



# SANY

Quality Changes the World



## SANY HYDRAULIC EXCAVATOR SY335C/SY365C

## ENERGY SAVING STAR, LEADING THE INDUSTRY

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**P1**

The Engine Customized For Sany  
Realized High Efficiency And  
Low Consumption

**P3**

Less Vibration and Low Noise  
Luxurious and Comfortable Cab

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Optimized Control System  
Super-large LCD Controller

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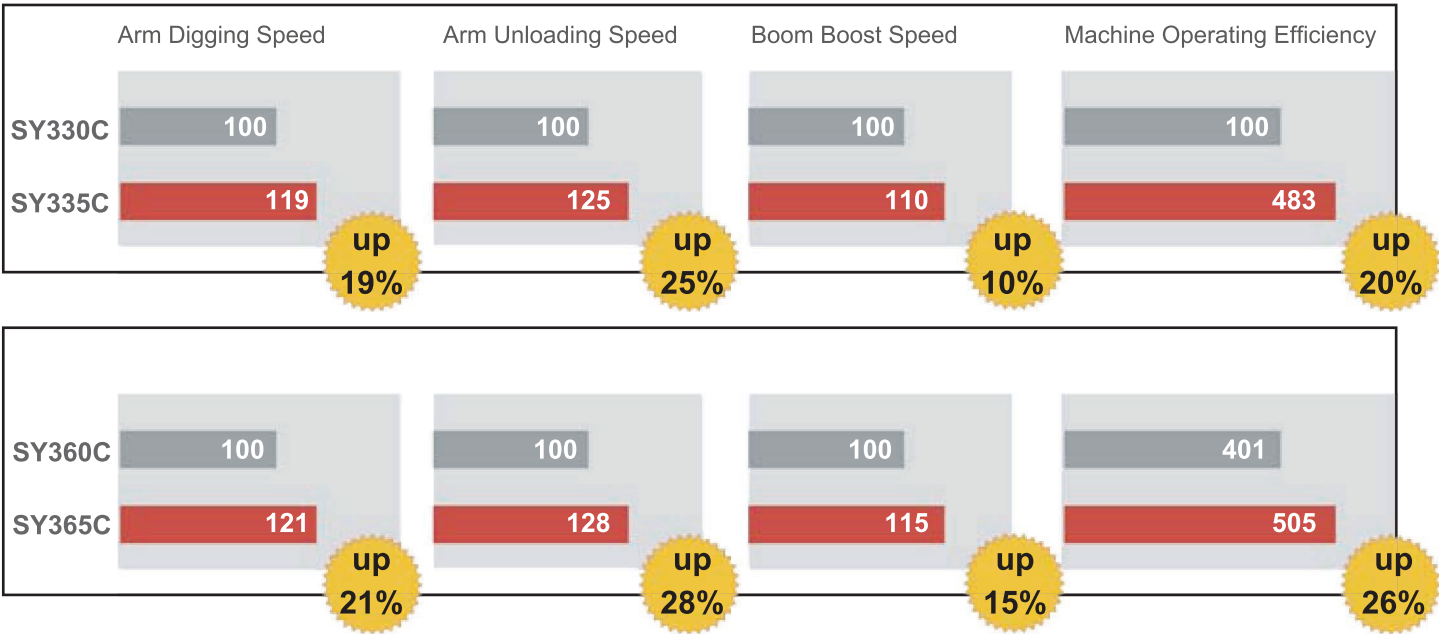
Standard & Optional



# THE ENGINE CUSTOMIZED FOR SANY REALIZED THE HIGH EFFICIENCY AND LOW CONSUMPTION



With a dual-pump, dual-circuit constant power control system, the engine can fully develop its power. The perfect combination of this two realizes the heavy-duty mode with large workload, the standard-mode with auto-adjusted engine speed and light-duty mode, high efficiency and low fuel consumption, while optimizing the combustion.



### ◆ Arm Regeneration Circuit, Faster Digging Speed and Lower Energy Loss

A quick circuit is added to the arm oil cylinder circuit. The hydraulic oil in arm cylinder rod end does not return the tank but goes directly to the cylinder head end. The arm speed is increased as a result. The fuel consumption is low under this condition.

