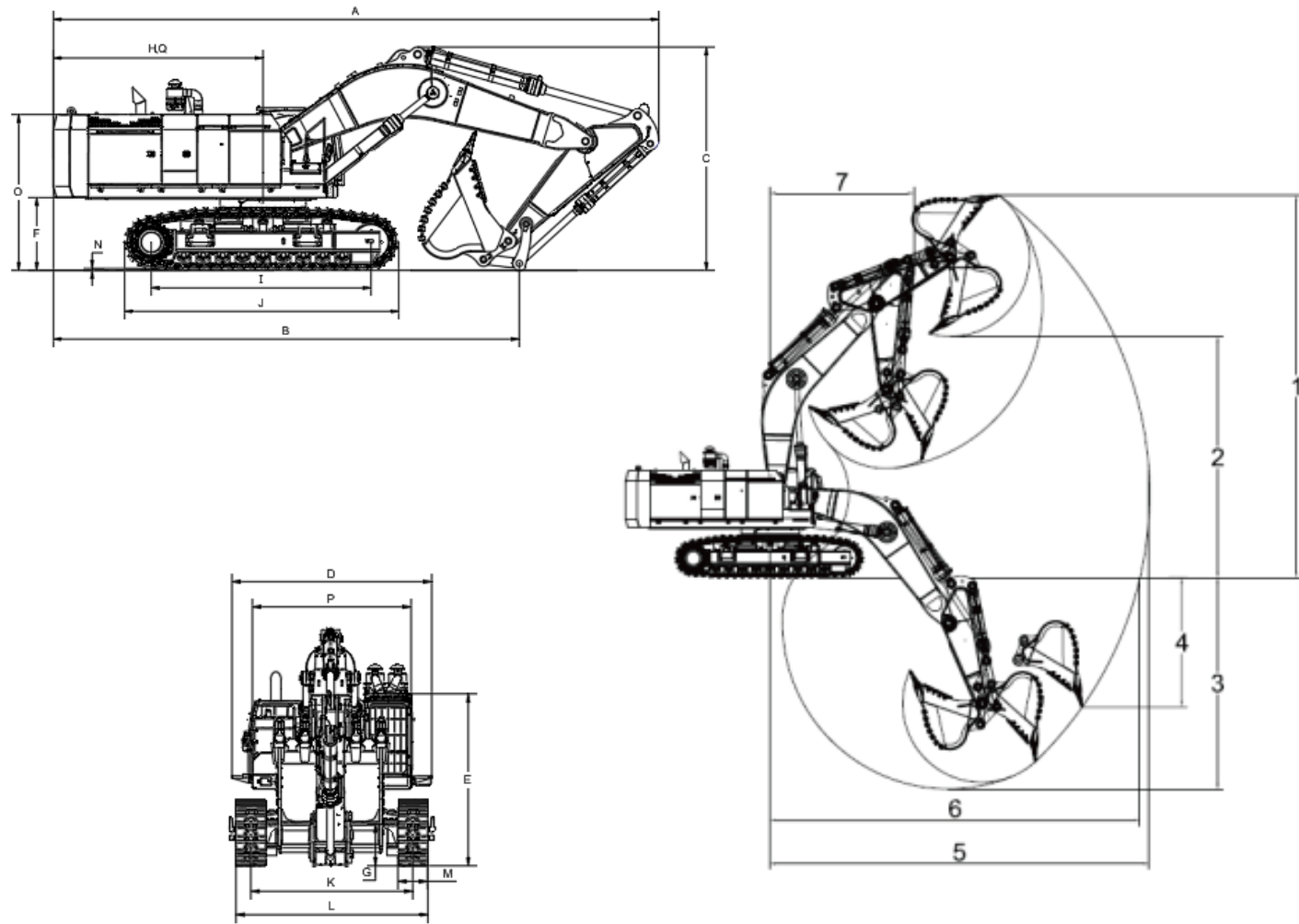


A	Total Length, mm	13935	K	Track Gauge, mm	2790/3550
B	Grounding Length of Transport Attitude, mm	8500	L	Undercarriage Width, mm	3440/4200
C	Total Height, mm	4870	M	Std. track Shoe Width, mm	800
D	Shipping Width, mm	4472	P	Rotary Platform Width, mm	4380
E	Cab Height, mm	3782	1	Max. Cutting Height,mm	12672
F	Ground Clearance of Counter Weight, mm	1695	2	Max. Dumping Height,mm	8253
G	Min. Ground Clearance, mm	920	3	Max. Digging Depth,mm	7010
H	Rear-end Swing Radius, mm	4950	4	Max. Vertical Excavating Depth,mm	4370
I	Ground Contact Length of Crawler, mm	5090	5	Max. Excavating Radius,mm	12509
J	Track Length, mm	6355	6	Max. Excavating Radius at Floor Level,mm	12177
			7	Min. Swing Radius,mm	4850



# WE AIM AT CUSTOMERS' SATISFACTION

Lovol Heavy Industry, a wholly state-owned subsidiary under WEICHAI Holding Group, was established in 2004. It currently possesses "three manufacturing bases and two innovation centers" .

