# HL660/660L HL665/665L

With Tier 2 / Stage II Engine Installed

			HAIS SOL
	In In		
		*Photo may include optional	equipment

CAB & INTERIOR	STD OP
Alarms, audible and visual	
Brake pressure	•
Charging indicator	
Parking brake	•
Batteries, PT	
850 CCA, 12 V, (2)	
Gauges	
Hour table	
Engine oil pressure	
Coolant temperature	
Transmission oil temperature	
Brake pressure	
Battery voltage	
Fuel level	•
Transmission pressure	- •
Horn, electric	
Indicator lights	
High beam	•
Turn signal	
Lighting system	
Dome light	
2 Stop and tail lights	
4 Turn signals	SELL CO.
Brake lights (Counterweight)	
2 Working lights on front roof	
Switches	
Ignition	
Parking	
Cab (Sound suppressed and pressurized)	with
Cigar lighter & ashtray	
Coat hook	
Automatic climate control	
Air conditioner & heater	
Front intermittent wiper	
Seat	
2" retractable seat belt & adjustable	
Personal storage space	
Console box	
Holder, can and cup	
Safety hammer	
Rear view mirrors (1 Inside)	
Rear view mirrors (2 Outside)	
Steering column Steering wheel with knob	
Roller type sunshade (Front window)	
Tinted safety glass	
Pedals	
One accolorator padal	
One accelerator pedal One brake pedal	

ENGINE	STD	OF
Antifreeze		
Engine, WEICHAI WD10G220E23		
Tier II	•	
Engine enclosure, lockable		
Engine fuel priming pump		
Fan guard Fuel / water separator (Return)		
Rain cap, engine air intake		
Radiator		-
Big size radiator & tropical oil		
Fuel heater		
Coolant level sight gauge		
Engine oil level dipstick gauge		
Oil bath air cleaner		C
Cold start package & arctic oil		
POWER TRAIN	STD	OF
Brake caliper		
Parking brake		
Torque converter		
Transmission F2 / R1, hydraulic control, manual shift	•	
Transmission oil sight level		
Tires		
23.5-25, 16PR, L3 (HL660 / 665) 23.5-25, 18PR, L3 (HL660L / 665L)		
	CER	
HYDRAULIC SYSTEM	STD	OF
Boom kickout, automatic		92
Diagnostic pressure taps		
Hydraulic oil cooler Hydraulic control, 2 spool	Н	
Joystick control	H	
OTHER	STD	
	עונ	UF
Articulation locking bar	ч	
Counterweight Door and cab locks, one key	Н	
Doors, service access (Locking)		
Drawbar with pin		
Ergonomically located and slip, resistant, left & right		É
Handrails		
Ladders		
Platforms		ġř.
Steps	•	
Fenders (Front / rear)		
Hydraulic oil level sight gauge		
Lift and tie-down hooks		
Loader linkage, sealed		
Z-bar design Long boom		
Rock bucket		
Enlarged bucket	1	-
Oversize bucket (HL660L / 665L)		
ROPS / FOPS Cabin (HL660L / 665L)		
Rear window wiper	6	
Rear work light	<b>*</b>	C
	STD	OF
SAFETY		



3F, BUNDANG FIRST TOWER, 55 BUNDANG-RO, BUNDANG-GU, SEONGNAM-SI, GYEONGGI-DO, 13591, KOREA

PLEASE CONTACT

2019. 05 Rev.1

www.hyundai-ce.com

Gross Power 162 kW at 2,000 rpm Net Power 146 kW at 2,000 rpm Max. Speed 36.0 km/h

Operating Weight 16,800 (17,330) / 17,300 (18,000) kg Hyundai Construction Equipment strives to build state-of-the art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences. Open up the future with Hyundai!



