

**ZW-6 series**

**HITACHI**

**Reliable solutions**

**ZW180**



## **WHEEL LOADER**

**Model code :** ZW180-6 / ZW180PL-6

**Engine rated power :** 129 kW / 173 hp (ISO14396)

**Operating weight :** 14 880 – 15 250 kg

**Bucket ISO heaped :** 2.4 – 2.8 m<sup>3</sup>



# ZW180-6. NO COMPROMISE

The latest Hitachi wheel loaders have been developed specifically to meet the demands of the evolving European construction industry. The ZW180-6 offers exceptional levels of performance without compromising on efficiency, thanks to low levels of fuel consumption.

The new model underlines Hitachi's reputation for high-quality engineering and durable products. The epitome of reliability, the ZW180-6 is also extremely versatile for a variety of industry solutions.



6. FIRST FOR RELIABILITY



8. DEDICATED TO DURABILITY



10. INCREDIBLE VERSATILITY





12. INDUSTRY-LEADING QUALITY



14. UNIQUE TECHNOLOGY



# DEMAND PERFECTION

The ZW180-6 has been designed and built using market-leading technology in Japan. Developed to perfection, with an emphasis on the environment, operator comfort and safety, it responds to customer demands for exceptional productivity at the lowest possible cost of ownership.



**Industry-leading safety**  
360° visibility from the cab.



## **Easy to operate**

New multifunctional monitor shows information at a glance.



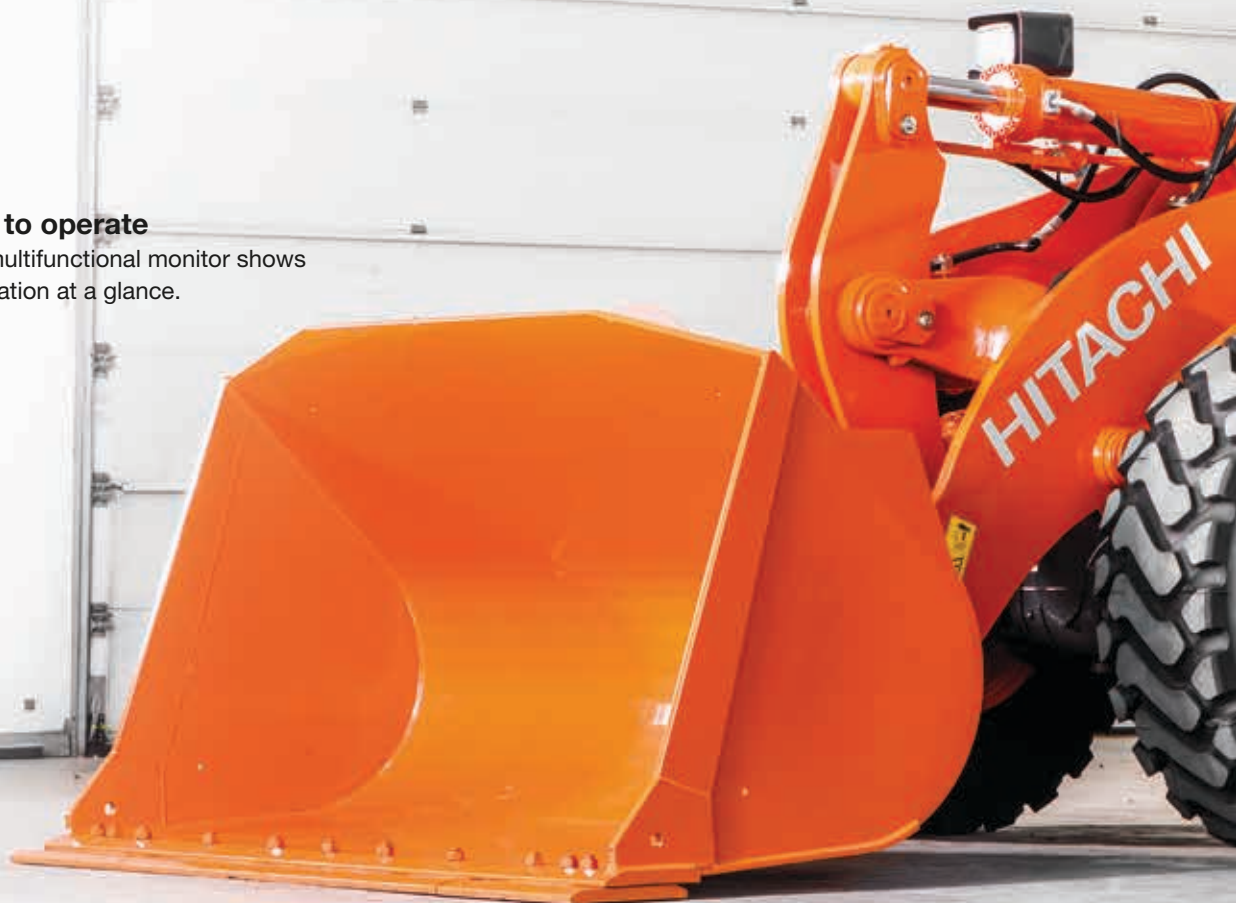
## **Smooth operation**

Ride control minimises machine pitching.



## **Superior comfort**

Spacious cab with several storage compartments.



**Powerful performance**

Quick power switch increases engine output when required.