Lovol Heavy Industry's business is one of the six core business segments of WEICHAI Group. Its products cover four main categories including excavators, loaders, off-highway mining trucks, and backhoe loaders. The R&D, production, and sales center of excavators, loaders, and backhoe loaders is located in Qingdao, covering an area of over 900 acres. The R&D and production center of off-highway mining trucks is located in Yangzhou, Jiangsu, covering an area of over 300 acres. Lovol Heavy Industry has gradually developed into a global leader in intelligent construction solutions by providing customers with intelligent products, equipment interconnection, intelligent construction, new energy products, and scenario solutions.





Official Website



Facebook

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Shandong Province,China.  
Website:en.wlovol.com

Z20250609-2

Information of Lovol Heavy Industry Agents

Ⓒ As manufacturer, LOVOL has right to constantly upgrade and improve our products without informing to customers.  
Ⓒ The pictures in literatures are for reference only, the detailed specifications are subject to real products.

**LOVOL**



Engine:  
WEICHAI 6M33

Rated Power:  
571kW/1800rpm

Total Machine Weight:  
101000kg

Standard Bucket Capacity:  
7.0m³

**FR1000F**

**EXCAVATOR**

Technical specifications and designs are subject to change without notice and additional equipment may be installed on the supplied machines.



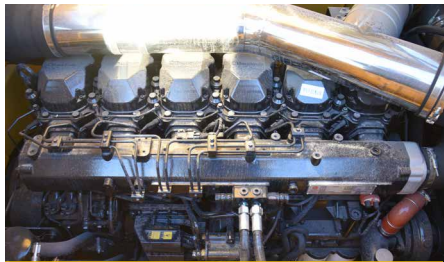
# 01

## Product Introduction

LOVOL

### Golden Hydraulic Power Assembly

LOVOL Customized WEICHAI 6M33 Engine + 1-in-3 Transfer Case + Independent Oil/Hydraulic Cooling System + WEICHAI 300cc Main Pump + Fully Electro-Hydraulic Control .



WEICHAI 6M33 Engine

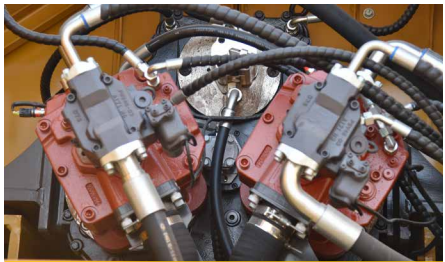
20L Large displacement

3600N·m

Low-speed high-torque performance with minimal fuel consumption.

571kW High power

1-to-3 power take-off case, with main pumps symmetrically distributed, featuring a compact structure and rational layout.



Large Displacement Main Pump

8.3%

Compared to Competitors, the Main Pump Displacement is Increased.

21°

Adopting the plunger pack slipper and 21° swash plate technology, the structure is compact and the power density is high.



WEICHAI Main Valve

3000000

The main valve body is made of vermicular graphite cast iron material, which has better shock absorption and thermal conductivity. Small shrinkage tendency to avoid spool jamming.

Withstood 3 million cycles of ultra-high pressure endurance testing without cracking, ensuring reliable quality.

### Reinforced Machine Body Efficient And Reliable

#### Large Capacity Earthmoving Special Bucket

- Standard configuration includes a 6.0 m³ rock bucket;
- Adopting a large-capacity earthmoving-specific bucket with an optimized shape, the cutting resistance is reduced, and wear resistance is increased by 25%;
- The front cutting edge is thickened to 100 mm and made of NM400 wear-resistant steel plate.



