HITACHI

Reliable solutions

ZW50 / ZW80

WHEEL LOADER

Model	ZW50	ZW80
Gross rated engine output	46 hp/34.1 kW	63 hp/47.3 kW
Operating Weight	9,250 lb (4,195 kg)	12,210 lb (5,540 kg)
Bucket ISO Heaped	0.8 yd³ (0.6 m³)	1.2 yd³ (0.9 m³)

Agile and Compact
ZW50 and ZW80 Wheel Loaders

ZW

Designed and engineered with versatility and maneuverability in mind, Hitachi ZW compact wheel loaders perform in a wide range of applications and environments.

Eco Mode provides a fuel efficient setting resulting in better fuel economy without affecting productivity (ZW80)

HN Bushings impregnated with high viscosity oil extend lubrication period to 500 hours on linkage pins

Reliable Tier 4i compliant Kubota engines

	ZW50	ZW80
Engine Power	46 HP gross (34.1 kW)	63 HP gross (47.3 kW)
Breakout Force	5,620 lb (25 kN)	8,273 lb (36.8 kN)
Maximum Travel Speeds, F/R	10.6 mph (17 km/h)	21.1 mph (34 km/h)

Note:
Photos and illustrations shown in this brochure may include optional equipment.
The machines shown are positioned for the sake of demonstration. When leaving the machine on job sites, please take necessary safety measures: for instance, rest the front attachment on the ground.

Side-by-side aluminum radiator and aluminum oil cooler provide easy access for maintenance and cleaning

Easy access to cab on both sides of machine

Universal Coupler allows a wide range of attachments

Limited Slip Differentials provide additional traction for applications requiring extreme traction control (ZW50)

Wrap-around counterweight lowers center of gravity increasing stability

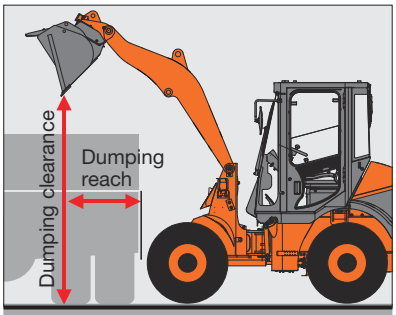
Power and Performance Provide Best in Class Productivity

Excellent Stability
Wrap-around counterweight lowers the center of gravity increasing stability.

Reliabile, Efficient Kubota Engines

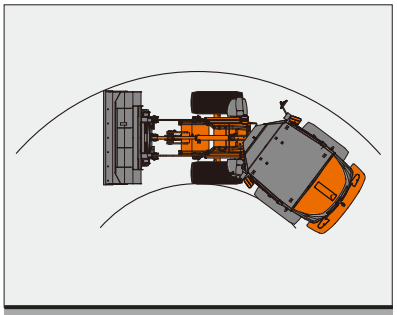
Eco-mode provides a fuel efficient setting resulting in better fuel economy (ZW80)

Ample Dumping Clearance and Reach



	Dumping clearance	Dumping reach
ZW50	7.8 ft (2,380 mm)	3.3 ft (995 mm)
ZW80	7.8 ft (2,390 mm)	3.2 ft (990 mm)

Tight Turning Radius



	Overall length	Min. turning radius*
ZW50	16.2 ft (4,925 mm)	12.7 ft (3,870 mm)
ZW80	17.7 ft (5,380 mm)	14.9 ft (4,540 mm)

**Loader clearance circle, bucket in carry position.*

Easy-to-Read Monitor

ZW50

ZW80

Easy-read monitor provides operating data at a glance

Features of HST

Hydrostatic Transmission (HST) automatically adjusts tractive effort and loading force, providing very smooth shifting operation. The HST also functions much like an autobrake saving wear and tear on wet disc brakes.

- Inching/brake pedal provides smooth deceleration, natural braking.
- Precise operation at extremely low speeds
- Smooth startup on slopes using the HST brake
- Excellent traction at all speed ranges

Hydraulic Controls

ZW80

- Easy access controls
- Shift lever locks to prevent accidental lever engagement while engine is running

ZW80

ZW50

Universal Quick Coupler and Attachment piping (ZW50)

Switch attachments from the comfort of your cab. Enables the rapid and seamless replacement of working tools.

