



SY135C

Engine power

78.5kW/2000rpm

Bucket capacity

*0.6m³

Operating weight

14870kg

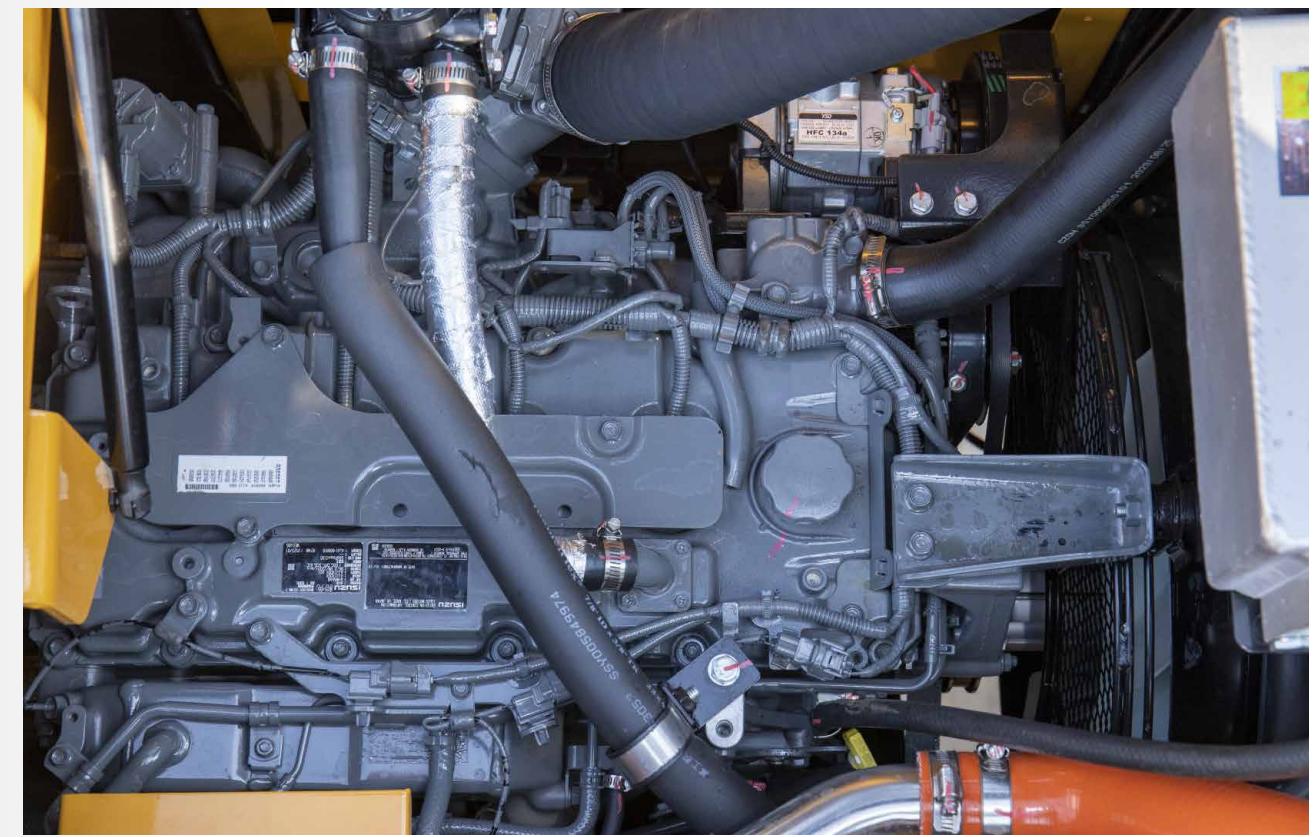


SANY HEAVY MACHINERY LTD

<http://www.sanyglobal.com>

This manual was printed in 2023. The product information may have been changed when you read it. Products (including specific configuration, detail, etc.) are based on the specific models and products applicable to markets outside China, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Ltd.

