## **HITACHI**

#### **Reliable solutions**

**ZW140** 

Tier 4 Final Certified

**145 hp** 108 kW Engine Output, Max, Gross (ISO 14396) **142 hp** 106 kW Engine Output, Max, Net (ISO 9249) **2.8 yd³** 2.1 m³ Bucket capacity

**25,661 lbs** 11,640 kg Operating weight

**ZW150** 

Tier 4 Final Certified

**145 hp** 108 kW Engine Output, Max, Gross (ISO 14396) **142 hp** 106 kW Engine Output, Max, Net (ISO 9249) **3.1 yd³** 2.4 m³ Bucket capacity

**27,029 lbs** 12,260 kg Operating weight

**ZW150**PL

Tier 4 Final Certified

**145 hp** 108 kW Engine Output, Max, Gross (ISO 14396) **142 hp** 106 kW Engine Output, Max, Net (ISO 9249) **2.8 yd³** 2.1 m³ Bucket capacity

**27,010 lbs** 12,830 kg Operating weight



## NO COMPROMISE

Offering exceptional levels of performance without compromising on efficiency, Hitachi ZW-6 wheel loaders are designed to satisfy the requirements of the North American construction industry.

Designed to be reliable, durable and versatile for a variety of job sites, and to operate with low levels of fuel consumption, they incorporate the high-quality engineering for which Hitachi is renowned.





6. FIRST FOR RELIABILITY



8. DEDICATED TO DURABILITY



10. INCREDIBLE VERSATILITY



# DEMAND PERFECTION

Designed and built with an emphasis on the environment, operator comfort and safety, the ZW-6 wheel loaders have been developed to perfection. They incorporate industry-leading technology created in Japan to meet the highest standards for performance at the lowest possible costs of ownership.



Quick power switch increases engine output when required.







#### Easy to operate

The hydrostatic transmission enhances versatility and increases productivity.





#### Superior comfort

Spacious cab with several storage compartments.



#### Enhanced design

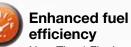
Excellent rear view thanks to the curved engine hood.



#### **Quieter performance**

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





New Tier 4 Final engine without DPF.



### Low running costs

6% fuel saving in V-shaped loading (19% in travelling operations).



#### **Exceptional durability**

Developed in-house, the front frame has been reinforced (ZW140-6 and ZW150-6).



#### **Convenient access**

Easy-to-open wide engine covers.

# FIRST FOR RELIABILITY

Renowned for reliability, Hitachi ZW-6 wheel loaders achieve exceptional levels of performance and efficiency with minimum downtime. The ZW140-6/ZW150-6/ZW150PL-6 have been designed with several user-friendly features that ensure quick and easy maintenance, and also contribute to lower running costs.

#### Minimal downtime

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

#### **Quick access**

The side engine cover opens fully for convenient access. This helps to ensure routine maintenance is completed quickly to ensure a reliable performance.

#### Improved fuel efficiency

The ZW-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 standard. This helps to avoid electrical accidents and retain battery energy during long-term storage.

#### **Reduced cost**

The new Tier 4 Final certified engine does not require a diesel particulate filter, which further reduces fuel consumption and maintenance costs.



Easy access to the engine compartment.







The final pre-delivery 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

Strengthened components, robust materials and additional reinforcement for key features ensure the durability. They also contribute to its reliable operation, particularly when working in challenging environments.



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**

Heavy-duty axles, designed in-house, have been incorporated into the design to improve durability.

#### **Durable materials**

High-quality radiators improve resistance to corrosion and enhance the overall durability.

#### Maximum uptime

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

# INCREDIBLE VERSATILITY

ZW-6 wheel loaders are often described as a perfect fit by Hitachi customers, which illustrates their versatility for a wide range of applications and job sites. In addition, they are smooth and efficient to operate, and offer 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 efficiency**

When working in snowy, slippery or muddy conditions, the traction control system helps to avoid tire slippage, and ultimately prevents wear and fuel waste, and lowers

running costs. It is highly effective for light applications.

#### Parallel lift arm

The ZW150PL-6 provides parallel movement from ground level. Perfect for loading and unloading items with increased load control.

#### Superior performance

The rimpull control system allows for a superior digging performance by striking a balance between rimpull and front digging force. Rimpull can be adjusted to varying degrees, depending on the work mode.



Rear visibility has been enhanced by design modifications.









To set industry-leading standards in terms of performance, reliability, comfort and safety, the ZW140-6/ZW150-6/ZW150PL-6 have been built using components of the highest quality. Its clever design offers 360° visibility from the cab and ensures it is one of the quietest wheel loaders in its class.



The optional rear-view camera contributes to all-round visibility.

#### **Reduced emission**

A selective catalytic reduction (SCR) system injects urea into exhaust gas to reduce nitrous oxide from emissions. This cutting-edge technology not only helps the environment, but also complies with Tier 4 Final 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 optional 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.

## UNIQUE TECHNOLOGY

Advanced technology developed by Hitachi is at the heart of the ZW-6 wheel loaders. It has an impact on everything, from the wheel loader's environmental performance to the comfort and safety of its operator. A technology-led approach enables Hitachi to meet the evolving needs of the construction industry, and improve the experience of its customers.

#### **Reduced maintenance**

A new Tier 4 Final certified engine contains a high-volume cooled exhaust gas recirculation (EGR) system, a common rail-type fuel injection system and a diesel oxidation catalyst (DOC). This helps to reduce fuel costs and maintenance requirements.