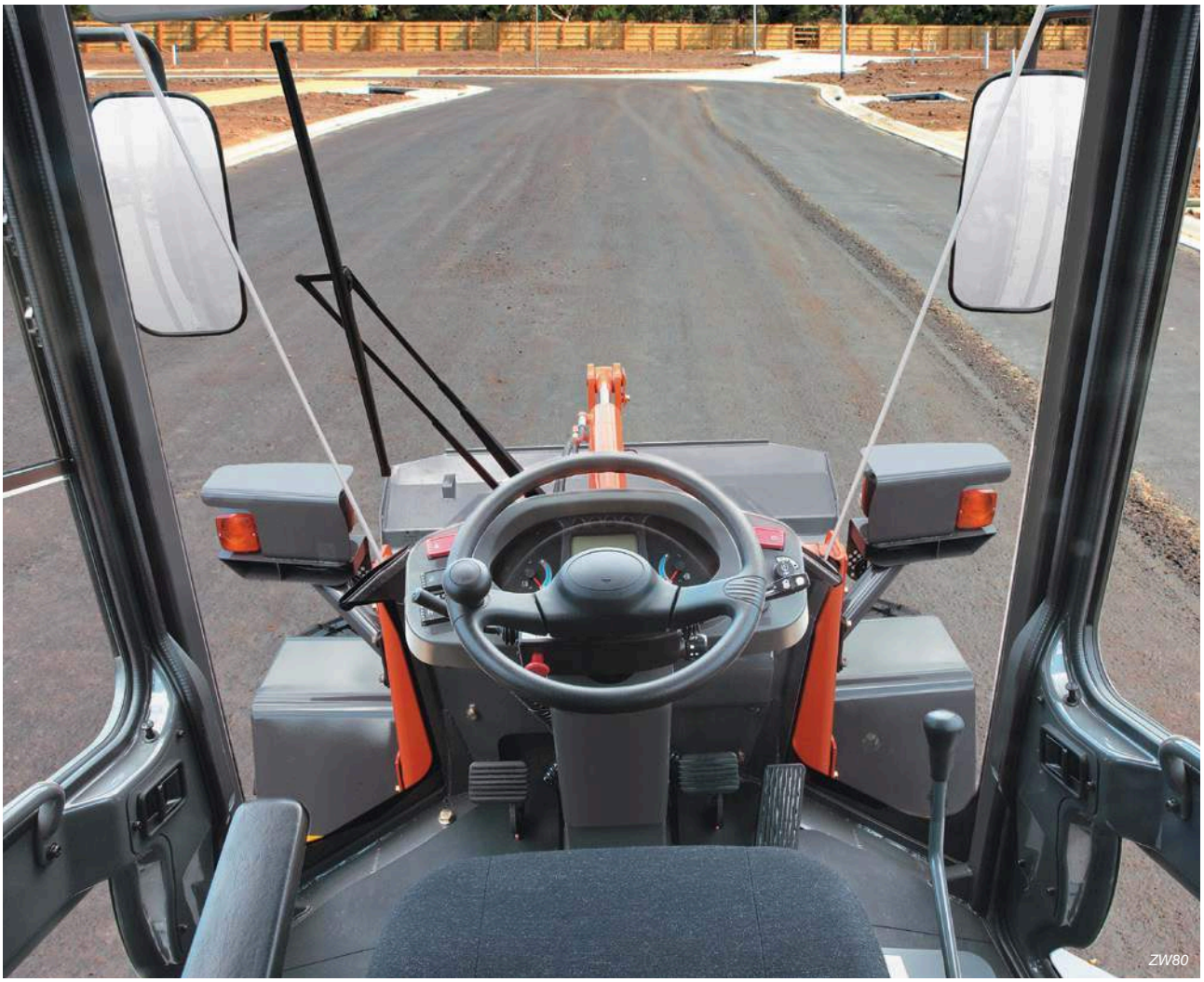
Locking Front Differential (ZW80)

- Manually locking front differentials are standard.
- Limited Slip Differentials provide added traction (ZW50).

Electric Controlled Parking Brake

The electronically controlled parking brake prevents dragging as well as seizure. If the engine stops, the parking brake is applied automatically.