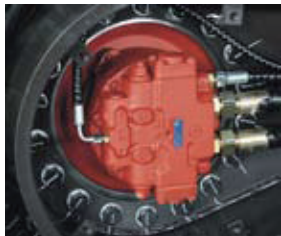
### ◆ Auto Deceleration System

The function of auto deceleration or acceleration reduces fuel consumption by 5-10%. When an operation has been stopped for 3 seconds, the engine speed drops automatically to idle level and maintains the idling state. When the operation is resumed by maneuvering the control levers, the engine speed will increase to the set rpm within 0.1 second. The working capability is resumed instantly.

## Powerful Travel Ability

### ◆ Large-torque Travel Mechanism

The latest Nabtesco Large-torque travel mechanism is adopted to enhance driving force and reliability, and improve operational efficiency.



SY335C travel motor driving force increased to 274KN.

### ◆ Travel Pilot Valve with Hydraulic Damping Device

When machine is being started or stopped, this device improves machine travel manageability via vibration absorption and reduces operation fatigue.



SY365C travel motor driving force increased to 320KN.

### ◆ Secondary Boosting Technology

Overall machine overflow pressure can be increased without pressing the secondary boosting button to improve excavation force and operation speed.

### ◆ Precise Swing Control

Improved vibration absorption and ensures smoothness of swing operation.

### ◆ Optimized Main Valve

Optimized Kawasaki main valve customized for Sany with excellent combined movement coordination and leveling performance improves boom and arm operating speed, boom-down regeneration and bucket confluence performance to enable higher operating efficiency.

### ◆ Reduced Arm Oil Pressure Loss and Improved Operation Speed

Two return oil pipes on the big end of the arm cylinder and the oil inlet pipe of larger diameter on the small end reduce the arm pressure loss during digging and dumping operation to ensure higher working speed.

### ◆ Working Mode Selection

Touch the display to switch working mode  
Heavy duty mode: maximum operating efficiency  
Standard mode: reducing fuel consumption and noise  
Light duty mode: lower fuel consumption and high economy  
Breaker mode: special for hammer



Press F1 to switch between the four working modes

### ◆ Latest Swing Mechanism

The latest Kawasaki large-torque swing mechanism is used, and rotary torque is increased by 32% from the original 100.6kN.M to 132.8kN.M. Swing starting-torque is enhanced with reduced swing drift.(SY335C)





# COMFORTABLE AND SAFE CAB ENVIRONMENT



◆ Innovative Large Cab

The height of seat, the inclination of backrest, the height of armrest, the seat position and the headrest can be adjusted as desired.

◆ Silicone Rubber Shock Absorber

innovative silicone rubber shock absorber is fixed to the swing platform in six points, which has minimized the shock brought by rough road and engine or hydraulic impact, considerably increased the stability of cab, and improved the comfort of operator.

◆ Cab Door and Front Window are Easy to Open, Close and Lock

Cab door can be opened by 180°and secured by locking mechanism either open or closed. The upper window of the cab can be moved to the top of the cab when the front window is unlocked. The roof hatch is openable, through which the cab can have better ventilation and more lights.

◆ Longer Control Levers

The control levers and joysticks designed and arranged according to human engineering, can be operated easily. Each operation button is within the reach of operator.

◆ Well-sealed Cab, Clean and Quiet

Equipped with excellent sealing ring, the cab is free from dust and rain. Quiet cab can effectively relieve the fatigue of operator.

◆ Multiple Air Outlets at Different Levels and Locations

There are several air outlets – the front window defrost outlet ensuring operator's visibility, and the outlets for operator face, back and feet – which can be turned on/off as desired. By changing the direction of air stream, the operator can fully enjoy the benefit of air conditioner.



◆ Hydraulic Lockout Control

When the hydraulic lockout control is placed in LOCK position, all controls are inoperable, which prevents accidents caused by unintentional operation.



◆ Reduce Fatigue

The seat rigidity can be adjusted according to the driver's weight, even if the big drivers can enjoy a comfortably operation.

◆ Luxurious Mechanical Damping Seat

The suspension rigidity can be adjusted according to the drivers' weight, effectively absorbing the vibration came from the cab floor to improve comfort and reduce fatigue.

◆ Automatic Air Conditioner

The standard large-capacity air conditioner keeps in-cab air fresh by purifying fresh air and recirculation air. The quick temperature control ensures a comfortable temperature in cab all the year round.



