

## Standard Configuration

### Power system

- H, S, L and B modes control
- 24V/5.0kW starter motor
- 50A alternator
- Air filter
- Engine oil filter
- Fuel filter
- Engine oil cooler
- Radiator with protective screen
- Auxiliary radiator water tank
- Fan deflector
- Isolated mounted engine
- Automatic idling system

### Hydraulic system

- Operating mode selector button
- Control valve with main overflow valve
- Spare oil port of control valve
- Oil suction filter
- Oil return filter
- Pilot filter

### Upper slewing platform

- Sensor
- Hydraulic oil level gauge
- Toolbox
- Slewing motor
- Guard rail

### Cab

- Sound-proof steel-structure cab
- Reinforced light-color glass window
- Silicone oil rubber damper support
- Openable top/front wall upper window and left side window
- Emergency exit on rear window
- Wiper with washer
- Adjustable tilting seat with adjustable armrest
- AM-FM radio
- Loudspeaker
- Foot rest and floor mat
- Seatbelt and fire extinguisher
- Cup holder and reading lamp
- Ash tray and escape hammer
- Storage box and sundries bag
- Pilot control cut-off lever

### Monitoring system instruments

- Hour meter and fuel tank oil level gauge
- Engine coolant temperature
- Engine oil pressure gauge

### Alarm system

- Insufficient engine oil pressure
- Engine coolant temperature too high
- Insufficient fuel volume
- Blockage of air filter
- Throttle rotary knob failure
- Failure alarm system

### Traveling body of undercarriage

- Traveling motor
- Traveling motor guard plate
- H-shaped track guide mechanism
- Hydraulic tensioning device of track
- Bolted driving wheel
- Carrier roller and thrust wheel
- Reinforced chain track with pin shaft seal
- Frame drawbar device
- 960mm single-rib track plate
- Reinforced side pedal
- Bottom cover plate

### Others

- Standard battery
- Lockable engine hood
- Lockable fuel filler cap
- Traveling direction sign on traveling frame

### Front-end working device

- Flange pin
- Bucket clearance adjuster
- Welded connecting rod
- Central lubrication system
- All bucket pins are equipped with dustproof seal ring
- 4.6m reinforced all-welded box-type boom
- 2.5m reinforced all-welded box-type bucket rod
- Anti-collision guard plate

# SY135F

**NEW QUALITY**  
**CHANGES THE WORLD**

Leading Innovation  
Splendid SANY



**SANY Heavy Machinery Co., Ltd.**

SANY Industrial Park, Dongcheng Avenue,  
Kunshan Economic & Technological Development Zone, Jiangsu Province

- Post code: 205300
- After-sales service hotline: 4008282318
- Consulting & complaint hotline: 4008282333
- www.sany.com.cn

**Note**

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# SY135F



## Customized Working Condition and Reliable Upgrade

**New Generation of SY135F  
Upgraded Forestry Excavator**



## SELLING POINTS

SY135F is an upgraded forestry excavator specially developed for the global forestry market. It is customized and developed to be a high reliability machine suitable for working conditions such as hill grabbing, swamp grabbing and palm cutting.

SY135F has the characteristics of "High Reliability, High Cost-performance Ratio, Big Tractive Force, High Efficient & Energy Saving". It provides a variety of options for auxiliary pipeline, track, working light and drawbar device, and leads in the product differentiation.



High reliability



High cost-performance ratio



Big tractive force



High Efficient & Energy Saving

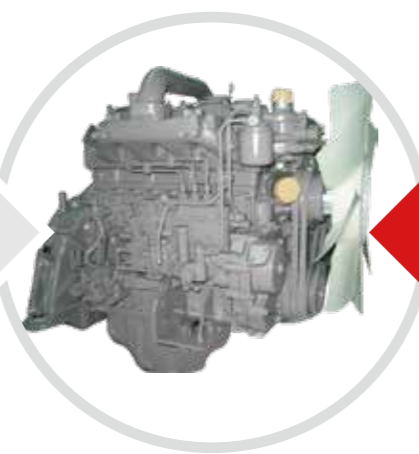
# Excellent performance

## ○ More powerful

### Engine

- The Isuzu 4BG1 engine specially designed for Sany is adopted, so that the dynamic performance is strong and the performance is reliable.