* Bucket is optional



Strong power



► Engine



► Main valve



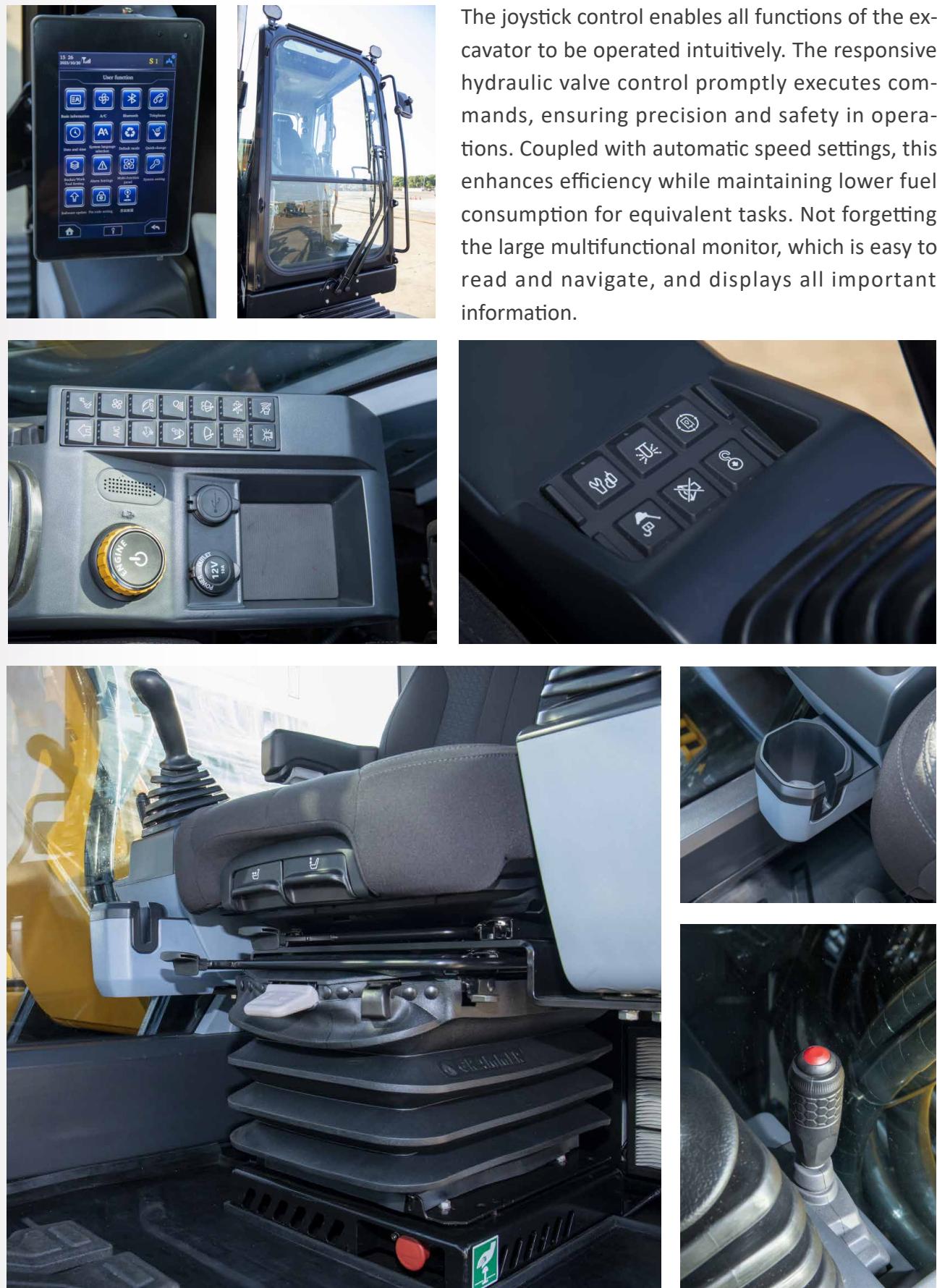
► Main pump

More work with less fuel – the SY135C's sophisticated engine and hydraulic concept make this a reality. The hugely powerful diesel engine is equipped with common rail technology and AdBlue emission control, so that the maximum torque of 375nm can be reached at an engine speed of 1800rpm. Various operating modes and automatic speed reduction options optimize fuel consumption, showcasing a synergy of power and efficiency.



Comfortable driving

A key feature of the SY135C is comprehensive comfort for its drivers. Excellent insulation around the cab provides reliable protection from noise and vibrations, as well as from high and low temperatures. The air-suspension driver's seat, provided as standard, offers the optimal comfort and fatigue prevention, featuring a high seat backrest and various adjustment options. Plenty of space and room for movement, a radio and a 12 V jack, adjustable ventilation, heating and an automatic climate control system, a huge amount of stowage space, extensive storage options, and various amenities contribute to a well-rounded comfort.

