of cylinders 4
Rated power
ISO 9249, net ..... 34.1 kW (45.7 HP) at 2 000 min^{-1} (rpm)
EEC 80/1269, net ..... 34.1 kW (45.7 HP) at 2 000 min^{-1} (rpm)
SAE J1349, net ..... 34.1 kW (45.7 HP) at 2 000 min^{-1} (rpm)
Maximum torque ..... 204.1 Nm (20.8 kgfm) at 1 000 min^{-1} (rpm)
Piston displacement ..... 3.053 L
Bore and stroke ..... 94 mm x 110 mm
Batteries ..... 2 × 12 V / 52 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps ..... 3 variable displacement axial piston pumps
Maximum oil flow ..... 2 x 72 L/min
1 x 56 L/min
Pilot pump ..... 1 gear pump
Maximum oil flow ..... 20.0 L/min

Hydraulic Motors

Travel ..... 2 variable displacement axial piston motors
Swing ..... 1 axial piston motor

Relief Valve Settings

Implement circuit ..... 26.0 MPa (265 kgf/cm^2)
Swing circuit ..... 26.5 MPa (270 kgf/cm^2)
Travel circuit ..... 31.4 MPa (320 kgf/cm^2)
Pilot circuit ..... 3.9 MPa (40 kgf/cm^2)

Hydraulic Cylinders

	Quantity	Bore	Rod diameter	Stroke
Boom	1	115 mm	65 mm	885 mm
Arm	1	95 mm	60 mm	900 mm
Bucket	1	85 mm	55 mm	730 mm
Blade	1	120 mm	70 mm	145 mm
Boom swing	1	110 mm	60 mm	563 mm
Positioning	2	110 mm	60 mm	432 mm

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed ..... 10.5 min^{-1} (rpm)
Swing torque ..... 16 kNm

Operator's Cab

Independent spacious cab, 1 065 mm wide by 1 655 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat.
* International Organization for Standardization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame.

Numbers of Rollers and shoes on Each Side

Upper roller 1
Lower rollers 5
Track shoes 40

Travel Device

Each track driven by 2-speed axial piston motor.
Parking brake is spring-set/hydraulic-released disc type.
Automatic transmission system: High-Low.

Travel speeds ..... High : 0 to 5.0 km/h
Low : 0 to 3.1 km/h

Maximum traction force ... 71 kN

Gradeability ..... 70% (35 degree) continuous

SOUND LEVEL

Sound level in cab according to ISO 6396 ..... LpA 72 dB(A)
External sound level according to ISO 6395 and
EU Directive 2000/14/EC ..... LwA 97 dB(A)

SERVICE REFILL CAPACITIES

Fuel tank ..... 120.0 L
Engine coolant ..... 7.0 L
Engine oil ..... 12.3 L
Travel device (each side) ..... 1.2 L
Hydraulic system ..... 100.0 L
Hydraulic oil tank ..... 56.0 L

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

Monoblock boom

Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm^2)
Grouser shoe	450 mm	1.62 m	8 430	37 (0.38)
		2.12 m	8 470	37 (0.38)
	600 mm	1.62 m	8 610	28 (0.29)
		2.12 m	8 650	28 (0.29)
Rubber shoe	450 mm	1.62 m	8 460	37 (0.38)
		2.12 m	8 500	37 (0.38)
Pad crawler shoe	450 mm	1.62 m	8 480	37 (0.38)
		2.12 m	8 520	37 (0.38)