◆ Large Rear View Mirror and Alternate Exit

Rear view mirror is mounted on both sides of the cab, which can observe the situation behind the excavator without looking back.



◆ Three Stage Air Filtering

Equipped with air pre-cleaner and dual air filtering elements, the three-stage air cleaner ensures supply of sufficient clean air that can reduce the wear of cylinders.





# MULTI FUNCTIONAL LCD MONITOR ALLOWING EASY MONITORING AND MAINTENANCE

## ◆ Bi-lingual Color LCD Monitors

Waterproof, dustproof, large screened machine monitor with excellent anti-interference and anti-shock ability keeps a close and continuous watch on the condition of the machine and gives out alarms under different circumstances as programmed.

Backlight can be lit automatically to light up the monitor when lighting condition gets poor and gray scale of the LCD screen can be adjusted automatically as per ambient temperature to provide optimal vision for the operator .

The operator can also scroll up and down the screen to access the value of various operating parameters and check the status of switches.

The monitor is very easy to operate and it is programmed in both English and Chinese to facilitate the needs of worldwide users.

## ◆ Working Mode Selection

In Addition to Heavy Duty Mode (H) and Light Duty Mode, There are Also Have Other Working Modes.

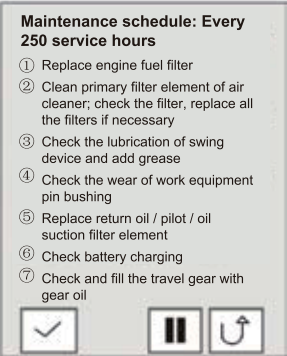
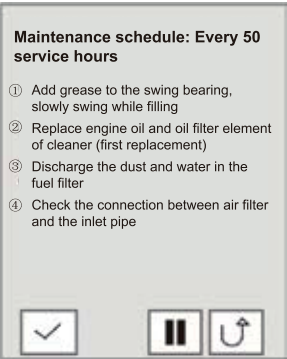
Breaker mode (B mode)  
Corresponding flow can be regulated according to breaker model in breaker mode.



## ◆ Equipment Managing and Monitoring System

### Monitoring Function

In case any abnormality of oil amount, water temperature, hydraulic pressure, etc. should occur, failure information will be displayed on the monitor timely.



## ◆ Maintenance Function

You will be prompted on the monitor screen the maintenance items and replacement intervals when the maintenance schedule is due.

## ◆ Failure Memory Function

Failure history is saved in the monitor for effective troubleshooting diagnosis.

### Indicator

- 1 Working mode
- 2 Throttle gear
- 3 Engine coolant
- 4 Fuel level gauge
- 5 Working hours
- 6 Failure code
- 7 GPS signal indicator
- 8 System clock
- 9 Function menu

### Indicator

- 1 Function keys
- 2 Operation buttons

## ◆ Maintenance Schedule Displayed on The Monitor Maintenance Reminder

A maintenance icon is display on the screen 10 hours in advance. Press the ENTER button to view maintenance schedule.



Self-diagnosis function, GPS function, built-in tutorial system, auxiliary maintenance system and alarming system of the controller ensures optimal machine operating condition.

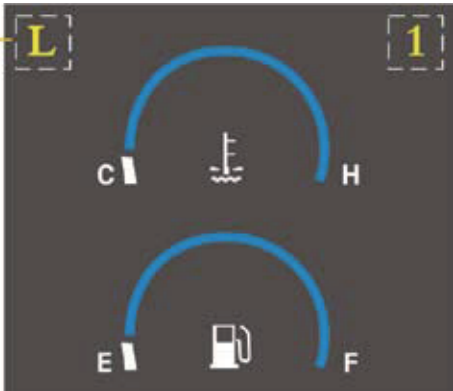
## To Protect The Environment

### Please Select The "Light Duty Mode."

◆ Low emission and low noise (L: light duty) mode can satisfy the customers' needs like [saving the fuel costs], [quiet operation at night and residents-near construction site area], [reducing emissions as much as possible] and other low-carbon pattern life environmental requirements.

