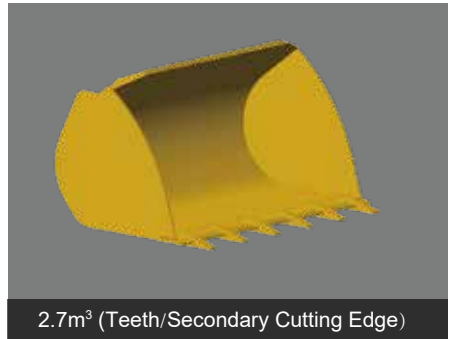


Machine Applications

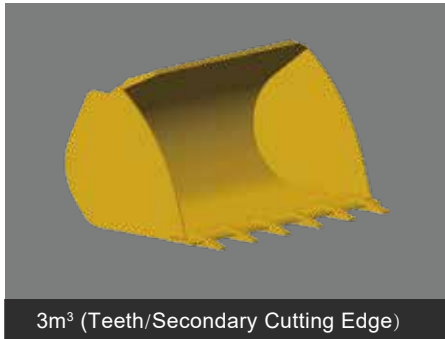
- Landscaping, building, sewer/water in, local construction
- Ready mix cement/concrete products, quarry/stone, clay, recycled aggregate, sand and gravel
- Highway, street, tunnel, airport, residential commercial



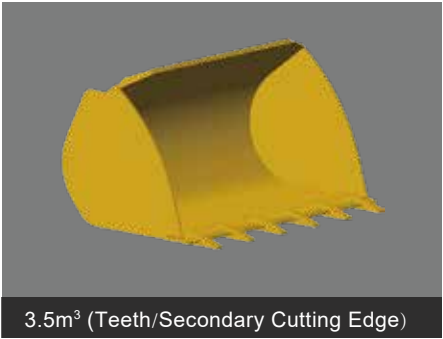
Work Tool Options



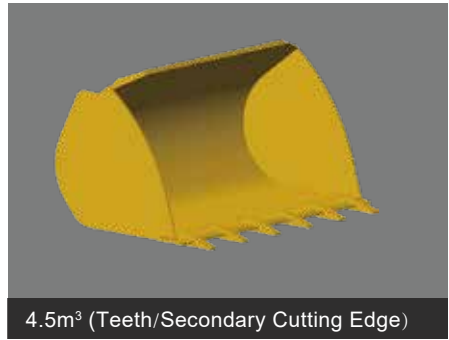
2.7m³ (Teeth/Secondary Cutting Edge)



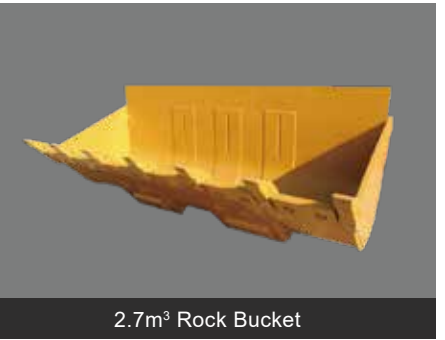
3m³ (Teeth/Secondary Cutting Edge)



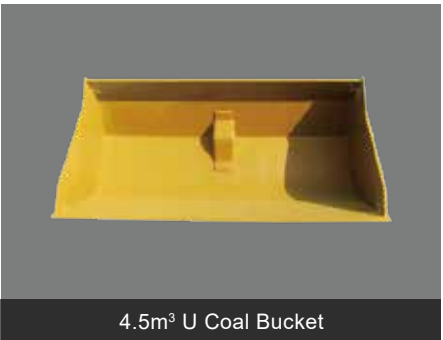
3.5m³ (Teeth/Secondary Cutting Edge)



4.5m³ (Teeth/Secondary Cutting Edge)