**Enhanced design**

Excellent rear view thanks to the curved engine hood.

**Quieter performance**

New materials in the cab absorb sound to reduce noise levels.

**Enhanced fuel efficiency**

New Stage IV engine without DPF.

**Low running costs**

7% fuel saving in V-shaped loading (5% in load and carry operations).

**Exceptional durability**

The front lift arm has a thicker cross tube to provide more strength against torsion.

**Convenient access**

Easy-to-open wide engine covers.



“No other equipment works as well as Hitachi construction machinery”

Andre Molenaar, owner, A Molenaar

## FIRST FOR RELIABILITY

The reliability of the ZW180-6 Hitachi wheel loader ensures it operates at the highest levels of efficiency on a wide range of job sites. Designed with several easy maintenance features, it delivers an optimum performance with minimal downtime, helping to reduce running costs.

### Minimal downtime

The ZW180-6 battery compartment can be accessed easily for maintenance and battery replacement. This results in minimal downtime and a high level of availability.

### Quick access

The engine covers open full for convenient access. This helps to ensure routine maintenance is completed quickly to ensure a reliable performance.

### Improved fuel efficiency

The ZW180-6 demonstrates greater fuel efficiency than the previous model during V-shape loading, and load and carry operations. This results in considerable savings for running costs.

### Easy maintenance

For safer and easier maintenance, the battery disconnect switch is now included as standard. This helps to avoid electrical accidents and retain battery energy during long-term storage.

### Reduced cost

The new Stage IV-compliant engine does not require a diesel particulate filter, which further reduces fuel consumption and maintenance costs.



Easy access to the engine compartment.





The battery is easy to maintain.



New engine reduces fuel consumption.





Increased lift arm strength.



Optional anti-clogging radiators enhance durability.



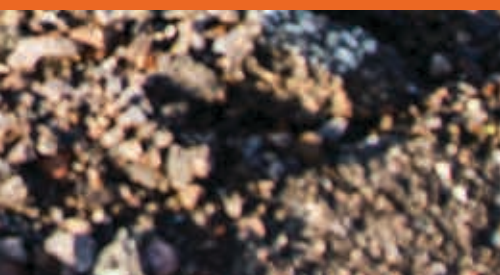


**i** The final checking and inspection procedure for each Hitachi wheel loader is typical of Hitachi's dedication to manufacturing products of unfailing quality in response to customer needs.



# DEDICATED TO DURABILITY

Hitachi is dedicated to the design and engineering of robust construction machinery. In line with this, the new ZW180-6 wheel loader has been built with durable materials, strengthened components and added protection for key features to operate reliably in demanding conditions.



The optional belly guard provides added protection.

## Added protection

The optional belly guard protects the machine powertrain and driveshaft from potential damage caused by materials on the ground.

## Strengthened components

The lift arm strength of the ZW180-6 has been increased to meet customer demand.

## Durable materials

High-quality radiators improve resistance to corrosion and enhance the overall durability of the ZW180-6 wheel loader.

## Maximum uptime

Optional anti-clogging radiators (WPFR) are designed with square-shaped instead of triangular-shaped fins to prevent clogging. This reduces radiators maintenance frequency.







“ I have an excellent  
all-round view from  
inside the cab ”

Carsten Folmer Jensen, operator, LNSG

## INCREDIBLE VERSATILITY

The ZW180-6 is suitable for working on a variety of job sites and wide range of applications thanks to its versatility. Whatever the task, it offers a smooth and efficient operation, increased productivity and greater fuel efficiency.

### Efficient flexibility

The quick power switch increases engine output when more power is instantly required, or when driving uphill.

### Enhanced rear visibility

The muffler and air intake have been repositioned and aligned to improve the rear-view visibility from the cab, enhancing safety on a variety of job sites.

### High productivity

The simultaneous movement of the bucket and lift arm ensures a smooth digging operation. To reduce the shock that occurs while the lift arm comes to a halt smart hydraulic valve controls the flow in lift arm circuit.

### Parallel lift arm

The ZW180PL-6 provides parallel movement from ground level. Perfect for loading and unloading items with increased load control.

### Effective control

To ensure a smooth drive on all kinds of terrain, the ride control feature prevents unnecessary pitching via the movement of lift arm cylinders.



Rear visibility has been enhanced by design modifications.





The ride control feature ensures a smooth travel performance.



The quick power switch increases power when required.





Urea is injected into the exhaust gas to reduce emissions.



Easy access for maintenance from ground level.



**i** Hitachi conducts user tests to assess the features of its wheel loaders. Results have revealed an unrivalled level of control.



# INDUSTRY-LEADING QUALITY

Thanks to the use of high-quality components, the ZW180-6 meets the highest possible standards of performance, reliability, comfort and safety. Offering the best all-round visibility in its class, it is also one of the quietest wheel loaders available in the market.

## Reduced emission

A selective catalytic reduction (SCR) system injects urea into exhaust gas to reduce nitrogen oxide from emissions. This cutting-edge technology not only helps the environment, but also complies with EU Stage IV emission regulations.

## Easy access

The engine air filter has been relocated to the rear of the engine compartment, providing easier access at ground level for maintenance. The urea tank is also positioned for convenience.

## Excellent visibility

The 360° panoramic view of the spacious cab creates a comfortable working environment, and helps to increase safety and productivity. The rear-view camera also contributes to excellent all-round visibility and safety on the job site.