Compared with heavy duty mode, fuel cost declines by 20% and CO2 emission is decreased by 20%. Operation capacity is basically the same as the SY42 (heavy duty mode).  
Light duty mode

Light Duty Mode





# ERGONOMIC DESIGN MAXIMIZES THE OPERATING SAFETY



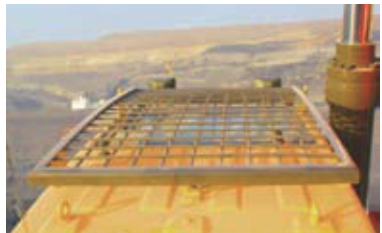
◆Falling Object Protection Structure

The cab is punch-formed with thick high-strength steel sheet. The door and windows are made of toughened glass. In addition to the seat belt equipped, the cabin maximizes the safety of operator.



◆Larger View

Operation safety is improved as a result of narrowed blind zone of vision by means of improved cab design featuring reduction of the size of column without decreasing the structural strength of the cab. The front and side window enable the operator to see clearly work equipment condition and the surroundings; the rear window and the engine hood of properly designed height provide a good rear view.



◆Optional Equipment

Top guard net in line with ISO, OPG standard.

◆High Standards Safety Design

Safety design meets European, US and Japanese safety standards, and has reached world-class security and reliability standards.

◆Heat Insulation/ Fan Guard

The engine is housed in excellent heat insulation to prevent accidental burns. The radiator fan is enclosed with a protective net cover that can prevent objects from falling into the fan to damage its blades.



◆Boom and Arm Holding System

The holding valve on the main control valve can prevent the boom and arm from declining under their own weight and extend holding time, improving reliability of the machine.

◆Anti-swing Valve and Delay Valve

Swing mechanism with anti-swing valve and delay valve makes swing operation more stable and reliable; swing brake ensures safety of machine stopping.

◆Large Handrails

Large handrail ensures operator safety during mounting and dismounting.

◆Anti-splashing Screen

The pump chamber and engine chamber are separated with a screen, which can prevent leaked hydraulic oil from splashing onto the hot engine.



◆Anti-skid Pedals

Specially designed pedal, can effectively prevent the operator from slipping and skid.



Environment-friendly Engine Customized for Sany Is In Line with EPA Tier 2 and Eu Tier 2 Emission Standards.

◆Low-noise Design to Meet Noise Emission Requirement

To meet noise emission standard of GB 16710.1-1996, the engine adopts sound absorbing materials and is equipped with curved wind guide cover and muffler, reducing air resistance and noise emission. Improved damping system and various anti-noise designs of components reduce noise efficiently. Noise level around the operator is less than 80dB (A) (reference value is 80dB (A)).

◆Track Shoe Fender and Track Tensioner

Track shoe fender ensures proper positioning of the track. Track tensioner consists of a grease filling cylinder and a shock-absorbing spring, providing adequate track tension during machine travel.





# SCIENTIFIC STRUCTURE AND CONFIGURATION DESIGN ENSURES EASIER AND FASTER MAINTENANCE

◆ Easy Cleaning for Radiator

One end of the air conditioner condenser is fixed with hinges for easy cleaning. Innovation radiator with easily washable internal structure, excellent cooling capacity ensures prolonged engine running without being overheated.



◆ New Engine Oil Drain Valve

Additional drain port on engine bottom cover makes oil change possible without removing the cover plate.



◆ New Swing Mechanism Oil Drain Valve

Additional oil drain valve on swing mechanism makes gear oil replacement much easier.



◆ Water Separator and Three-level Fuel Filter

Water separator can remove the water in fuel and prevent fuel system failures. The function of fuel pre-filter can be developed to make maintenance easy. Fuel pre-filter also has the same function as a water separator.



◆ Accessible Engine Oil Filter and Bottom Drain Plug

Accessible oil filter installed far away the engine, ensure easy maintenance. The radiator, fuel tank, hydraulic oil tank and oil pan are equipped with screw plugs at the bottom, which is convenient for discharging foreign substances and waste liquid out in the change of oil or cleaning.



◆ Extended Lubrication Port of The Swing Bearing is Used

For the convenience of lubricating the swing bearing, grease filling of the swing mechanism is extended to the front through the grease tube installed along the swing gear.

◆ Standard Equipped Oil Drain Pipe

The use of this pipe can prevent contamination of your clothes and the floor when engine oil is being changed, and maintenance becomes easier.

