

Machine Applications

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



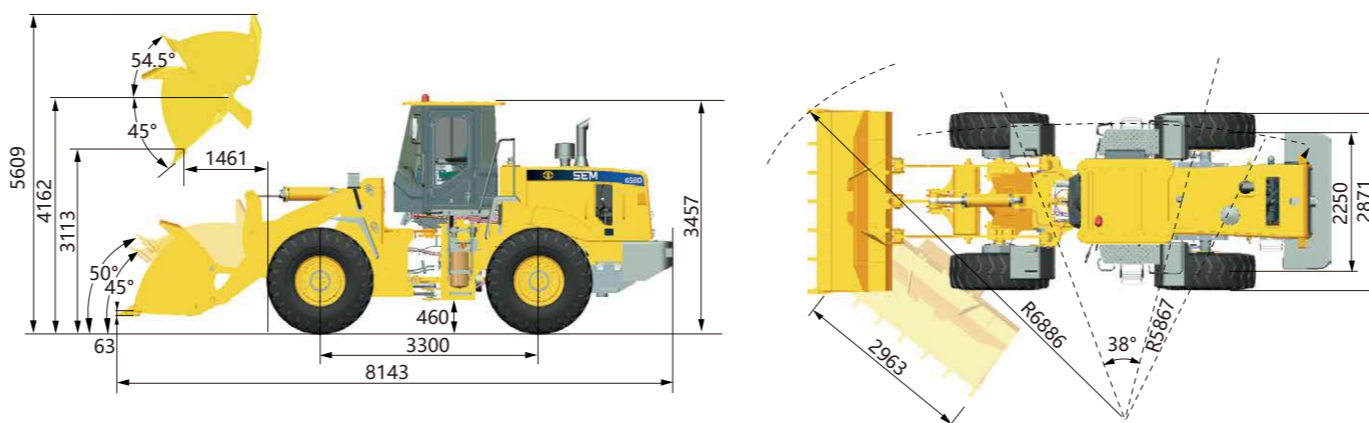
Work Tool Options



Main Specifications

Items	SEM658D		Items	SEM658D	
Main Specifications			Engine		
Rated Load	kg	5,000	Model		Weichai WD10G220E21
Operating Weight with Standard Bucket	kg	17,158	Rated Power	kW	162
Bucket Capacity	m ³	2.6-4	Rated Speed	r/min	2,200
Wheel Base	mm	3,300	Displacement	L	9.7
Overall Dimension	mm	8,143 * 2,963 * 3,457	Implement Hydraulic		
Max. Drawbar Force	KN	170	Implement System Type		Open Center
Breakout Force	KN	178	Boom Raise Time	s	5.37
Dump Clearance	mm	3,113	Hydraulic Cycle Time	s	9.3
B-Pin Height	mm	4,162	System Pressure Setting	Mpa	18
Transmission			Brake System		
Transmission Type		Countershaft, Powershift, EH Control	Service Brake		Dry&Caliper, Air to Oil Control
Transmission Gears		F4/R3	Parking Brake		Drum/Shoe
Torque Converter Type		Single Stage, 3 Elements	Steering System		
Maker & Type		SEM160	System Type		Single Load Sensing
Forward I/Reverse I		7.2/7.2	Steering Pump Type		Piston Pump
Forward II/Reverse II		13/13	System Pressure Setting	Mpa	16
Forward III/Reverse III		23/23	Steering Angle (L/R)		38±1
Forward IV/Reverse IV		37/NA	Tires		
Axle			Size		23.5-25
Main Drive Type		Spiral Bevel Gear, Single Stage	Type		Bias
Final Drive Reduction Type		Planetary Type, Single Stage	Layer		16
Rear - Oscillating +/-		±11	Textured Type		L-3

Machine Dimensions



► Note: the above dimensions are based on the standard configuration.

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Version: April 2019- Weichai

SEM658D Wheel Loader



† Installed with Weichai Engine
 ※ Featured machines in photos may include optional equipment

SEM658D

Product Advantage

- **Reliability:** Sturdy frame design for heavy duty, Caterpillar design EH transmission and made in house axle make usage life longer
- **Productivity:** EH control transmission with KD and auto speed function, optimized TC and engine match 8% rimpull improved
- **Fuel Consumption:** Optimized transmission flow save fuel, E-fan and single load sensing hydraulic system make lower fuel consumption
- **Comfortable:** Good visibility, low noise design with first class premium 5 direction adjustable seat make operation comfortable