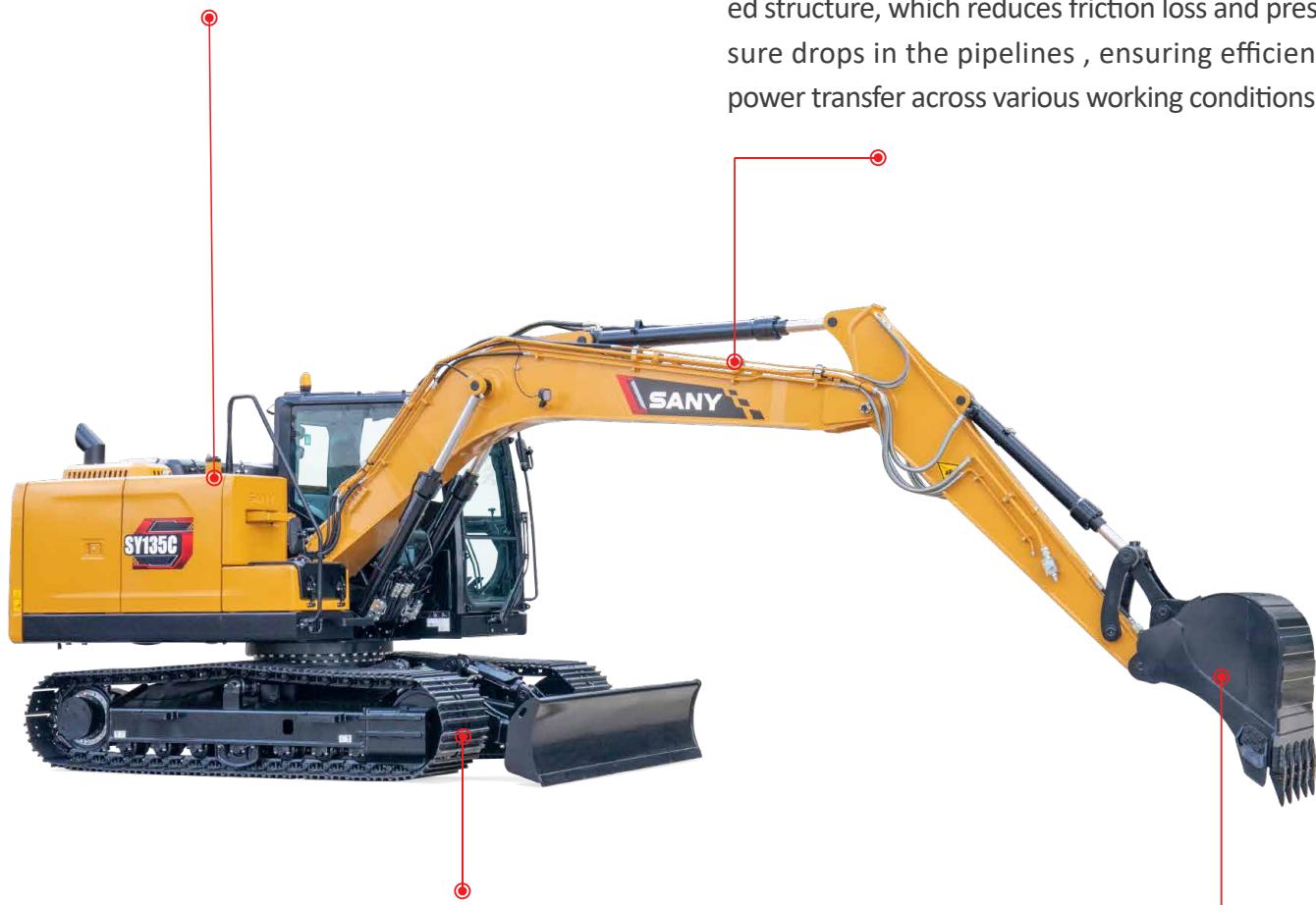


The joystick control enables all functions of the excavator to be operated intuitively. The responsive hydraulic valve control promptly executes commands, ensuring precision and safety in operations. Coupled with automatic speed settings, this enhances efficiency while maintaining lower fuel consumption for equivalent tasks. Not forgetting the large multifunctional monitor, which is easy to read and navigate, and displays all important information.

Super adaptability

Minimum risks

Ergonomic handrails enable safe access to the maintenance platform. Large mirrors facilitate safe movement during operation. Furthermore, the integrated safety valves keep the boom and arm in position, even in the worst-case scenario.



Durable and robust construction

Durability and robustness are standard features on all SANY excavators. The SY135C's reinforced structure provides exceptional stability to the chassis, significantly extending the machine's overall service life. What's more, all of the panels are made solely of metal, which makes them particularly resilient.

Right Pressure for optimal performance

Both powerful variable displacement axial piston pumps are operated in such a way that they only build up as much pressure as is actually required. This intelligent design not only conserves fuel but also extends the lifespan of components. In addition, its hydraulic system has a sophisticated structure, which reduces friction loss and pressure drops in the pipelines, ensuring efficient power transfer across various working conditions.

