

SANY HEAVY INDUSTRY INDIA PVT. LTD.

HEAD OFFICE
 Address : Plot No. E-4, Chakan Industrial Area Phase-III,
 Village Kuruli, Taluka Khed, District Pune - 410501,
 Maharashtra, INDIA.
 E-mail : customercare@sany.in
 Website : www.sany.in
Toll Free No.: 1800-209-3337



Material & specification are subject to change without prior notice in accordance with our continuous technical innovations. Featured machines in photos may include additional equipment.

**BRAND NEW
10 SERIES**



Operating Weight: 52000 kg Bucket Capacity: 2.5-3.5 m³ Engine Power: 403 HP (300 kW)/ 1800 rpm



**BEST IN CLASS PRODUCTIVITY
 BEST IN CLASS FUEL EFFICIENCY
 BEST IN CLASS RELIABILITY**



SY580C-10HD
 HYDRAULIC EXCAVATOR

POWER OF 10

The 10-Series new SY580C-10HD is the powerful & reliable 55-65T category Superior-grade mining excavator, specially developed by SANY to meet heavy duty and high productive operating conditions in mine and offer high return on investment to the Customers.

1 New powerful and fuel efficient engine

CRDI Technology

15% HIGH FUEL EFFICIENCY



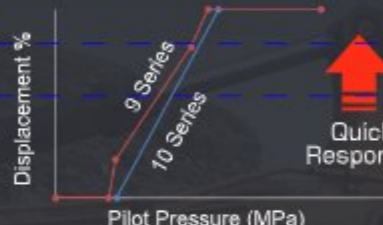
2 New Gen-hydraulic System



- Kawasaki New Gen MCV & Main pump
- New self-optimizing electronically controlled positive flow system.
- Optimized Software program for high Fuel Efficiency

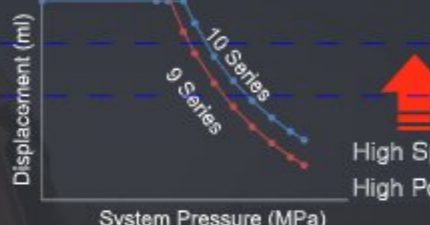
3 Pressure & Flow Loss Reduction Technology

Improved Pilot Pressure Control Curve



Quick Response

Improved PO Curve



High Speed High Power

- The overall pressure & flow loss is substantially reduced with New-Gen hydraulic aggregates, improved positive flow control curve, joysticks, optimized valve core structure & regenerating circuits.
- Two intermediate adjustment points are added to the positive flow control curve for more pilot pressure adjustment while moving the joysticks
- Adopted with Power-increasing control technology, the output power increases with the increase of main pressure

4 Dynamic & Intelligent Mode Control System

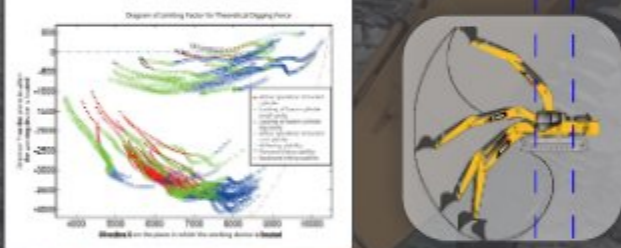


- P** Max. Power for high output
- H** Balanced power for high fuel efficiency with optimum productivity
- S** Optimized power for unmatched fuel efficiency
- I** Rated power for fine controlled operation

Advanced "DOMCS" System independently developed by SANY and "Power Optimized mode control system" ensures mutual Engine & hydraulic pump power at optimum level under various working conditions.


5 Big mining Power

To the realtime power adjustment & excellent digging forces 10 series excavator offers best in class productivity



16% bigger bucket for best-in class Productivity

6 Three Dimensional Design Test System



Forged pivot ends

- "NAS7" Industry best hydraulic system delivery cleanliness level.
- The service life of Main Pump, MCV, Oil cylinder, Travel & Swing gearbox, fuel tank & cabin are doubled with Oil impulse test bed, endurance test bed & vibration test bed
- Comprehensive structural design system, CAE & FEM analysis, static/ dynamic impact fatigue taste

Manganese alloy high-strength steel plates are adopted & all welding joints are 100% gone through ultrasonic flow detection

7 11 series automotive grade operator cabin



- Ultra silent & dust proof cabin design ensures more operator comfort
- Spacious operator cabin incorporated with Premium features & comfort

8 10" informative & intelligent screen touch display



- Revolutionary screen touch display for accurate & smooth machine monitoring
- New user friendly Interface for complete peace of mine

9 Super Easy Maintenance Management

- Advance Telematics System
- 30% more spacious hydraulic pump compartment
- 20% more spacious engine compartment

10 Super High Adaptability

- High corrosion-resistant coating
- Turbo type air pre-cleaner
- Large-capacity multi-stage fuel filtration system
- Independent oil cooler
- Multi tool adaptability (breaker, shear, quick coupler etc.)



