ENERGY SAVING STAR, LEADING THE INDUSTRY

P1
High Efficiency and Low Consumption Cummins Engine

P3
High Reliability

P5
Safe and Comfortable Cab Environment

P7
Scientific Structure and Configuration Design Ensures Easier and Faster Maintenance

P9
Equipment Specification

P11
Standard & Optional
High Efficiency and Low Consumption Engine Customized for SANY

With a dual-pump, dual-circuit constant power control system, the engine can fully develop its power to provide a strong operating force. Optimized operation performance of the engine reduces the loss of power. The engine is designed to work in four modes according to different working conditions.

- Working efficiency up by 8%
- Digging force up by 9.5%
- Fuel consumption down by 10%

Operating Priority and Fuel-saving Priority Working Modes

Heavy duty mode: Full power output provides efficient operation.
Standard mode: 90% of the rated power reduces fuel consumption and noise.
Light duty mode: 80% of the rated power ensures fuel economy.
Break mode: 90% of the rated power reduces fuel consumption

Innovative Features of Controller

1. Precise controller customized for SANY.
2. Faster computing speed, 66% higher than last generation.
3. Automatic self-diagnosis and recovery system.
4. Remote Diagnosis: according to the real-time applications, shown on the centralized diagnostic monitor, determine the location of the faults that may occur remotely.

Advanced computer dynamic control technology provides real-time match between engine power and main pump power.
High reliability

High-power engine: 114KW/2050rpm. The Mitsubishi engine customized for SANY with high efficiency, reliability and weather resistance, saves the energy and meets customer expectation on engine stability.

- High-strength engine
- Excellent cooling effect
- Displacement 5.86L

6-Cylinder diesel engine

Water-cooling turbo diesel engine, with six-cylinder, four-stroke direct-injection turbocharger and air-air intercooler. The overheat protection function limits the speed when coolant reaches certain temperature. This ensures high reliability and stability of the machine as a whole.

Strong structure with higher reliability

- High-reinforced swing platform
  Reinforced plates, welded on the two main beam of swing platform, considerably improve the bending resistance performance.

- Track rollers, carrier rollers
  Track rollers, carrier rollers and idlers use seal-in lubrication that gives a longer service life. The tri-grouser track shoe rolled with high-strength alloy provides favorable contact, stability and durability. The track links have additional reinforced ribs to increase their strength, which can absorb the shock when the machine travels on rough surface.

Boom, Arm and Bucket Meeting Customer Requirement

With optimized design, the boom and the arm can provide considerable working range and depth on the occasion of ditching, excavating and common construction while maintaining powerful digging force.

- Boom
  With a large-box structure, the boom is reinforced in key positions to form a compact, strong and durable integrity.

- Arm
  The rear support of arm is specially reinforced, with welded baffle plates offering excellent torsion resistance.

- Bucket
  Standard equipped reinforced bucket with highly rigid steel sheet, tips and side cutters can serve a longer period.
Comfortable and Safe Cab Environment

- **Innovative Large Cab**
  The innovative large cab is equipped with an adjustable seat with suspension. The rigidity of seat can also be adjusted according to the operator’s weight.

- **Pressure Sealed Cab**
  The sealed design ensures that the air pressure inside the cab is higher than outside, thus preventing the dust invasion.

- **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.

- **Silicone Rubber Shock Absorber**
  The operator station is supported with innovative silicone rubber shock absorber, 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.

- **Low Noise Cab**
  With a high-rigid structure, the new cab uses damping materials that give a better noise-absorbing effect. The adoption of properly sealed windows, noise reduction design and low-noise engine enables the machine to produce a noise as low as a passenger car.

- **Longer Control Levers**
  The control levers and joysticks designed and arranged according to ergonomic, can be operated easily.

- **Falling Object Protection Structure**
  The top plate of cab is punch-formed with thick high-strength steel sheet integrated with reinforced ribs, which maximizes the safety of operator.

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

- **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.

- **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.

- **Pump/Engine 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 Plates**
  Anti-skid plates are provided on the machine body to protect people from slipping during maintenance.
Scientific Structure and Configuration Design Ensures Easier and Faster Maintenance

- **Serially-arranged Cooling Units**
  Coolant radiator, oil radiator, intercooler and condenser are placed side by side for easy cleaning and maintenance.

- **Bottom Drain Plug**
  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.

- **Standard Engine Oil Drain Valve**
  The use of this valve can prevent contamination of your clothes and the floor when engine oil is changed.

- **Easy Replacement of Filter Element**
  The primary and secondary fuel filters and water separator reduce the early wear of injection pump and nozzle and extend the service life of engine. Opening the access door, you can replace them quickly on the ground.

- **Incline Track Frame**
  The incline track frame makes the soil to fall easily and is easy to clean.

- **Easy-to-use Reliable Engine Hood Spring and Securing Bar**
  The engine hood is installed with a spring that can help you open the engine hood easily for engine service. The hood can be secured with the bar during maintenance or service of the machine in order to prevent injury caused by wind.

- **Easy Cleaning of Radiator**
  Opening the left rear access door allows you to access the engine radiator.