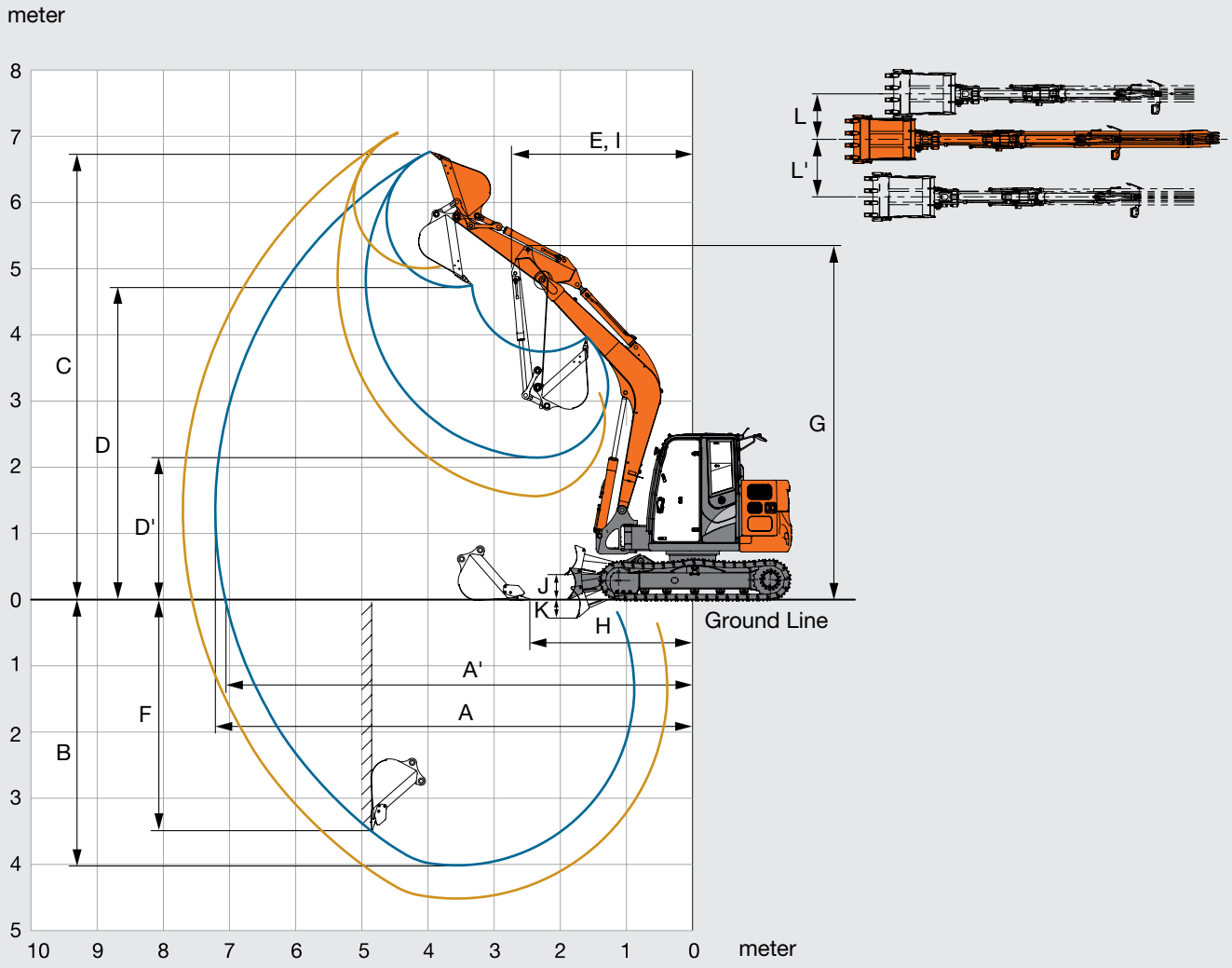
Including 0.28 m^3 (ISO heaped) bucket weight (211 kg).

2-Piece boom

Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm^2)
Grouser shoe	450 mm	1.62 m	8 850	39 (0.40)
		2.12 m	8 890	39 (0.40)
	600 mm	1.62 m	9 030	30 (0.30)
		2.12 m	9 060	30 (0.30)
Rubber shoe	450 mm	1.62 m	8 880	39 (0.40)
		2.12 m	8 910	39 (0.40)
Pad crawler shoe	450 mm	1.62 m	8 900	39 (0.40)
		2.12 m	8 940	39 (0.40)

Including 0.28 m^3 (ISO heaped) bucket weight (211 kg).