## Improved comfort

Sound insulation has been improved in the cab to significantly reduce noise levels and provide a quieter working environment for operators. The low-noise engine also results in a quieter performance, which makes it suitable for working in urban areas.



The SCR system reduces emissions.





“ *The ZW180-6 was designed and built using market-leading Japanese technology* ”

HCME Wheel Loader Specialist Vasilis Drougas

## UNIQUE TECHNOLOGY

Designed with a focus on the environment, operator comfort and safety, the ZW180-6 incorporates advanced technology developed by Hitachi in Japan. This technology is at the heart of Hitachi's success in enhancing the experience of its customers, and satisfying increasingly demanding industry requirements.

### Reduced maintenance

A new Stage IV-compliant engine contains a high-volume cooled exhaust gas recirculation (EGR) system, a common rail-type fuel injection system and a diesel oxidation catalyst (DOC), which are maintenance free.

### Smaller environmental impact

The optional auto shutdown feature helps to prevent fuel wastage, as well as reduce noise levels, exhaust emissions and CO<sub>2</sub> levels of the ZW180-6 medium wheel loader.

### Optimum performance

Hitachi ZW-6 wheel loaders are fitted with a multifunctional LCD colour monitor that shows useful information at a glance, such as fuel and urea levels, oil temperature and power mode. It ensures an optimum performance and easy maintenance. It also includes the display for the easy-to-use rear-view camera, which enhances visibility for a safe operation.

### Remote monitoring

Global e-Service allows ZW180-6 owners to monitor their Hitachi machines remotely via Owner's Site (24/7 online access) and ConSite (an automatic monthly report). These help to maximise efficiency, minimise downtime and improve overall performance.

### Improved performance

An auto power up function increases engine rpm as the ZW180-6 slows down when travelling uphill. This improves traveling performance by optimizing operational time.





New LCD monitor shows the machine's status and settings.



Auto power up function improves uphill performance.



Reduced maintenance with the new Stage IV-compliant engine.





*“ We are very happy with the quality and low cost of ownership of the Hitachi wheel loader ”*

Phil Meuser-Schaede, owner, Trasswerke Meurin

## REDUCING THE TOTAL COST OF OWNERSHIP



Hitachi has created the Support Chain after-sales programme to ensure optimum efficiency, as well as minimal downtime, reduced running costs and high resale values.

### Global e-Service

Hitachi has developed two remote monitoring systems as part of its Global e-Service online application. Owner's Site and ConSite are an integral part of the wheel loader, which sends operational data daily via GPRS or satellite to [www.globaleservice.com](http://www.globaleservice.com). This allows immediate access to the Owner's Site, and the vital information that is required for support on job sites.

Comparing the ratio of operating and non-operating hours helps to enhance efficiency. Effective management of maintenance programmes helps to

maximise availability. Running costs can also be managed by analysing the fuel consumption. The location and movements of each machine are clearly displayed for essential planning.

An automatic service report – ConSite – sends a monthly email summarising the information from Global e-Service for each machine. This includes: daily working hours and fuel consumption data; statistics on the operating mode ratio, plus a comparison for fuel consumption/efficiency, and CO<sub>2</sub> emissions.

### Technical support

Each Hitachi service technician receives full technical training from HCME in Amsterdam. These sessions provide access to the same technical knowledge available within the Hitachi quality assurance departments and design centres. Technicians combine this global expertise with the local language and culture of the customer to provide the highest level of after-sales support.





Global e-Service

Technical support

Hitachi Parts

## Extended warranty and service contracts

Every new Hitachi ZW-6 model is covered by a full manufacturer's warranty. For extra protection – due to severe working conditions or to minimise equipment repair costs – Hitachi dealers offer a unique extended warranty called HELP (Hitachi Extended Life Program) and comprehensive service contracts. These can help to optimise the performance of each machine, reduce downtime and ensure higher resale values.

## Parts

Hitachi offers a wide range and a high availability of parts dispatched from the 53,000 m<sup>2</sup> HCME European Parts Depot in The Netherlands.

- Hitachi Genuine Parts: allow machines to work for longer, with lower running and maintenance costs.
- Hitachi Select Parts and 2Genuine Parts: especially for older machines, they cost less, are of proven quality and come with the manufacturer's warranty.

- Performance Parts: to cope with highly demanding conditions, they have been engineered for greater durability, better performance or longer life.

- Remanufactured components: offering an economically viable solution, they are the best option when preventative replacements are required.

Whatever the choice, the renowned quality of Hitachi construction machinery is assured.





EH dump trucks



EX ultra-large excavators



ZW wheel loaders





“ We develop construction machinery that contributes to the creation of affluent and comfortable societies ”

Koutarou Hirano , HCM President

## BUILDING A BETTER FUTURE

Established in 1910, Hitachi, Ltd. was built upon a founding philosophy of making a positive contribution to society through technology. This is still the inspiration behind the Hitachi group's reliable solutions that answer today's challenges and help to create a better world.

Hitachi, Ltd. is now one of the world's largest corporations, with a vast range of innovative products and services. These have been created to challenge convention, improve social infrastructure and contribute to a sustainable society.