Imported Isuzu engine



### Advantages of Isuzu engine:

- It is widely used and well recognized by customers
- It is sturdy, durable and fuel-saving, fitted with low-cost spare parts and is convenient for maintenance. It should be the first choice for the excavator.

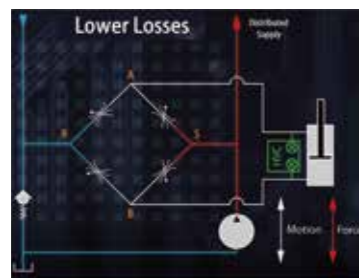
## ○ More perfect operation

### Electrically-controlled positive flow

- Sany adopts the electrically-controlled positive flow hydraulic system and three unique technologies: accurate flow distribution technology, which reduces the pressure loss of system; hydraulic system buffer technology, which improves the operation efficiency, control performance and flat-ground performance of excavator. The excellent micro-operation performance can provide you with the almost perfect operation experience.



Accurate flow distribution technology



Reduced system pressure loss



Hydraulic system buffer technology

## ○ Lower energy consumption and higher efficiency

### Fuel consumption and efficiency

- Compared with the old forestry excavator, the fuel consumption of Gear H11 of SY135F upgraded model is reduced by 8% under the same efficiency, and the comprehensive energy consumption competitiveness is significantly improved.



The above data are from the comparative test of Sany Indonesian Company, and the test data under different working conditions may be different from this data.

# High reliability

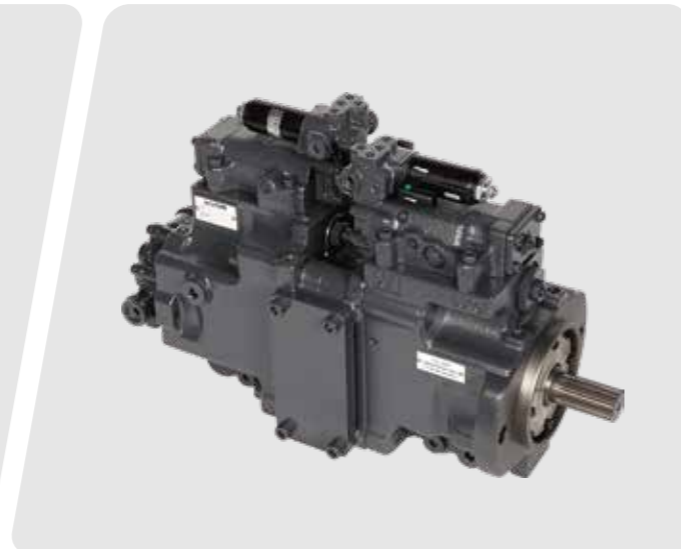
## ○ Top-ranking core configuration

### Core configuration

- The **Isuzu engine specially designed for Sany** is adopted, which can ensure the reliability of machine during operation under severe operating conditions.
- A complete set of **positive-flow hydraulic system** makes the operation performance of the whole machine more comfortable with higher reliability.
- **Reinforced structural members** with brand-new design have longer service life.



Engine



Hydraulic pump



Traveling motor



Slewing motor



Multi-way valve

## ○ Upgraded electrical system

### Electrical

- The upgraded model is equipped with 7" display screen, which makes the operation of large screen more convenient.
- The platform lighting has been upgraded with dual protections of protection and anti-collision.
- The customized working condition program is developed to optimize the coordination of compound actions and improve the micro motion of operations.



## ○ Upgraded covering parts

### Covering parts

- The upgraded front hood improves the anti-collision performance.
- A steel wire screen is installed on the engine hood to prevent falling leaves from entering the power cabin and causing fire.
- According to the forestry working conditions, the air inlet area at the left door is increased to improve the heat balance performance.



