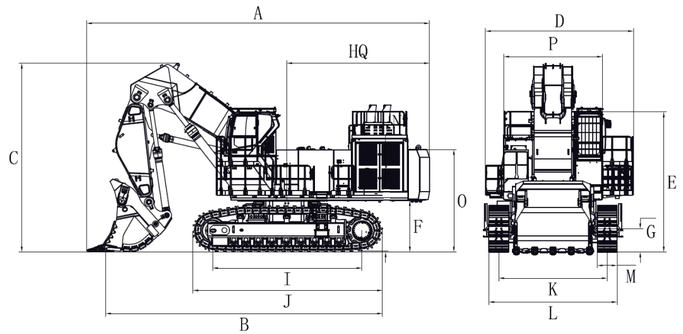
03 Product Specification

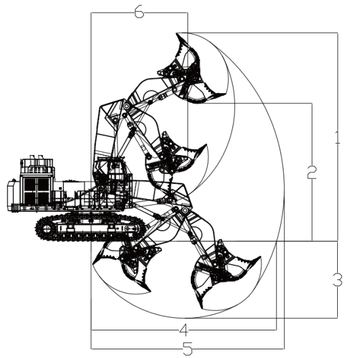
FR1500F

A	Overall length, mm	12980
B	Transport ground length, mm	10480
C	Overall height, mm	7150
D	Overall width, mm	5650
E	Cab height, mm	5475
F	Counterweight clearance, mm	1968
G	Min. ground clearance, mm	882

H	Tail swing radius, mm	5512
I	Track ground length, mm	5660
J	Track length, mm	7210
K	Track gauge, mm	4100
L	Undercarriage width, mm	5280
M	Track shoe width, mm	750
P	Upper structure width, mm	5604



1	Max. digging height, mm	13517
2	Max. dumping height, mm	9336
3	Max. digging depth, mm	4982
4	Min. crowd reach, mm	11977
5	Max. digging reach, mm	12477
6	Min. swing radius, mm	6244



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

LOVOL HEAVY INDUSTRY GROUP CO.,LTD.

Address:No.75,Huanghe East Road,Huangdao District,Qingdao City, Shandong Province,China.

Website:en.wlovol.com Z20261110

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 Model: WEICHAI 8M33

Rated Power: 680kW/1800rpm

Total Machine Weight: 150000kg

Standard Bucket Capacity: 10m³

FR1500F 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

Core Components

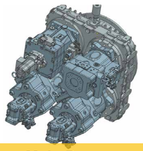


WEICHAI 8M33

680kW

Custom Weichai twin-turbo-charged engine.

Large displacement, low speed and high torque deliver 680kW of power.



Main Pumps

A four-output transfer case drives 2 Hengli radial-suction main pumps, 1 axial-suction main pump and 1 Linde closed-loop swing pump.

Hengli main pumps deliver 300ml/r displacement for faster response and high reliability.



LOVOL Smart Control

10-inch HD touchscreen and 360° panoramic cameras.

Pair a phone via Bluetooth to remotely switch machine power, start / stop the engine, control A/C and lighting, and perform simple remote operations.

STRONG. EFFICIENT. RELIABLE.



OPTIMIZED DIGGING

·Simulation and structural optimization improve strength.
·A large 10m³ bucket increasesproduc-tivity.
·Strong digging force maintains efficiency in harsh conditions.
·D-grade steel suits low-temperature operation.
·Full post-weld heat treatment reduces residual stress.
·Dual-line automatic lubrication and a semi-automatic grease gun reduce maintenance effort and labor costs.

INDEPENDENT COOLING

·A variable cooling pump adjusts flow and fan speed to temperature, reducing overflow losses.
·Interchangeable water / oil fan pumps, motors and directional valves reduce spare-parts variety and improve commonality.

REINFORCED PLATFORM

·A triple-row roller slewing bearing provides tighter clearance and greater strength.

DURABLE CHASSIS

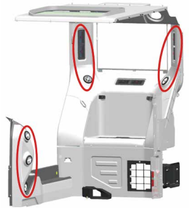
·A reinforced split undercarriage for large mining Excavators includes full track guards as standard for greater strength and reliability.
·Shantui 150T-class track components use upgraded heat treatment for rollers and links to improve wear resistance.

02 Product Introduction

WE AIM AT CUSTOMERS' SATISFACTION

Cab

The new Lovol smart operating system integrates powertrain management, smart interaction, automatic work-mode recognition, assisted operation and personal settings.



FIRST-CLASS WORKSPACE

Excellent visibility supports productive operation.
A well-arranged mining cab features fully automatic high-output heating and A/C with multiple outlets. Multi-point damping reduces vibration and noise, providing a spacious, comfortable workspace and reducing fatigue.
A large display and multi-camera monitoring eliminate blind spots for safer work.
A high-capacity handheld fire extinguisher is standard.
3 emergency stop switches are located in the cab, engine compartment and under the left walkway.

EASIER MAINTENANCE

Convenient service access and engine-compartment lighting simplify maintenance.

03 Product Specification

FR1500F

PERFORMANCE	
Swing speed, rpm/min	4.8
Low travel speed, km/h	2.1
High travel speed, km/h	3.1
Max. traction force, kN	1031
Gradeability, %	51
Ground pressure, kPa	158.1
Bucket digging force, kN	714
Arm digging force, kN	652

POWERTRAIN	
Engine make / model	Weichai / 8M33
Cylinders-bore*stroke, mm*mm	8-150*185
Displacement, L	26.1
Aspiration	Turbocharged
Emissions	Tire III
Max. torque, Nm/rpm	4450/1300
Top-gear speed, rpm	1550
Engine oil, L	95
Fuel tank, L	1900

FRONT ATTACHMENT	
Boom weight, kg	10430
Arm weight, kg	6269
Bucket weight, kg	12984
Bucket width, mm	2860

HYDRAULICS	
Control system	Electronic positive flow
Main pump type	4 variable piston + gear
Main pump quantity	3+1
Main pump displacement, cc/rpm	3*300+281.9
Max. pump flow, L/min	1616.2
Main relief pressure, MPa	35
Max. main valve flow, L/min	550*2
Swing motor quantity	2
Swing motor displacement, cc/rpm	210
Max. swing motor flow, L/min	567
Swing relief pressure, MPa	35
Min. travel motor displacement, cc/rpm	228.6
Max. travel motor displacement, cc/rpm	337.2
Max. travel motor flow, L/min	550
Hydraulic tank, L	1588
Total hydraulic system, L	-

UNDERCARRIAGE	
Frame type	H-frame, fixed track gauge
Slewing bearing teeth	107
Track rollers per side	9
Carrier rollers per side	3

UPPER STRUCTURE	
Platform layout	Conventional tail / side layout