Hitachi Construction Machinery Co., Ltd. (HCM) was founded in 1970 as a subsidiary of Hitachi, Ltd. and has become one of the world's largest construction equipment suppliers. A pioneer in producing hydraulic excavators, HCM also manufactures wheel loaders, rigid dump trucks, crawler cranes and special application machines at state-of-the-art facilities across the globe.

Incorporating advanced technology, Hitachi construction machinery has a reputation for the highest quality standards. Suitable for a wide range of industries, it is always

hard at work around the world – helping to create infrastructure for a safe and comfortable way of living, developing natural resources and supporting disaster relief efforts.

Hitachi ZW wheel loaders are renowned for being reliable, durable and versatile – capable of delivering the highest levels of productivity under the most challenging of conditions. They are designed to provide owners with a reduced total cost of ownership, and operators with the ultimate level of comfort and safety.



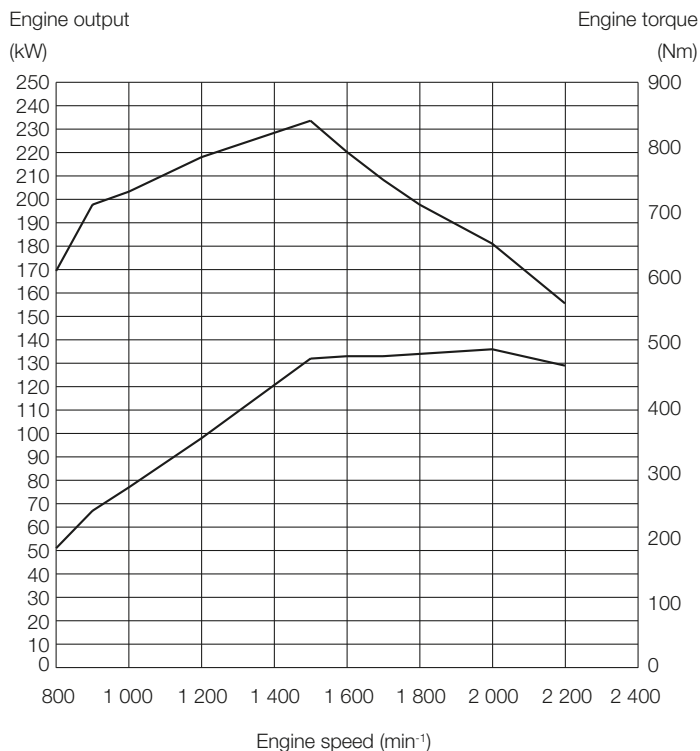
Mini excavators



# SPECIFICATIONS

## ENGINE

Model .....	CUMMINS QSB6.7
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Turbocharger and intercooled
Aftertreatment .....	DOC and SCR system
No. of cylinders .....	6
Maximum rated power	
ISO 14396, gross .....	129 kW (173 HP) at 2200 min <sup>-1</sup> (rpm)
ISO 9249, net .....	125 kW (168 HP) at 2200 min <sup>-1</sup> (rpm)
Maximum torque .....	841 Nm at 1 500 min <sup>-1</sup> (rpm)
Bore and stroke .....	107 mm X 124 mm
Piston displacement .....	6.690 L
Batteries .....	2 x 12 V
Air cleaner .....	Two element dry type with restriction indicator
Emission.....	Complies with EU stage IV and US EPA Tier 4 Final



## POWER TRAIN

Transmission .....	Torque converter, countershaft type powershift with computer-controlled automatic shift and manual shift features included.
Torque converter .....	Three elements, single stage, single phase
Main clutch .....	Wet hydraulic, multi-disc type
Cooling method .....	Forced circulation type
Travel speed* Forward / Reverse	
1st .....	5.9 / 6.2 km/h (6.3 / 6.6 km/h)
2nd .....	11.5 / 12.1 km/h (12.2 / 12.9 km/h)
3rd .....	17.4 / 26.5 km/h (18.5 / 28.3 km/h)
4th .....	25.3 / — km/h (27.0 / — km/h)
5th .....	38.5 / — km/h (38.5 / — km/h)
*With 20.5 R25 (L3) tires	
( ): Data at Power Mode	

## AXLE AND FINAL DRIVE

Drive system .....	Four-wheel drive system
Front & rear axle .....	Semi-floating
Front .....	Fixed to the front frame
Rear .....	Trunnion support
Reduction and differential gear .....	Two stage reduction with torque proportional differential
Oscillation angle .....	Total 20° (+10°, -10°)
Final drives .....	Heavy-duty planetary, mounted inboard

## TIRES

Tire size .....	20.5 R25 (L3)
Optional .....	Refer to standard & optional equipment list

## BRAKES

Service brakes .....	Inboard mounted fully hydraulic 4 wheel wet disc brakes. Front & rear independent brake circuit
Parking brakes .....	Spring applied, hydraulically released, dry disc type with external output shaft

## STEERING SYSTEM

Type .....	Articulated frame steering
Steering angle .....	Each direction 40° ; total 80°
Cylinders .....	Double-acting piston type
No. x Bore x Stroke .....	2 x 70 mm x 442 mm