High corrosion resistant finish paint

High corrosion resistant primer

Base (high strength steel plate)



BEST-IN CLASS PERFORMANCE

SANY SY580C-10HD excavator is specially designed for heavy duty operating conditions in Mines with combination of best in class productivity and superior fuel economy.

UNMATCHED PRODUCTIVITY

POWERFUL & FUEL EFFICIENT ENGINE

SY580C-10HD comes with maximum engine power of 403HP attained by powerful & proven branded Isuzu 15.68Liters electronic injection engine. High peak torque of 1950Nm ensures optimum performance in toughest mining applications

ADVANCED HYDRAULIC SYSTEM

16% BIGGER GP BUCKET

Bigger & Wider GP bucket leads to higher fill factor & enhanced productivity in mining application.

The positive flow control hydraulic system with class leading digging forces make this machine highly suitable for Heavy Duty mining applications.

The new Generation Main Control Valve adopted for "low pressure loss, high flow distribution efficiency and smooth compound control action" It helps the Customers to "Dig More & Earn More" with SANY SY580C-10HD.

More energy optimized software program implemented on SY580C-10HD for enhanced fuel efficiency

SUPER HIGH DIGGING FORCE

Green curve in the diagram indicates the digging efficiency is given into full play and blue curve indicates other corresponding digging efficiency. The region in which the digging force of SY580C-10HD is given to full play reaches 90% and others only reach 50%. By way of regulating power in real time digging process and analysis of digging force under full working conditions, the digging force is given into full play, and the efficient area of digging force is improved by 40%.

SMOOTH CONTROLLABILITY

With special joystick control, optimized valve core structure, regenerating channel and added intelligent interflow control etc. The pressure loss is reduced, operation control is improved and the equipment can be operated smoothly.

Boom & arm flow priority system for optimized performance with respect to site conditions.

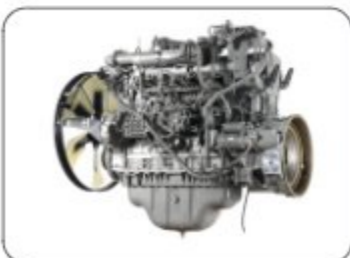
SUPERIOR FUEL EFFICIENCY

DOMCS WITH ENERGY OPTIMIZED SOFTWARE PROGRAM

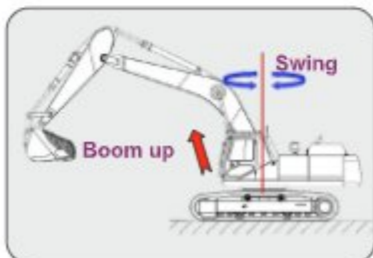
The "DOMCS" Dynamic hunting Intelligent Matching Control System developed independently by SANY, the efficiency and fuel consumption are improved. The overall fuel consumption is reduced by with energy optimized software program

CUSTOMIZED WORKING MODES & AUTO IDLE

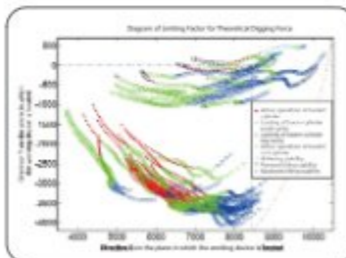
SY580C-10HD is equipped with user-friendly 4 power modes & 3 additional customized modes for high adaptability & optimum performance in various mining applications. Auto idle system reduced engine rpm automatically when machine is not at work, thus saving more fuel.



