



SW405K

Rated power
170kW/2300rpm

Bucket capacity
2.7-4.5m³

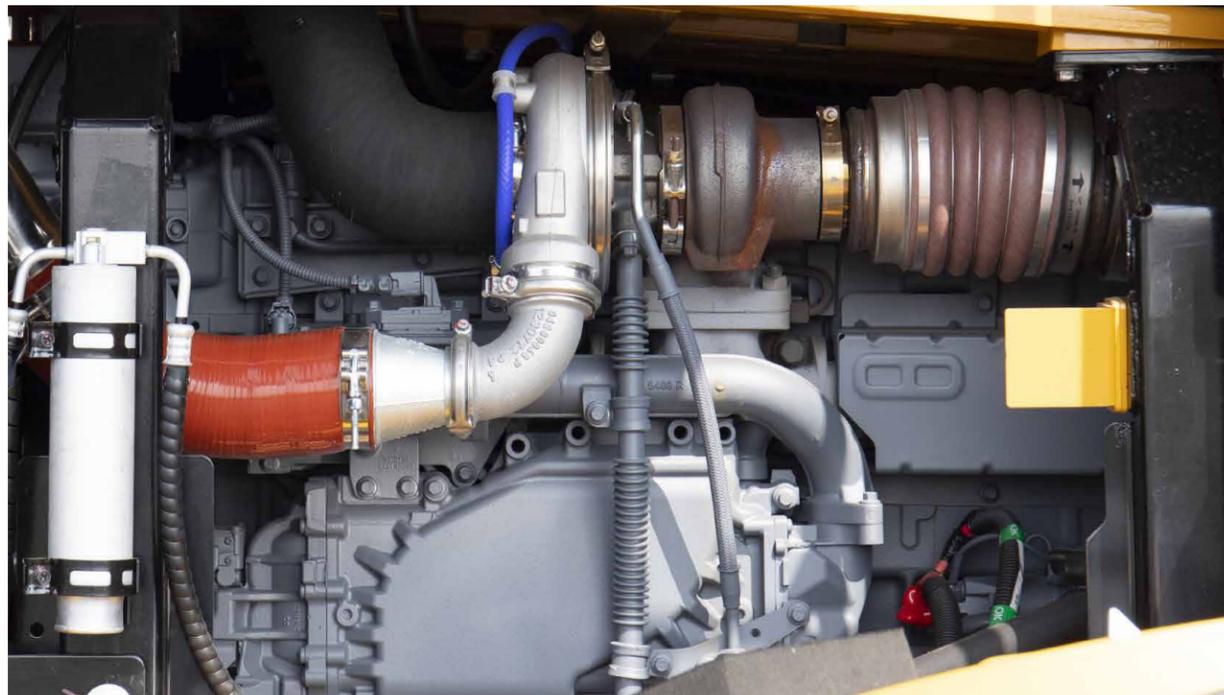
Operating weight
18500kg



SANY HEAVY MACHINERY LTD

<http://www.sanyglobal.com>

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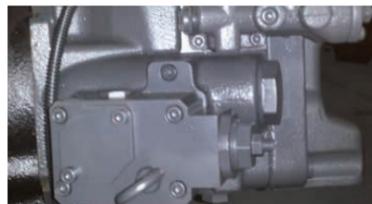


More Powerful

The engine meets the requirement of EU and America EPA with DVERT selective catalytic reduction (SCR) and particulate filter (DPF). The powerful DEUTZ Common Rail (DCR) injection system and electronic engine control (EMR4) with intelligent link to the drive management ensure optimum engine performance at low fuel consumption 500h oil change intervals and easy changing of the engine fluids reduce the running cost and increase the availability of the machinery. Best cold starting performance even under extreme conditions.



▶ The filtration system provides clean fuel for the engine under various harsh working conditions, ensuring engine's long-lasting operation.



▶ The main pump maximizes flow utilization, achieving on-demand supply. Compared to a negative flow system, it reduces mid level reflux loss while responding faster and reducing energy loss.



▶ The main valve, developed and designed according to customer needs, has outstanding advantages such as high reliability, small pressure loss, and smooth composite action.

Productivity and reliability



· Z-bar Linkage

The proven Z-bar linkage with performance series bucket can penetrate into the pile easily with high breakout force. Large roll back angles and optimized design bucket can load more materials with less spillage, which leads to high fuel efficiency and superior production capacity. The total cycle time is short to ensure loading more materials in the same time.



· Boom suspension system

Sany wheel loader SW405K standard equipped boom suspension system, which can dramatically avoid boom and bucket vibrating to spill the material when working, also reduce the operator's fatigue and improve working efficiency.