BOOM/A	ATTACHMENT C	PTION
Model	Standard Bucket Capacity	Optional
恋情	The state of the s	High Dump (Long Boom)
3		Enlarged Bucket (4.5 m³)
HL660	3.0 m <sup>3</sup>	Coal Bucket (3,5 m³)
HL665	55.0 m²	Rock Bucket (2.3 m³)
		Side Dump
	雅 工作 新	Log Grapple

BOOM/ATTACHMENT OPTION		
Model	Standard Bucket Capacity	Optional
		High Dump (Long Boom)
- A - A - A - A - A - A - A - A - A - A		Enlarged Bucket (4.5 m <sup>3</sup> )
HL660L		Coal Bucket (3.5 m³)
HL665L	3.0 m³	Rock Bucket (2.7m³, 2.3 m³)
		Side Dump
		Log Grapple



### **HIGH EFFICIENCY MACHINE**

Innovative technologies make the HL600 Series wheel loader fast, smooth and easy to control. HL600 Series wheel loaders are designed for maximum performance to keep the operator working productively.

#### Powerful, Fuel Efficient and Energy-Saving Engine

Weichai turbocharged engine are built for maximum power, reliability. This engine meets the emission standards EPA Tier II, EU Stage II. Weichai WD10 engine has maximum power of 162 kW and peak torque of 980 N·m at 1,200 - 1,400 rpm, it provides sufficient power. The Weichai engine provides more energy saving and stronger power.

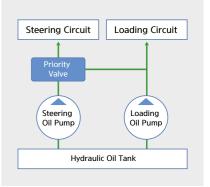


### **Load Sensitive Hydraulic System**

Load sensing steering directs power through the steering system only when the steering system needs the force. When not steering, more engine power is available to generate breakout force, lift force, and results in reduced fuel consumption.

#### Dual Hydraulic Pump Confluence Technology

Due to dual pump confluence technology, hydraulic system conduct efficient work, fully utilizing pump.



#### Large Capacity Fuel Tank for Long Working Time

Large capacity fuel tank (290  $\ensuremath{\mathbb{Q}}$  ) offers long working time.



# Large Displacement Booster Pump

Braking system has equipped large displacement booster pump ensure high reliability and safety.



### **PROVEN RELIABILITY**

The reliable components and solid frame structure not only improved the durability of the device, but also enhanced its work efficiency.

# Reliable and Proven Transmission with The Best Combination of Engine

JinGong Transmission & Shantui Torque convertor is best matching with Weichai WD10 engine. JinGong Transmission & Shantui Torque convertor are reliable and easily for operation to suit in all requirements of working situations.

Due to the best matching, HL660 / 665 / 660L / 665L provides more powerful workability. Manual shifting mode, convenient for customers to choose gears according to actual conditions.



#### **Durable and Sturdy Axle**

Feicheng Yunyu durable and sturdy front and rear axle provides running stability, good performance even in poor jobsite conditions, and maximization of the operation capability.



#### **Firm and Durable Structural Parts**

Extend product life and ensure superior running function using product structure of limited element analysis and optimization.