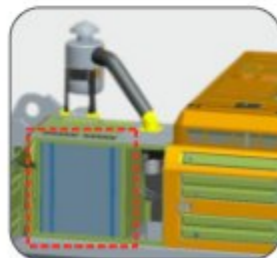
Powerful & Fuel efficient Engine



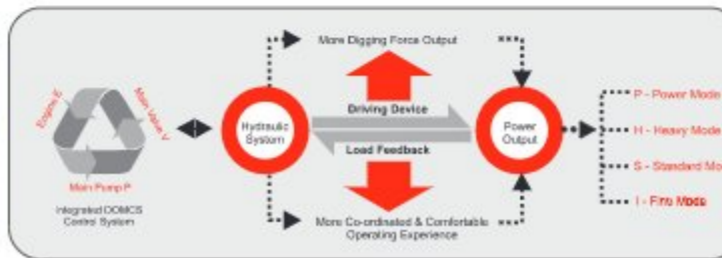
Hydraulic flow priority system & Hydraulic Regeneration System



Big Mining Power



Bigger & Wider bucket



Advanced Integrated DOMCS Control System

212D main pump is parallel pump customized for SY580C-10HD. The power output is improved by 10%, arrangement is more compact and the maintenance is more convenient.

New Generation 32NA main valve specially designed for severe duty applications. It comes with low pressure loss, high flow distribution efficiency & smooth compound control action technology.

High Efficient Hydraulic System



SUPERIOR RELIABILITY

The service life of SY580C-10HD key structural members like Boom, Arm, Upper structure & Lower structure are doubled with advanced world-class design & testing system including Optimization design, stress test, research of welds & plates, endurance test, 100% UT detection & fatigue test.

ROBUST STRUCTURE

HEAVY DUTY BOOM & ARM

The new box-type structure heavy-duty boom is made of high strength steel plates through advanced welding and moulding process. Forged pivot ends are introduced for enhanced load carrying capacity & more service life.

Heavy Duty arm comes with SY580C-10HD, adopts reinforced bottom wear ribs and forging front support. Specially designed & manufactured to reduce the critical load point stress by 30% for higher service life.

WEAR RESISTANT BUCKET

High strength wear resistant steel plates are used for manufacturing the Bucket. Motion tail of bucket bottom is optimized and with special design, the digging resistance is also reduced. The wear resistance property is improved by 2 times.

HEAVY DUTY UPPER FRAME & LOWER FRAME

D-Shaped large section stronger beam with Side skirt protects the structure from external impact. Special welding process and thick plates are used at concentrated stress points such as oil cylinder connections and boom foot etc. to reduce the stress & enhanced service life.

ENHANCED TRACK PERFORMANCE

Specially designed Heavy Duty track chain assembly is adopted to provide higher service life while working in toughest & abrasive underfoot conditions. Anti-collision ribs have been added to improve the track frame life.

ADVANCED WORLD-CLASS TESTING METHODS FOR CORE PARTS

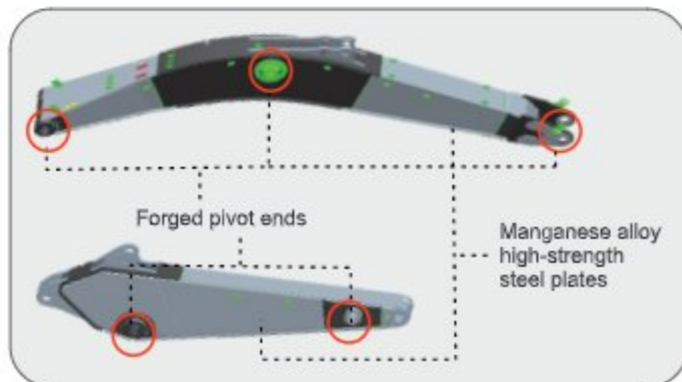
SANY'S Joint research with world famous research Institutions on service life of major aggregates, special design & technologies are adopted for improving the life of SY500C-10 HD core parts. The service life of components including main pump, Main control valve, swing & travel motors, fuel tank & cab etc. are doubled.

INDEPENDENT OIL COOLER & RADIATOR SYSTEM

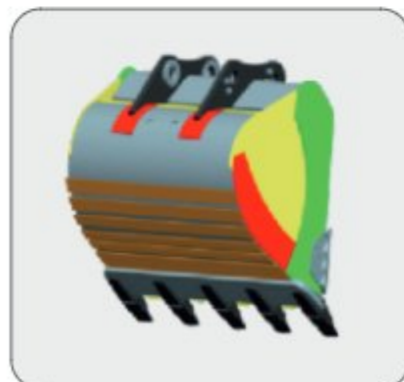
The cooling efficiency of both the Engine & hydraulics are improved by adopting independent oil cooler & radiator system. This ensures system operating temperature is 8-10°C lower than general cooling method. The adaptability to high-temperature environment is significantly improved, the service life of rubber parts are prolonged and the energy consumption is reduced.

HIGH CORROSION-RESISTANT COATING

With new corrosion-resistant coating system, service life of the paint under tough working environment is improved by 50%. Enhanced resale value.