Boosted Operator Comfort and Safety



Excellent Visibility

- Pillarless design offers unobstructed visibility.
- Front floor to ceiling windows.
- Cab enables panoramic views via addition of a lower window

Low Noise Level in Cab

The cab is sound insulated with ntegrating a highly sealed design. New low-noise engine, and rubber-mounted operator frame and hydraulics, contribute to reduced decibel levels.

Adjustable Suspension

The short-stroke suspension seat is provided as standard equipment to absorb shocks and vibration during operation, reducing operator's fatigue in long hours of operation.

A long-stroke suspension seat, which absorbs shocks and vibration well, is standard.

Walkthrough Type Cab

The walkthrough type cab allows for easy access from either side. The flat floor enables easy cleaning.

ZW80

Easy Access to Operator's Station

There are handrails and large steps mounted on both the left and right of the operator's station for easy access.

Control Lever Lock

The control lever and auxiliary function lever lock for safety.

Locking Fuel Cap and Engine Cover

The fuel cap and engine cover can be locked with the engine key.

- Pneumatic "one touch" access— easy access engine compartment

ROPS/FOPS* Cab

ROPS/FOPS cab

The ROPS/FOPS cab is adapted to protect the operator from roll-over accidents and falling objects.

ROPS: Roll-Over Protective Structure: ISO3471
FOPS: Falling Object Protective Structure: ISO3449

Neutral Engine Start System

If the forward/reverse lever is not in neutral (N), the engine cannot start.

Reducing Environmental Impact

Resin parts are marked for identification, facilitating recycling after disposal.

Concentrated Servicing Points

Wide-Open Engine Cover

Daily maintenance is simplified with the wide-open engine cover and low-profile counterweight. The engine cover can be opened at a touch and held with a gas damper for quick inspection, replacement and replenishment.

HN Bushings

Innovative HN Bushing technology extends lubrication intervals.

Note: For an initial 50-hour lubricating interval, refer to the Operator's Manual.

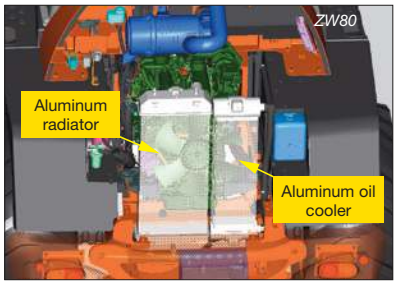
Brake Oil Reservoir

Easy access brake reservoir provides visual fluid check. The visual brake alarm is located on the monitor.

Battery (ZW80)

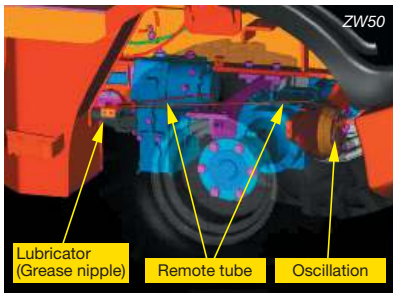
Battery electrolyte level can be checked at a glance through an opening in the counterweight.

Aluminum Radiator and Oil Cooler



The aluminum radiator and oil cooler are located side by side for easy cleaning.

Easy Remote Lubrication



Remote easy access lubrication and engine oil drain.

Concentrated Electric Parts

Electric parts, such as relays, are grouped at one point for simple maintenance.

Coolant Reservoir

The coolant reservoir allows for direct coolant level checking.

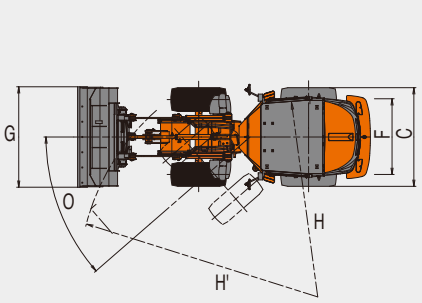
Double-Element Air Cleaner

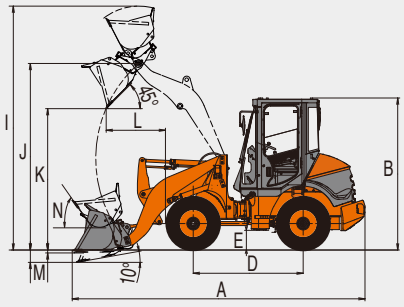
The double-element air cleaner is located strategically for convenient inspection and replacement.

