



QUALITY CHANGES THE WORLD

Sany Heavy Machinery Co., Ltd

Sany Industrial Park, Dongcheng Avenue, Kushan City, Jiangsu Province, China

Hotline: +86 4008-28-2318 (Service) / 4008-87-9318 (Support)

<https://www.sanygroup.com>

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your local dealer for available options please.



Reliable, High-productivity & Smart

Rated power: 210 kW @2200 rpm | Operating weight: 24,300 kg | Rated payload: 7,000 kg

Bucket capacity: 5.0 m³

SW978KI
Wheel Loader



Highlights

Engineered for greater productivity & reliability, better fuel efficiency & more comfortable operating experience, the SW978K is built of stronger frame, leading hydraulic & braking technology.

More powerful

Automatic transmission

Constant power hydraulic system

Wet disc braking system

Pilot control, FNR function

Intelligent Management

Rear camera

Digital weighting system(optional)

Engine and Transmission



■ The Weichai WP10 engine tailored for SANY has large displacement, power and driving force. The engine has a large market share, sufficient accessories, economical prices, and easy purchase.



■ Tailor-made and developed for SANY, a large-capacity 7-ton fully automatic gearbox matched with a high-power engine. The vehicle speed increased by 5%, the traction force increased to 205kN, and the overall operating efficiency increased by more than 10%.

Axles and Drive Shaft



Wet Brake Drive Axle

- Reinforced front axle with stronger bearing capacity
- Wet braking is safe and reliable
- Maintenance-free brake
- Box structure axle housing



Drive Shaft

- 8.5C heavy-duty flange
- High torsion strength

Frame and Tires



Mine type Heavy-duty Frame

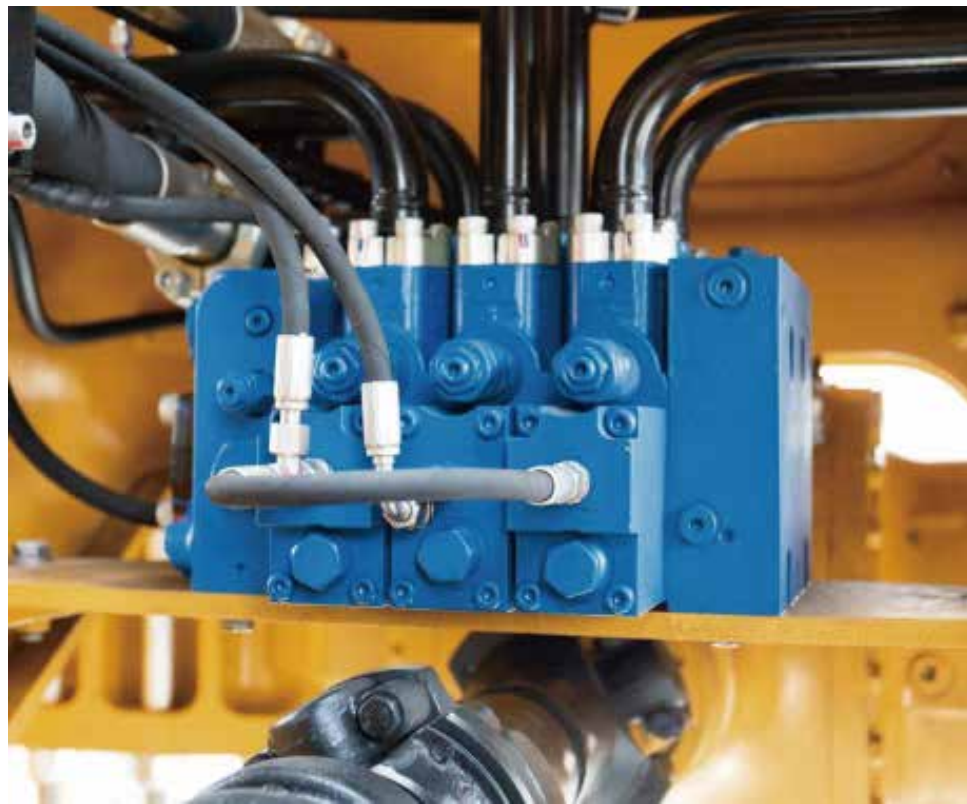
- Heavy-duty frame structure design, large-span articulation, double tapered roller bearings, thickened steel plate with stronger load-bearing capacity
- After professional finite element stress analysis and rigorous reliability testing, the safety factor of the front and rear frames is more than 2 times