◆ Large-capacity Fuel Tank With Anti-rust Treatment

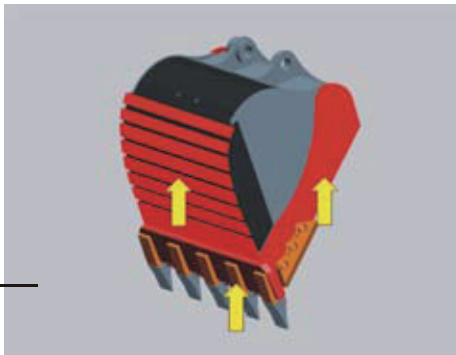
The large capacity of fuel tank reduces the times for refueling. Interior of the fuel tank has been treated well against rusting. No rusting will occur even if the tank is soaked in oil containing water and phosphoric acid and other chemicals for a long period of time.

◆ Monitoring Function

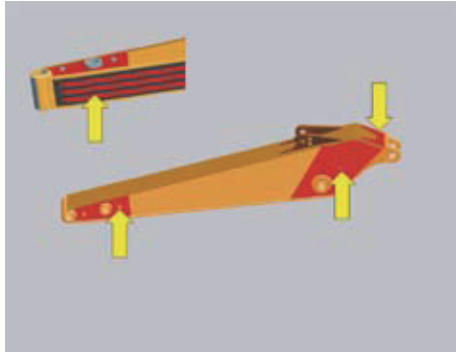
When an abnormality occurs while the engine is running, warning alarm on the monitor will sound, alarm indicator will light up and auto-diagnosis will start. The monitor displays fault name and location and relevant information.

◆ Incline Track Frame

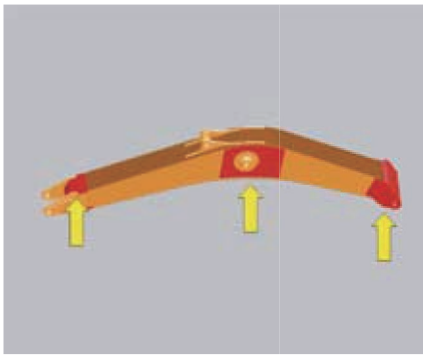
The incline track frame makes the soil to fall easily and is easy to clean.



◆ Strengthened Bucket



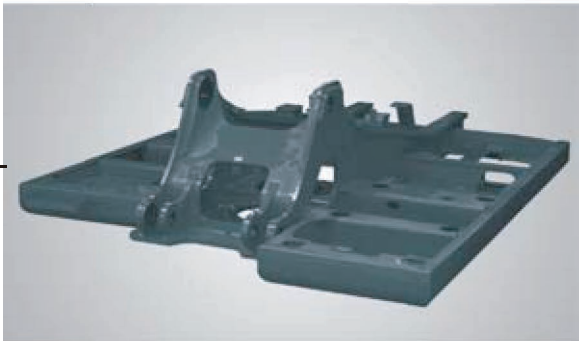
◆ Strengthened Arm



◆ Strengthened Boom



◆ Thickened Oil Pipe



◆ Platform



◆ Larger Counterweight



EQUIPMENT SPECIFICATION

SPECIFICATION

ENGINE

Model.....	Isuzu 6HK1-XABEA-08-C2
Displacement.....	7.79L
Engine power	
At rated engine speed.....	190.5kw/2000rpm

HYDRAULIC SYSTEM

Type .....	negative control system
Number of selectable working modes.....	4
Main pump	
Type.....	variable-capacity piston pumps
Maximum flow.....	2*360ltr/min
Hydraulic motors	
Travel.....	2* axial piston motor with parking brake
Swing.....	1* axial piston motor with swing holding brake
Relief valve setting	
Implement circuits.....	34.3mpa 336kg/cm2 4,974psi
Travel circuit.....	34.3mpa 336kg/cm2 4,974psi
Swing circuit .....	28.5mpa 279kg/cm2 4,133psi
Heavy lift circuit .....	34.3mpa 336kg/cm2 4,974psi
Pilot circuit .....	3.9mpa 38kg/cm2 565psi
Hydraulic cylinders	
Boom.....	2-140mm*1480mm
Arm.....	1-170mm*1685mm
Bucket.....	1-140mm*1285mm