Fuel Filter and Water Separator

A cartridge type fuel filter is used for easy replacement. The water separator has a transparent cup for easy water level checking.

DIMENSIONS & SPECIFICATIONS





Bucket type			ZW50	ZW80
			Standard arm with quick-coupler	
			General purpose with bolt-on cutting edges	
Bucket capacity	ISO heaped	yd³ (m³)	0.8 (0.6)	1.2 (0.9)
	ISO struck	yd³ (m³)	0.7 (0.52)	1.0 (0.73)
A Overall length		ft (mm)	16.2 (4,925)	17.7 (5,380)
B Overall height, bucket on ground (with ROPS/FOPS cab)		ft (mm)	8.4 (2,560)	9.4 (2,850)
C Width over tires		ft (mm)	5.4 (1,660)	6.3 (1,920)
D Wheel base		ft (mm)	6.1 (1,850)	7.2 (2,200)
E Ground clearance		in (mm)	11.8 (300)	13.4 (340)
F Tread		ft (mm)	4.1 (1,260)	4.8 (1,470)
G Bucket width		ft (mm)	5.5 (1,690)	6.5 (1,990)
H Turning radius (centerline of outside tire)		ft (mm)	10.3 (3,125)	12.4 (3,765)
H'Loader clearance radius, bucket in carry position		ft (mm)	12.7 (3,870)	14.9 (4,540)
I Overall operating height		ft (mm)	13.5 (4,105)	13.6 (4,160)
J Height to hinge pin, fully raised		ft (mm)	10.3 (3,140)	10.4 (3,160)
K Dump clearance 45 degree, full height		ft (mm))	7.8 (2,380)	7.8 (2,390)
L Reach, 45 degree dump, full height		ft (mm))	3.3 (995)	3.2 (990)
M Digging depth (horizontal digging angle)		in (mm)	2.0 (50)	2.6 (65)
N Max. roll back at carry position		deg	55	53
O Steering Angle		deg	41	40
Static tipping load*	Straight	lb (kg)	5,840 (2,650)	8,470 (3,840)
	Full turn	lb (kg)	4,760 (2,160)	7,170 (3,250)
Breakout force		lb (kN)	5,620 (25)	8,270 (36.8)
Operating weight (with ROPS/FOPS cab)*		lb. (kg)	9,250 (4,195)	12,210 (5,540)

Notes: 1. All dimensions, weight and performance data based on ISO 6746-1:1987, ISO 7131:1997 and ISO 7546:1983
2. Static tipping load and operating weight marked with * include 17.5/65-20 10PR: ZW80 tires (no ballast) and 15.5/60-18 8PR: ZW50tires (no ballast) with lubricants, coolant, full fuel tank and operator.

BUCKET SELECTION GUIDE

%=Bucket Fill Factor 110% 100% 95%

ZW50: General purpose bucket with bolt-on cutting edges	Bucket capacity yd³ (m³)	Material density lb/yd³ (kg/m³) 1,350 (800)	1,690 (1,000)	2,020 (1,200)	2,360 (1,400)	2,700 (1,600)	3,030 (1,800)
Standard lift with quick-coupler	0.8 (0.6)						

ZW80: General purpose bucket with bolt-on cutting edges	Bucket capacity yd³ (m³)	Material density lb/yd³ (kg/m³) 1,350 (800)	1,690 (1,000)	2,020 (1,200)	2,360 (1,400)	2,700 (1,600)	3,030 (1,800)
Standard lift with quick-coupler	1.2 (0.9)						

SPECIFICATIONS

ENGINE		ZW50	ZW80
Air cleaner		Double stage dry type with indicator	
Batteries		12V × 450 CCA, 98-min. rated reserve	12V × 565 CCA, 125-min. rated reserve
Bore and stroke		3.4 in x 4.0 in (87 mm x 102.4 mm)	3.7 in x 4.7 in (94 mm x 120 mm)
Engine power (Gross)		46 HP (34.1 kW) at 2,400 rpm (2 400 min^{-1})	63 HP (47.3 kW) at 2,200 rpm (2 200 min^{-1})
Model		KUBOTA V2403-M-DI	KUBOTA V3307-DI-T
No. of cylinders		4	
Piston displacement		149 in^3 (2.434 L)	203 in^3 (3.331 L)
Type		4-cycle water-cooled,direct injection	