○ Reinforced structural members

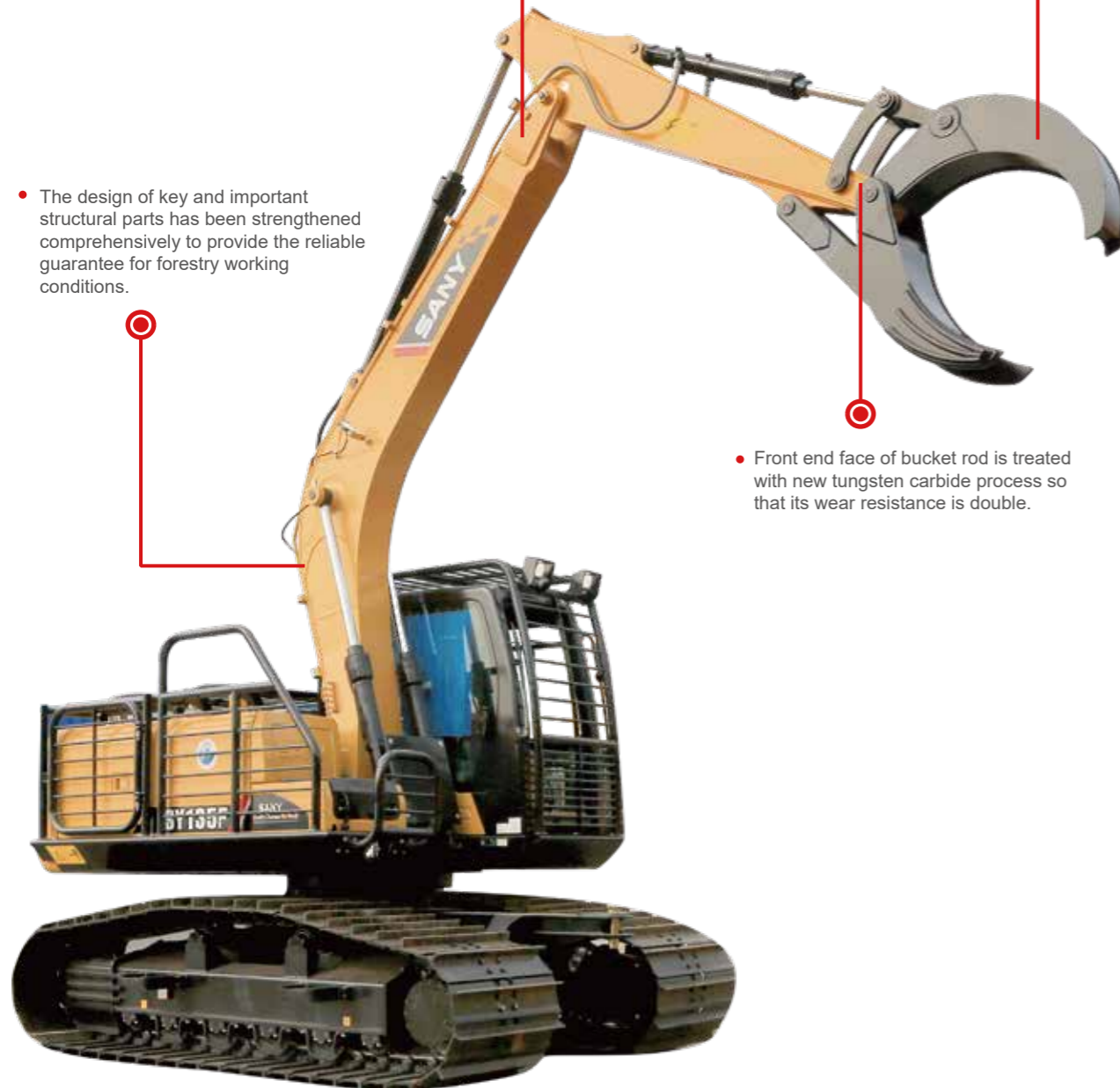
- The strength and height of the reinforced boom are improved, and the shaft sleeve is added to improve the wear resistance.



- The reinforced wood grabber can greatly improve the mechanical properties and create a powerful jungle assistant.



- The design of key and important structural parts has been strengthened comprehensively to provide the reliable guarantee for forestry working conditions.



- Front end face of bucket rod is treated with new tungsten carbide process so that its wear resistance is double.

- The front and rear supports of the reinforced bucket rod are equipped with large diameter pin shafts, which are more reliable for forestry working conditions.



- It is equipped with assembled oil cylinder guard plates to comprehensively protect key and important mechanisms.



- It improves the passing performance of chassis and optimizes the convenience of maintenance. The large-diameter tension spring can cope with complex working conditions of forestry.