Super easy management

More work with less fuel – the SY135C's sophisticated engine and hydraulic concept make this a reality. The hugely powerful diesel engine, equipped with common rail technology and AdBlue emission control, puts on a strong show with its maximum torque of 375 Nm and 1 800 rpm. Various operating modes and automatic speed reduction options optimize fuel consumption, showcasing a synergy of power and efficiency.

Quality

Quality is worth it – High-quality components improve the machine's durability, and extends the intervals between each maintenance and service.

Dimensions

Compact power – The SANY SY135C tackles work extremely efficiently as a compact excavator. High performance and impressive stability – the perfect combination completes all tasks quickly and reliably on the construction site.

User experience

Easy to maintain – The engine bonnet that can be fully opened and the clear arrangement of the key components in the centre make maintenance and service quick and easy.



Flexibility as standard

The full hydraulic arrangement of the quick-change system guarantees that functions are perfectly integrated into the control menu, facilitating quick and safe attachment replacement. A further benefit is time and cost savings compared with regular retrofitting.

Safety

Comprehensive protection – The hydraulic cylinders are optimally protected against damage thanks to their careful arrangement and stable protective plates.

Components

Reliable drive – The tried and tested ISUZU-4JJ1X engine guarantees reliable performance in the long term, even in harsh working conditions.

Economy

Efficiency and power – The smart control system adapts the pump capacity to the available engine power for greater cost effectiveness and reduced fuel consumption.

Complete research & development and test system

SANY has established 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 RGV assembling line and fullautomatic welding robots, and possesses high precision machining equipment and precise machining center.

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



Performance you can rely on

The SY135C resoundingly proves that the performance of a compact excavator is not necessarily determined by bulky size. Weighing a total of almost 15 tonnes, it offers the optimum ratio of power to manoeuvrability. In addition, the robust, wide heavy-duty undercarriage and the robust shovel bucket provide a high level of stability. This allows it to optimally apply its power – for a comprehensive range of applications anywhere where larger machines have to fit.

Quality is worth it

High-quality materials and careful machining are the basis for a long service life. This is part of a sophisticated concept. For example, the boom on the topside and underside is manufactured from one single sheet and welded continuously from front to back.

Compact power

The machine offers excellent excavating forces at maximum stability for its class.

Easy to maintain

All routine checks and work on the machine can be carried out quickly and easily. For example, the machine's various bearings can be lubricated with grease nipples from just one point.



Comprehensive protection

Safety for users, machines and the working environment is of the utmost importance at SANY. The SY135C's safety equipment, amongst other features, a driving alarm and rotating beacon, an overload warning for lifting, safety valves and of course the corresponding protective plates over the blade cylinders.

Reliable drive

The powerful Isuzu-4JJ1X engine with AdBlue emission control ensures that the correct forces are applied for all tasks.

Efficiency and power

In conjunction with the electronic fuel injection, the autothrottle function adjusts the engine speed to the power required. This means that the smart hydraulic system reduces the fuel consumption, engine wear and exhaust emissions.

Parts warehouse & service network

- Parts Warehouse: **500** parts warehouses
- Service Network: **600** service networks and **4,000** service engineers



Technical specifications

Specification	Main performance		
Operating weight	14870 kg	Traveling speed (high/low)	5.3/3.1 (km/h)
Bucket capacity	0.6 m ³	Gradeability	70%(35°)
Model	ISUZU 4JJ1X	Slewing speed	12 rpm
Type	Water-cooled, 4 cylinder, with common rail and AdBlue	Ground pressure	39 kPa
Engine power	78.5 kW/2000 rpm	Digging force of bucket	93 kN
Maximum torque	375 Nm/1800 rpm	Digging force of arm	66 kN
Displacement	2999 ccm		

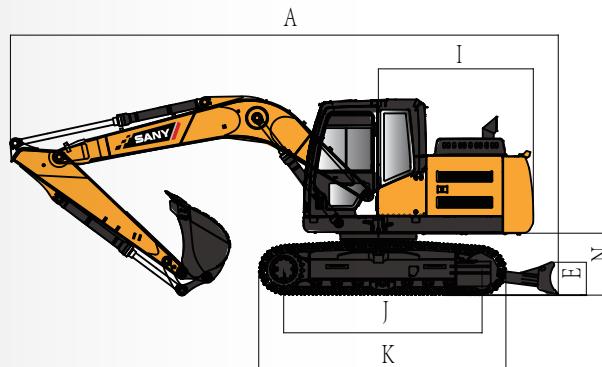
Capacity of oil and coolant	Under and upper structure		
Fuel tank	240 L	Boom length	4600 mm
Engine coolant	27 L	Arm length	2500 mm
Engine oil	16.7L	Bottom roller	1
Drive (per side)	2.1 L	Top roller	7
AdBlue	20 L	Rotation device	Planetary gear reducer driven by an axial piston motor, automatic hydraulic released gyration brake