OPERATING WEIGHT

Operating weight with standard bucket, fully serviced, +75 kg operator (ISO)	
Operating weight.....	32475/34175kg

UNDERCARRIAGE

Track width.....	600mm
Number of track shoes.....	49
Carrier roller (per side).....	2
Track roller(per side).....	9

TRANSMISSION

Travel Speed (Highest/Lowest).....	5.4/3.2 5.5/3.5km/h
Swing Speed.....	9.5rpm
Gradeability.....	70%/35°
Ground Pressure.....	59.2/59.9kpa

SERVICE CAPACITIES

Fuel tank.....	540L
Hydraulic tank.....	380L
Engine oil.....	.35/36L
Radiator.....	8.4/60L
Final drive.....	2*4.0L
Swing drive.....	10.5L

DIGGING FORCE

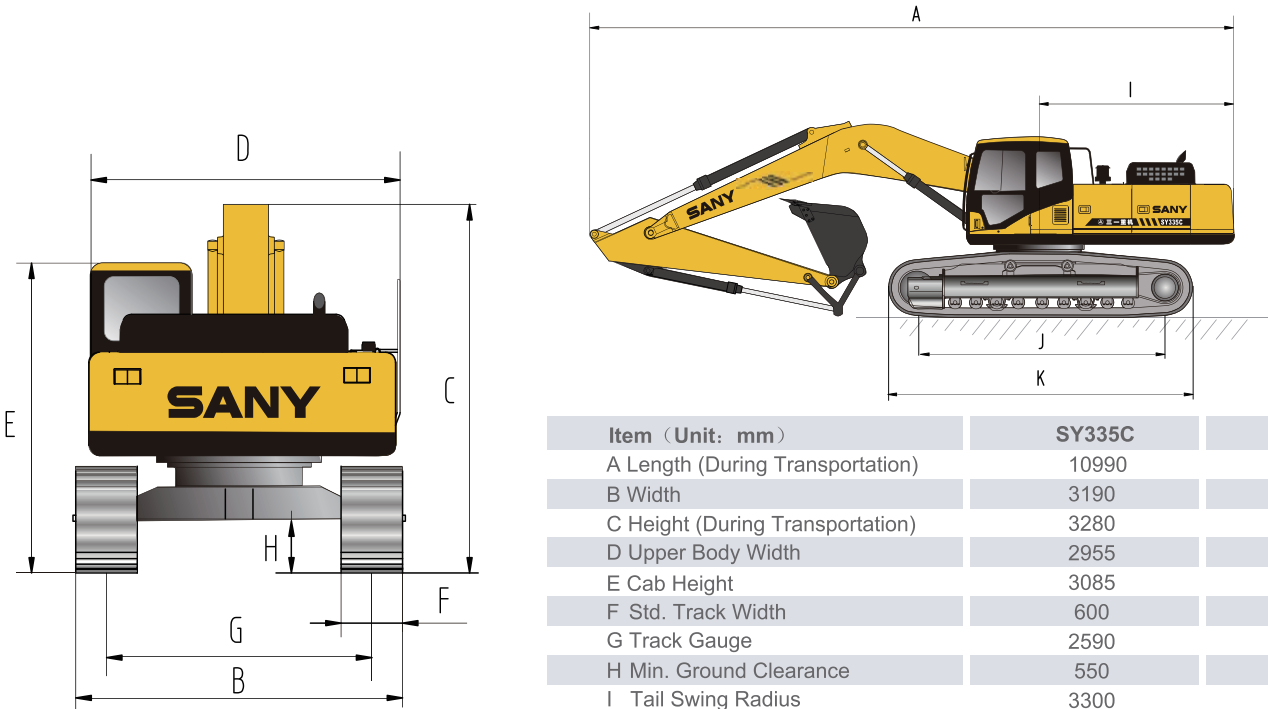
Bucket Digging Force.....	220kN
Arm Digging Force.....	165/180kN

BUCKET CAPACITY OPTIONAL

Bucket Type	Capacity	Outer Diameter (mm)	Weight (Kg)	Standard Arm (3.2/2.9m)	Short Arm (2.4)
Rockwork	1.5	1487	1505.6	◇	◇
	1.6	1543	1567.5	◇	◇