WORKING RANGES: MONOBLOCK BOOM



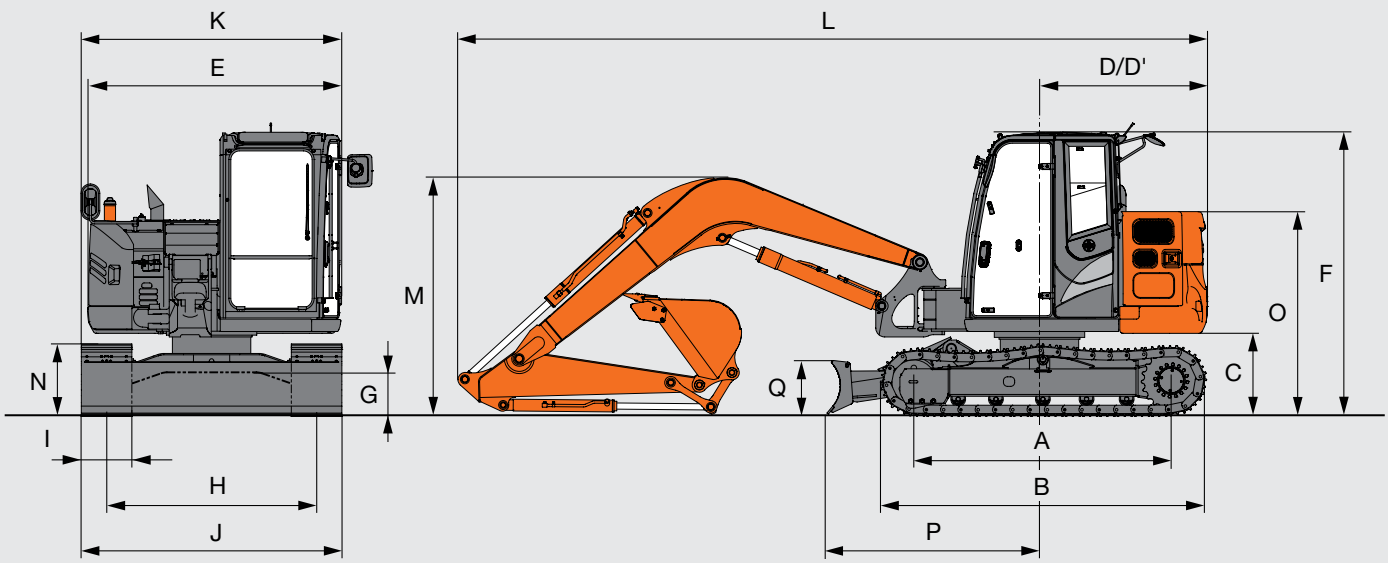
Unit: mm

Arm length		1.62 m	2.12 m
A	Max. digging reach	7 210	7 700
A'	Max. digging reach (on ground)	7 060	7 560
B	Max. digging depth	3 990	4 510
C	Max. cutting height	6 790	7 140
D	Max. dumping height	4 770	5 080
D'	Min. dumping height	2 130	1 670
E	Min. swing radius	2 740	2 890
F	Max. vertical wall	3 470	4 050
G	Front height at Min. swing radius	5 370	5 400
H	Min. level crowding distance	2 470	2 310
I	Working radius at Min. swing radius (Max. boom-swing angle)	–	–
J	Blade bottom highest position above ground	360	360
K	Blade bottom lowest position above ground	300	300
L/L'	Offset distance (Max. boom-swing angle)	1 150 / 1 150	1 150 / 1 150
	Max. boom-swing angle (deg.)	60 / 60	60 / 60

Excluding track shoe lug.

SPECIFICATIONS

DIMENSIONS: MONOBLOCK BOOM



Unit: mm

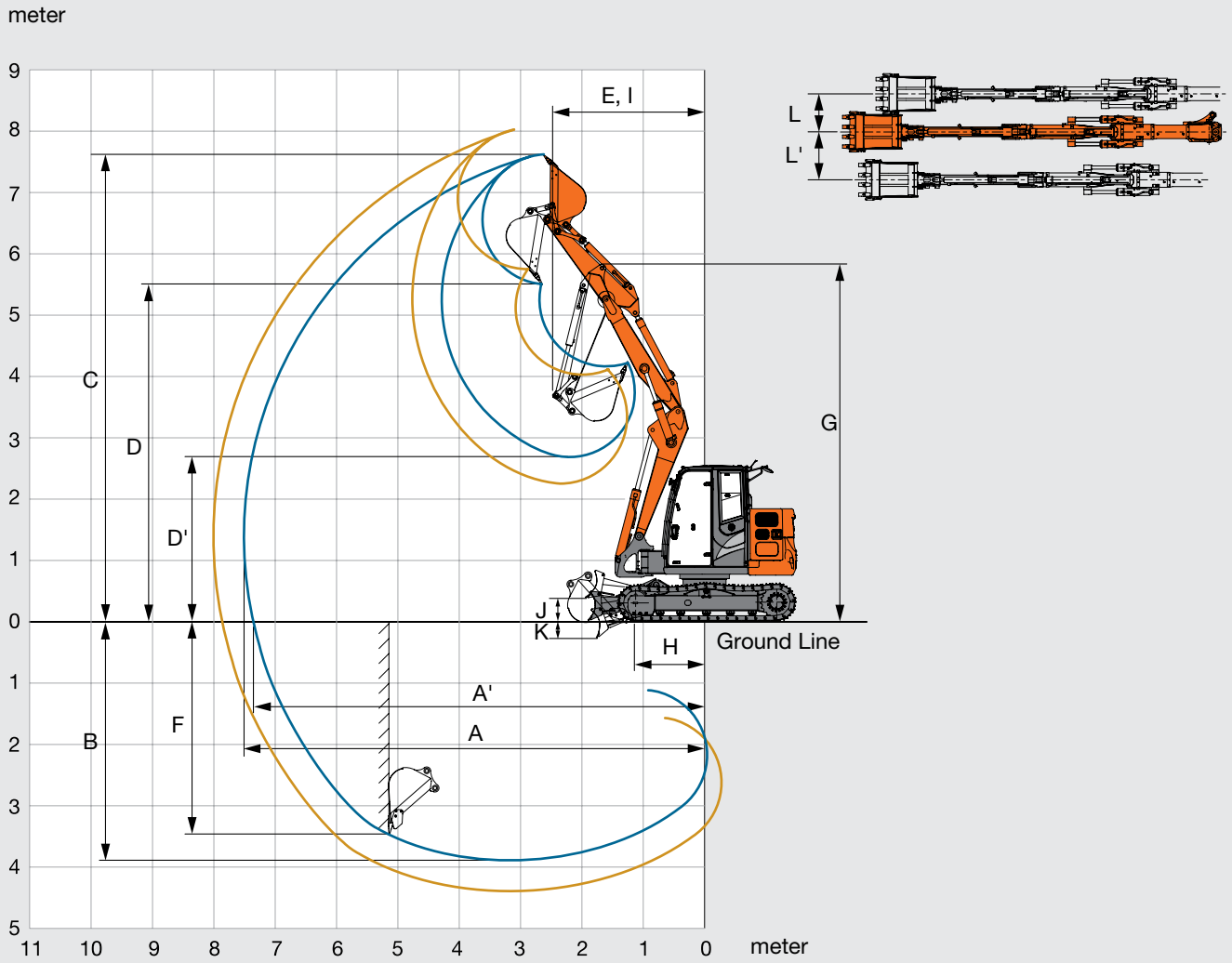
	ZAXIS 85USB
A Distance between tumblers	2 290
B Undercarriage length	2 920
* C Counterweight clearance	720
D Rear-end swing radius	1 490
D' Rear-end length	1 490
E Overall width of upperstructure	2 260
F Overall height of cab	2 530
* G Min. ground clearance	360
H Track gauge	1 750
I Track shoe width	450
J Undercarriage width	2 200
K Overall width	2 260
L Overall length	
With 1.62 m arm	6 640
With 2.12 m arm	6 820
* M Overall height of boom	
With 1.62 m arm	2 610
With 2.12 m arm	2 610
N Track height	650
O Engine cover-height	1 810
P Horizontal distance to blade	1 880
Q Blade height	480