- **Large-capacity Fuel Tank with Anti-rust Treatment**
  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.
**SPECIFICATION**

**ENGINE**
- Model: 6D34-TL Mitsubishi
- Displacement: 5.86L
- Engine power at rated engine speed: 114kw/2050rpm

**HYDRAULIC SYSTEM**
- Type: Positive control system
- Number of selectable working modes: 4
- Main pump: Variable-capacity piston pumps
  - Maximum flow: 2*220Itr/min

**Bucket**
- Bucket: 115mm*1120mm

**Arm**
- Arm: 135mm*1490mm

**Boom**
- Boom: 120mm*1285mm

**Hydraulic motors**
- Travel: 2* axial piston motor with parking brake
- Swing: 1* axial piston motor with swing holding brake

**ENGINE POWER**
- At rated engine speed: 29000/21500kg
- Engine power: 114kw/2050rpm
- Displacement: 5.86L
- Model: Mitsubishi 6D34-TL

**OPERATING WEIGHT**
- Operating weight with standard bucket, fully serviced: +75 kg
- Operating weight: 20900/21500kg

**UNDERCARRIAGE**
- Track width: 600mm
- Number of track shoes: 46/47
- Track roller (per side): 2
- Track roller (per side): 7/8

**TRANSMISSION**
- Travel Speed (Highest/Lowest): 5.5/3.5km/h
- Swing Speed: 11rpm
- Gradedability: 70%-35%
- Ground Pressure: 44.8/45kpa

**SERVICE CAPACITIES**
- Fuel tank: 340L
- Engine oil: 22.75L
- Hydraulic tank: 230L
- Pilot circuit: 34.3mpa 336kg/cm² 4,974psi
- Heavy lift circuit: 34.3mpa 336kg/cm² 4,974psi
- Swing circuit: 27.5mpa 270kg/cm² 3,988psi
- Hydraulic motors: 2* 220Itr/min
- Maximum flow: 2*220Itr/min
- Type: Variable-capacity piston pumps

**DIGGING FORCE**
- Bucket Digging Force: 138kN
- Arm Digging Force: 100kN

**OPERATION RANGE**

**DIMENSION**

**OPERATION RANGE**

**BUCKET OPTIONAL**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Number of Teeth</th>
<th>Arm length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2600mm</td>
<td>2400mm</td>
<td>1800mm</td>
</tr>
<tr>
<td>SAE CECE</td>
<td>Without Side Cutters</td>
<td>With Side Cutters</td>
<td></td>
</tr>
<tr>
<td>0.8(kcubh)</td>
<td>1177</td>
<td>1252</td>
<td>1316.6</td>
</tr>
<tr>
<td>0.8(lcbh)</td>
<td>1046</td>
<td>1090</td>
<td>1129</td>
</tr>
<tr>
<td>0.9(kcubh)</td>
<td>1177</td>
<td>1128.6</td>
<td>1176.6</td>
</tr>
<tr>
<td>0.9(lcbh)</td>
<td>1177</td>
<td>1128.6</td>
<td>1176.6</td>
</tr>
</tbody>
</table>

Suitable for materials with density of 1 800 kg/m³ (3 030 lb/yd³) or less

Suitable for materials with density of 1 600 kg/m³ (2 700 lb/yd³) or less

Suitable for materials with density of 1 100 kg/m³ (1 850 lb/yd³) or less

Materials and specifications are subject to change without further notice in accordance with our continuous technical innovations. Photos and illustrations may not include additional equipment.
### SY205/215C LIFTING CAPACITY

<table>
<thead>
<tr>
<th>SY205C</th>
<th>SY215C</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>7.5m</td>
</tr>
<tr>
<td></td>
<td>4.5m</td>
</tr>
<tr>
<td>3.0m</td>
<td>9.0m</td>
</tr>
<tr>
<td>4.5m</td>
<td>9.0m</td>
</tr>
</tbody>
</table>

- **SY205C**: Boom length 21575Kg, Arm length 46.3Kpa
- **SY215C**: Boom length 22032Kg, Arm length 41.4Kpa

### Standard Equipment

- **Engine**
  - Mode control (H, S, L and B)
  - Start motor 24V/4.5KW
  - Alternator 50A
  - Air pre-cleaner
  - Dry double-filtering air cleaner
  - Cylindrical engine oil filter
  - Enine oil cooler
  - Radiator with protective screen
  - Auxiliary water tank for radiator
  - Fan cover
  - Separately installed engine
  - Automatic idle speed system
  - Accelerating system
- **Hydraulic System**
  - Working mode selection switch
  - 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
  - 5.7 m fully-welded box boom
  - 2.92 m 4 fully-welded box arm
  - Guard
  - 0.83m standard bucket (SY205C)
  - 0.93m standard bucket (SY215C)
- **Undercarriage**
  - Travel brake
  - Travel motor guard
  - H-tracking 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
- **Operator Station**
  - Noiseproof steel-structured cab
  - Toughened light-color window
  - 6 siliconie rubber damping support
  - Opensable 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
  - Cab holder and cab light
  - Ashtray
  - Storage box, literature bag
  - Hydraulic lockout control
  - Fully automatic air-conditioner
  - Cab visor
- **Swing Platform**
  - Fuel level float
  - Hydraulic oil level gauge
  - Tool box
  - Rear view mirror (R)
  - Swing brake
- **Others**
  - Standard battery
  - Lockup engine hood
  - Lockup fuel filler cap
  - Anti-skid film, handhold and...
SANY GROUP CO., LTD.
Address: SANY Industrial Park, Economic and Technological Development Zone, Changsha, Hunan, China
Service Hotline: +0086-4006-098-318
E-mail: crd@sany.com.cn
For more information, please visit: www.sanygroup.com
B06S2ENAM1-SY215C

Quality Changes the World