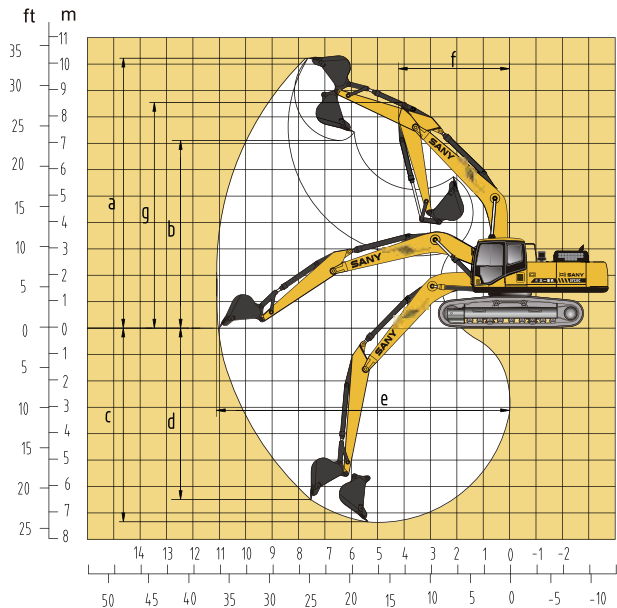
◇ 1.8t/ m³ Used to load materials with a specific gravity not more than 1.8t/ m³

DIMENSION



Item (Unit: mm)	SY335C	SY365C
A Length (During Transportation)	10990	11015
B Width	3190	3190
C Height (During Transportation)	3280	3315
D Upper Body Width	2955	2955
E Cab Height	3085	3025
F Std. Track Width	600	600
G Track Gauge	2590	2590
H Min. Ground Clearance	550	550
I Tail Swing Radius	3300	3300
J Roller Gauge	4140	4140
K Track Length	5065	5050

OPERATION RANGE















Item (Unit: mm)	SY335C	SY365C
a Max. Digging Height	10135	9810
b Max. Dumping Height	7165	7140
c Max. Digging Depth	7330	7040
d Max. Vertical Digging Depth	6480	—
e Max. Excavating Distance	11070	10615
f Min. Swing Radius	4340	4370
g Height at Min. Swing Radius	8470	8500

Materials and specifications are subject to change without further notice in accordance with our continuous technical innovations. Photos and illustrations may not include additional equipments.



SY335C/365C LIFTING CAPACITY

	<div>A B</div>	3.0m		4.5m		6.0m		7.5m		9.0m		Maximum		
Arm 2950mm	7.5m							7505	6266			6755.9	6063.7	7635
	6.0m							9081.7	6207.7			6614.9	4980.4	8525
	4.5m					11431	8406.8	9129.5	5991.7	6748.5	4461.1	6639	4387.4	9085
Boom 5900mm	3.0m			17525	11744.8	12565	7960.8	8813.8	5715.5	6617.5	4343.3	6201.4	4017.3	9365
	1.5m			19431	10864.9	11997	7194	8516	5725.6	6474.3	4214.5	6063.3	3954.3	9400
Balance weight 4800kg	0			18947	10498	11636	7084.6	8300.7	5266.5	6374.3	4124.5	6184.5	4008.9	9195
	−1.5m	12948	12948	18868	10438	11492	6964.6	8206.2	5183.8			6644.7	6281.9	8750
	−3.0m	20228	20228	17394	10564	11541	7006.1	8648.7	5571			7654.9	4894.8	7935
	−4.5m	17908	17908	14149	10875	10945	7234					9275.5	6255.6	6730

	<div>A B</div>	3.0m		4.5m		6.0m		7.5m		9.0m		Maximum		
														mm
Arm 3180mm	7.5m											7779.7	7360	7250
	6.0m							9704.2	6909.8			7630.2	5983.2	8185
	4.5m					11758	9389.5	10237	6690.4			7799.1	5255.1	8760
Boom 6470mm	3.0m			18075	13008	13330	8767.9	9932	6423.3	7504	6922.6	7432.4	4878.1	9060
	1.5m			10307	12219	13542	8320.2	9649.3	6175.9	7376.2	4807.6	7269.2	4741.1	9090
Balance weight 6800kg	0			20040	11946	13222	8053	9455.2	6006.1			7646.2	4826.4	8380
	−1.5m	13827	13827	18948	11934	13121	7968.3	9512.3	6056.1			8050.5	5183.4	8750
	−3.0m	21329	21329	16868	12091	13237	8177.5	9507.4	6051.8			9045.8	9595.8	7400
	−4.5m	16459	16459	13330	12435	10201	8315.3					9538.3	7849.1	6280

