

HYDRAULIC EXCAVATOR **SY235C**



SANY
GERMANY

ENGINE ISUZU AL-4HK1X
POWER 140 KW /2000 RPM
OPERATING WEIGHT 25,300 KG
GROUND PRESSURE 30.4 KPA
BUCKET CAPACITY 1.12 M³



RELIABLE FIRST-CLASS COMPONENTS 08

Guaranteeing easiest and most versatile operation in every working environment. A structure that keeps all promises

LOWER FUEL CONSUMPTION 04 | 05

With perfectly aligned engine and hydraulics.

OPTIMIZED CABIN 06 | 07

For highest visibility and maximum comfort.

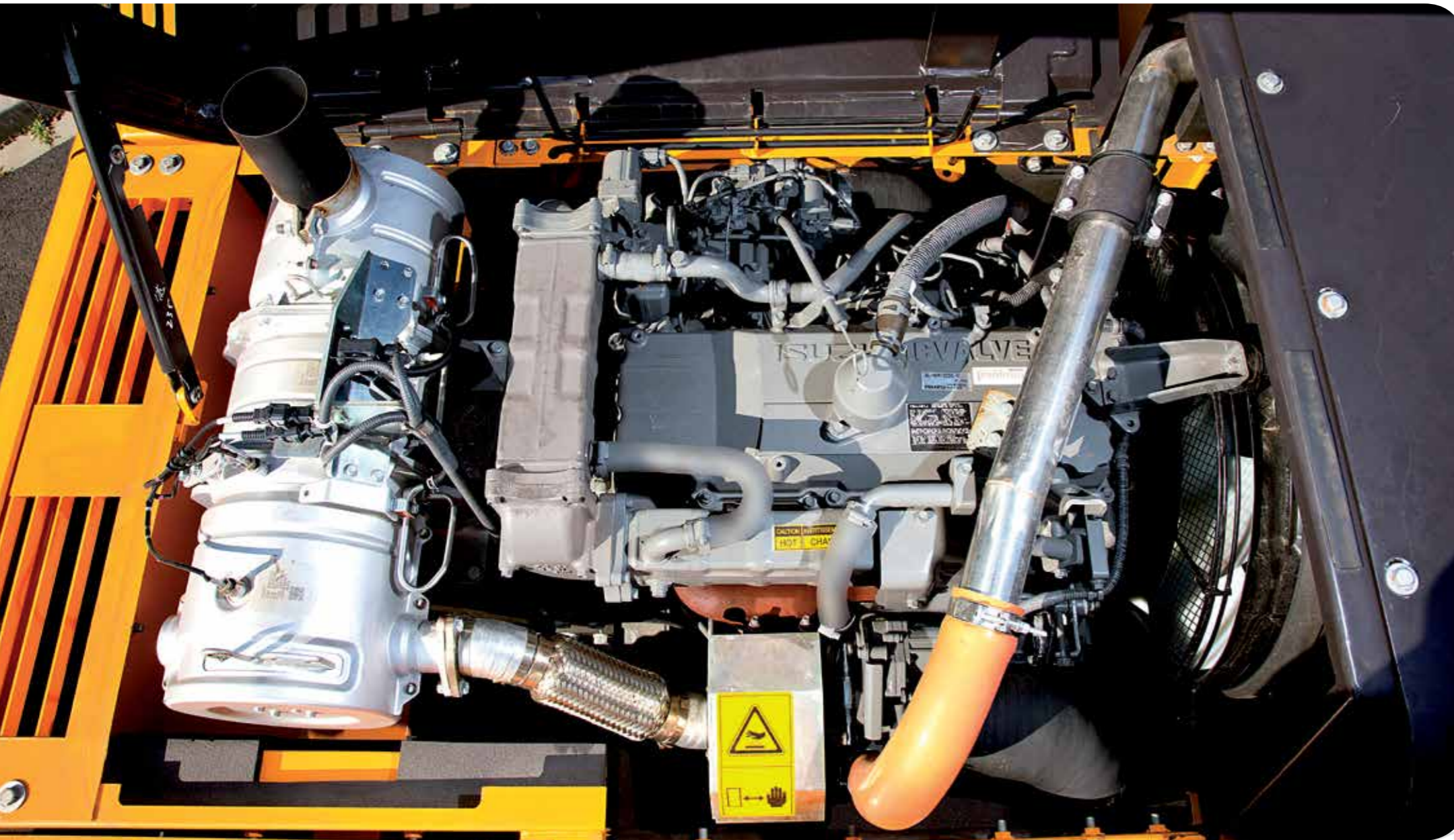
INSTRUMENT OF PERFORMANCE.