Table of lifting capacity

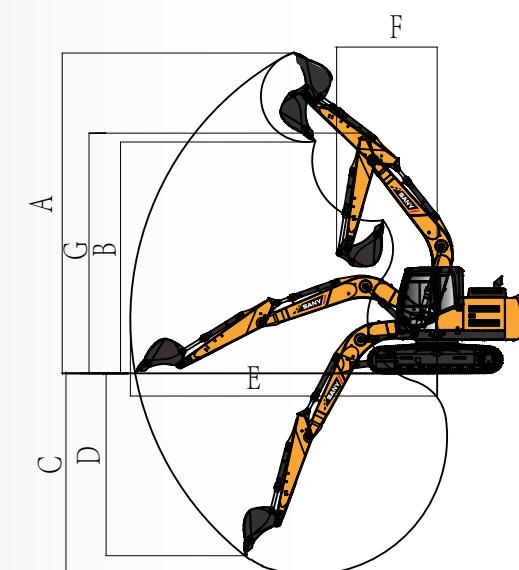
	2.0m	3.0m	4.0m	5.0m	6.0m	6.0m	7.5m	Maximal	Digging reach
Load point height	2.0m	3.0m	4.0m	5.0m	6.0m	6.0m	7.5m	Maximal	
7.0m kg		3200	3200				2550	2550	
6.0m kg			3150	3150			2250	2250	
5.0m kg				3500	3500	2400	2400	2400	2400
4.0m kg				3950	3950	3700	3500	3550	2650
3.0m kg			5800	5800	4650	4650	4050	3400	3700
2.0m kg			7500	7500	5450	4500	4500	3300	3950
1.0m kg			6800	6800	6150	4300	4900	3200	4150
ground kg			6750	6750	6300	4200	4900	3100	4300
-1.0m kg			4550	4550	8450	8450	6250	4100	5200
-2.0m kg			6900	6900	8150	8150	6300	4100	5000
-3.0m kg			9600	9600	7200	7200	6350	4150	4350
-4.0m kg			5500	5500	5500	4150			3550

* at 600 mm track pads width

Machine dimensions



Overall dimensions (mm)	SY135C
A. Total length (during transportation)	8100
B. Overall width	2590
C. Total height	2960
D. Upper width	2490
E. Height of shovel bucket	480
F. Width of standard track shoe	600
G. Track gauge	1990
H. Minimum ground clearance	425
I. Gyration radius	2290
J. Wheel base	2930
K. Track length	3665
L. Track height	809
M. Cab width	1000
N. Ground clearance of counterweight	935



Operation range (mm)	SY135C
A. Maximum digging height	8690
B. Maximum unloading height	6280
C. Maximum digging depth	5460
D. Maximum vertical digging depth	4950
E. Maximum digging distance	8320
F. Minimum gyration radius	2720
G. Max. height at min. gyration radius	6520

Standard configuration

Operators comfort / cabine	Working equipment
Airsuspension	• Boom and arm load holding valves with overload indicator
Heater	• Double acting circuit for hydraulic quick coupler with piping
Automatic air conditioning C/H	• Breaker&Shear line proportional on Joystick with piping
Radio and speaker	• Rotation line proportional on Joystick with piping
Armrests (adjustable)	• Flow adjustment for attachments
12v outlets	• Dozer blade
Wiper	• Without dozer blade
parallel wiper	•
Sky light openable	•
Integrated cooling box	•
AUX 1 on Joystick	•
AUX 2 on Joystick	•
Removable front-window	•
Rubberfloor	•
heated seat	•

Hydraulic system	Safety
Swing brake	• Battery master switch
2 speed travel	• Warning beacon
Hydr. pre-pressure operating joysticks	• Lockable hoods
Piping for additional hydraulic function AUX 1	• Handrails
Piping for additional hydraulic function AUX 2	• Lockable fuel cap
Mainfilter	•

Working lights	Engine	Undercarriage
Lights – front (LED)	• Auto idle	• Steel tracks
Lights – boom (LED)	• Diesel filter	• Safety valves on shovel bucket's cylinder
Lights – platform (LED)	• Airfilter	• Holes/loops for fixing

Standard equipment • Special option •