* Excluding track shoe lug.

BUCKET AND ARM DIGGING FORCE

	Monoblock boom		2-Piece boom	
Arm length	1.62 m	2.12 m	1.62 m	2.12 m
Bucket digging force ISO	55.0 kN (5 600 kgf)		55.0 kN (5 600 kgf)	
Bucket digging force SAE : PCSA	47.0 kN (4 800 kgf)		47.0 kN (4 800 kgf)	
Arm crowd force ISO	38.0 kN (3 900 kgf)	32.0 kN (3 300 kgf)	38.0 kN (3 900 kgf)	32.0 kN (3 300 kgf)
Arm crowd force SAE : PCSA	36.0 kN (3 700 kgf)	31.0 kN (3 200 kgf)	36.0 kN (3 700 kgf)	31.0 kN (3 200 kgf)

WORKING RANGES: 2-PIECE BOOM



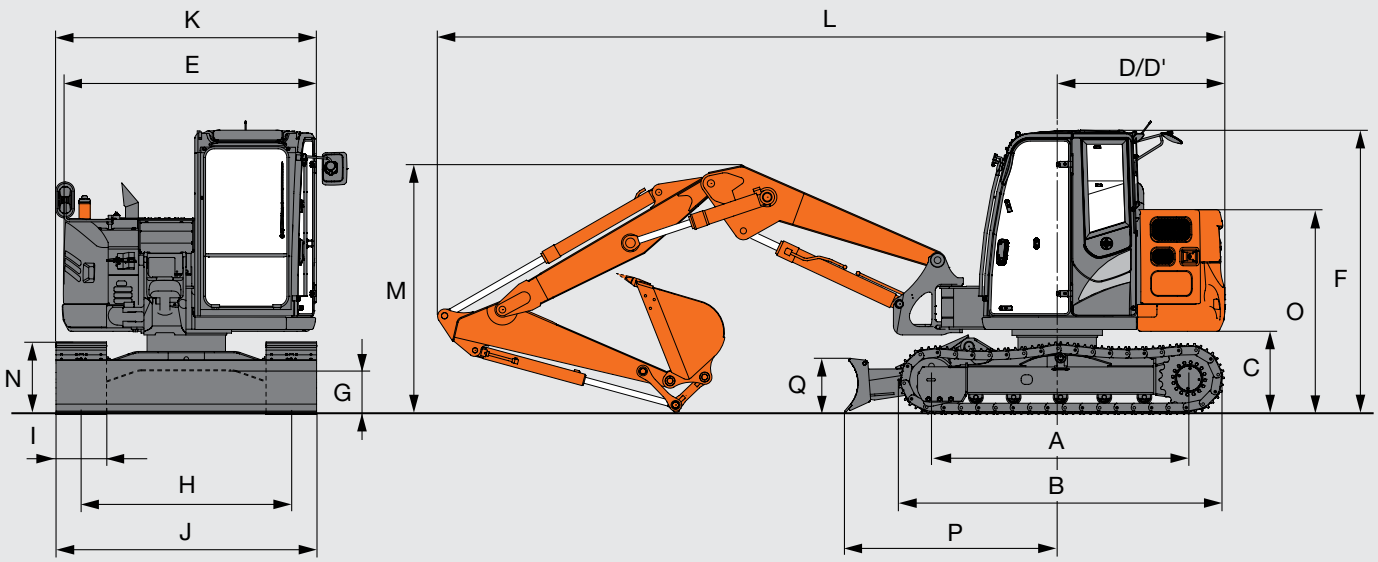
Unit: mm

Arm length		1.62 m	2.12 m
A	Max. digging reach	7 510	8 000
A'	Max. digging reach (on ground)	7 360	7 860
B	Max. digging depth	3 910	4 410
C	Max. cutting height	7 600	8 060
D	Max. dumping height	5 490	5 940
D'	Min. dumping height	2 670	2 320
E	Min. swing radius	2 480	2 910
F	Max. vertical wall	3 440	3 940
G	Front height at Min. swing radius	5 810	5 830
H	Min. level crowding distance	1 150	750
I	Working radius at Min. swing radius (Max. boom-swing angle)	–	–
J	Blade bottom highest position above ground	360	360
K	Blade bottom lowest position above ground	300	300
L/L'	Offset distance (Max. boom-swing angle)	1 150 / 1 150	1 150 / 1 150
	Max. boom-swing angle (deg.)	60 / 60	60 / 60

Excluding track shoe lug.