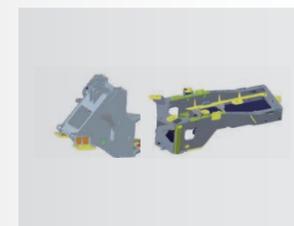
· DANA TZL18 Transmission & DANA 37RL118 Axles

Automatic transmission with stable and user-friendly gear shifting bevel gear could reduce the noise. The internal lubrication pipelines reduce the leakage and avoid external damage. The large capacity clutch ensures the long service life. The automatic gear shift has self-adjustment function, which is more convenient when operating.



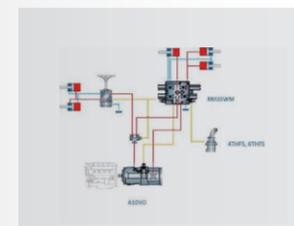
· Reinforced working device

The working device is reinforced dramatically with optimized design featuring high breakout force, super lifting capability and large roll back angle. Optional ISO quick coupler makes machine can link diverse tools for different jobs.



· Proven front and rear frames

Passing through the million times fatigue experimental test in the lab, thousands of working hours jobsite test, the bearing performance of the frames have been proven.



· Optimized hydraulic system

The world-class hydraulic components match the powertrain system perfectly, which lead to high system pressure, excellent performance and long service life.



Comfortable experience

Wide field, standard air suspension chair, pilot operation at the loading ends, which make you own more comfortable experience.

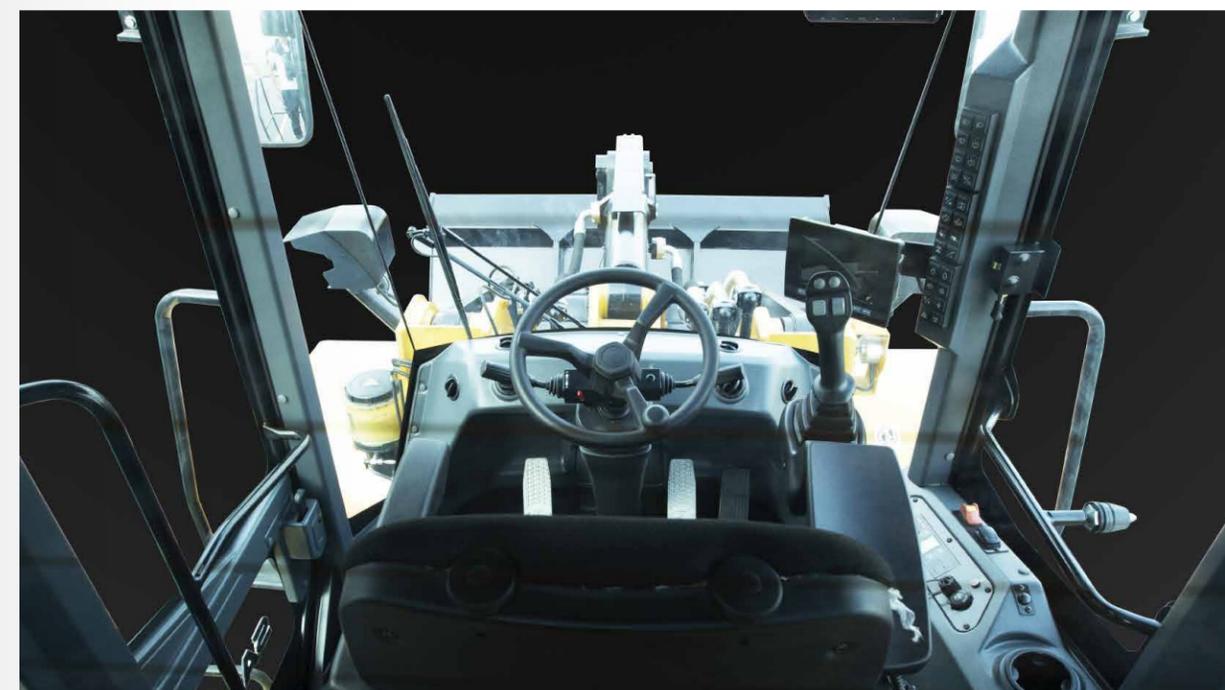
The LCD takes the place of traditional instrument board, which makes you enjoy high-end quality while mastering the running status of machine well.

Cigar lighter, ashtray, cup holder, file box and reading lamp all are complete

Comfort and control comes standard

The adjustable air suspension seat provides a variety of adjustments. The safety belt can protect the operator's safety when emergency. The arm rest is adjustable to fit the operator's working habits.

The extended front windshield makes operator has wider vision, the cameras on the machine can take 360° panoramic images which significantly help operator observe the outside environment when working. The operator can drive the machine safety and quickly with high efficiency.