- Remarks:
- 1.Rated figure meets the criterion of GB/T 13331-2005/ISO 10576
  - 2.Rated rollover loading is 75% of static rollover loading, rated limiting hydraulic weight is 87% of limiting hydraulic weight.
  3. Loading radius is the distance from the loading point to the swing center.
  4. The figure with \* stands for the rated figure of the limiting hydraulic weight.

STANDARD EQUIPMENT

◆Engine

- Mode control (H, S, L and B)
- Start motor 24V/4.5KW
- Alternator 70A
- Air pre-cleaner
- Dry double-filtering air cleaner
- Cylindrical engine oil filter
- Cylindrical fuel filter
- Engine oil cooler
- Radiator with protective screen
- Auxiliary water tank for radiator
- Fan cover

- Separately installed engine
- Automatic deceleration system
- Accelerating system

◆Operator Station

- Noiseproof steel-structured cab
- Toughened light-color window
- 6 silicone rubber damping support
- Openable roof hatch, upper front
- Window and left window
- Rear window,alternate exit

- Silent window wiper with washer
- Adjustable inclined seat with adjustable armrest
- AM-FM radio with digital clock
- Foot rest and floor mat
- Loudspeaker,rear view mirror
- Seat belt and fire extinguisher
- Cup holder and cab light
- Ashtray
- Storage box, literature bag
- Hydraulic lockout control
- Fully automatic air-conditioner
- Cab visor

STANDARD AND OPTIONAL

◆Hydraulic System

- Working mode selection switch
- Power enhancement device
- Control valve with main relief valve
- Spare oil port for control valve
- Oil suction filter
- Oil return filter
- Pilot filter

◆Front Work Equipment

- Flange pin
- Bucket clearance adjustment
- Welded lever
- Central lubrication system
- Dust ring-seal of bucket pin
- Guard
- 1.5/1.6m3 standard bucket (SY335C/365C)

◆Swing Platform

- Fuel level float
- Hydraulic oil level gauge
- Toolbox
- Rear view mirror (R)
- Swing brake

◆Undercarriage

- Travel brake
- Travel motor guard
- H-track guiding mechanism
- Hydraulic track tensioner
- Bolted sprocket
- Carrier roller and track roller
- Reinforced track link with pin and seal
- 600 mm track shoe
- Reinforced side pedal
- Bottom coverplate

◆Monitoring System

- Hour meter, fuel tank, fuel level gauge
- Engine coolant temperature
- Oil pressure display
- Locking information
- Signal status
- Fault information tips

◆Alarm Lights

- Oil pressure lack, engine coolant Over heat
- Throttle knob fault
- Fuel oil lack

◆Others

- Standard battery
- Lockup engine hood
- Lockup fuel filler cap
- Anti-skid film, handhold and passage
- Travel direction mark
- Hand grease gun

OPTIONAL EQUIPMENT

			Standard Parts							Optional Spare Parts(Free)			Optional Spare Parts(Charge)			
S/N	Model for Contract	Common Name in The Company	Engine			Track Width (mm)	Arm Length (mm)	Bucket Form/ Capacity (m³)		Arm Length (mm)	Bucket Form /Capacity (m³)		Pipeline of The Hammer	Hammer	Concentrated Grease System	Fueling Pump
			Brand	Emission Standard	Control System			Soil	Rock		Soil	Rock				
1	SY335C	SY335C9I2K	Isuzu	Tier2	Negative Flow	600	3200	——	1.5	2400	——	1.6	Optional	Optional	Optional	Optional
2	SY365C	SY365C8I2K	Isuzu	Tier2	Negative Flow	600	2900	——	1.6	2400	——	——	Optional	Optional	Optional	Optional

Selecting Marked Optional Spare Parts Will Extend The Delivery Cycle (at Least One Month).



**Quality Changes the World**

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For our consistent improvement in technology, specifications may change without notice.  
The machines illustrated may show optional equipment which can be supplied at additional cost.