## HYDRAULIC SYSTEM

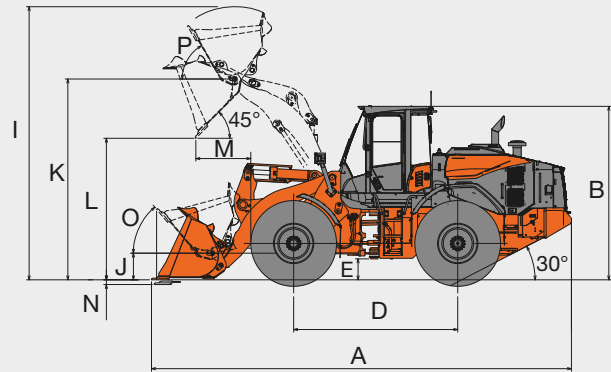
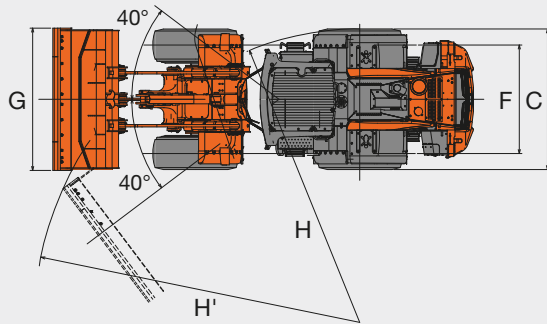
Arm and bucket are controlled by independent control lever		
Arm controls .....	Four position valve ; Raise, hold, lower, float	
Bucket controls with automatic bucket return-to-dig control .....	Three position valve ; Roll back, hold, dump	
Main pump (Serve as steering pump)	Variable Displacement Axial Plunger Pump	
Maximum flow .....	210 L/min at 2 200 min <sup>-1</sup> (rpm)	
Maximum pressure ...	27.4 MPa	
Fan pump	Fixed Displacement Gear Pump	
Maximum flow .....	54.8 L/min at 2 200 min <sup>-1</sup> (rpm)	
Maximum pressure ...	18.2 MPa	
ZW180-6 Hydraulic cylinders	Double acting type	
No. x Bore x Stroke ...	Arm : 2 x 125 mm x 765 mm	
	Bucket : 2 x 150 mm x 495 mm	
ZW180PL-6 Hydraulic cylinders	Double acting type	
No. x Bore x Stroke ...	Arm : 2 x 125 mm x 765 mm	
	Bucket : 2 x 110 mm x 955 mm	
Filters .....	Full-flow 15 micron return filter in reservoir	
Hydraulic cycle times	ZW180-6	ZW180PL-6
Lift arm raise .....	5.9 s (5.7 s)	5.9 s (5.7 s)
Lift arm lower .....	3.6 s (3.6 s)	3.6 s (3.6 s)
Bucket dump .....	1.3 s (1.3 s)	2.5 s (2.5 s)
Total .....	10.8 s (10.6 s)	12.0 s (11.8 s)
( ): Data at Power Mode		

## SERVICE REFILL CAPACITIES

Fuel tank .....	245 L
Engine coolant .....	33 L
Engine oil .....	25 L
Torque convertor & transmission .....	30 L
Front axle differential & wheel hubs .....	31 L
Rear axle differential & wheel hubs .....	34 L
Hydraulic oil tank .....	100 L
DEF/AdBlue® tank .....	25 L



## DIMENSIONS & SPECIFICATIONS ZW180-6



Bucket type			Standard arm				High lift arm			
			General purpose		Flat Bottom		General purpose		Flat Bottom	
			Weld-on teeth	Bolt-on cutting edge	Weld-on teeth	Bolt-on cutting edge	Bolt-on cutting edge			
Bucket capacity	ISO heaped	m³	2.7	2.8	2.7	2.8	2.4	2.8	2.8	
	ISO struck	m³	2.3	2.4	2.3	2.4	2.1	2.4	2.4	
A Overall length		mm	8 070	7 960	8 070	7 960	8 380	8 450		
B Overall height		mm	3 285							
C Width over tires		mm	2 490							
D Wheel base		mm	3 100							
E Ground clearance		mm	400							
F Tread		mm	1 930							
G Bucket width		mm	2 535							
H Turning radius (Centerline of outside tire)		mm	5 240							
H' Loader clearance circle, bucket in carry position		mm	6 150	6 120	6 150	6 120	6 310	6 330		
I Overall operating height		mm	5 310		5 300		5 670	5 720		
J Carry Height of bucket pin		mm	410							
K Height to bucket hinge pin, fully raised		mm	3 925				4335			
L Dumping clearance 45 degree, full height		mm	2 720	2 790	2 720	2 790	3 250	3 200		
M Reach, 45 degree dump, full height		mm	1 190	1 080	1 190	1 080	1 180	1 230		
N Digging depth (Horizontal digging angle)		mm	60	90	60	90	170			
O Max. roll back at carry position		deg	48							
P Roll back angle at full height		deg	60				53			
Static tipping load*	Straight	kg	13 000	12 760	13 000	12 660	10 140	10 000	9 900	
	Full 40 degree turn	kg	11 200	11 000	11 200	10 900	8 700	8 600	8 500	
Breakout force		kgf	12 850	11 870	12 850	11 870	11 640	10 880	10 880	
		kN	126	116	126	116	114	107	107	
Operating weight *		kg	14 880	14 980	14 980	15 080	15 110	15 180	15 250	

Note: All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7137:2009 and ISO 7546:1983