Heavy Duty Boom & Arm with Forged pivot ends



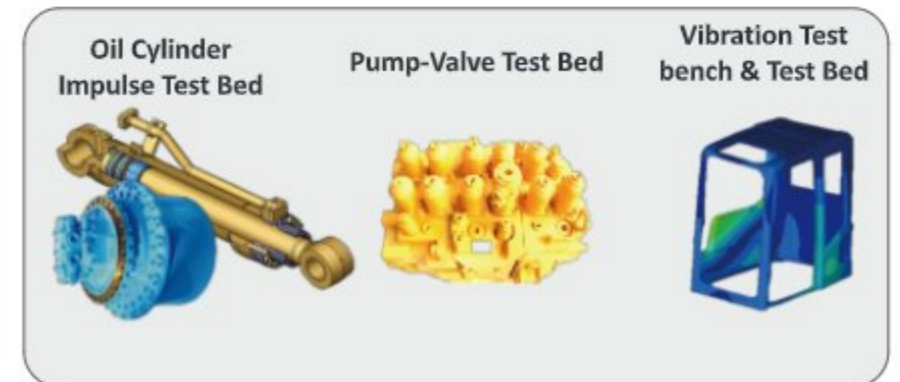
All Side Protected Robust Bucket



Heavy Duty Under Carriage



Independent Oil Cooler & Radiator



Advanced world class testing methods



SUPERIOR OPERATOR COMFORT & SAFETY

In light of the operating conditions in mine, the safe and comfortable cab is adopted with new type dust-proof & noise-reducing technology. Safety is increased by 5times and the noise in cab is reduced by 5dB as compared with ordinary cab.

OPERATOR COMFORT

AUTOMOTIVE GRADE SPACIOUS CAB WITH PROTECTIVE GUARDS

New technology spacious cabin with 35% reduced indoor noise for more operator comfort. SY870C-10HD comes with safe cab, and through finite element model analysis the steel structure and sealing property of cab are optimized.

KEYLESS ENGINE IGNITION SYSTEM

In new series excavator the conventional method of Engine starting system is replaced with keyless ignition system for better convenience.

FULLY ADJUSTABLE DOUBLE SLIDE SUSPENSION SEAT

SANY excavator comes with superior multi angle adjustable suspension seat that incorporates the side consoles mounted together with high back. Multiple adjustment points allows you to select most comfortable position as per the actual site underfoot conditions.

JOG DIAL & CAN TYPE CONTROL SWITCHES

10 series excavator cabin comes with Jog dial type control switch with backlight provides smooth & fatigueless operation. First In class feather touch multifunctional CAN switches provides bright & clear view in night time operation.

10" FLAT MULTIFUNCTIONAL & INTELLIGENT TOUCHSCREEN PANEL

A revolutionary large high resolution touch screen display enables accurate & smooth work equipment monitoring & Control. The interface has been redesigned to display key machine information in a new user friendly interface.

HIGH CAPACITY, MULTI DUCT, AUTOMATIC AC SYSTEM

The large capacity multi-duct air conditioning system keeps in-cab air fresh. The cooling and heating effect cab be achieved quickly results operating the machine more comfortable for longer hours.

OPERATOR SAFETY

ENHANCED WORKING STABILITY

The New SY870C-10HD comes with long crawler undercarriage & higher operating weight for better working stability while working in the toughest mining underfoot conditions.

OTHER SAFETY PROVISIONS

Emergency stop switch, battery cut-off switch, seat belt, fire extinguisher, pilot controlled cut-off lever & various warning alerts are adopted with SY870C-10HD to work more safely in toughest working conditions.



Keyless engine ignition



10" screen touch panel



Multifunctional panel



LED lamps for boom & cabin



Comfortable suspension seat



Effortless & thin joysticks



Battery cutoff switch



Emergency stop Switch



Rear view camera



Fan Guard



Safety Hammer & Fire Extinguisher



SUPERIOR EASE OF SERVICEABILITY

In allusion severe working conditions of this segment, the design of maintenance convenience of the machine is improved. "More Spacious, Easy to Operate" fundamentals are applied. Maintenance space for key compartment is increased by 20-30%, makes the maintenance easy resulted high uptime.