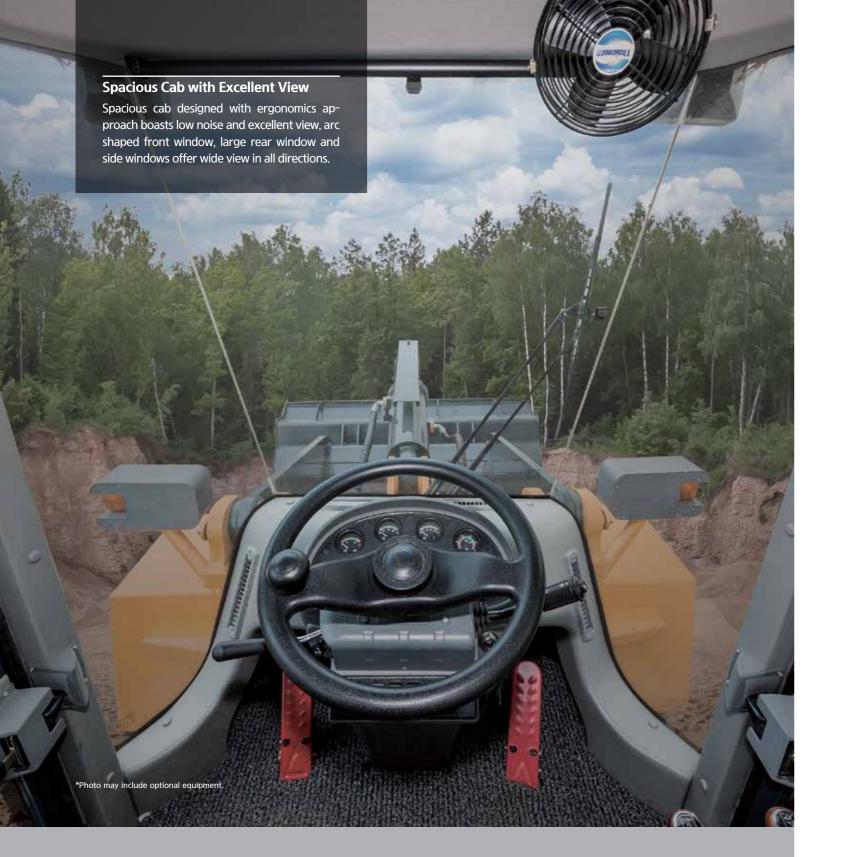


#### **Enhanced Cooling System**

Large capacity radiator and coolers significantly improve thermal shock, impulse and vibration resistance and increase durability.







#### **Centralized Monitoring Panel**

Centralized monitoring panel designed with simplicity of ergonomics that shows working conditions and warning lights at a glance.



#### **Easy Controlled Rocker Switches**

All the switches are arranged in concentrated and combined ways, easy to operate.





### **EASY AND COMFORTABLE OPERATION**

Operating a HL600 Series wheel loader is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.

# Standard Large Capacity Air Conditioning

Large capacity, air circulation and defrost system make the space comfortable for operators.



#### **Excellent Air Circulation System**

Excellent air conditioning and circulation system provide operators with more comfortable working environment.



#### **Suspension Seat**

It can be adjusted to the position optimized for driver's weight and size reducing operator's fatigue.



#### Rear Wiper Option

In case of rain, a lot of dust in the work environment, improving rear visibility.



#### **Large Side Mirror**

Large side mirror ensures the operator's driving safety.



#### **Air Purification Filter**

It effectively filters dusts out of the cab to keep the air clean and fresh.



#### Rear View Camera Option

Optional rear view camera helps you keep an extra eye on the jobsite.



#### **Headlight and Turn Signal**

Lights are beautifully and durably designed.



# **Customized Operation with Joystick Control**



## **SERVICEABILITY**

The Hyundai HL600 Series is the ideal equipment for easy maintenance and service.

#### **Key-Locking Fuel Cap**

The location of fuel cap increased accessibility and key locking function is applied for the prevention of vandalism.

#### Oil Sight Gauge

The hydraulic oil check sight gauge is installed on the side of the hydraulic tank for the convenience of maintenance check from ground level.