## Smaller environmental impact

The standard auto idle shutdown feature helps to prevent fuel waste, as well as reduce noise levels, exhaust emissions and CO<sub>2</sub> levels in the medium wheel loaders.

#### **Optimum performance**

The 1st speed select switch in combination with the creep mode switch optimize the usage on different job sites and with hydraulic attachments.

#### Remote monitoring

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

#### **Smooth operation**

The ZW140-6 and ZW150-6 are easy to maneuver thanks to the HST control system. The operator can choose between two work modes according to the task and terrain, and it enables a smooth transition between speeds.



1st speed select switch optimize performance on different job sites.



The HST control system enables a smooth performance.

The new engine and SCR system have a smaller environmental impact.

# REDUCING THE TOTAL COST OF OWNERSHIP

Hitachi has created the After Sales Solutions Program to ensure optimum efficiency, as well as minimal downtime, reduced running costs and high resale values.

#### Global e-Service

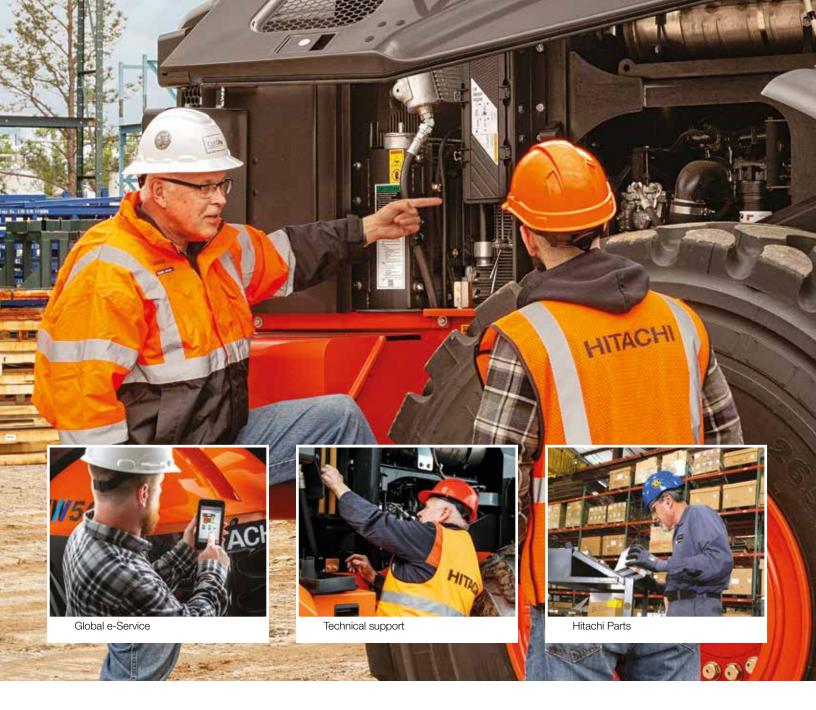
Hitachi has developed two remote monitoring systems as part of its Global e-Service online application. Owner's Site and ConSite are an integral part of the wheel loader, which sends operational data daily via GMS to www.globaleservice.com. This allows immediate access to the Owner's Site, and the vital 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 programs helps to maximize availability. Running costs can also be managed by analyzing 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 summarizing 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 emissions.

#### **Technical support**

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



## 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 minimize equipment repair costs — Hitachi dealers offer a unique extended warranty called HELP (Hitachi Extended Life Program) and comprehensive service contracts. These can help to optimize the performance of each machine, reduce downtime and ensure higher resale values.

#### **Parts**

Hitachi offers a wide range, and high availability, of parts located in the new 400,000 sq. ft. Parts Depot centrally located just outside of Atlanta, Georgia.

- Hitachi Genuine Parts: allow machines to work longer, with lower running and maintenance costs.
- Hitachi Select Parts and Genuine Parts: 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.
- Genuine Hitachi rebuilt components are available from HCMA's in-house rebuild center and are offered with a standard warranty.

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



# 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.

### **SPECIFICATIONS**

#### **ENGINE** 145 HP/2,000 RPM Gross power (ISO 14396) (108 kW/2,000 RPM) 142 HP/2,000 RPM Net power (ISO 9249) (106 kW/2,000 RPM) Make/Model Cummins QSB4.5 diesel engine 4-cycle, water-cooled, direct injection with Туре turbocharger and air cooled intercooler Fuel type #2 Diesel (Requires ultra-low sulfur fuel.) Fuel injection pump Electronically controlled, common rail type Governor All speed electrical type Cooling module type Forced circulation type Number of cylinders Bore and stroke 4.2" x 4.9" (107mm x 124mm) Total displacement 272 in<sup>3</sup> (4.5 liters) Alternator DC 24V-65A (2.64 kW) Dry type (double element) with Air cleaner restriction indicator Starter motor DC 24V-6.1 HP (4.5 kW) Battery (2) 12V-930 CCA (140 Ah)

#### **TORQUE CONVERTER AND TRANSMISSION**

Transmission	Electrical-controlled 2 motor hydrostatic transmission with summation gear box, Gear box: Fixed gear ratio,
	powershift countershaft type

		Normal Mode	Power Mode
	1st:	4.3 MPH (7.0 km/hr)	4.3 MPH (7.0 km/hr)
Speeds:	2nd:	7.2 MPH (11.5 km/hr)	7.8 MPH (12.5 km/hr)
Forward	3rd:	12.4 MPH (20.0 km/hr)	12.4 MPH (20.0 km/hr)
	4th:	24.2 MPH (39.0 km/hr)	24.2 MPH (39.0 km/hr)
	1st:	4.3 MPH (7.0 km/hr)	4.3 MPH (7.0 km/hr)
Speeds:	2nd:	7.2 MPH (11.5 km/hr)	7.8 MPH (12.5 km/hr)
Reverse	3rd:	12.4 MPH (20.0 km/hr)	12.4 MPH (20.0 km/hr)
	4th:	24.2 MPH (39.0 km/hr)	24.2 MPH (39.0 km/hr)