Wide Base Radial Tires

- Wide-base radial tires increase the ground contact area and adhesion, and the shoveling efficiency is high
- Wide tires, large tire spacing, stable driving speed and high operating efficiency
- Optional 26.5-25 tires

Constant Power Load Sensitive Variable Flow System



Large Flow Main Valve

- Flow distribution on demand
- Using constant power control and pressure cut-off technology, which can withstand heavy loads

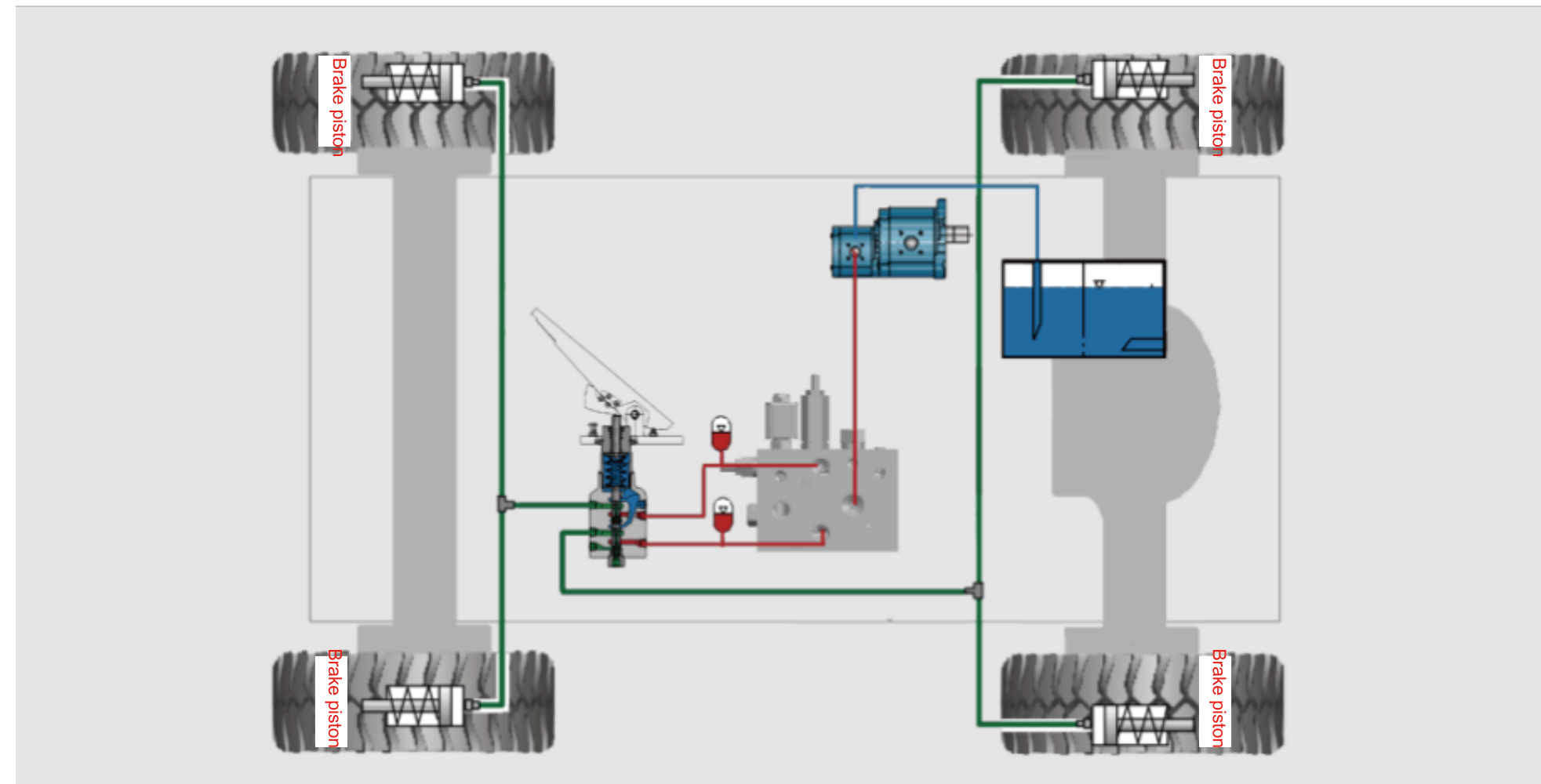


Variable Piston Pump

- The power of the hydraulic system is constant to maintain sufficient power
- Shoveling conditions, the hydraulic system has high pressure and small flow, reducing power loss by 95%, realizing high efficiency and energy saving