POWER TRAIN	ZW50	ZW80
Transmission controls	Hydrostatic transmission (HST) automatically controls power and 2-speed	
Travel speed: Forward & Reverse	17 km/h (10.6 mph) With 15.5/60-18 8PR (L2) tires	34 km/h (21.1 mph) with 17.5/65-20 10PR (L2) tires

AXLE AND FINAL DRIVE		ZW50	ZW80
Drive system		Four-wheel drive system	
Final drives		Heavy-duty, planetary final drive	
Front & rear axle		Semi-floating	
	Front	Fixed to the front frame	
	Rear	Center pivot	
Oscillation angle		total 16° (±8°)	total 22° (±11°)

TIRES (tubeless, nylon body)	ZW50	ZW80
Standard	15.5/60-18 8PR (L2)	17.5/65-20 10PR (L2)

BRAKES	ZW50	ZW80
Parking brake	Spring applied hydraulic released wet disk	
Service brakes	Inboard mounted fully hydraulic wet disk	

STEERING SYSTEM	ZW50	ZW80
Cylinders	Double-acting piston type	
No. x Bore x Stroke	1 × 2.4 in × 9.0 in (1 × 60 mm × 228 mm)	2 × 1.8 in × 13.4 in (2 × 45 mm × 340 mm)
Steering angle	Each direction 41°; total 82°	Each direction 40°; total 80°
Steering mechanism	Full hydraulic power steering with orbitrol®	
Type	Articulated frame steering	

HYDRAULIC SYSTEM		ZW50	ZW80
Arm and bucket are controlled by mechanical single control lever			
Arm controls		Four position valve; Raise, hold, lower, float	
Bucket controls		Four position valve; Dump, hold, tilt, detent	
Filters		Full-flow 10 micron return filter	
Hydraulic cycle times	Arm raise	4.5 s	5.0 s
	Arm lower	3.0 s	3.5 s
	Bucket dump	1.0 s	1.0 s
Hydraulic cylinders	Type	Two arm and one bucket, double acting type	
	No. x Bore x Stroke	Arm: 2 × 2.8 in × 20.9 in (2 × 70 mm × 531 mm) Bucket: 1 × 2.8 in × 17.7 in (1 × 70 mm × 450 mm)	Arm: 2 × 3.3 in × 21.7 in (2 × 85 mm × 552 mm) Bucket: 1 × 3.1 in × 18.0 in (1 × 80 mm × 457 mm)
Main pump	(Load & steer)	Gear type 12.8 gal/min (48.3 L/min) 2 200 min^{-1}(rpm) at 20.6 MPa (210 kgf/cm^2)/(2,987 psi)	Gear type 19.0 gal/min (72 L/min) 2 200 min^{-1}(rpm) at 20.6 MPa (210 kgf/cm^2)/(2,987 psi)
Relief pressure setting		20.6 MPa (210 kgf/cm^2)/(2,987 psi)	

SERVICE REFILL CAPACITIES	ZW50	ZW80
Engine coolant	2.00 gal (7.40 L)	3.50 gal (13.4 L)
Engine oil	2.00 gal (7.60 L)	3.50 gal (13.2 L)
Fuel tank	11.9 gal (45.0 L)	21.7 gal (82.0 L)
Front axle differential & wheel hubs	1.20 gal (4.50 L)	1.60 gal (6.20 L)
Hydraulic reservoir tank	11.1 gal (42.0 L)	19.3 gal (73.0 L)
Rear axle differential & wheel hubs	1.20 gal (4.50 L)	1.70 gal (6.40 L)

Orbitrol® is a registered trademark of Char-Lynn.