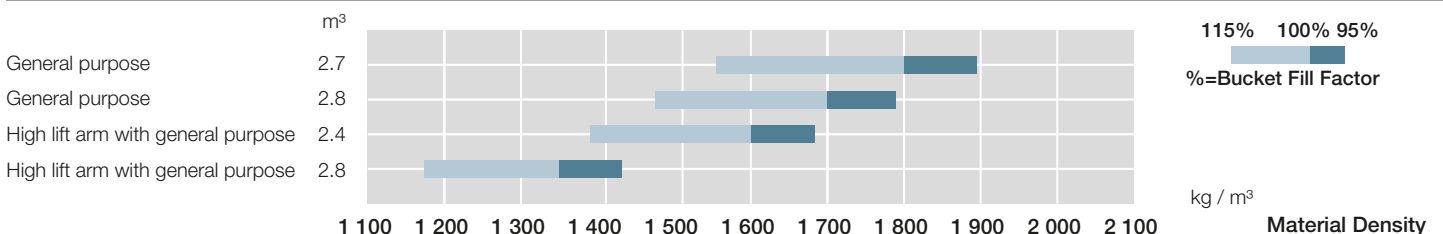
\*: Static tipping load and operating weight marked with \* include 20.5R25 (L3) tires (No ballast) with lubricants, full fuel tank and operator.

Machine stability and operating weight depend on counterweight, tire size and other attachments.

## WEIGHT CHANGE

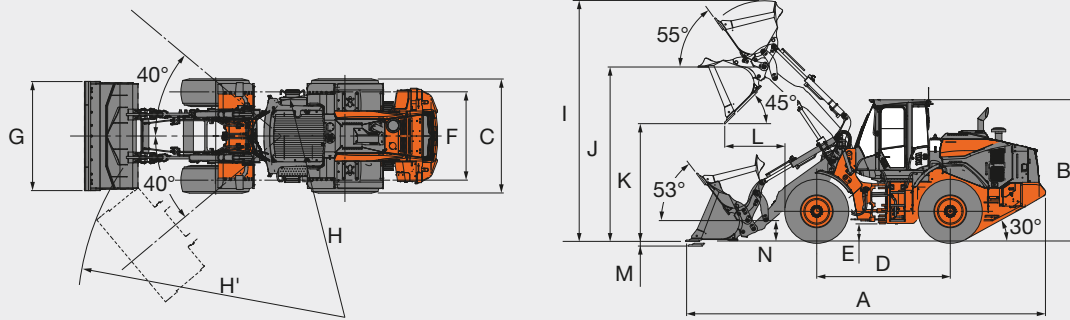
Option item		Operating weight (kg)	Tipping load (kg)		Overall width (mm) (outside tire)	Overall height (mm)	Overall length (mm)
			Straight	Full turn			
Tire	20.5R25(L3)XHA2	±0	±0	±0	±0	±0	±0
	20.5R25(L5)XLDD2A	+460	+350	+320	+30	+25	-20
	20.5R25(L5)XMINED2	+620	+480	+430	+25	+35	-30
	650/65R25(L3)XLD	+550	+430	+400	+170	±0	±0
Belly guard		+160	+110	+100	±0	±0	±0

## BUCKET SELECTION GUIDE



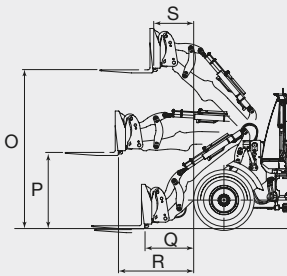


## DIMENSIONS & SPECIFICATIONS ZW180PL-6



			General purpose					
			Bolt-on cutting edge			Weld-on teeth		
Bucket capacity	ISO heaped	m³	2.6	2.8	3.1	2.5	2.7	3.0
	ISO struck	m³	2.3	2.4	2.7	2.2	2.3	2.6
A Overall length		mm	8 330	8 380	8 480	8 450	8 500	8 600
B Overall height		mm				3 285		
C Width over tires		mm				2 490		
D Wheel base		mm				3 100		
E Ground clearance		mm				400		
F Tread		mm				1 930		
G Bucket width		mm				2 535		
H Turning radius (Centerline of outside tire)		mm				5 240		
H' Loader clearance radius, bucket in carry position		mm	6 230	6 250	6 270	6 260	6 270	6 300
I Overall operating height		mm	5 590	5 650	5 720	5 590	5 650	5 720
J Height to bucket hinge pin, fully raised		mm				4 050		
K Dumping clearance 45 degree, full height		mm	2 720	2 690	2 620	2 650	2 610	2 540
L Reach, 45 degree dump, full height		mm	1 390	1 420	1 490	1 510	1 540	1 610
M Digging depth (Horizontal digging angle)		mm	110	110	110	80	80	80
N Carry height of bucket pin		mm				400		
Bucket weight		kg	1 290	1 330	1 390	1 190	1 230	1 290
Static tipping load *	Straight	kgf	10 740	10 680	10 530	10 960	10 900	10 740
	Full 40 degree turn	kgf	9 240	9 180	9 040	9 440	9 390	9 250
Breakout force		kgf	11 400	11 000	10 300	12 200	11 800	11 000
		kN	112	108	101	120	116	108
Operating weight *		kg	15 650	15 690	15 750	15 550	15 590	15 650

### WITH FORK ATTACHMENT



Attachment type			Fork
O	Max. stacking height	mm	3 830
P	Height of fork at maximum reach	mm	1 810
Q	Reach at ground level	mm	1 240
R	Max. reach	mm	1 840
S	Reach at max. stacking height	mm	990
Static tipping load	Straight	kgf	10 250
	Full 40 degree turn	kgf	8 900
Max. payload per EN 474-3, 80 %		kg	6 930
Max. payload per EN 474-3, 60 %		kg	5 200
Fork tine length		mm	1 200
Operating weight *		kg	14 930

Note: All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7137:1997, ISO 7546:1983 and ISO 8313:1989

\*: Static tipping load and operating weight marked with\* include 20.5R25 (L3) tires (No ballast) with lubricants, full fuel tank and operator.