QUALITY CHANGES THE WORLD

The SY235C is one of five excavator models developed for the European market, meeting the highest customer requirements and needs. The reliable structure and improved stability enables the operator to fully concentrate on his work, whilst operating in a safe and efficient manner.

SIMPLIFIED SERVICE 09

Is a key tool for more uptime and reduced cost.



ISUZU AL-4HK1X STAGE IIIB

The power for SY235C comes from an Isuzu four-cylinder four-stroke common rail diesel engine, featuring a variable geometric turbocharger, intercooler, cooled EGR and high-precision Diesel Particle Defuser (DPD). With Stage IIIB emission standards, the engine follows the environmentally friendly direction of SANY products.



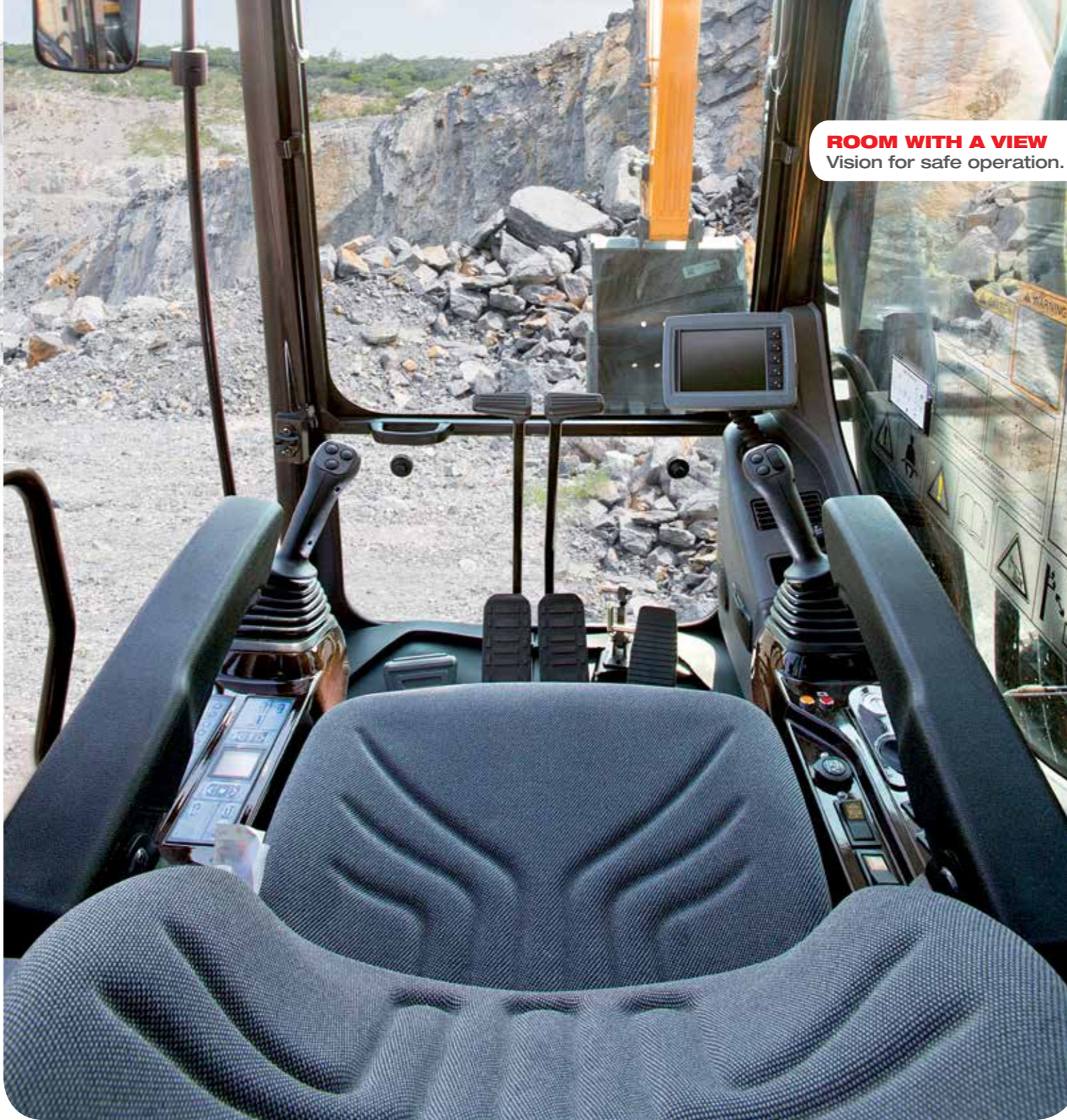
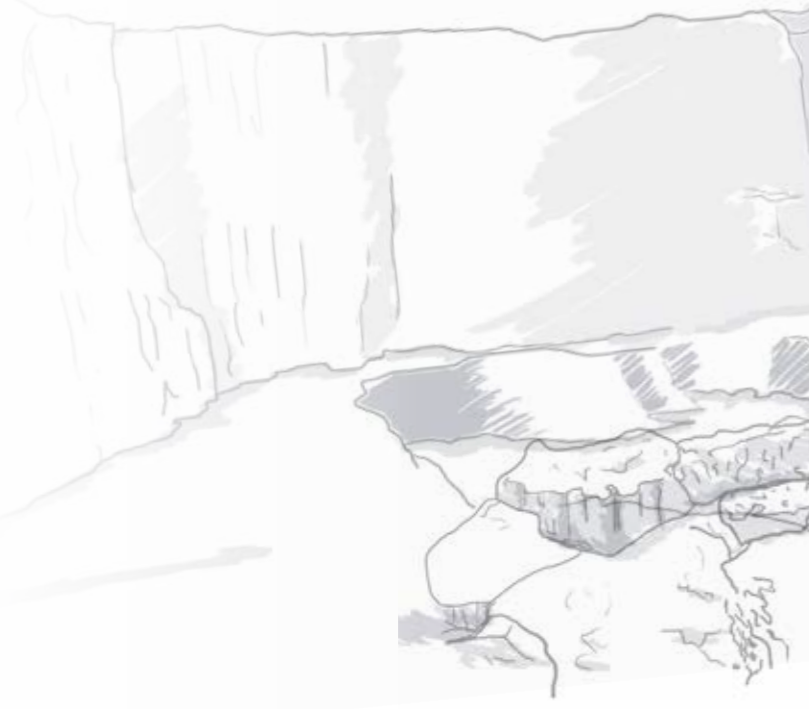
WORLD-LEADING POSITIVE FLOW CONTROLLED HYDRAULIC SYSTEM