EASY ACCESS

EASY ACCESS TO KEY MAINTENANCE COMPONENTS

Engine compartment volume is increased by 20% . The space for replacing external air filter element is 30% larger than general excavator and the filter element can be replaced without the help of any special tool. The pump compartment volume is increased by 30% and maintenance space for filter element replacement is increased by 20%

OIL BATH TYPE AIR FILTER

Extremely high dust filtration efficiency design to dealt with highly dusty environment

EASY CLEANING FOR RADIATOR

Radiator and oil cooler packing is easily washable which leads into excellent cooling capacity and ensures prolonged engine running without being overheated.

ELECTRICAL FUEL FEED PUMP (Opt)

Fuel feeding pump is provided for easy fuel refilling.

EASE OF REGULAR CHECK UP

Regular performing components (swing gear greasing, engine oil and hydraulic oil) of the machine can be easily checked up which leads to time saving and long working ability.

10" LCD DISPLAY (Intelligent & Informative)

Cabin is equipped with waterproof, dust proof and vibration proof anti-interference colour LCD display which provides real-time information regarding machine working status, abnormal alarm function etc. ensuring safe operation.

Swing, Travel & attachment utilisation can be monitor through display for better maintenance planning

IMPROVED GREASING(ACLS Std.)

Auto centralized lubrication system as standard offering with SY580C-10HD for better machine maintenance & high machine up time. Graphite infused bushes are provided for prolonged greasing interval. Centralized greasing points are provided for easy greasing of various points of boom assembly.

FLOATING BUSH PROVISION

Floating bush and shim arrangement are provided in bucket for easy and quick adjustment. All bucket pins are equipped with dust proof seal ring for better pin & bush life



LONG SERVICE INTERVAL

Hydraulic Oil
4000hrs

Hydraulic Suction Filter
2000hrs

Engine Oil & Filter
500hrs

Fuel Filters
500hrs

30% More Spacious Hydraulic Pump Chamber

20% More Spacious Engine Compartment



Wire Mesh Protected Air Filter



Oil Bath Type Air Pre-cleaner



Independent ROC with Wire Mesh Guard



Centralized 3 Stage Fuel Filtration System



Electrical Fuel Feed Pump (Opt)



Engine Oil Level Check-up Access



10" Informative & Intelligent Display



Graphite Bush



Centralized Greasing Points

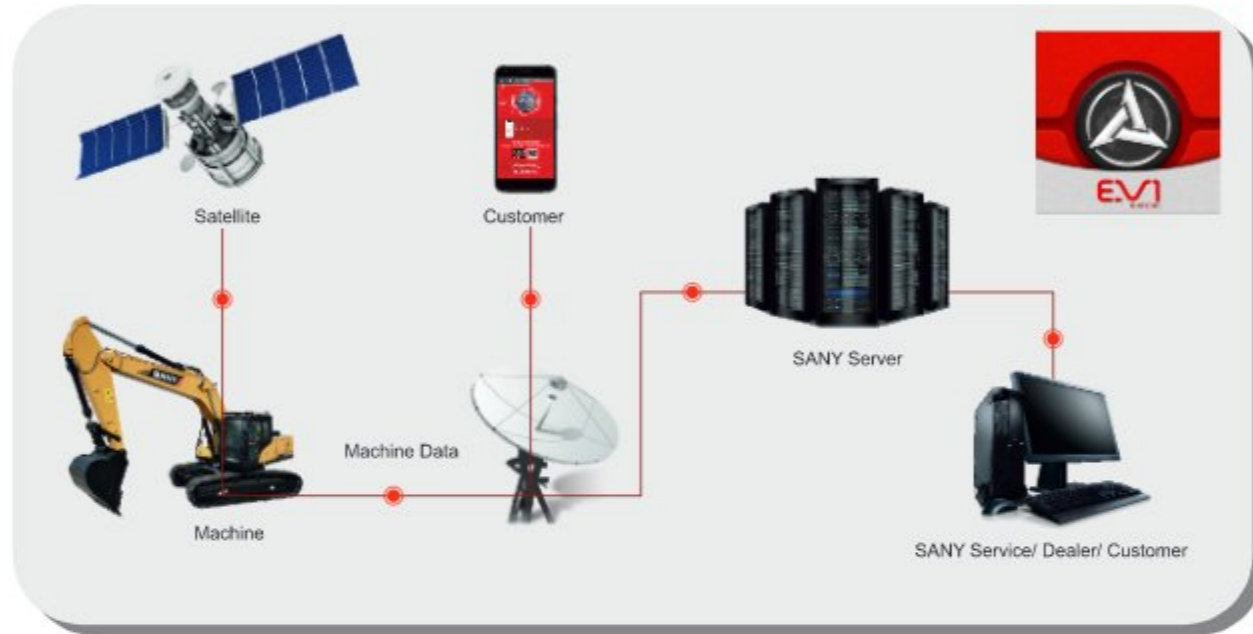


Floating Bush Provision Dust Proof Sealing



EVI REMOTE MONITORING

EVI in SANY C-10 series excavator is a sophisticated system that helps you to remotely monitor wide range of excavator functions and access operating information