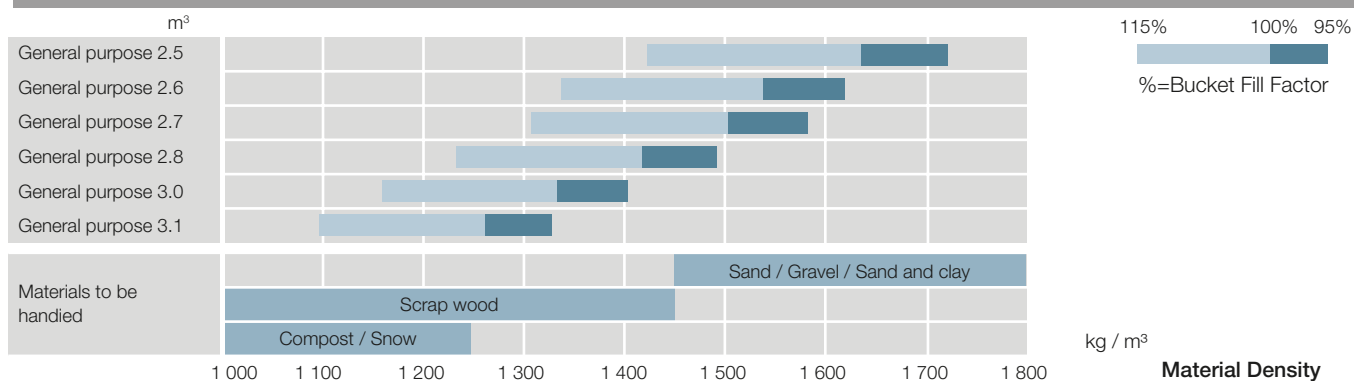
Machine stability and operating weight depend on counterweight, tire size and other attachments.

## WEIGHT CHANGE

Option item		Operating weight (kg)	Tipping load (kg)		Overall width (mm) (outside tire)	Overall height (mm)	Overall length (mm)
			Straight	Full turn			
Tire	20.5R25(L3)XHA2	±0	±0	±0	±0	±0	±0
	20.5R25(L5)XLD D2A	+460	+290	+260	+30	+25	-20
	20.5R25(L5)XMINE D2	+620	+390	+350	+25	+35	-30
	650/65R25(L3)XLD	+550	+275	+275	+170	±0	±0
Belly guard		+160	+110	+100	±0	±0	±0



## BUCKET SELECTION GUIDE





● ..... Standard equipment

○ ..... Optional equipment

OPERATOR'S STATION	ZW180-6	ZW180PL-6
Adjustable steering column with POP-UP	●	●
AM/FM radio with AUX for digital audio player	●	●
Ashtray, cigar lighter	●	●
Auto control air conditioner	●	●
with single intake filter	●	●
with double intake filters	○	○
Coat hook	●	●
Front/Rear defroster	●	●
Glove compartment	●	●
Rear view camera & monitor	●	●
Rear under mirror	●	●
Rear view mirrors		
Inside (2)	●	●
Outside (2)	●	●
Outside (Heated, 2)	○	○
Retractable seat belt, 50 mm	●	●
ROPS (ISO 3471), FOPS (ISO 3449): multi-plane isolation mounted for noise, vibration reduction	●	●
Rubber floor mat	●	●
Seat		
Air suspension seat with headrest and heater: fabric, high back, adjustable for damper, inclination of the seat, seat depth, weight-height, fore-aft position, reclining angle, armrest angle, headrest height and angle, lumbar support	●	●
Air suspension seat (heavy duty) with headrest and heater: fabric, high back, adjustable for damper, inclination of the seat, seat depth, weight-height, fore-aft position, reclining angle, armrest angle, headrest height and angle, lumbar support	○	○
Storage		
Cup holder	●	●
Digital audio player holder	●	●
Document holder	●	●
Hot & cool box	●	●
Seatback pocket	●	●
Sun visor	●	●
Textured steering wheel with spinner knob	●	●
Tinted safety glass: others : tempered, windshield : laminated	●	●
Windshield washer front and rear	●	●
Windshield wipers front and rear	●	●

## ELECTRICAL SYSTEM

Backup alarm	●	●
Batteries		
Standard batteries (120AH-760A)	●	●
Large capacity batteries (155AH-900A)	○	○
Battery disconnect switch	●	●
12 V power outlet	○	○

## LIGHTS

Brake & tail lights (LED)	●	●
Clearance lights	●	●
Headlights	●	●
Rotating lamp	○	○
Turn signals with hazard switch	●	●