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



Engine

- E-fan make fuel consumption better, 3 speeds auto-selection depend on coolant temperature
- 3 stages 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. Four air valves delivers robust power
- Radial seal air filter makes the maintenance easier and with good reliability



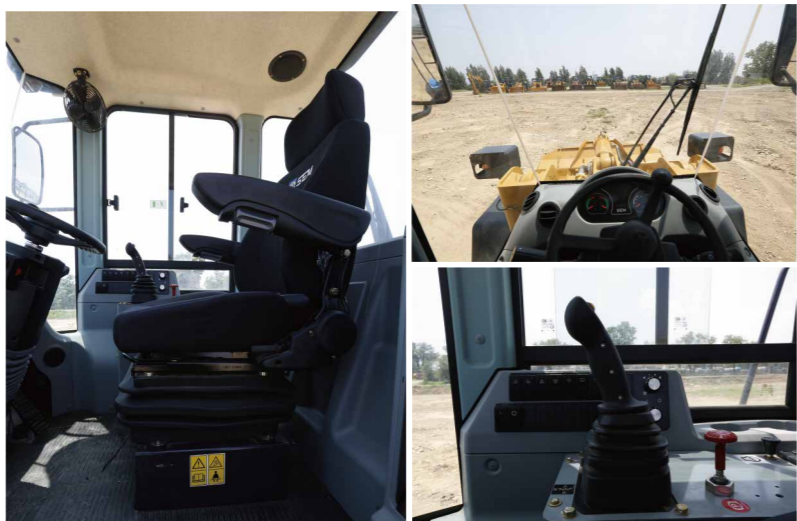
Hydraulic System

- Single load sensing system, high productivity and high fuel efficiency
- Piston pump, lower heat load contribution and provide more rim pull when hydraulic partial working
- Less hydraulic oil capacity required because provide flow depends on demand



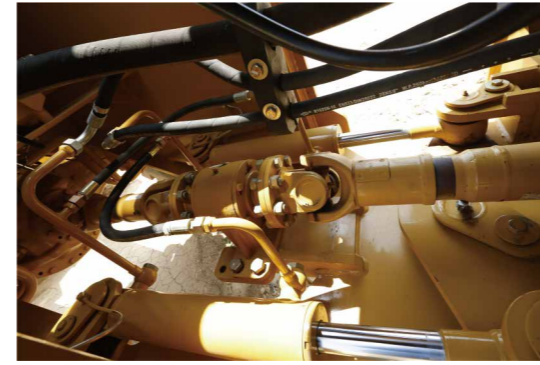
Operator Station

- 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
- Caterpillar method design damping mount reduce vibration failure
- Slide window, fresh air inlet system make environment better



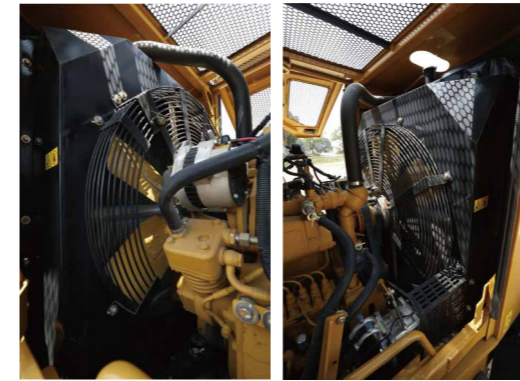
Drivetrain

- Improve transmission oil system efficiency, machine fuel consumption reduced
- Optimized marc mount reduce vibration
- Made in house axle well fitted heavy duty application
- Caterpillar design drive shaft and block bearing make machine more reliable



Cooling System

- High performance aluminum cooling package suitable for most severity applications
- Oil cooler and radiator parallel design can balance heat load inside and suitable diversity applications
- Damping design reduce vibration failure
- High ambient 50°C cooling package make machine reliability better



Solid Structure

- Validated by Cat method FEA (Finite Element Analysis) and OMSA (On Machine Stress Analysis)
- Middle articulation frame less work space needed, reduce tire wearing and fuel consumption
- Large thread design in articulation section improves load capacity



Serviceability

- Quick pressure test ports on hydraulic (SOS) and brake air lines make diagnose easier
- large wing hood door make service easier, approach to air cleaner, fuel filters and oil filters
- Large thread design in articulation section make operator easier to approach
- Air tank with pressured air tap provide more convenience for service and maintenance



Safety

- High decibel beacon and backup alarm make person around easy to attention
- 3 stages alarm system on panel make operator easy to notice
- 3 points touch entering and exit cab make operator more safely