Full Hydraulic Wet Brake System

- Full hydraulic braking is more sensitive, safe and reliable, and the brake components have a long life
- Wet multi-disc brake, maintenance-free



Newly upgraded cab

- Large space: comfortable driving environment, enhance the driver's driving experience
- Ultra-low noise: the noise value is not higher than 75dB (A), which effectively protects the driver's physical strength and reduces fatigue
- Large field of view: the panoramic front window and the reversing monitor can improve the efficiency of the driver's work and avoid the occurrence of safety accidents
- Humanized design: The seat and each control mechanism are designed according to ergonomics, so that they are in the best operating position



Operation Environment

Electrical control Shift, Joystick, Display & Rear Camera



- Electronically controlled shift, much more smoother and no impact
- Pilot single handle, integrated FNR function for more convenient operation



- Display and control integrated screen, which can display various data on time, so that the driver can monitor the status of the machine
- Reversing video monitor, easy to check the rear situation to ensure safety



Easy Service

Smart Fleet



05



EV-Cloud

- Cluster distribution
- Construction statistics
- Remote Service

EV-APP

- Keep track of equipment working conditions
- One-click service call
- Service process visualization



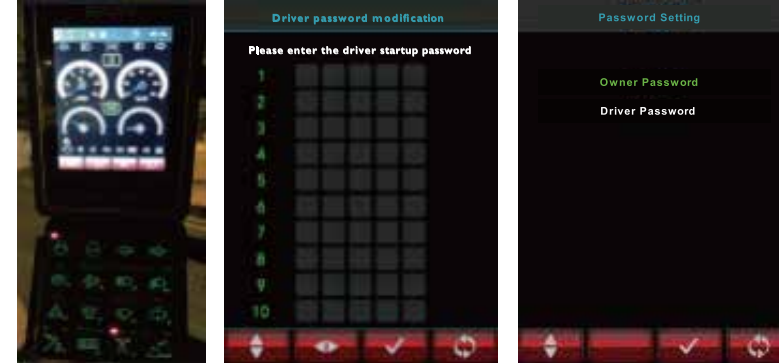
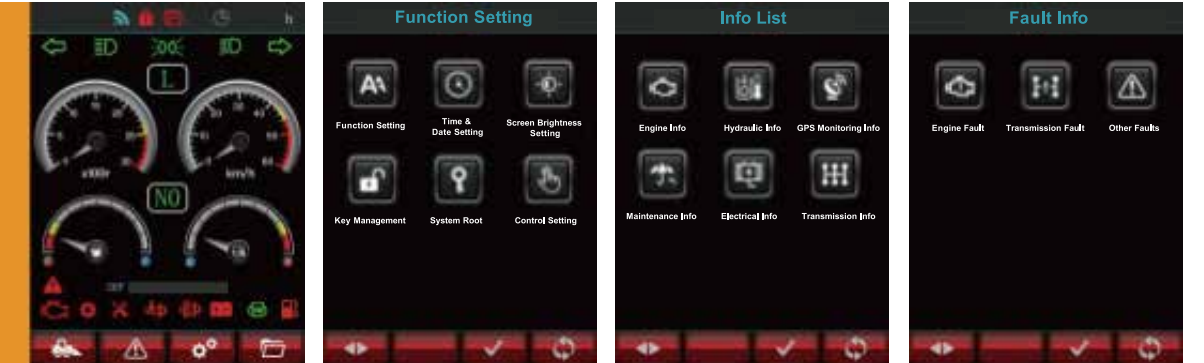
“易眼”-APP

- Loader field service diagnosis system

Easy Operation

Smart Display

- 5.0-inch TFT display and control integrated screen, real-time display of equipment information
- GPRS networking, GPS positioning
- IP65 protection level, adapt to harsh working conditions