SYSTEMS REFILL CAPAC	ITY	
LOCATION	GALLONS	LITERS
Fuel tank (diesel fuel)	53	200
Engine lubricant (including oil pan)	4.2	16
Engine coolant	5.3	20
T/M	2.6	10
Axle (front/rear)	6.6/6.6	25/25
Hydraulic oil tank	25.4	96
Hydraulic system (including hydraulic tank)	39.6	150
DEF/AdBlue® tank	3.2	12

#### ZW140-6/ZW150-6/ZW150PL-6

#### **EPA Tier 4 Final/EU Stage IV Certified**

HYDRAULIC AND STEERING SYSTEM					
HTDNAULIC	AND STEEL	TING STSTEIN			
Steering type		Articulated frame steering	J		
Steering mecha	nism	Hydraulic power steering piston type	unit, double-acting		
ZW140-6 and	Lift (boom) cylinder	Two (2) double-acting pis 4.9" x 29.9" (125mm x 76			
ZW150-6	Tilt (bucket) cylinder	One (1) double-acting pis 5.9" x 19.3" (150mm x 49			
704 5001 0	Lift (boom) cylinder	Two (2) double-acting pis 4.9" x 29.9" (125mm x 76			
ZW150PL-6	Tilt (bucket) cylinder	Two (2) double-acting piston type: 4.3" x 39.6" (110mm x 1005mm)			
Steering cylinde	r	Two (2) double-acting piston type: 2.6" x 16.5" (65mm x 419mm)			
Main oil pump		51.2 GPM/2,988 PSI @ 2,200 RPM (194 LPM/20.6 MPa @ 2,200 RPM)			
HST charging p	ump	14.2 GPM/355 PSI @ 2,200 RPM (53.9 LPM/2.45 MPa @ 2,200 RPM)			
Relief valve set	Control	2,988 PSI, 20.6 MPa (210 kgf/cm²)			
pressure	Priority	2,843 PSI, 19.6 MPa (200 kgf/cm²)			
HYDRAULIC CY	CLE TIME* fro	ont end loading, Z bar linka	ge system		
		ZW140-6, ZW150-6	ZW150P-6L		
Lifting time (at full load)		6.0 sec.	6.0 sec.		
Lowering time (empty)		4.5 sec.	3.4 sec.		
Bucket dumping	g time	1.4 sec.	3.4 sec.		
TOTAL		11.9 sec. 12.8 sec.			

<sup>\*</sup> Measured in accordance with SAE J732C

AXLE SYSTEM	
Drive system	4-wheel drive
Front and rear axle	Semi-floating type
Tires	20.5 R25 (L-3)
Reduction and differential gear	Two-stage reduction with limited slip differential
Final reduction gear	Inboard mounted, heavy duty planetary gear
Oscillation angle	Total 20 (+10, -10)°

BRAKE SYSTEM	
Service brakes	Inboard mounted fully hydraulic 4-wheel disc brake. Front and rear independent brake circuit.
Parking/Emergency brake	Transmission mounted, spring-applied, hydraulically-released multi wet disc

#### Remarks

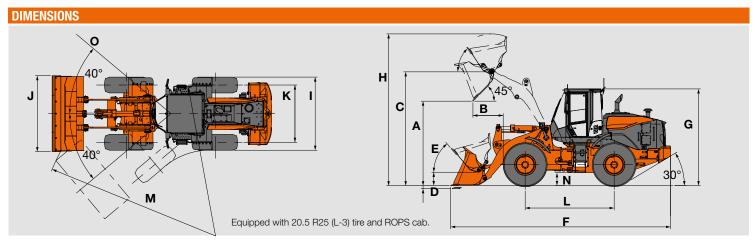
- Materials and specifications are subject to change without notice and without any obligation on the part of the manufacturer.
- This information, while believed to be completely reliable, is not to be taken as warranty for which we assume legal responsibility.
- Dumping clearance and reach are measured from bucket edge in accordance with SAE J732C.
- Counterweight should not be used with tire ballast.
- This specification sheet may contain attachments and optional equipment not available in your area.

Please contact your local HCMA dealer for additional information.