## ○ Sound R&D and test system

### Test system

- Sound R&D and test system is the strong backup for excellent performance.
- It 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 and important parts and components like working device, cab and hydraulic components etc. must be subject to fatigue test over **800,000 times**.



## ○ Leading manufacturing technology

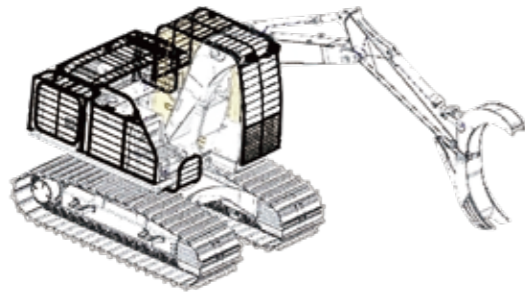
### Manufacturing technology

- Leading manufacturing technology is a reliable guarantee for producing excellent products.
- SANY has **RGV assembly line** and **full-automatic welding robots**, and possesses **high-precision machining equipment** and **precise machining center**.
- SANY's manufacturing and assembly lines won Five-star National Site in 2013 and National Quality Award in 2014.



# SAFETY AND ENVIRONMENTAL PROTECTION

## ○ Upgraded vehicle protection configuration



- The vehicle protection device has been customized and upgraded to enhance the driving confidence of operators.
- A new right front guard is added to ensure the collision avoidance and convenience.
- The dense guardrail of the cab can protect the operation safety in the whole process.



## ○ World-class environmental protection standard

### Recoverable

- Metal covering parts are used, which are recoverable and environmental-friendly; materials liable to pollution like FRP is not used.



### Environmental protection

- Environment-friendly engine is equipped and meets latest standard of National II.
- Aluminum radiator and oil cooler are used.
- Environment-friendly paint is used to minimize environmental pollution.
- Garden-type manufacturing site.



# Comfortable and convenient

## o Comfortable Driving • Warm like Home

### Comfortable experience

- With high-grade trim parts, wide view, air suspended seat, excellent vibration damping and noise reduction performance, the driving experience will be more comfortable.
- Cigar lighter, ashtray, cup holder, file box and reading lamp all are complete.





# SPECIAL CONFIGURATION



## o Special configuration

- SY135F upgraded version is available in many configurations, so as to meet the needs of different countries and customers.

Bucket rod configuration	
Standard bucket rod (standard configuration)	2.5m
Long bucket rod (optional)	3.0m

Track configuration	
Single-rib track (standard configuration)	960mm
Three-rib track (optional)	800mm

Accessories and pipeline configuration	
Wooden claw (standard configuration)	
Standard bucket (optional)	0.6m <sup>3</sup>
Crushing hammer pipeline (optional)	

Electrical configuration	
7" display screen (standard configuration)	
Working light above oil tank (optional)	
Alarm lamp, A/C (optional)	

## ○ Technical specifications

Specification	
Overall weight	16800kg
Bucket capacity	0.60m <sup>3</sup>

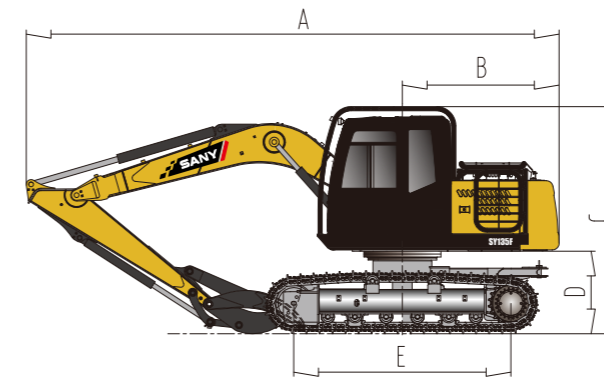
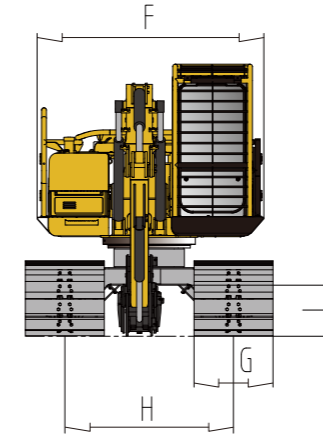
Engine	
Model	4BG1TRP
Type	4-stroke, water-cooled, overhead valve, direct injection, turbocharged
Rated power	72.7kw/2200rpm
Maximum torque	349.1Nm/1600rpm
Displacement	4.329L