SPECIFICATIONS

DIMENSIONS: 2-PIECE BOOM



Unit: mm

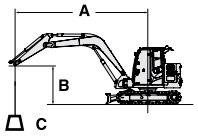
	ZAXIS 85USB
A Distance between tumblers	2 290
B Undercarriage length	2 920
* C Counterweight clearance	720
D Rear-end swing radius	1 490
D' Rear-end length	1 490
E Overall width of upperstructure	2 260
F Overall height of cab	2 530
* G Min. ground clearance	360
H Track gauge	1 750
I Track shoe width	450
J Undercarriage width	2 200
K Overall width	2 260
L Overall length	
With 1.62 m arm	6 990
With 2.12 m arm	7 040
* M Overall height of boom	
With 1.62 m arm	2 690
With 2.12 m arm	2 750
N Track height	650
O Engine cover-height	1 810
P Horizontal distance to blade	1 880
Q Blade height	480

* Excluding track shoe lug.

LIFTING CAPACITIES

Notes:
1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



A: Load radius
B: Load point height
C: Lifting capacity

ZAXIS 85USB Monoblock boom, Blade above Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
		over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	meter
Boom 3.67 m Arm 1.62 m Counterweight 1 400 kg Grouser shoe 450 mm	4					*2 180	1 990	1 680	1 410			1 480	1 240	5.41
	3			*3 580	2 930	2 320	1 910	1 650	1 380			1 290	1 080	5.88
	2					2 210	1 810	1 600	1 330	1 230	1 020	1 200	1 000	6.11
	1					2 120	1 720	1 560	1 280	1 210	1 000	1 170	970	6.14
	0 (Ground)			*2 280	*2 280	2 080	1 680	1 520	1 250			1 200	1 000	5.97
	-1	*2 750	*2 750	3 230	2 540	2 070	1 670	1 510	1 240			1 320	1 090	5.57
	-2			3 270	2 570	2 090	1 690					1 590	1 300	4.89

ZAXIS 85USB Monoblock boom, Blade on Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
		over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	meter
Boom 3.67 m Arm 1.62 m Counterweight 1 400 kg Grouser shoe 450 mm	4					*2 180	1 990	*2 040	1 410			*1 920	1 240	5.41
	3			*3 580	2 930	*2 590	1 910	*2 190	1 380			*1 920	1 070	5.88
	2					*3 150	1 810	*2 430	1 330	*2 070	1 020	*2 000	1 000	6.11
	1					*3 560	1 720	*2 630	1 250	*2 140	1 000	*2 080	970	6.14
	0 (Ground)			*2 280	*2 280	*3 650	1 680	*2 710	1 240			*2 120	1 000	5.97
	-1	*2 750	*2 750	*4 430	2 540	*3 440	1 670	*2 570				*2 150	1 090	5.58
	-2			*3 890	2 570	*2 900	1 690					*2 130	1 300	4.89

ZAXIS 85USB Monoblock boom, Blade above Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
		over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	meter
Boom 3.67 m Arm 2.12 m Counterweight 1 400 kg Grouser shoe 450 mm	5							1 700	1 420			1 550	1 300	5.29
	4							1 700	1 420			1 270	1 060	5.98
	3					*2 240	1 940	1 660	1 390	1 250	1 040	1 130	940	6.39
	2					2 240	1 830	1 610	1 330	1 230	1 020	1 060	880	6.61
	1					2 130	1 730	1 550	1 280	1 200	990	1 030	860	6.63
	0 (Ground)			*2 440	*2 440	2 060	1 670	1 510	1 240	1 170	970	1 060	870	6.48
	-1	*2 220	*2 220	3 170	2 490	2 040	1 640	1 490	1 220	1 160	960	1 140	940	6.12
	-2	*3 710	*3 710	3 200	2 510	2 040	1 650	1 490	1 220			1 310	1 080	5.52
	-3			3 260	2 570	2 080	1 690					1 740	1 430	4.55

ZAXIS 85USB Monoblock boom, Blade on Ground

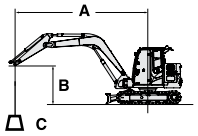
Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
		over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	over-front	over-side	meter
Boom 3.67 m Arm 2.12 m Counterweight 1 400 kg Grouser shoe 450 mm	5							*1 780	1 420			*1 650	1 300	5.29
	4							*1 780	1 420			*1 550	1 060	5.98
	3					*2 240	1 940	*1 960	1 390	*1 820	1 040	*1 540	940	6.39
	2					*2 830	1 840	*2 240	1 330	*1 930	1 020	*1 590	880	6.61
	1					*3 360	1 730	*2 500	1 280	*2 050	990	*1 700	860	6.63
	0 (Ground)			*2 440	*2 440	*3 610	1 670	*2 660	1 240	*2 110	970	*1 890	870	6.48
	-1	*2 220	*2 220	*3 760	2 490	*3 560	1 640	*2 640	1 220	*2 020	960	*1 940	940	6.12
	-2	*3 710	*3 710	*4 490	2 510	*3 200	1 650	*2 360	1 220			*1 960	1 080	5.52
	-3			*3 310	2 570	*2 370	1 690					*1 870	1 430	4.55