			Standa	rd Arm	High Lift Arm
			General Purpose	Material Handling	Material Handling
			Straight Edge w/ Bolt-on Cutting Edge	Straight Edge w/ Bolt-on Cutting Edge	Straight Edge w/ Bolt-on Cutting Edge
	Heaped	yd³	2.8	3.1	2.8
Capacity	Поароа	(m³)	(2.1)	(2.4)	(2.1)
	Struck	yd <sup>3</sup>	2.4	2.6	2.4
		(m³)	(1.8)	(2.0)	(1.8)
Maximum	dumping clearance	ft-in	9'6"	9'4"	10'8"
		(mm)	(2,885)	(2,845)	(3,245)
	each (to front of	ft-in	3'3"	3'5"	3'11"
bucket edg	ge or tooth)	(mm)	(990)	(1,030)	(1,185)
Max. hinge	pin height	ft-in (mm)	12'7"	12'7"	13'9"
) Diagina I	nth	` '	(3,840) 4"	(3,840) 4"	(4,200) 11"
<ul><li>Digging de (with bucket)</li></ul>		in (mm)	4" (95)	4" (95)	(280)
(WILLI DUCK	st level)	(mm) lbf	(95)	(95)	(280)
Breakout force		IDT (KN)	23,850 (106)	(100)	(103)
Bucket tilt-	at ground level	degree	43°	(100) 43°	(103) 44°
ack angle			50°	50°	50°
ack arigic	E at carry position	degree ft-in	23'11"	24'1"	25'6"
	<b>F</b> Length	(mm)	(7,290)	(7,345)	(7,780)
	G Height (up to	ft-in	10'9"	10'9"	10'9"
	cab top)	(mm)	(3,265)	(3,265)	(3,265)
	H Height (bucket	ft-in	16'6"	17'	17'9"
Overall	fully raised)	(mm)	(5,040)	(5,190)	(5,400)
	I Width	ft-in	8'2"	8'2"	8'2"
	(outside tire)	(mm)	(2,490)	(2,490)	(2,490)
	J Width	ft-in	8'5"	8'5"	8'5"
	(outside bucket)	(mm)	(2,560)	(2,560)	(2,560)
	(3.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	ft-in	6'4"	6'4"	6'4"
Tread		(mm)	(1,930)	(1,930)	(1,930)
100		ft-in	9'11"	9'11"	9'11"
<ul> <li>Wheel base</li> </ul>		(mm)	(3,000)	(3,000)	(3,000)
	M at outside	ft-in	19'6"	19'6"	20'2"
Clearance	of bucket	(mm)	(5,935)	(5,950)	(6,140)
Circle (bucket	at outside	ft-in	17'7"	17'7"	17'7"
arry position)	of tire	(mm)	(5,355)	(5,355)	(5,355)
		in	17"	17"	17"
Minimum g	round clearance	(mm)	(435)	(435)	(435)
Full articula	ation angle	degree	40°	40°	40°
	· ·	lb	25,661	25,816	26,169
Operating weig	ht (with ROPS cab)*	(kg)	(11,640)	(11,710)	(11,870)
		lb	20,261	20,150	16,028
Static tipping	Straight	(kg)	(9,190)	(9,140)	(7,270)
oad (with		lb	17,570	17,461	13,823
ROPS cab)*	Full turn	(kg)	(7,970)	(7,920)	(6,270)

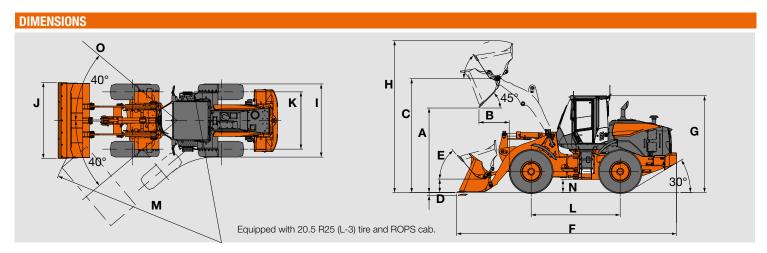
Note: All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7137:2009 and ISO 7546:1983

\* 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.



ZW150-6 Bl	JCKET DATA					ZW150PL-6 BUCKET DATA
			Standa	ard Arm	High Lift Arm	Standard Arm
			General Purpose	Material Handling	Material Handling	General Purpose
			Straight Edge w/ Bolt-on Cutting Edge			
	Heaped	yd <sup>3</sup>	3.1	3.5	3.1	2.8
Capacity		(m³)	(2.4)	(2.7)	(2.4)	(2.1)
	Struck	yd³ (m³)	2.6 (2.0)	2.9 (2.2)	2.6 (2.0)	2.4 (1.8)
		ft-in	9'4"	9'1"	10'6"	9'2"
A Maximum of	dumping clearance	(mm)	(2,845)	(2,765)	(3,205)	(2,805)
<b>B</b> Dumping re	each (to front of	ft-in	3'5"	3'8"	4'	4'2"
bucket edg		(mm)	(1,030)	(1,105)	(1,220)	(1,280)
_		ft-in	12'7"	12'7"	13'9"	13'
C Max. hinge	pin height	(mm)	(3,840)	(3,840)	(4,200)	(3,975)
<b>D</b> Digging de	nth	in	4"	4"	11"	4"
(with bucke		(mm)	(95)	(95)	(280)	(90)
,	,	lbf	22,481	20,233	21,807	23,155
Breakout force		(kN)	(100)	(90)	(97)	(103)
Bucket tilt-	at ground level	degree	43°	43°	44°	43°
back angle	E at carry position	degree	50°	50°	50°	50°
Ŭ		ft-in	24'4"	24'8"	25'9"	25'5"
	<b>F</b> Length	(mm)	(7,420)	(7,530)	(7,855)	(7,735)
	G Height (up to	ft-in	10'9"	10'9"	10'9"	10'9"
	cab top)	(mm)	(3,265)	(3,265)	(3,265)	(3,265)
. "	H Height (bucket	ft-in	17'	17'2"	18'3"	17'7"
Overall	fully raised)	(mm)	(5,190)	(5,230)	(5,555)	(5,360)
	I Width	ft-in	8'2"	8'2"	8'2"	8'2"
	(outside tire)	(mm)	(2,490)	(2,490)	(2,490)	(2,490)
	<b>J</b> Width	ft-in	8'5"	8'5"	8'5"	8'5"
	(outside bucket)	(mm)	(2,560)	(2,560)	(2,560)	(2,560)
K Tread		ft-in	6'4"	6'4"	6'4"	6'4"
neau		(mm)	(1,930)	(1,930)	(1,930)	(1,930)
L Wheel base	2	ft-in	9'11"	9'11"	9'11"	9'11"
L WHOCH Base	,	(mm)	(3,000)	(3,000)	(3,000)	(3,000)
Clooron	M at outside	ft-in	19'6"	19'7"	20'2"	19'9"
Clearance Circle (bucket	of bucket	(mm)	(5,950)	(5,980)	(6,155)	(6,030)
carry position)	at outside	ft-in	17'7"	17'7"	17'7"	16'8"
oary position	of tire	(mm)	(5,355)	(5,355)	(5,355)	(5,090)
N Minimum ~	round clearance	in	17"	17"	17"	17"
iviii iii iiii g	TOUTIU CIEATATICE	(mm)	(435)	(435)	(435)	(435)
<ul> <li>Full articula</li> </ul>	tion angle	degree	40°	40°	40°	40°
Operating weig	ht (with ROPS cab)*	lb (kg)	27,029 (12,260)	27,117 (12,300)	27,540 (12,490)	27,010 (12,830)
	01 111	lb	22,950	22,619	18,188	20,128
Static tipping	Straight	(kg)	(10,410)	(10,260)	(8,250)	(9,130)
load (with	E !!.	lb	19,930	19,643	15,719	17,394
ROPS cab)*	Full turn	(kg)	(9,040)	(8,910)	(7,130)	(7,890)