2.7m³ Rock Bucket

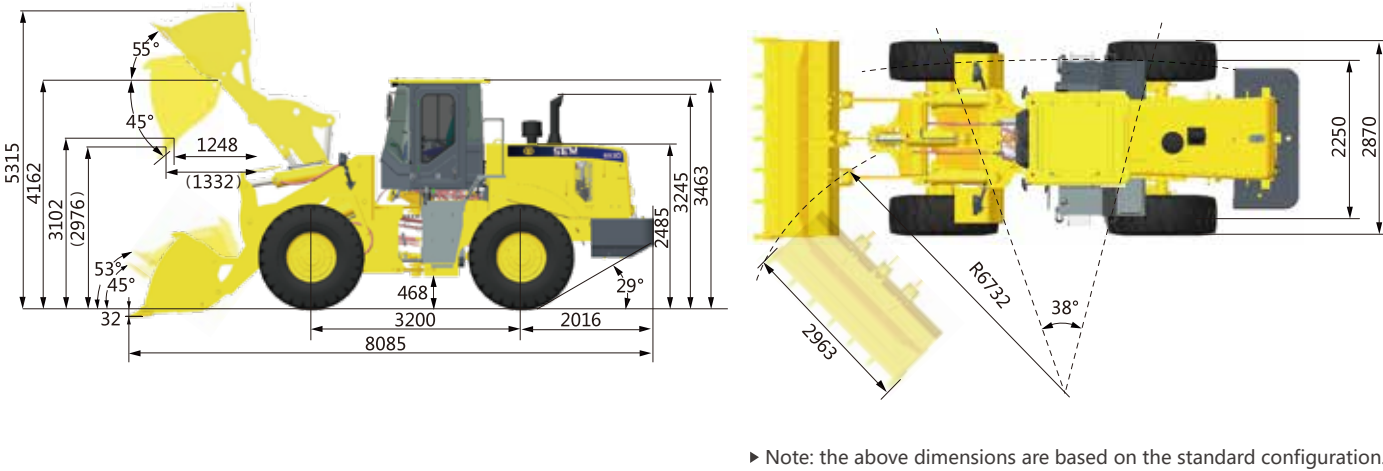


4.5m³ U Coal Bucket

Main Specifications

Items		SEM653D	Items		SEM653D
Main Specifications			Engine		
Rated Load	kg	5,000	Model		WD10G220E23
Operating Weight with Standard Bucket	kg	16,640	Rated Power	kW	162
Bucket Capacity	m³	2.6-5.5	Rated Speed	r/min	2,000
Wheel Base	mm	3,200	Displacement	L	9.7
Overall Dimension	mm	8,085*2,963*3,463	Implement Hydraulic		
Max. Drawbar Force	KN	171	Implement System Type		Open center
Breakout Force	KN	177	Boom Raise Time	s	5.1
Dump Clearance	mm	3,102	Hydraulic Cycle Time	s	9.3
			System Pressure Setting	Mpa	17
Transmission			Brake System		
Transmission Type		Countershaft, power shift	Service Brake		Dry&caliper,air to oil control
Transmission Gears		F4/R4	Parking Brake		Drum/shoe
Torque Converter Type		Single stage, 3 elements	Steering System		
Maker & Type		Tr200	System Type		Shared flow
Forward I/Reverse I		7.9/7.9	Steering Pump Type		Gear pump
Forward II/Reverse II		14/14	System Pressure Setting	Mpa	16
Forward III/Reverse III		22.9/22.9	Steering Angle (L/R)		38±1
Forward IV/Reverse IV		39.4/39.4	Tires		
Axle			Size		23.5-25
Main Drive Type		Spiral bevel gear, single stage	Type		PR
Final Drive Reduction Type		Planetary type,single stage	Layer		16
Rear - Oscillating +/-		±11	Textured Type		L-3/E-3

Machine Dimensions



Caterpillar (Qingzhou) Ltd. Address: No.12999 Nanhuan Road,Caterpillar Industrial Park, Qingzhou City,Shandong Province, Zip Code: 262500 P.R.China

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Version: November 2018

SEM653D
Wheel Loader



* Installed with Weichai engine
※ Featured machines in photos may include optional equipment

SEM653D

Product Advantage

- Reliability: Sturdy frame design for heavy duty, proved made in house transmission make usage life longer
- Productivity: 1st with bigger force and 2nd gear with fast speed conjoint usage deliver high productivity. Auto to ready function save your time for operation
- Fuel consumption: Low speed engine, E-fan and flow shared hydraulic system make lower fuel consumption
- Comfortable: Good visibility cab and low noise design with first class premium 5 directions adjustable seat make comfortable operation

Website <http://www.semmachinery.com>



Engine

- Low speed engine and E-fan make fuel consumption better
- 3 stage air cleaner with 93% efficiency pre cleaner reduce earlier wearing, high efficiency fuel filter make engine work in good condition
- Cat technology damping mount reduce vibration failure



Efficient Hydraulic System

- Excellence modulation performance implement valve with mechanical control, make operation more accurately
- Full hydraulic load sensing steering and flow shared system save fuel and raise productivity, hydraulic cycle time is only 9.3s
- Word class pump and Cat technology lines routing deliver better reliability



Operator Station

- Mould formed cab with all trims design and more vents with HVAC make operator feel better
- First class premium seat with suspension adjustable, arm rest and safety belt. Up-down, forward and reverse adjustable
- Cat technology damping mount reduce vibration failure
- Slide window, fresh air inlet system make environment better



Drivetrain

- SEM made in house counter shaft transmission reliable and high efficiency, core components reliable improvement
- One stage and 3 element torque converter deliver higher efficiency
- 1st gear higher draw bar and 2nd gear faster speed make penetration easier and move material faster



Cooling System

- High performance aluminum cooling package suitable for most of severe applications
- Oil cooler and radiator parallel design can balance heat load inside and suitable diversity applications
- Damping design reduce vibration failure



Solid Structure

- Validated by Cat technology FEA(Finite Element Analysis) and OMSA(On Machine Stress Analysis)
- Middle articulation frame less work space needed and reduce tire resistance
- Large spread hitch design in actuation section can stand more load



Serviceability

- Quick pressure test ports on HYD and brake lines make diagnose easier
- Large wing hood door make service easier, approach to air cleaner, fuel filter and oil filter
- Large spread hitch design in actuation section make operator easier to approach



Safety

- Slope switch make machine approach to hopper and pile in slope safety and easier
- High decibel Beacon and backup alarm make person around easy to attention
- 3 stage alarm system on panel
- 3 touch points entering and exiting cab make operator more safe