## LIGHTS

	ZW180-6	ZW180PL-6
Work lights		
Front lights on cab (2)	●	●
Rear lights on rear grille side cover (2)	●	●
Additional front lights on cab (2)	○	○
Rear lights on cab (2)	○	○
Additional LED front lights on cab (2)	○	○
LED rear lights on cab (2)	○	○

## POWER TRAIN

Automatic transmission with load sensing system	●	●
Clutch cut position switch	●	●
Differential		
TPD (Torque Proportioning Differential, front and rear)	●	●
LSD (Limited Slip Differential, front and rear)	○	○
Driving speed limiter (20km/h)	○	○
DSS (Down Shift Switch)	●	●
Forward/Reverse lever	●	●
Forward/Reverse selector switch	●	●
Power mode switch	●	●
Quick power switch	●	●
Travel mode selector (Auto1-Auto2)	●	●
1st speed fixed switch	●	●

## ENGINE

Air intake		
Rain cap	●	●
Pre-cleaner (Cyclone type)	○	○
Pre-cleaner (Turbo II)	○	○
Air filter double elements	●	●
Automatic reversible cooling fan with heat sensing	●	●
Cartridge-type engine oil filter	●	●
Cartridge-type fuel pre-filter (with water separator function)	●	●
Cartridge-type fuel main filter	●	●
Coolant reservoir sight gauge	●	●
DEF/AdBlue® tank inlet strainer and extension filter	●	●
DEF/AdBlue® tank with ISO magnet adapter	●	●
Engine auto shut-down control system	○	○
Engine oil remote drain	●	●
Fan guard	●	●
Radiator		
Standard fin pitch radiator	●	●
Anti-clogging radiator (Wide fin pitch)	○	○

## MONITORING SYSTEM

Gauge: coolant temperature, fuel	●	●
Indicator lights: clearance lights, control lever lock, fuel level, high beam, parking brake, preheat, turn signals, work lights	●	●
Indicator on multifunction monitor: air conditioner display, auto shut-down indicator, clock, clutch cut off indicator, DEF alarm indicator, DEF level gauge, dual lift arm auto leveler indicator, ECO indicator, fan reverse indicator, F-N-R/Shift position indicator, forward/reverse selector switch indicator, hold display, hour meter, odometer, power mode indicator, ride control indicator, seat belt indicator, speedometer, tachometer, transmission auto-shifting indicator, transmission oil temperature	●	●
Warning lights: air filter restriction, brake oil low pressure, communication system error, discharge warning, engine oil low pressure, engine warning, hydraulic oil level, low steering oil pressure, overheat, transmission warning	●	●



BRAKE SYSTEM	ZW180-6	ZW180PL-6
Front & rear independent brake circuit	●	●
Inboard mounted fully hydraulic 4 wheel wet disc	●	●
Spring applied/Hydraulic-released parking brake	●	●

HYDRAULIC SYSTEM		
Bucket auto leveler (Automatic return to dig control)	●	●
Control lever		
for 3 spools control valve		
Multifunction lever (MF lever)	●	—
2 levers	○	—
MF lever & AUX lever for 3rd function	○	—
2 levers & AUX lever for 3rd function	○	—
for 4 spools control valve		
MF lever & AUX joystick lever for 3rd & 4th function	○	—
2 levers & AUX 2 levers for 3rd & 4th function - Inside layout pattern (4th - 3rd - bucket - liftarm)	○	—
MF lever & AUX lever for 3rd function	—	○
2 levers & AUX lever for 3rd function	—	○
Control lever lock switch	●	●
Dual lift arm auto leveler	●	●
Hydraulic filters	●	●
Lift arm float system	●	●
Reservoir sight gauge	●	●
Ride control system (OFF-AUTO type)	●	●

TIRES		
20.5R25 (L3) XHA2	●	●
20.5R25 (L5) XLDD2	○	○
20.5R25 (L5) XMINED2	○	○
650R65R25 (L3) XLD	○	○

MISCELLANEOUS	ZW180-6	ZW180PL-6
Articulation lock bar	●	●
Auto lubrication system	○	—
Belly guard (Bolt on type)	○	○
Bucket cylinder guard	○	—
Counterweight, built-in	●	●
Cutting edge protection	○	○
Drawbar with locking pin	●	●
Emergency steering	●	●
Fenders		
for 20.5 R25 (Front & full covered rear fenders with mud flaps)	●	●
for 650R65R25 (Front & full covered rear fenders with mud flaps)	○	○
Front windshield guard	○	○
Global e-Service	●	●
Lift arm		
Standard lift arm	●	—
High lift arm	○	—
Parallel lift arm	—	●
Lift & tie down hooks	●	●
On board information controller	●	●
Pilfer proof		
Battery cover with locking bracket	●	●
Lockable engine cover	●	●
Lockable fuel refilling cap	●	●
Quick coupler (ISO 23727)	—	●
Rear licence plate bracket	○	○
Road homologation		
German road homologation kit: rearlicense plate bracket, reflective sticker, wheel blocks	○	○
Italian road homologation kit: cab lights, bucket cutting edge protection, link stopper, rear license plate bracket, reflective sticker, rotating lamp	○	○
Standard tool kit	●	●
Theft prevention system*	○	○
Wheel blocks	○	○

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

[illegible]

# MEMO

Lined area for writing the memo.



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, and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.