LIFTING CAPACITIES

Notes:
1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



A: Load radius
B: Load point height
C: Lifting capacity

ZAXIS 85USB 2-Piece boom, Blade above Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
2-Piece boom Arm 1.62 m Counterweight 1 400 kg Grouser shoe 450 mm	5					*2 240	1 970	1 610	1 320			1 600	1 310	5.02
	4			*3 000	*3 000	2 340	1 910	1 610	1 320			1 250	1 020	5.75
	3					2 200	1 780	1 550	1 270	1 150	930	1 090	880	6.19
	2					2 030	1 620	1 470	1 190	1 110	900	1 000	810	6.41
	1					1 900	1 500	1 400	1 120	1 080	870	970	780	6.44
	0 (Ground)					1 840	1 440	1 350	1 070	1 050	840	990	790	6.28
	-1			2 900	2 210	1 830	1 430	1 330	1 060			1 070	860	5.91
	-2			*2 890	2 250	1 860	1 460	1 360	1 080			1 270	1 020	5.28

ZAXIS 85USB 2-Piece boom, Blade on Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
2-Piece boom Arm 1.62 m Counterweight 1 400 kg Grouser shoe 450 mm	5					*2 240	1 970	*2 050	1 320			*1 960	1 310	5.03
	4			*3 000	*3 000	*2 380	1 910	*2 070	1 320			*1 820	1 020	5.75
	3					*2 760	1 780	*2 210	1 270	*1 910	930	*1 790	880	6.19
	2					*3 200	1 620	*2 390	1 190	*1 960	900	*1 840	810	6.41
	1					*3 410	1 500	*2 510	1 120	*1 990	870	*1 810	780	6.44
	0 (Ground)					*3 320	1 440	*2 490	1 070	*1 930	840	*1 770	790	6.28
	-1			*3 340	2 210	*2 980	1 430	*2 280	1 060			*1 700	860	5.91
	-2			*2 890	2 250	*2 380	1 460	*1 760	1 080			*1 530	1 020	5.28

ZAXIS 85USB 2-Piece boom, Blade above Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
2-Piece boom Arm 2.12 m Counterweight 1 400 kg Grouser shoe 450 mm	5					*1 950	*1 950	1 680	1 390			1 330	1 090	5.68
	4					*2 110	1 990	1 670	1 370	1 210	990	1 100	900	6.32
	3			*3 420	2 940	2 300	1 870	1 600	1 320	1 190	970	970	790	6.71
	2					2 120	1 710	1 520	1 240	1 150	930	910	730	6.91
	1					1 960	1 560	1 440	1 160	1 100	890	880	710	6.94
	0 (Ground)					1 870	1 470	1 370	1 100	1 060	850	890	720	6.79
	-1			2 880	2 190	1 840	1 440	1 340	1 070	1 050	840	950	760	6.45
	-2			2 910	2 220	1 850	1 450	1 340	1 070			1 090	870	5.89

ZAXIS 85USB 2-Piece boom, Blade on Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
2-Piece boom Arm 2.12 m Counterweight 1 400 kg Grouser shoe 450 mm	5					*1 950	*1 950	*1 840	1 390			*1 580	1 090	5.68
	4					*2 110	1 990	*1 890	1 370	*1 760	990	*1 490	900	6.32
	3			*3 420	2 940	*2 500	1 870	*2 060	1 320	*1 810	970	*1 470	790	6.71
	2					*2 990	1 710	*2 280	1 240	*1 900	930	*1 490	730	6.91
	1					*3 350	1 560	*2 460	1 160	*1 980	890	*1 570	710	6.94
	0 (Ground)					*3 420	1 470	*2 530	1 100	*1 980	850	*1 630	720	6.79
	-1			*2 880	2 190	*3 220	1 440	*2 420	1 070	*1 850	840	*1 580	760	6.45
	-2			*3 640	2 220	*2 760	1 450	*2 090	1 070			*1 480	870	5.89

ZX85USB-5 Monoblock boom, Blade above Ground

Rating over-front Rating over-side or 360 degrees Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
Boom 3.67 m Arm 1.62 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5													
	4					*2 180	*2 180	1 870	1 569			1 652	1 388	5.41
	3			*3 579	3 256	2 571	2 128	1 839	1 540			1 440	1 210	5.88
	2					2 461	2 025	1 789	1 492	1 375	1 153	1 341	1 124	6.11
	1					2 370	1 940	1 741	1 447	1 354	1 132	1 313	1 099	6.14
	0 (Ground)			*2 275	*2 275	2 326	1 899	1 710	1 417			1 352	1 129	5.97
	-1	*2 754	*2 754	3 613	2 860	2 317	1 891	1 701	1 408			1 478	1 231	5.57
	-2			3 651	2 895	2 338	1 910					1 777	1 473	4.89