Auto Start with PIN Management

- CAN communication intelligent start management system
- The intelligent key start, engine start and flameout management system can easily start and stop, and extend the life of the starter motor and battery
- One-button start ensures that the engine starts without impact and overtime, and effectively prevents the starter motor from overheating and battery over-discharge
- Intelligent key management, private order of the owner's password, and 10 operator passwords assigned by the owner, making the equipment more secure

Intelligent power management

- CAN communication intelligent power management and fault diagnosis system
- The bus communication controls the power management system to realize overload protection and multi-mode automatic fault identification and alarm
- Intelligent power management module, using non-contact relay, with overload and short-circuit protection, life span increased by 100 times
- Graphic + text fault diagnosis, fault information prompt is more intuitive and accurate, and troubleshooting is convenient and quick
- Intelligent non-contact multi-function button panel, one button for multiple purposes, more comfortable operation, extremely simple wiring, and more reliable to use
- The life of the panel button can reach 300,000 times, far exceeding the life of the rocker switch 40,000 times.



Easy Maintenance



Centralized Filling Port

The centralized arrangement of butter filling ports improves convenience and makes maintenance more convenient

Side Opening Hood

Easy to check and replace the oil and filter element, fuel filter element, air filter element body and its supporting parts



Roto-molding Fuel Tank

The use of polymer material and one-piece molding technology greatly improve cleanliness and impact resistance



Single Layer Radiator

The single-layer structure is convenient for daily cleaning and maintenance

Equipment

● Standard		○ Optional		
Power System	Cab	Cab	Alarm	Monitor
Electrical, CN stage III engine	● Soundproof steel structure cab	● Seat belt	● High water temperature	● Electronic weighing display ○
Generator	● Light-colored tempered glass windows	● Fire extinguisher	● High oil temperature	● Rear view video display ●
93#Desert air filter machinery alarm	● Silicone rubber shock absorber	● Drinking cup holder	● Low oil pressure	● Fuel level display ●
Centrifugal pre-filter	● Sliding window	● Dome light	● Battery undervoltage	● EVI mobile APP ●
Oil filter	● Wiper	● Cigarette lighter	● Fuel oil shortage	● Function setting ●
Fuel Filter	● Arm support device	● Escape hammer	● High hydraulic oil temperature	● Accident details ●
Electronic grille intake heating	● Adjustable suspension seat	● Storage box	● High water content in oil-water separator	● System settings ●
Fuel dewatering, heating and pumping integrated device	● Radio	● Grocery bag	● Preheat fault	● Maintenance information ●
Oil water cooler	● Floor mat	● Air conditioning	● Low brake pressure	● System message ●
Plate-fin radiator	● Speaker	● Sunshade	● Fuse short circuit	● Password setting ●
Electric Fuel sensor	● rearview mirror		● Electronic component short circuit and open circuit	●
Oil-bath air pre-filter	○			
Transmission System	Hydraulic System	Structure	Others	
Automatic power shift	● Variable system	● Large-articulation centrally arranged reinforced frame	● Battery (2*12V*120Ah)	●
7-ton wet reinforced drive axle	● Full hydraulic brake	● Tapered roller supporting hinged structure	● Lockable back-turning hood	●
Reinforced drive shaft	● Constant power and pressure cut-off control	● Implement device (3.4m dumping clearance)	● Portable fuel oil filling cover	●
Automatic and manual dual mode KD function	● Joystick	● 5m³ reinforced bucket for gravels	● Anti-slip pedals, handrails and walkways	●
FNR	● Flow amplification steering system	● Deflector on the top of the bucket	● Tool kit	●
Four-wheel wet multi-disc service brake	● High-position closed hydraulic oil tank	● Bolt-on teeth		
Swing structure rear drive axle	● High pressure resistant cylinder	● Curved side cutting edges of bucket		
26.5-25 bias tires	●			

Engine		Transmission	
Manufacture	Weichai	Torque Converter & Transmission	Fully Automatic Electric Control Fixed Shafts Transmission
Model	WP10G286E301		I (Front / Rear) >6.5 km/h
Type	6-Cylinder Inline, Air-to-Air Cold, 4-Stroke, EFI	Speed	II (Front / Rear) ≥13.5 km/h
Rated power / Speed	210 kW / 2200 RPM		III (Front / Rear) ≥27km/h
Cylinder Number * Bore * Stroke	6*126mm*130mm		IV (Front) ≥40 km/h
Max. Torque	1185 Nm		