TECHNICAL SPECIFICATIONS

| ENGINE | |
|--------------------|----------------------------------|
| Model | ISUZU 6WG1X |
| Type | 6 Cylinder, Inline, Water Cooled |
| Rated Engine Power | 403 HP (300kW)/1800 rpm |
| Max. Torque | 1950 N.m @ 1400 rpm |
| Displacement | 1568 L |

| CONTROL SYSTEM | |
|--------------------------|------------------------------|
| Control System | DOMCS Intelligent Controller |
| Working Modes | I, S, H, P |
| Remote Monitoring System | GPRS, GPS, GIS |

| HYDRAULIC SYSTEM | |
|------------------|---|
| Main Pumps | 2 Variable Displacement Axial Piston Pumps |
| Max. Flow | 2 X 366 lpm |
| Pilot Pump | Gear Pump |
| Travel Motor | 2 Axial Piston Motor with Parking Brake |
| Swing Motor | Axial Piston Motor with Swing Holding Brake |

| RELIEF VALVE SETTINGS | |
|-----------------------|----------|
| Implement Circuit | 34.3 Mpa |
| Swing Circuit | 26.9 Mpa |
| Travel Circuit | 31.4 Mpa |
| Pilot Circuit | 3.9 Mpa |

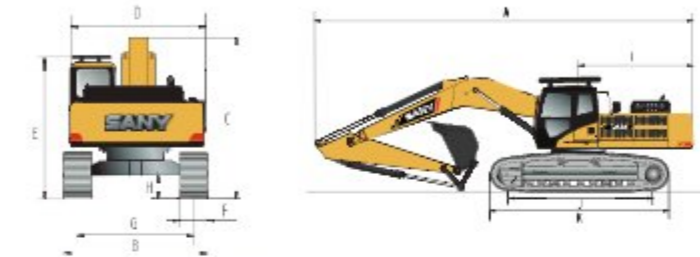
| UNDERCARRIAGE & WORKING DEVICE | |
|--------------------------------|----------------------|
| Track Shoes (Each side) | 50 |
| Upper Rollers (Each side) | 2 |
| Lower Rollers (Each side) | 9 |
| Std. Track | 600 mm |
| Std. Boom | 7000 mm |
| Std. Arm | 2800 mm |
| Std. Bucket | 3.5m ³ GP |

| PERFORMANCE | |
|-----------------------------|--------------|
| Max. Travel Speed(High/Low) | 5.4/3.1 km/h |
| Swing Speed | 8.0rpm |
| Grade ability | 70%/35° |
| Ground Pressure | 87.1kPa |
| Max. Tracking Force | 339kN |
| Bucket Digging Force | 270kN |
| Arm Digging Force | 244kN |

| SERVICE REFILL CAPACITIES | |
|---------------------------|-------|
| Hydraulic Tank | 480 L |
| Fuel Tank | 680 L |
| Engine Oil | 50 L |
| Radiator | 24L |
| Swing Device | 14L |
| Travel Device | 2x15L |

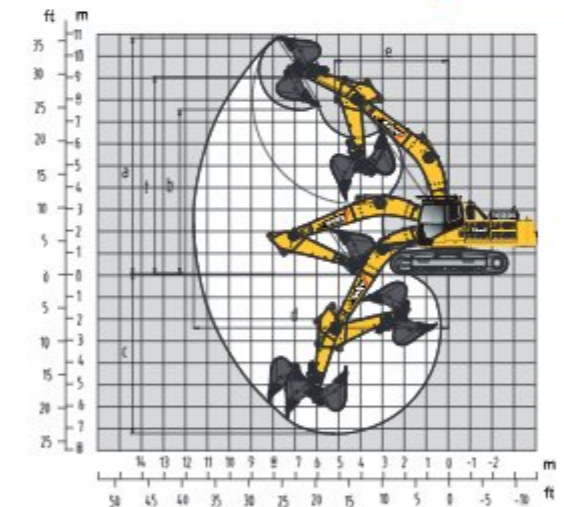
| CAB | |
|-------------|------|
| AC | Std. |
| Cabin Guard | Opt. |