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.



#### **SPECIFICATIONS**

# WITH FORK ATTACHMENT O R

ZW-	140-6		ISO (48")	416 (48")	ISO (60")	416 (60")
Q Max. stacking height		ft	12'	12'1"	12'	12'1"
R Height of fork at maxir	mum reach	ft	5'7"	5'10"	5'7"	5'10"
S Reach at ground level		ft	3'11"	3'8"	3'11"	3'8"
T Max. reach ft		ft	5'7"	5'6"	5'7"	5'6"
U Reach at max. stacking height ft		ft	3'1"	3'	3'1"	3'
Tipping load	Straight	lb	12,316	12,173	11,632	11,501
Tipping load	Full turn	lb	10,668	10,544	10,076	9,962
Max. payload per EN 474-3	3, 80%	lb	8,535	8,436	8,061	7,970
Max. payload per EN 474-3, 60% lb		lb	6,401	6,327	6,046	5,977
SAE allowable load lb		lb	5,334	5,272	5,038	4,981
Operating weight *		lb	25,846	25,832	25,948	25,935

#### ZW140-6 BUCKET SELECTION CHART

	yd³(m³)			115% 100% 95%
Material handling   SLA	3.1 (2.4)			
Waterial Hariding   OLA	0.1 (Z.+)			%=Bucket Fill Factor
General purpose   SLA	2.7 (2.1)			,
denotal parpose   eart	2.7 (2.1)			
High lift arm w/GP   HLA	2.7 (2.1)			
riigiriiit airir w/ai   riibA	2.1 (2.1)			

#### **ZW140-6 WEIGHTS AND DIMENSIONS** Tipping Load Operating **Overall Width** Overall Height Overall Length Weight (Outside Tire) Straight Full Turn +150 +70 +110 +90 lb in Belly guard (40)(mm) (kg) (70)(30)(50)lb -400 -260 -240 in -3.3 -2.4 +2.0 20.5-25-12PR (L2) (kg) (-180)(-120)(-110)(mm) (-85)(-60)(+50)Tires: -400 -260 -240 +0.6 +1.2 -1.0 lb in 20.5-25-12PR (L3) (+30) (kg) (-180)(-120)(-110)(mm) (+15)(-25)Emergency steering lb +80 +0 +0 (Secondary steering) (kg) (+35)(+0)(+0)(mm) lb +70 +0 +0 in Full covered rear fender (+0)(kg) (+30)(+0)(mm) +20 +0 +0 Bracket for rotating beacon (kg) (+10)(+0)(+0)(mm)

Specs highlighted in orange denote Canada only. Note: All dimensions, weight and performance data based on ISO 6746-1:1987,ISO 7131:2009 and ISO 7546:1983

\* Static tipping load and operating weight include 20.5R25 (L3) tires, ROPS cabin and ride control. Machine stability and operating weight depend on counterweight, tire size and other attachments.

#### **SPECIFICATIONS**

# WITH FORK ATTACHMENT Q R

ZW15	0-6		ISO (48")	416 (48")	ISO (60")	416 (60")
Q Max. stacking height		ft	12'	12'1"	12'	12'1"
R Height of fork at maximu	ım reach	ft	5'7"	5'10"	5'7"	5'10"
S Reach at ground level		ft	3'11"	3'8"	3'11"	3'8"
T Max. reach		ft	5'7"	5'6"	5'7"	5'6"
U Reach at max. stacking	height	ft	3'1"	3'	3'1"	3'
Tipping load	Straight	lb	13,798	13,636	13,044	12,896
Tipping load	Full turn	lb	11,961	11,821	11,308	11,180
Max. payload per EN 474-3,	30%	lb	9,569	9,457	9,046	8,944
Max. payload per EN 474-3,60 % lb		lb	7,177	7,092	6,785	6,708
SAE allowable load lb		lb	5,980	5,910	5,654	5,590
Operating weight *		lb	27,054	27,040	27,156	27,143

# ZW150-6 BUCKET SELECTION CHART Yd³(m³) Material handling 3.5 (2.7) General purpose 3.1 (2.4) High lift arm with general purpose 3.1 (2.4)