#### **Quickly Changeable Brake Disc**

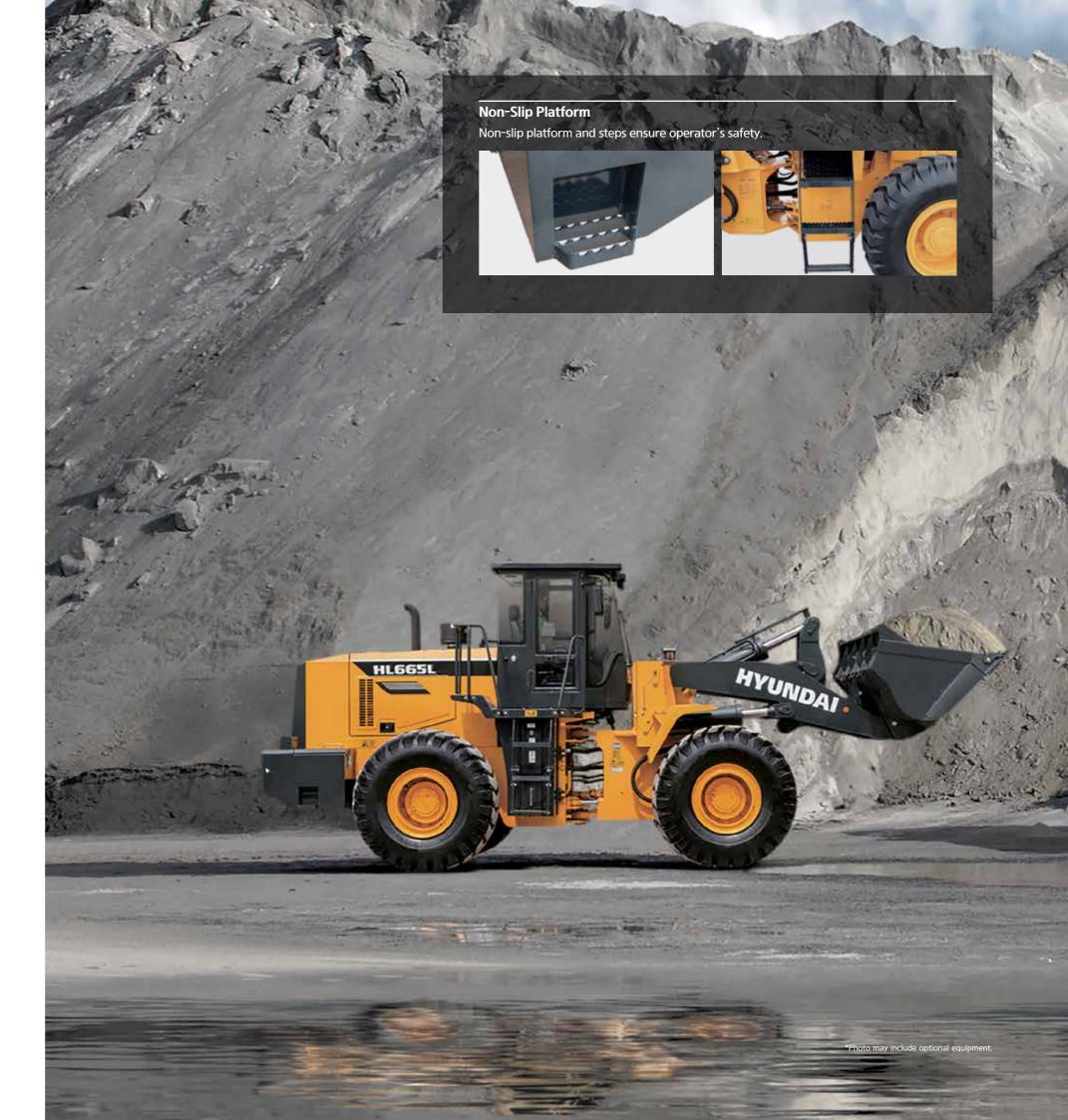
The brake discs can be replaced quickly and easily without removing the tires, which saves maintenance time.



#### **Easy Access to Engine Compartment**

Engine hood with two side wing flap opened door provide access for maintenance to easily replace engine components and perform daily maintenance.





## **DIMENSIONS & WORKING RANGE**

665 HL660L / 665L
IAI WEICHAI
20E23 WD10G220E23
II Tier II
7 hp) / 162 kW (217 hp) / pm 2,000 rpm
6 hp) / 146kW (196 hp) / pm 2,000 rpm
m / 900 N·m / pm 1,400 rpm
Q 9.726 Q
6 EA

TRANSMISSION					
Description	HL660 / 665	HL660L / 665L			
Transmission type	Planetary hydraulic shift	Planetary hydraulic shift			
Transmission configuration	2F-1R	2F-1R			
Torque converter	4 Elements single phase, twin-turbine	4 Elements single phase, twin-turbine			
Tire	23.5-25 L3	23.5-25 L3			
Travel speed (F1)	12 km/h	11.5 km/h			
Travel speed (F2)	36 km/h	36 km/h			
Travel speed (R1)	17 km/h	16 km/h			

AXLES		
Description	HL660 / 665	HL660L / 665L
Differential front type	Conventional only	Conventional only
Differential rear type	Conventional only	Conventional only
Rear axle oscillation	±10 °	±10 °

OVERVIEW		
Description	HL660 / 665	HL660L / 665L
Operating weight	16,800 (17,330) kg	17,300 (18,000) kg
Bucket capacity (Heaped)	3 m³	3 m³
Breakout force	16,800 (16,000) kgf	17,000 (16,200) kgf
Tipping load (Full turn)	10,000 (8,700) kg	10,800 (10,000) kg
Tipping load (Straight)	10,272 (8,930) kg	11,300 (10,450) kg
		* ( ): Long boom option