DIMENSION (Unit: mm)



| DIMENSION (Unit: mm) | Arm 2800 |
|-----------------------------|----------|
| A. Overall Length | 12076 |
| B. Overall Width | 3360 |
| C. Overall Height | 3700 |
| D. Upper Width | 3290 |
| E. Overall Height of Cab | 3470 |
| F. Std. Track Shoe Width | 600 |
| G. Track Gauge | 2740 |
| H. Min. Ground Clearance | 560 |
| I. Rear-end Swing Radius | 3765 |
| J. Distance between Tumbles | 4415 |
| K. Under Carriage Length | 5440 |

WORKING RANGE



| WORKING RANGE (Unit: mm) | Arm 2800 |
|-------------------------------------|----------|
| a. Max. Cutting Height | 10936 |
| b. Max. Dumping Height | 7255 |
| c. Max. Digging Depth | 7096 |
| d. Max. Digging Reach | 11489 |
| e. Min. Swing Radius | 5251 |
| f. Max. Height at Min. Swing Radius | 9100 |

BUCKET

| Capacity | Width mm | Weight Kg | Arm Length 2.8m |
|---------------------------|----------|-----------|-----------------|
| 3.5m ³ GP Std. | 2028 | 2906 | ✓ |
| 3.1m ³ GP Opt. | 1910 | 2780 | ✓ |
| 2.5m ³ HD Opt. | 1730 | 2460 | ✓ |

REAL TIME NEWS UPDATES

Keep the customers always updated on Sany special offers, product upgrades & new product launches timely which help them to take right decision for maximum savings.

MACHINE OPERATING MANAGEMENT

Daily machine operation hours, non-working hours, engine idling time can be monitored and remaining fuel in the diesel tank can be determined.

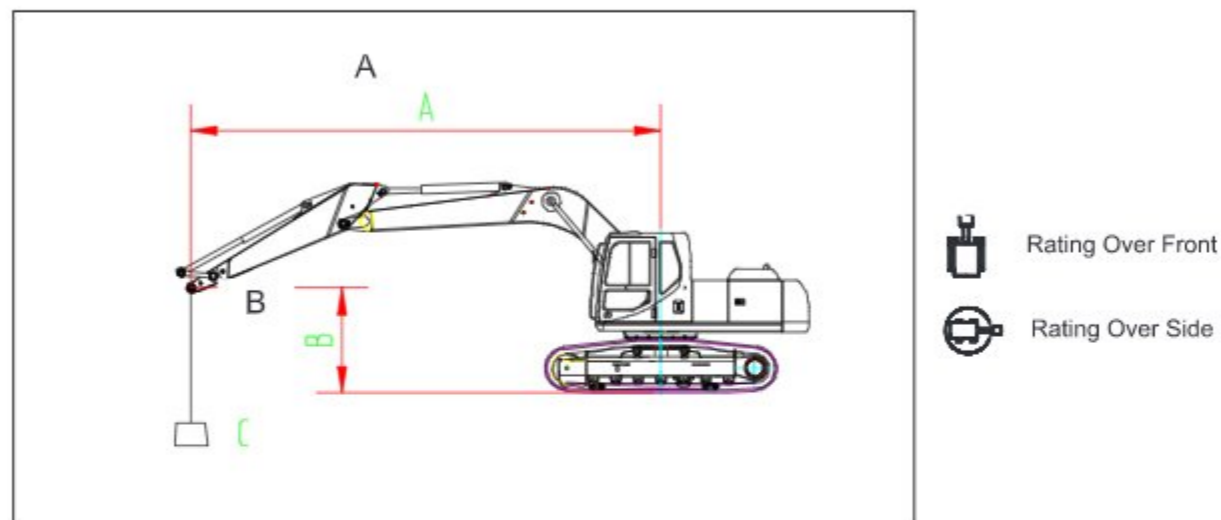
REAL-TIME MONITORING

The real-time monitoring system displays various operating parameters like hydraulic oil pressure, engine rpm, working mode along with selected gear, coolant temperature, voltages and current etc.

LOCATION & TRACKING

Machine's current location can be captured for easy tracking. Route to working site of the machine can be determined as well. Dealer network also can be tracked through EVI app for quick contact if required.