Hydraulic System		Steering System	
Variable System, Double Pump Confluence		Articulated, Load-sensitive, Flow-amplified Steering System	
Main Pump	Variable Piston Pump	Steering Pump	Variable Piston Pump
Hydraulic Cycle Time	≤9.2s	Articulation Angle	±38°

Axles and Tires		Brake System	
Style	Wet Heavy-duty Swing Axle	Service Brake	Four-wheel wet multi-disc brake System
Specification	750/65 R25	Parking Brake	Electric Controlled Full Hydraulic Capliper Disc Brake System
Air Pressure	Front / Rear : 0.63 MPa / 0.53 MPa		

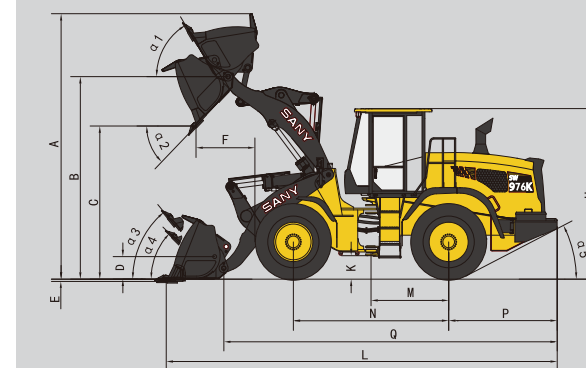
Accessories			
Fuel Tank	330L	Hydraulic Oil	220L
Cooling System	45L	Oil in The Front Axle	48L
Gear Oil	38L	Oil in The Rear Axle	40L

SW978KI Standard Boom

Forward Speed	km/h	0~40
Backward Speed	km/h	0~27
Total cycling time	s	≤9.2
Breakout Force	kN	210
Max. traction force	kN	205
Bucket Capacity	m³	5
Operation Weight	kg	24300
Rated Load	kg	7000

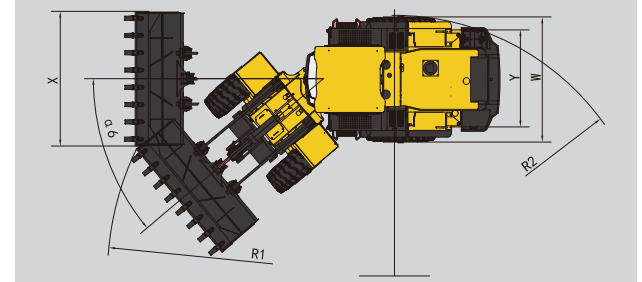
SW978KI Standard Boom

A.Overall height with bucket at Maximum lift	mm	6100
B. Hinge pin height (fully rasied)	mm	4800
C. Dump clearance (at 45°-fully raised)	mm	3440
D. Hinge pin height (at carry position)	mm	570
E. Digging depth	mm	130
F. Dump reach (at 45°-fully raised)	mm	1280
H. Overall height	mm	3490
K. Ground clearance	mm	385
L. Overall length (bucket on ground)	mm	9560
M. Length from centerline to rear axle	mm	1775
N. Wheel base	mm	3550
P.Center line rear axle to edge of counterweight	mm	2383



SW978KI Standard Boom

Q Length from bucket hinge shaft to edge of counter weight	mm	7983
α1 Roll back angle (boom fully raised)	°	60
α2 Max. dump angle (fully raised)	°	45
α3 Roll back angle (at carry position)	°	51
α4 Roll back angle (at ground level)	°	45
α5 Departure angle	°	25
α6 Articulation angle	°	±40
W Width over tires	mm	3110
X Bucket width	mm	3420
Y Tread	mm	2300
R1 Turning radius to outside of bucket	mm	7335
R2 Turning radius to outside of tires	mm	6525





Service Outlets/Spare Parts Warehouse

Service Network in China

○ Service Hotline 4008 28 2318

○ Complaints Hotline 4008 87 9318

● Spare Parts Warehouse

535
535 spare parts warehouses
10,000
Over 10,000 kinds of spare parts
500 Million- RMB
Spare parts stock amounting to 500 Million- RMB

▲ Service Outlets

600
600 Service outlets
2000
2,000 service engineers overseas