ZX85USB-5 Monoblock boom, Blade on Ground

Rating over-front Rating over-side or 360 degrees Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
Boom 3.67 m Arm 1.62 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5													
	4					*2 180	*2 180	*2 044	1 569			*1 924	1 388	5.41
	3			*3 579	3 255	*2 593	2 128	*2 189	1 540			*1 915	1 209	5.88
	2					*3 152	2 025	*2 425	1 492	*2 072	1 153	*1 995	1 124	6.11
	1					*3 562	1 940	*2 631	1 447	*2 136	1 132	*2 084	1 099	6.14
	0 (Ground)			*2 275	*2 275	*3 650	1 898	*2 705	1 417			*2 124	1 128	5.97
	-1	*2 754	*2 754	*4 430	2 860	*3 443	1 891	*2 572	1 408			*2 153	1 230	5.58
	-2			*3 888	2 895	*2 900	1 910					*2 126	1 472	4.89

ZX85USB-5 Monoblock boom, Blade above Ground

Rating over-front Rating over-side or 360 degrees Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
Boom 3.67 m Arm 2.12 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5							*1 782	1 588			*1 647	1 450	5.29
	4							*1 781	1 585			1 419	1 193	5.98
	3					*2 235	2 160	1 851	1 550	1 399	1 174	1 265	1 062	6.39
	2					2 491	2 052	1 795	1 497	1 373	1 150	1 189	995	6.61
	1					2 382	1 949	1 738	1 443	1 344	1 121	1 166	974	6.63
	0 (Ground)			*2 437	*2 437	2 314	1 886	1 696	1 402	1 320	1 099	1 192	994	6.48
	-1	*2 217	*2 217	3 559	2 809	2 288	1 862	1 674	1 382	1 311	1 090	1 280	1 066	6.12
	-2	*3 706	*3 706	3 586	2 833	2 294	1 867	1 678	1 385			1 477	1 226	5.52
	-3			*3 307	2 890	2 335	1 906					*1 871	1 612	4.55

ZX85USB-5 Monoblock boom, Blade on Ground

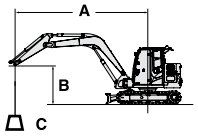
Rating over-front Rating over-side or 360 degrees Unit: kg

Conditions	Load point height m	Load radius										At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
														meter
Boom 3.67 m Arm 2.12 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5							*1 782	1 588			*1 647	1 450	5.29
	4							*1 781	1 585			*1 552	1 193	5.98
	3					*2 235	2 160	*1 963	1 550	*1 820	1 174	*1 540	1 062	6.39
	2					*2 829	2 052	*2 236	1 497	*1 933	1 150	*1 586	995	6.61
	1					*3 357	1 949	*2 499	1 443	*2 053	1 121	*1 695	974	6.63
	0 (Ground)			*2 437	*2 437	*3 608	1 886	*2 656	1 402	*2 110	1 099	*1 890	994	6.48
	-1	*2 217	*2 217	*3 760	2 809	*3 556	1 862	*2 639	1 382	*2 018	1 090	*1 942	1 066	6.12
	-2	*3 706	*3 706	*4 491	2 833	*3 201	1 867	*2 360	1 385			*1 958	1 226	5.52
	-3			*3 307	2 890	*2 373	1 906					*1 871	1 612	4.55

LIFTING CAPACITIES

Notes:
1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is the center-line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



A: Load radius
B: Load point height
C: Lifting capacity

ZX85USB-5 2-Piece boom, Blade above Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius 2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		At max. reach		
														meter
2-Piece boom Arm 1.62 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5					*2 236	2 182	1 795	1 485			1 780	1 472	5.03
	4			*3 000	*3 000	*2 383	2 129	1 796	1 486			1 408	1 162	5.75
	3					2 454	2 002	1 738	1 430	1 295	1 065	1 227	1 008	6.19
	2					2 279	1 837	1 658	1 354	1 261	1 033	1 136	929	6.41
	1					2 147	1 713	1 584	1 284	1 224	997	1 105	900	6.44
	0 (Ground)					2 089	1 659	1 536	1 238	1 198	972	1 130	917	6.28
	-1			3 279	2 531	2 080	1 651	1 520	1 223			1 224	992	5.91
	-2			*2 886	2 575	2 106	1 676	1 541	1 243			1 444	1 169	5.28

ZX85USB-5 2-Piece boom, Blade on Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius 2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		At max. reach		
														meter
2-Piece boom Arm 1.62 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5					*2 236	2 182	*2 045	1 485			*1 957	1 472	5.03
	4			*3 000	*3 000	*2 383	2 129	*2 065	1 486			*1 821	1 162	5.75
	3					*2 760	2 002	*2 206	1 430	*1 911	1 065	*1 793	1 008	6.19
	2					*3 196	1 837	*2 389	1 354	*1 964	1 033	*1 838	929	6.41
	1					*3 413	1 713	*2 510	1 284	*1 993	997	*1 809	900	6.44
	0 (Ground)					*3 318	1 659	*2 492	1 238	*1 927	972	*1 771	917	6.28
	-1			*3 338	2 531	*2 983	1 651	*2 282	1 223			*1 699	992	5.91
	-2			*2 886	2 575	*2 379	1 676	*1 759	1 243			*1 529	1 169	5.28