LIFTING CAPACITY



| Boom | 7000mm | | Bucket rod | | 2800mm | | Track width | | 600mm | | Counterweight | | 10000Kg | |
|--------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|---------------|---------|--------------|---------|
| | | | 3.0m | | 4.5m | | 6.0m | | 7.5m | | 9.0m | | | |
| | Longitudinal | Lateral | Longitudinal | Lateral | Longitudinal | Lateral | Longitudinal | Lateral | Longitudinal | Lateral | Longitudinal | Lateral | Longitudinal | Lateral |
| 7.5m | Kg | | | | | | | | *10373 | *17373 | | | | |
| 6.0m | Kg | | | | | | | | *10863 | *10863 | *10504 | *10504 | | |
| 4.5m | Kg | | | *18882 | *18882 | *14005 | *14005 | *11834 | *11834 | *10759 | *10759 | | | |
| 3.0m | Kg | | | | | *16082 | *16082 | *12949 | *12949 | *11291 | 10444 | | | |
| 1.5m | Kg | | | | | *17614 | *17614 | *13905 | 13073 | *11793 | 10267 | | | |
| Ground | Kg | | | *14639 | *14639 | *18300 | 17394 | *14461 | 12868 | *12033 | 10163 | | | |
| -1.5m | Kg | | | *23664 | *23664 | *18149 | 17352 | *14432 | 12815 | | | | | |
| -3.0m | Kg | *23840 | *23840 | *21857 | *21857 | *17075 | *17075 | *13472 | 12945 | | | | | |

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.

WEIGHTS AND GROUND PRESSURE

| Shoe type | Shoe width | SY580C-10HD | |
|----------------|------------|------------------|-----------------|
| | | Operating weight | Ground pressure |
| Double grouser | 600mm | 52000 kg | 87.1kPa |

STANDARD EQUIPMENT

Engine

- Isolated mounted engine
- Dynamic optimizing mode control
- Radiator
- Independent self-filtering circulating system
- 24V/5.5KW starter motor
- 50A alternator
- Oil-bath type air filter
- Dry-type dual-element air filter
- Engine oil filter
- Three-stage fuel oil filter
- Engine oil cooler
- Radiator auxiliary water tank
- Fan deflector
- Automatic idling system
- Fuel filling pump and electronic pump

Hydraulic system

- Operating mode selector switch
- Control valve with main overflow valve
- Control valve with spare oil port
- Oil suction filter
- Oil return filter
- Pilot filter
- Oil drain filter

Upper slewing platform

- Fuel oil level sensor
- Hydraulic oil level gauge
- Toolbox
- Slewing parking brake
- Rearview mirror (right)
- Rearview camera *
- Cab alarm lamp *

Cab

- Ultra-silence frame cab
- Reinforced light-color glass window
- Silicone oil rubber damper
- Openable top/front wall upper window and left side window
- Emergency exit on rear window
- Wiper (with washer)
- Multidirectional adjustable seat
- Radio (with digital clock)
- Foot rest and floor mat
- Loudspeaker and rearview mirror
- Seat belt and fire extinguisher
- Cup holder and compartment lamp
- Ash tray and escape hammer
- Storage box and sundries bag
- Pilot controlled cut-off lever
- Fully-automatic A/C
- Sun shade
- Emergency stop switch
- Falling object protect structure and front protective screen

Front-end working device

- Flange pin
- Bucket clearance adjuster
- Welded connecting rod
- Integrated lubricating system
- All bucket pins are equipped with dustproof seal ring
- Reinforced all-welded box-type boom
- Reinforced all-welded box-type bucket rod
- Anti-collision guard plate

Instruments of monitoring system

- Global positioning system (GPS)
- 7" colored display screen
- EEVIA system
- Hour meter, fuel tank oil level gauge
- Engine coolant temperature gauge
- Engine oil pressure gauge

Traveling body of undercarriage

- Traveling parking brake
- 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
- 600mm double-rib track plate
- Reinforced side pedal
- Bottom cover plate

Alarm system

- Controller failure
- Abnormal pump pressure
- Pilot pressure of various movements abnormal
- Abnormal power supply voltage
- Starter motor relay abnormal
- Abnormal hydraulic oil temperature
- Engine oil pressure insufficient and engine coolant temperature too high
- Throttle rotary knob failure
- Fuel volume insufficient

Others

- High-capacity storage battery
- Lockable engine hood
- Lockable fuel filler cap
- Anti-slip pedal, armrest and sidewalk
- Traveling direction sign on traveling frame
- Manual grease gun
- Motor-driven diesel pump

Option

- AFSS
- Rear View Camera
- Beacon Lamp
- Cabin Front Guard
- 2.5m³ HD-Opt.
- 5.0m³ Coal-Opt.

* Indicates optional configuration