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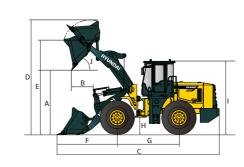
HYDRAULIC SYSTEM					
Description	HL660 / 665	HL660L / 665L			
Pump type	Fixed gear pump	Fixed gear pump			
Flow rate	160 lpm	100 lpm			
System pressure	173 kgf/cm² (kPa)	163 kgf/cm² (kPa)			
Cycle time (Lift with load)	5.1 sec	5.1 sec			
Cycle time (Dump with load)	1.3 sec	1.6 sec			
Cycle time (Lower)	4.2 sec	3.3 sec			
Cycle time (Total)	10.6 sec	10 sec			

STEERING		
Description	HL660 / 665	HL660L / 665L
<b>Pump Type</b>	Fixed gear pump	Fixed gear pump
Flow rate	80 lpm	80 lpm
System pressure	173 kgf/cm² (kPa)	163 kgf/cm² (kPa)
Articulation angle	35 °	35 °

SERVICE REFILL	ERVICE REFILL CAPACITY		
Description	HL660 / 665	HL660L / 665L	
Fuel tank (Refill)	290 ℓ	290 ℓ	
Hydraulic tank	210 Q	210 ℚ	
Hydraulic system (Including tank)	290 Q	290 ℓ	
Coolant	50 ℓ	50 Q	
Crank case	22 Q	22 Q	
Transmission	50 ℓ	50 Q	
Front axle	44 Q	44 Q	
Rear axle	44 Q	44 Q	

### HL660 / 665 DIMENSIONS

All dimensions are approximate.



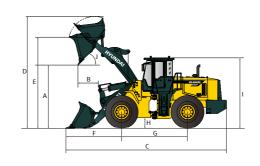


	Description	Standard	Longboom OPT
Α	Dump clearance at 45° (Full lift)	3,150 mm	3,510 mm
В	Reach at 45° (Full lift)	1,130 mm	1,170 mm
C	Overall length (Ground)	7,750 mm	8,255 mm
	Overall length (Carry)	7,580 mm	8,085 mm
D	Overall height (Full raised)	5,314 mm	5,660 mm
Ε	Bucket pivot max. height	4,151 mm	4,510 mm
F	Front overhang	2,750 mm	3,255 mm
G	Wheel base	2,920 mm	2,920 mm
Н	Ground clearance	512 mm	512 mm

	Description	Standard	Longboom OPT
Τ	Overall height (Cabin)	3,450 mm	3,450 mm
J	Dump angle	45°	45°
Κ	Overall width (with Bucket)	2,990 mm	2,990 mm
	Overall width (without Bucket)	2,840 mm	2,840 mm
	Rollback angle (Ground)	45 °	45 °
	Rollback angle (Carry)	48 °	48 °
	Clearance circle (Bucket)	13,340 mm	16,510 mm
	Turning radius (Center of outside tire)	5,960mm	5,960mm

#### HL660L / 665L DIMENSIONS

All dimensions are approximate.





	Description	Standard	Longboom OPT
Α	Dump clearance at 45° (Full lift)	3,100 mm	3,520 mm
В	Reach at 45° (Full lift)	1,220 mm	1,430 mm
C	Overall length (Ground)	7,780 mm	8,320 mm
	Overall length (Carry)	7,615 mm	7,075 mm
D	Overall height (Full raised)	5,340 mm	5,652 mm
Ε	Bucket pivot max. height	4,150 mm	4,527 mm
F	Front overhang	2,605 mm	3,145 mm
G	Wheel base	3,230 mm	3,230 mm
Н	Ground clearance	400 mm	400 mm

	Description	Standard	Longboom OPT
1	Overall height (Cabin)	3,410 mm	3,410 mm
J	Dump angle	45°	45°
K	Overall width (with Bucket)	2,990 mm	2,990 mm
	Overall width (without Bucket)	2,840 mm	2,840 mm
	Rollback angle (Ground)	45 °	45 °
	Rollback angle (Carry)	49 °	49 °
	Clearance circle (Bucket)	14,100 mm	16,640 mm
	Turning radius (Center of outside tire)	6,295 mm	6,295 mm

# **MEMO**