#### Large Cross-section Structure Design For Boom And Stick

- The work device structure has been completely upgraded, with a lifespan of over 15,000 hours.
- Optimize the hinge point of the boom and optimize the lock-up of the cylinder; Adopt large cross-section three-section structure design, the internal rib plate of the transition middle section with variable cross-section at the tail; Whole annealing treatment, stress 58%.
- Optimize the hinge point of the bucket rod to increase excavation force and optimize cylinder locking.
- Adopting a large cross-section structural design, with widened front and rear axle housings, thickened side plates, and increased cross-sectional area to enhance overall strength and rigidity.

#### Independent Water and Oil Coolers

- The machine features a reliable hydraulic-driven fan whose speed can vary according to temperature changes.
- The system utilizes hydraulic pumps and hydraulic motors for driving, which offers higher reliability.
- The reversible hydraulic motor allows the fan to blow in reverse, which helps to clear dust and debris from the radiator. This prevents clogging and maintains high cooling efficiency.

#### Reinforced Rotating Platform

- The rotating platform uses a heavy-duty structure, reducing stress by more than 40%.
- Platform structure upgraded, with increased spacing between the main beam and arm, significantly enhancing load-bearing capacity.

#### Sturdy And Durable Chassis Structure

- The chassis uses a split-type mining-specific chassis, with 100-ton class four wheels and one track;
- Split-type bolted lower carriage with double-supported idlers;
- The heat treatment process of track roller and crawlers has been upgraded, and the wear resistance has been improved by 50%.

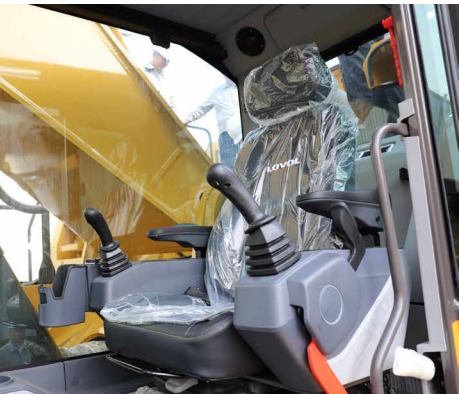
# 02

## Product Introduction

WE AIM AT  
CUSTOMERS'  
SATISFACTION

### Generation F Cabin

The newly developed Generation F cabin features a novel appearance and an overall layout that complies with ergonomic principles, enhancing visual experience, offering more storage space, and providing greater comfort for the operator.



#### Interior

New interior, ductwork, and air outlet design, increased storage space; seat improvements and upgrades for higher comfort.

#### First-Class Working Space

The newly developed Lovol intelligent operating system can achieve power system management, intelligent task interaction, automatic working condition recognition, auxiliary operations, and personalized customization functions;

Intelligent components such as a 10.1-inch touch screen display and one-key start switch.

#### Easier Maintenance

New walkway design for easier access to the vehicle;  
360° surround-view camera system enhances driving safety;  
Integrated fuel filter simplifies maintenance;  
Standard electric grease gun significantly reduces maintenance workload.

# 03

## Product Specification



#### Main Parameters

Operating Weight, kg	101000
Travel Speed, km/h	3.5/2.4
Swing Speed, r/min	5.6
Boom Length, mm	7250
Arm Length, mm	2925
Bucket Breakout Force, kN	501
Arm Crowd Force, kN	451
Max. Tracking Force, kN	618.3
Grade Ability 35, %	70
Ground Pressure, kPa	111.8



#### Power Module

Engine	
Manufacturer	WEICHAI
Model	6M33
Number of Cylinders	6
Aspirating Method	Turbocharged Intercooler
Displacement, L	19.6
Max. Torque, N·m/rpm	3600/1300-1500
Rated Power, kW/rpm	571/1800
Engine Oil	
Oil Capacity, L	68
Fuel Tank	
Capacity, L	1260



#### Platform Module

Type	Side-mounted With Tail
------	------------------------



#### Hydraulic Module

Main Pump	
Brand	WEICHAI
Model	HPR300L
Max. Flow, L/min	1085.7
Main Pump Type	2 independent variable displacement piston pumps + separate gear pump
Main Valve	
Brand	WEICHAI
Model	OCV36E
Maximum Flow, L/min	550*2
Swin Motor	
Brand	WEICHAI
Model	HMF249
Overflow Pressure, Mpa	29
Travel Motor	
Brand	KYB
Model	GR190H
Overflow Pressure, Mpa	36.8
Main Safety Valve Pressure, Mpa	
35	
Hydraulic Oil Tank	
Capacity, L	840
Chassis Module	
Type	H-frame track switching system
Track	
Track Shoe Width, mm	650
Track Roller	
Quantity (one side)	9