EQUIPMENT

Note: ● : Standard

STANDARD EQUIPMENT	ZW50	ZW80
Air Conditioning (manual operation type)	●	●
Alarms (audible):		
Brake oil level	-	●
Engine coolant temp	-	●
Engine oil pressure	-	●
Alarms (visual):		
Air filter	-	●
Brake oil level	●	●
Battery discharge	●	●
Engine coolant temp	-	●
Engine oil pressure	●	●
HST warning	-	●
Machine stop	-	●
Machine service	-	●
Alternator, 60 AMP	●	-
Alternator, 80 AMP	-	●
Battery, 12V 450 CCA	●	-
Battery, 12V 565 CCA	-	●
Brake (parking): spring applied; oil pressure released; enclosed wet disc	●	●
Brake (service): enclosed wet disc; full hydraulic system	●	●
Bucket, coupler-type	●	●
Bucket leveler	●	●
Cold start aid – glow plugs	●	●
Coupler, hydraulic, universal	●	-
Coupler, hydraulic, hook-type (std)	-	●
Counterweight	●	●
Diff-Lock (Front axle only, grip switch activated)	-	●
Drawbar	●	●
Easy clean floor	●	●
Engine fuel filter w/water separator	●	●
Engine coolant reservoir	●	●
Fenders	●	●
Gauges:		
Engine coolant temp	●	●
Fuel	●	●
Hourmeter	●	●
Hydraulic oil level, sight	●	●
Horn, electric	●	●
Hydraulic system, 3-spool valve	●	●
Inching pedal function	●	●
Indicators:		
Clearance light	-	●
Engine pre-heater	●	●
Forward/reverse	●	●
High beam	-	●
Parking brake	●	●
Turn signals	●	●
Working light (opt equipment)	-	●
Limited slip differentials (F&R)	●	-
Linkage (Z-type, sealed w/HN bushings)	●	●

STANDARD EQUIPMENT	ZW50	ZW80
Lights: (2) headlights (2) Turn signals (front) (2) Stop/tail/turn lights (1) Backup	●	●
Neutral safety start	●	●
Radiator, side-by-side w/oil cooler	●	●
Radiator dust screen	●	●
Reverse alarm	●	●
ROPS/FOPS cab	●	●
Safety articulation locking bar	●	●
Seat, adjustable suspension	●	●
Seat belt, 3"	●	●
Shift lever lock	●	●
Tires: 15.5/60-18	●	-
Tires: 17.5/65-20	-	●
Travel mode switch	●	●
Vandalism protection	●	●

OPTIONAL EQUIPMENT	ZW50	ZW80
Delete standard bucket	●	●
Mechanical coupler	-	●
ROPS/FOPS canopy	●	●
Solid tires	●	●

HITACHI

Hitachi Construction Machinery Co., Ltd. (Hitachi Construction Machinery) was established in 1970, when Hitachi, Ltd. spun off its Construction Machinery Division. Currently, there are 84 companies that comprise the Hitachi Construction Machinery Group providing Reliable solutions for customers in the heavy construction equipment industry. Hitachi Construction Machinery continues to grow as a strong, global, competitive enterprise.

Fast forward to 2010. A joint venture with Hitachi Construction Machinery and Kawasaki Heavy Industries was entered into to further develop the global scope of the wheel loader product line. This relationship combined the huge technological and manufacturing resources of Kawasaki Heavy Industries and Hitachi Construction Machinery Group. This effort has resulted in a very productive, reliable, and cost-effective product.

In 2016 Hitachi Construction Machinery bought 100% of KCM Corporation's stock transitioning to KCMA Corporation. In 2018 Hitachi Construction Machinery took the reins transitioning KCMA Corporation to Hitachi Construction Machinery Loaders America Inc., furthering their commitment to the North American market by introducing the Hitachi brand wheel loader line, offering outstanding parts availability, an unmatched factory component exchange program, customer and dealer training programs, and a wide range of services and programs.

With manufacturing facilities in Banshu, Japan; Ryugasaki, Japan, and Newnan, Ga., Hitachi Construction Machinery Loaders America has the experience and technology to design, engineer, manufacture, and service your next wheel loader. The Hitachi Construction Machinery Loaders America Inc. team is focused on wheel loaders. As a subsidiary of one of the largest construction machinery companies in the world, Hitachi Construction Machinery Loaders America Inc. is securely poised as your go-to source in the North American wheel loader market.

Reliable solutions

A FULL LINE OF WHEEL LOADERS

- 13 Models
- 30 HP–531 HP

REPUTATIONS ARE BUILT ON IT

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.

Hitachi Construction Machinery Loaders America Inc.
www.hitachicm.us

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