1,690 1,850 2,020 2,190 2,360 2,530 2,700 2,870 3,030 3,200 3,370 (1,000) (1,100) (1,200) (1,300) (1,400) (1,500) (1,600) (1,700) (1,800) (1,900) (2,000) Material Density lb/yd³ (kg/m³)

# WITH FORK ATTACHMENT

**ZW150PL-6 FORK SPECIFICATIONS** 

	ZW150PL-6		ISO (48")
Q Max. stacking height		ft	12'4"
R Height of fork at max	timum reach	ft	5'11"
S Reach at ground leve	el	ft	3'10"
T Max. reach		ft	5'11"
U Reach at max. stack	ing height	ft	3'2"
Ctatia tianing land	Straight	lb	18,120
Static tipping load	Full 40 degree turn	lb	15,720
Max. payload per EN 474	-3, 80 %	lb	12,350
Max. payload per EN 474	-3, 60 %	lb	9,260
SAE allowable load		lb	4.0
Operating weight *		lb	28,440

#### ZW150PL-6 BUCKET SELECTION CHART

 $\label{eq:control_grad} yd^3(m^3)$  General purpose 2.8~(2.1)

115% 100% 95%
1.1) %=Bucket Fill Factor
1,690 1,850 2,020 2,190 2,360 2,530 2,700 2,870 3,030 3,200 3,370

#### ZW150-6 AND ZW150PL-6 WEIGHTS AND DIMENSIONS

		Operating Weight	Tipping Load				Overall Width	Overall Height	Overall Length	
			Straight		Full Turn		(Outside Tire)	Overall Height	Overall Length	
Belly guard		lb (kg)	+150 (70)		+110 (50)	+90 (40)	in (mm)			
Tires:	20.5-25-12PR (L2)	lb (kg)	-400 (-180)	-260 (-120)		-240 (-110)	in (mm)	-3.3 (-85)	-2.4 (-60)	+2.0 (+50)
	20.5-25-12PR (L3)	lb (kg)	-400 (-180)	-260 (-120)		-240 (-110)	in (mm)	+0.6 (+15)	+1.2 (+30)	-1.0 (-25)
Emergency steering (Secondary steering)		lb (kg)	+80 (+35)	+0 (+0)		+0 (+0)	in (mm)			
Full covered rear fender		lb (kg)	+70 (+30)	+0 (+0)		+0 (+0)	in (mm)			
Bracket for rotating beacon		lb (kg)	+20 (+10)	+0 (+0)		+0 (+0)	in (mm)			

Specs highlighted in orange denote Canada only. Note: All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7131:2009 and ISO 7546:1983

Static tipping load and operating weight include 20.5R25 (L3) tires, ROPS cabin and ride control. Machine stability and operating weight depend on counterweight, tire size and other attachments.

#### **EOUIPMENT DATA**

#### **STANDARD EQUIPMENT**

#### ENGINE

Air cleaner, double element

Auto idle shut down

Cold start (air intake heater)

Cooling fan, automatic reversible

Cummins QSB4.5

EGR system

Fuel filter (main), w/water separator

Fuel pre-filter, w/water separator

Pre-cleaner (SyKlone)

SCR system and DOC

VGT (Variable Geometry Turbocharger)

Work mode selector

#### **POWERTRAIN**

Brakes, service

Enclosed wet disc

Dual circuit

Inboard mounted

Brake, parking

Spring applied

Oil pressure released

Wet disc type

Coolers, wide fin

Differential, limited slip (F/R)

Drive shafts, low maintenance

F-R direction selector (2-column mounted/HYD-control lever mounted)

Hydrostatic transmission

Inching pedal

Maximum speed adjuster for 1st speed

Traction control

Universal joints, sealed

#### HYDRAULIC SYSTEM

Boom kick-out, dual (operator adjustable in cab)

Bucket positioner

Control lever, single, pilot-assisted w/1 aux lever for 3rd spool control

Control lever lock (electric)

Control valve, 3-function, parallel and tandem control

Pump, gear, fixed displacement

Quick coupler control lines and controls

Ride control w/Load sensing valve and automatic shut-off

Steering, orbitrol

#### ELECTRICAL

24-volt electrical system

Back-up alarm

Batteries (2), 12V, 930 CCA

Battery disconnect switch

Converter, 12V/15 Amp

Horn, dual electric

Instrument panel, LCD, color

Lights:

2 Headlights (halogen)

4 Forward working lights (LED)

4 Rear working lights (LED)

2 Stop/tail/backup (LED)

Turn signal w/4-way flashers/marker

#### CAB

ROPS cab: Enclosed cab with sound suppression, front & rear wipers and washers, two rear view and side mirrors, tinted glass, full view latch-back doors, sliding side windows

Accessory outlet, 12V,

Adjustable armrest/console

Air conditioner/heater/pressurizer

AM/FM/WB radio with AUX input and Bluetooth

Ashtray

Cab dome lamps (2)

Cigarette lighter

Coat hook

Cooler box storage area

Cup holder (2)

Floormat

Retractable seat belt (3 inch)

ROPS/FOPS certified, ISO 3449 Level II compliance

Seat, premium, heated w/TLV suspension

Steering column, telescoping and tilting w/quickrelease pedal

Storage box (heated/cooled)

Sun visor

#### **OTHERS**

Articulation locking bar

Counterweight

Drawbar

Fire extinguisher, 5 lb., 2a:10b:c ratd (w/mounting) (US market only)