ZX85USB-5 2-Piece boom, Blade above Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius 2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		At max. reach		
														meter
2-Piece boom Arm 2.12 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5					*1 948	*1 948	*1 843	1 556			1 487	1 234	5.68
	4					*2 112	*2 112	1 851	1 538	1 358	1 126	1 235	1 021	6.32
	3			*3 420	3 264	*2 499	2 088	1 790	1 480	1 336	1 104	1 100	905	6.71
	2					2 372	1 924	1 706	1 400	1 294	1 064	1 029	843	6.91
	1					2 215	1 777	1 622	1 320	1 248	1 020	1 004	819	6.94
	0 (Ground)					2 124	1 692	1 560	1 261	1 212	985	1 020	830	6.79
	-1			*2 877	2 514	2 089	1 660	1 529	1 231	1 194	967	1 087	883	6.45
	-2			3 294	2 546	2 095	1 666	1 528	1 231			1 237	1 004	5.89

ZX85USB-5 2-Piece boom, Blade on Ground

Rating over-front | Rating over-side or 360 degrees | Unit: kg

Conditions	Load point height m	Load radius 2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		At max. reach		
														meter
2-Piece boom Arm 2.12 m Counterweight 1 400 kg + 370 kg Grouser shoe 450 mm	5					*1 948	*1 948	*1 843	1 556			*1 583	1 234	5.68
	4					*2 112	*2 112	*1 890	1 538	*1 756	1 126	*1 489	1 021	6.32
	3			*3 420	3 264	*2 499	2 088	*2 060	1 480	*1 807	1 104	*1 465	905	6.71
	2					*2 991	1 924	*2 282	1 400	*1 900	1 064	*1 491	843	6.91
	1					*3 348	1 777	*2 464	1 320	*1 977	1 020	*1 568	819	6.94
	0 (Ground)					*3 416	1 692	*2 526	1 261	*1 983	985	*1 627	830	6.79
	-1			*2 877	2 514	*3 216	1 660	*2 420	1 231	*1 853	967	*1 583	883	6.45
	-2			*3 635	2 546	*2 758	1 666	*2 085	1 231			*1 483	1 004	5.89

EQUIPMENT

● ..... Standard equipment ○ ..... Optional equipment

ENGINE

Air cleaner double filters	●
Auto idle system	●
Cartridge-type engine oil filter	●
Cartridge-type fuel filter	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Electric fuel refilling pump	●
Fan guard	●
Fuel main filter	●
PWR/ECO mode control	●
Radiator reserve tank	●
Radiator, oil cooler with dust-proof indoor net	●
Water-separator for engine fuel	●
60 A alternator	●

HYDRAULIC SYSTEM

Boom anti-drift valve	●
Extra port for control valve	●
Full-flow filter	●
Hose rupture valve	○
Hydraulic pilot type control levers	●
Pilot control shut-off lever with neutral engine start system	●
Pilot filter	●
Suction filter	●
Swing drain filter	●
Swing parking brake	●
Travel parking brake	●
Two-speed travel system	●
Valve for extra piping	●

CAB

Air suspension seat with heater	●
AM/FM radio	●
Anti-slip plate	●
Armrests	●
Ashtray	●
Auto control air conditioner	●
Auxiliary function lever (AFL)	○
AUX. terminal and storage	●
Defroster	●
Drink holder	●
Electric horn	●
Floor mat	●
Glove compartment	●
Rain guard	○
Reclining seat	●
Reinforced, tinted glass window	●
Retractable seat belt	●
ROPS/OPG cab	●
Spare power supply	●
Storage box	●
Sun visor	○
Transparency roof with roll cartain	●
Window washer	●
Wiper	●
4 fluid-filled elastic mounts	●
12 V power source	○

LIGHTS

Additional boom lights with cover	○
Additional cab roof front lights	○
Additional cab roof rear lights	○
Rotating lamp	○
2 working lights	●

UPPER STRUCTURE

Auxiliary overload relief valve	●
Electrical fuel feed pump with auto stop	●
Fuel level float	●
Pilot accumulator	○
Rear view camera	○
Rear view mirror (right, left side & cab rear)	●
Stack muffler	●
Tool box	●
Undercover	●
1 400 kg counterweight	●
370 kg additional counterweight	○

UNDERCARRIAGE

Blade	●
Reinforced track links with pin seals	●
Travel motor covers	●
4 tie down hooks	●
450 mm grouser shoe	●
450 mm pad crawler shoe	○
450 mm rubber shoe	○
600 mm grouser shoe	○

FRONT ATTACHMENTS

Assist piping	○
Dirt seal on all bucket pins	●
Flanged pin	●
HN bushing	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●
1.62 m arm	○
2.12 m arm	●

MISCELLANEOUS

Global e-Service	●
Theft deterrent system*	●

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.
* Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.

MEMO

MEMO

Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.

Hitachi Environmental Vision 2025

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, recycling of resources, and enhancement of ecosystem.

Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

*Life Cycle Assessment – ISO 14040

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance. These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, customer installed and modified parts, optional parts and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

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