Complete research & development and test system

SANY's has established a complete machine endurance test center with full functions. Each model of excavator must be subjected to over 2,000h field excavating test.

Key components like working device, cab and hydraulic components,etc. must be subject to fatigue test over 800,000 times.



Advanced manufacturing technology

SANY has an RGV assembling line and fullautomatic welding robots, and possesses highprecision machining equipment and a precise machining center.

SANY's manufacturing and assembling lines won a five-star national site recognition in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.



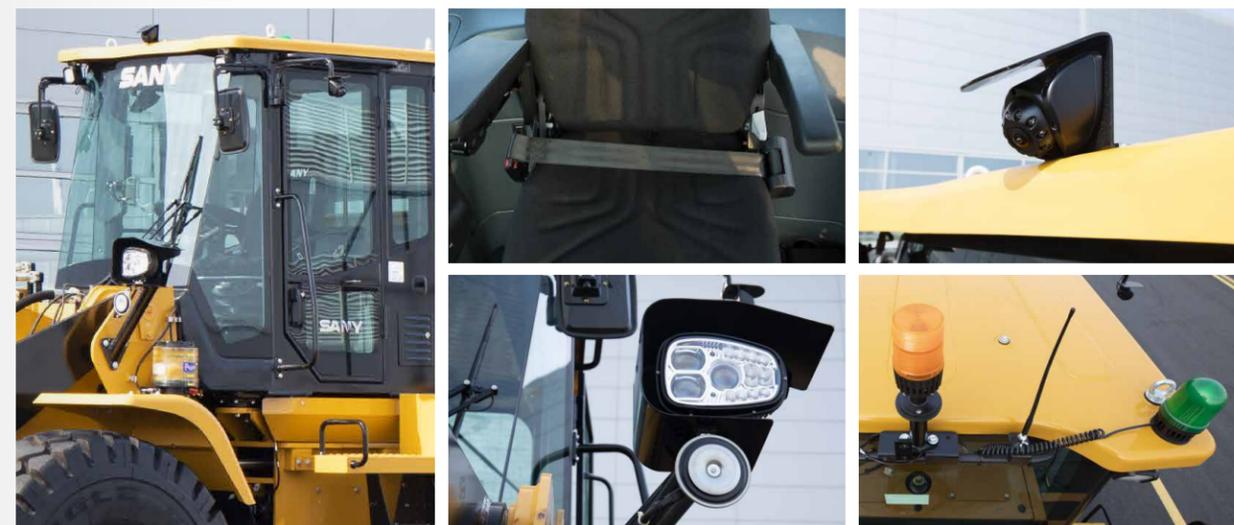
Safety facility

Panoramic glass design cab, 360° field no dead corner

Escape hammer

Handrails for getting on the vehicle and large-area rearview mirror

Seat belt, safety signs, safe foot step



Convenient maintenance

- Engine hood

Sany sloped tilting engine provides big access for service engineer to check and maintain the engine and other components. The rear protect fence also can be opened for easy to check the independent radiator system.

- Grease point

The grease fittings are set in the convenient place for the components who are difficult to reach for lubrication. The centralized lubrication system is option to liberate the engineer from lubricating job.

- Diagnose system

Once the issue happened, Sany intelligent diagnostic system can find the error quickly, that helps the technician fix the machine accurately with minimum time. The machine's uptime is prolonged dramatically.

- Cost saving

Depending on the global network, Sany can ship parts to everywhere quickly with reasonable price, which save a lot of time and money while enjoying excellent service.



Technical specifications

Specification		Main performance	
Operating weight	18500 g	Straight turn tipping load	14500 kg
Bucket capacity	2.7-4.5 m ³	Full turn tipping load	13100 kg
Engine	4-cylinder, water-cooled, electronically controlled fuel injection, intercooled, high-pressure common rail	Breakout force	180 kN
Model	Deutz TCD 7.8	Cycle time (raise/dump/float down)	5.4 s/ 1.9 s/ 3.3 s
Rated power	170 kW@ 2300 rpm	Transmission shift modes	Automatic,Manual,Kick down
Maximum torque	1308 Nm@ 1450 rpm	Forward gear 1-4	7.3/13.5/26/40 km/h
Displacement	7.8 L	Reverse gear 1-3	7.3/13.5/26 km/h

Service capacities			
Fuel tank	300 L	Rear axle	28 L
Cooling system	43 L	Hydraulic tank	290 L
Engine crankcase	23 L	DEF tank	20 L
Transmission	35 L		
Front axle	28 L		