Global e-Service, telematic monitoring system

Ladders, inclined

Lifting eyes

Linkage pins, HN bushing

Neutral safety start

Rear grill, steel

Steps, rear

Vandalism protection

Z-bar loader linkage

#### ALARMS, GAUGES, INDICATORS

Alarms (visual & audible)

Air cleaner element

Aftertreatment device

Brake oil low pressure

Engine oil low pressure

Emergency steering alarm

Engine trouble

Engine warning

Fuel filter (water in fuel)

Hydraulic oil level

Hydraulic oil temperature

Overheat (engine coolant)

Steering oil low pressure Gauges DEF/AdBlue® Level

Engine coolant temperature

Fuel gauge Speedometer

Indicators Air conditioner display

Cold start

Control lever lock

Eco-operating status

Engine warning

Fan reverse rotation

F-N-R selection

F-N-R switch enable

Fuel filter (plugged filter)

Fuel filter (water in fuel)

High beam

HST oil temperature

HST warning

Low fuel level Maintenance

Operating mode (Normal, Power)

Parking brake

Ride control

Time/operating hour/ODO

Traction control switch

Turn signal w/4-way flashers/marker

Work light

#### **OPTIONAL EQUIPMENT**

Belly guard, front chassis, transmission (rear)

Bolt-on cutting edges

Camera, rear view

Cooling cores, standard spacing (high ambient)

Dual lever hydraulic control

Emergency steering system

Front and full covered rear fenders with mud flaps (20.5 Tire)

Front and half covered rear fenders with mud flaps (20.5 Tire)

High lift arm

Mirror, heated rear view (outside)

Mount bracket, wiring harness and switch for rotating lamp (without beacon) (Canada Only)

Quick coupler & attachments

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

#### **EQUIPMENT DATA**

#### **STANDARD EQUIPMENT**

#### ENGINE

Air cleaner, double element

Auto idle shut down

Cold start (glow plug)

Cooling fan, automatic reversible

Cummins QSB4.5 diesel engine

EGR system

Fuel filter (main), w/water separator

Fuel pre-filter, w/water separator

Pre-cleaner (SyKlone)

SCR catalyst and DOC

VGT (Variable Geometry Turbocharger)

Work mode selector

#### **POWERTRAIN**

Brakes, service

Enclosed wet disc

Dual system

Inboard mounted

Brake, parking

Spring applied

Oil pressure released

Wet disc type

Cooling system cores, wide-fin

Differential, limited slip (F/R)

Drive shafts, low maintenance

F-R direction selector (2-column mounted/HYD-control lever mounted)

Hydrostatic transmission

Inching pedal

Maximum speed adjuster for 1st speed

Traction control

Universal joints, sealed

#### HYDRAULIC SYSTEM

Boom kick-out, dual (operator adjustable in cab)

Bucket positioner

Quick coupler control lines and controls

Control Lever, single, pilot-assisted w/1 aux Lever for 3rd spool control

Control lever lock (electric)

Control valve, 3-function, parallel control

Pump, gear, fixed displacement

Quick coupler control lines and controls

Ride control w/load sensing valve and automatic shut-off

Steering, orbitrol

#### ELECTRICAL

24-volt electrical system

Back-up alarm

Batteries (2), 12V, 930 CCA

Battery disconnect switch

Converter, 12V/15 Amp

Horn, dual electric

Instrument panel, LCD, monochrome

Liahts:

2 Headlights (halogen)

4 Forward working lights (LED)

4 Rear working lights (LED)

2 Stop/tail/backup (LED)

Turn signal w/4-way flashers/marker

#### CAB

ROPS cab: Enclosed cab with sound suppression, front & rear wipers and washers, two rear view and side mirrors, tinted glass, full view latch-back doors, sliding side windows.

Accessory outlet, 12V,

Adjustable armrest/console

Air conditioner/heater/pressurizer

AM/FM/WB radio with AUX input and Bluetooth

Ashtrav

Cab dome lamps (2)

Cigarette lighter

Coat hook

Cooler box storage area

Cup holder (2)

Floormat

Retractable seat belt (3 inch)

ROPS/FOPS certified, ISO 3449 Level II compliance

Seat, premium, heated w/TLV suspension

Steering column, telescoping and tilting

w/quick-release pedal

Storage box (heated/cooled)

Sun visor

#### OTHERS

Articulation locking bar

Counterweight

Drawbar

Fire extinguisher, 5 lb., 2a:10b:c ratd (w/mounting) (US market only)

Global e-Service, telematic monitoring system

Ladders, inclined

Lifting eyes

Linkage pins, HN bushing

Neutral safety start

Rear grill, steel

Steps, rear

Vandalism protection

Z-bar loader linkage

#### ALARMS, GAUGES, INDICATORS

Alarms (visual &

ms Brake oil low pressure

audible)

Engine oil low pressure

Hydraulic oil level
Overheat (engine coolant)

Steering oil low pressure

Gauges DEF/AdBlue® Level

Engine coolant temperature

Fuel gauge

HST oil temperature

Indicators Aftertreatment Device

Air cleaner element

Air conditioner display

Battery discharge warning

Cold start

Control lever lock

Eco-operating status

Emergency steering

Engine warning

Fan reverse rotation

F-N-R selection

F-N-R switch enable

Fuel filter (plugged filter)

Fuel filter (water in fuel)

High beam

HST oil temperature

HST warning

Maintenance

Operating mode (Normal, Power)

Parking brake

Ride control

Service

Speedometer

Time/operating hour/ODO

Traction control switch

Turn signal w/4-way flashers/marker

Work light

#### **OPTIONAL EQUIPMENT**

Belly guard, front chassis, transmission (rear)