Capacity of oil and coolant	
Fuel tank	300L
Hydraulic oil tank	175L
Engine oil	13L
Radiator	10L
Final drive	2×2.6L
Slewing drive	3L

Main performance	
Traveling speed (high/low)	4.2/2.6(km/h)
Slewing speed	13.8rpm
Gradeability	70% (35°)
Ground pressure	32.9kPa
Digging force of bucket	90.6kN
Digging force of bucket rod	57.2kN

Traveling part	
Number of track plates	41
Each carrier roller side	2
Each thrust wheel side	6
Standard track	960mm

## ○ Overall dimensions (mm)



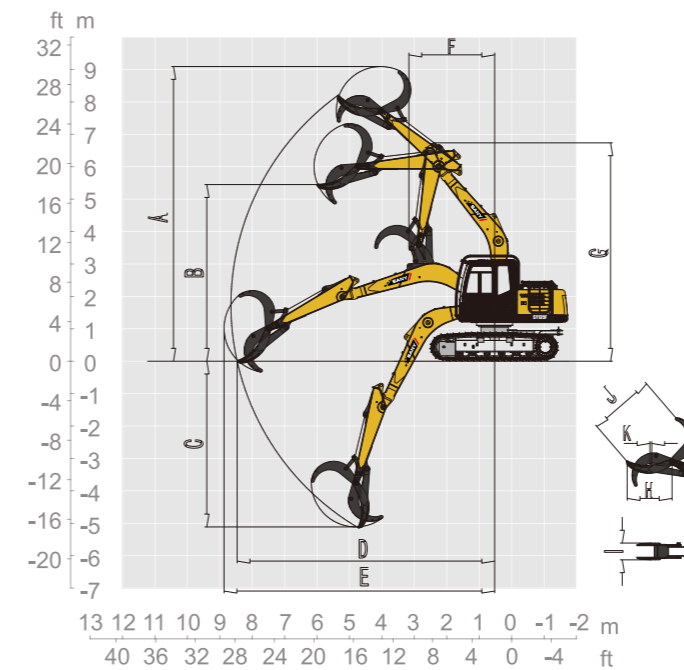
Machine Dimensions	(Unit:mm)	SY135F
A Shipping length		7760
B Tail swing radius		2286
C Shipping height		3308
D Ground clearance of upper structure		1202
E Track grounding length		3160
F Top width		2756
G Standard width of track shoe		960
H Gauge		2050
I Min. ground clearance		620

Performance Parameter	Standard	SY135F
Operating weight(kg)		16800
Bucket capacity(m <sup>3</sup> )		0.6
Engine model	ISUZU	4BG1-TABGC-03-C2
Engine power ( kW/rpm )		72.7 / 2200
Travel speed (km/h)		4.2/2.6
Swing speed ( rpm )		13.8

## ○ Table of Lifting Capacity

condition	Load point height m	Load radius								
		3.0m		4.5m		6.0m		AT max.reach		
	Lifting height m	3.0m		4.5m		6.0m		AT max.reach		meter
Boom	4.5			3921	3921			2272	2272	6.52
4.6m	3	6645	6645	4813	4813	4104	4101	2820	2820	6.97
Arm	1.5	7983	7983	5999	5999	4507	4201	3071	2876	7.08
2.5m	0	8149	8149	6347	6265	4539	4116	3178	3178	6.86
shoe	-1.5	9193	9193	6244	6208			3846	3846	6.27
960mm	-3	7618	7618					4161	4161	5.2

## ○ Operating range (mm)



Operation Range	(Unit:mm)	SY135F
A Maximum cutting height		9102
B Maximum dumping height		5515
C Maximum digging depth		4995
D Maximum horizontal reach		7832
E Maximum digging reach		8385
F Minimum swing radius		2638
G Maximum height at minimum swing radius		6809
H Grapple length		1226
I Grapple width		558
J Maximum grapple opening		1750
K Minimum grabbing radius		50



Customized Working  
Condition and  
Reliable Upgrade **SY135F**

**New Generation of SY135F  
Upgraded Forestry Excavator**