Technical specifications

Engine	
Exhaust aftertreatment (DPF+SCR)	•
Keyless start	•
Engine emergency stop(In cab)	•
P/E Patten	•
Cold start aid (air pre-heated)	•
Hydraulic-driven fan,regulated by temperature (Reverslble rotation, manual)	•
Power train	
Gear selector lever (Steering-column)	•
Fully automatic shifting 1-4, H/L Patten G Manual	•
Automatic Transmission Kick	•
DownClutch-cutoff	•
Service brake,4-wheel, wet-type, hydraulic brake	•
Parking brake, Electronically controlled, hydraulic caliper disc brake	•
Differential lock front axle (manual)	•
Hydraulic	
Full variable load-sensing system with steering priority	•
Single-lever joystick with F/R+KD+horn+3rd function valve roller)	•
Secondary steering	•
Dual brake pedals	•
3rd function valve	•
Hydraulic quick coupler lines	•
Ride conral system(Boom suspension system)	•
Boom kick-out	•
Bucket self-leveling and return to dig	•
Anti-drop valve	◦

Standard • Optional ◦

Technical specifications

Work tools

Bucket volume 3.2m³(Cutting edge, bolt-on) ○

Quick coupler ○

Cabin

Cab with ROPS /FOPS certification ●

Steeringwheel with turning signal control lever ●

Emergency hammer ●

Rear window, heated ●

Rear mirrors, outside(2, foldable, heated) ,inside(1) ●

Sun visor, front window ●

Air-Suspension seat (cloth, heated) ●

Seat belt, 2-point retractable ●

Armrest adjustable in multiple directions ●

Rear-view camera ●

360° view camera ●

7 inch smart color display ●

Auto air conditioner ●

Electricity

Battery main switch ●

12-volt socket ●

Cigarette lighter, 24V ●

USB socket ●

Bluetooth radio ●

Back up alarm ●

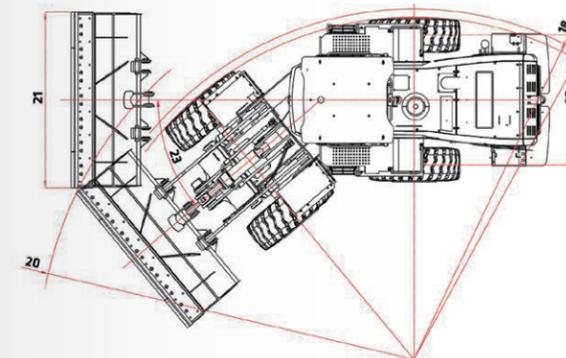
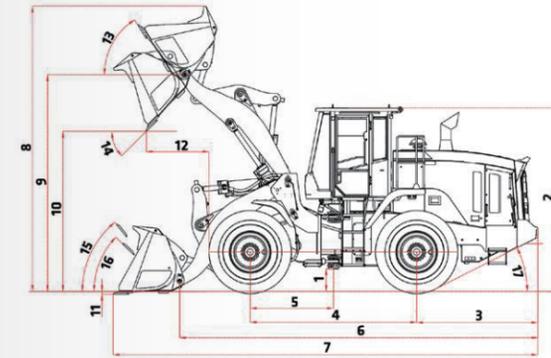
Travel acoustic alarm ●

Travel strobe light alarm ●

Standard and optional equipment may vary. Consult your local dealer for details

Standard ● Optional ○

Machine dimensions



Overall dimensions SW405K

1. Ground clearance	430mm
2. Height to Top of Cab	3580mm
3. Center Line of Rear Axle to Edge of Counterweight	2335mm
4. Wheelbase	3200mm
5. Center Line of Front Axle to Center Pivot	1600mm
6. Shipping Length without Attachment	7040mm
7. Shipping Length with Bucket	8180mm
8. Max. Dump Height	5415mm
9. Hinge Pin Height at Max. Lift	4145mm
10. Dump Clearance at Max Lift	3100mm
11. Dig Depth, Level Bucket	30mm
12. Reach at Max. Lift and 45° Discharge	1185mm
13. Roll Back at Max. Lift	58°
14. Dump Angle at Max. Lift and Dump	45°
15. Roll Back at Carry Height	50°
16. Roll Back at Ground	45°
17. Tail Angle to the Rear Wheel	27°
18. Clearance Circle to Outside of Tires	5635mm
19. Clearance Circle to Counterweight	5911mm
20. Max.Circle	6465mm
21. Width of the Bucket	3015mm
22. Width	2200mm
23. Articulation Angle	+/- 40°

Technical specifications

Engine	Deutz TCD 7.8
Displacement	7.8 L
Rated Power	170 kW
Max. Gross Torque	1308 Nm@ 1450 rpm
Hydraulics	Load Sensing with Pilot Control
Main Hydraulic Pump	Axial Piston – Variable Displacement
Max. flow	306.6 LPM
Max Pressure	27 MPa
Auxiliary Flow (maximum)	200 LPM
Auxiliary Pressure (maximum)	27 MPa