Bolt-on cutting edges

Camera, rear view

Cooling cores, standard spacing (high ambient)

Dual lever hydraulic control

Emergency steering system

Front and full covered rear fenders with mud flaps

Front and half covered rear fenders with mud flaps (20.5 Tire)

High lift arm

Mirror, heated rear view (outside)

Mount bracket, wiring harness and switch for rotating lamp (without beacon) (Canada Only)

Quick coupler & attachments

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

#### **EQUIPMENT DATA**

#### STANDARD EQUIPMENT

#### ENGINE

Air cleaner, double element

Auto idle shut down

Cold start (glow plug)

Cooling fan, automatic reversible

Cummins QSB4.5

EGR system

Fuel filter (main), w/water separator

Fuel pre-filter, w/water separator

Pre-cleaner (SyKlone)

SCR system

VGT (Variable Geometry Turbocharger)

Work mode selector

#### **POWERTRAIN**

Brakes, service

Enclosed wet disc

Dual system

Inboard mounted

Brake, parking

Spring applied

Oil pressure released

Wet disc type

Coolers, wide fin spacing

Differential, limited slip (F/R)

Drive shafts, low maintenance

F-R direction selector (2-column mounted/HYD-control lever mounted)

Hydrostatic transmission

Inching pedal

Maximum speed adjuster for 1st speed

Traction control

Universal joints, sealed

#### HYDRAULIC SYSTEM

Boom kick-out, dual (operator adjustable in cab)

Bucket positioner

Control Lever, single, pilot-assisted w/1 aux lever for 3rd spool control

Control lever lock (electric)

Control valve, 3-function, parallel control

Pump, gear, fixed displacement

Quick Coupler Control Lines and Controls

Ride Control w/Load sensing valve and automatic shut-off

Steering, orbitrol

#### ELECTRICAL

24-volt electrical system

Back-up alarm

Batteries (2), 12V, 930 CCA

Battery disconnect switch

Converter, 12V/15 Amp

Horn, dual electric

Instrument panel, LCD, monochrome

Liahts:

2 Headlights (halogen)

4 Forward working lights (LED)

4 Rear working lights (LED)

2 Stop/tail/backup (LED)

Turn signal w/4-way flashers/marker

#### CAB

ROPS cab: Enclosed cab with sound suppression, front & rear wipers and washers, two rear view and side mirrors, tinted glass, full view latch-back doors, sliding side windows.

Accessory outlet, 12V,

Adjustable armrest/console

Air conditioner/heater/pressurizer

AM/FM/WB radio with AUX input and Bluetooth

Ashtrav

Cab dome lamps (2)

Cigarette lighter

Coat hook

Cooler box storage area

Cup holder (2)

Floormat

Retractable seat belt (3 inch)

ROPS/FOPS certified, ISO 3449 Level II compliance

Seat, premium, heated w/TLV suspension

Steering column, telescoping and tilting

w/quick-release pedal

Storage box (heated/cooled)

Sun visor

#### OTHERS

Articulation locking bar

Counterweight

Drawbar

Fire extinguisher, 5 lb., 2a:10b:c ratd (w/mounting) (US market only)

Global e-Service, telematic monitoring system

Ladders, inclined

Lifting eyes

Linkage, parallel, sealed

Linkage pins, HN bushing

Neutral safety start

Rear grill, steel

Steps, rear

Vandalism protection

Quick coupler

#### ALARMS, GAUGES, INDICATORS

Alarms (visual & Brake oil low pressure

audible)

Engine oil low pressure

Hydraulic oil level
Overheat (engine coolant)

Steering oil low pressure

Gauges

DEF/AdBlue® Level

Engine coolant temperature

Fuel gauge

HST oil temperature

Indicators Aftertreatment device

Air cleaner element

Air conditioner display

Battery discharge warning

Cold start

Control lever lock

Eco-operating status

Emergency steering

Engine warning

Fan reverse rotation

F-N-R selection

F-N-R switch enable

Fuel filter (plugged filter)

Fuel filter (water in fuel)

High beam

HST oil temperature

HST warning

Maintenance

Operating mode (Normal, Power)

Parking brake

Service

Speedometer

Time/operating hour/ODO

Traction control switch

Turn signal w/4-way flashers/marker
Work light

#### OPTIONAL EQUIPMENT

Belly guard, front chassis, transmission (rear)

Bolt-on cutting edges

Camera, rear view

Cooling cores, standard spacing (high ambient)

Dual lever hydraulic control

Emergency steering system

Front and full covered rear fenders with mud flaps (20.5 Tire)

Front and half covered rear fenders with mud flaps (20.5 Tire)

High lift arm

Mirror, heated rear view (outside)

Mount bracket, wiring harness and switch for rotating lamp (without beacon) (Canada Only)

Quick coupler & attachments

## **HITACHI**



With manufacturing facilities in Banshu, Ryugasaki, Tierra, and Hitachinaka, Japan, and the U.S. corporate office and campus in Newnan, Georgia, Hitachi Construction Machinery Americas Inc. (HCMA) has the experience and technology to design, engineer, manufacture, and service your Hitachi construction machinery. The HCMA team is securely poised as your go-to source in the North American and Latin American construction machinery market.

Through our long-term commitment to maintaining a leadership position in technology, service, and support, HCMA supports an extensive network of independent, local dealers focused on providing you with knowledgeable and experienced sales, service, and parts personnel. All backed by dedicated HCMA support teams.

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Machines representative of global product. Options may not be available in all markets. 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.