With the positive flow controlled hydraulic system, the main pump's displacement is directly proportional to the signal pressure from the operator's joystick. The controller determines the flow demand and variation trend of the actuator, and regulates the displacement. This provides a real-time match of flow.

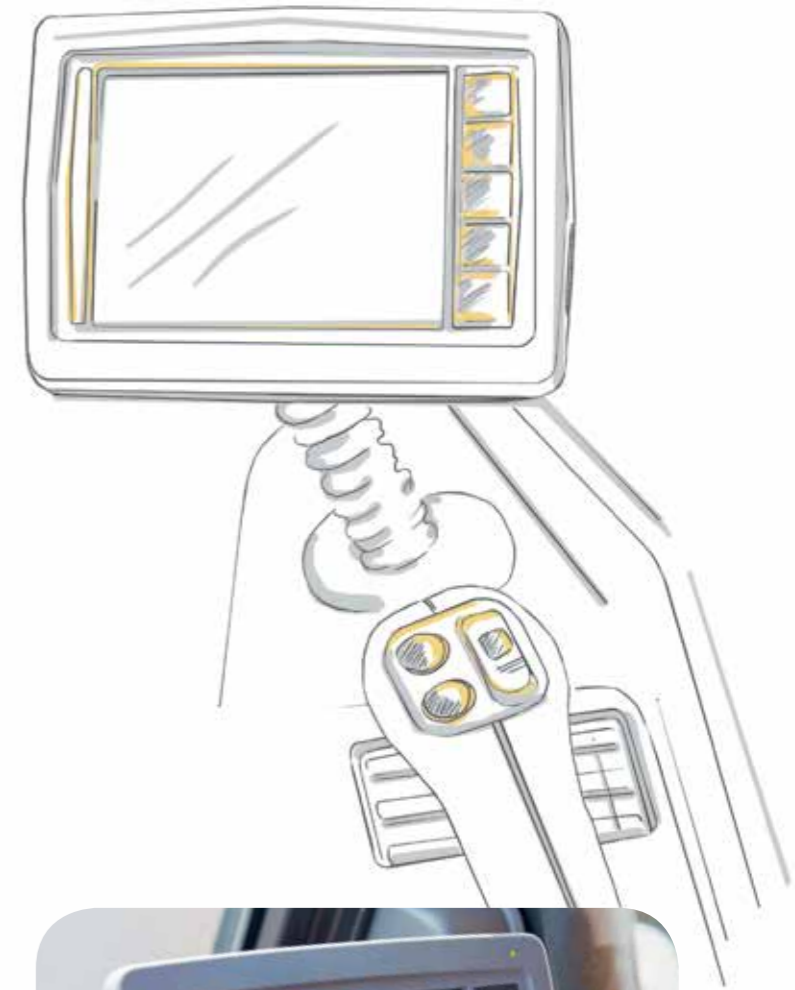
WHERE EFFICIENCY MEETS ECONOMICAL NEEDS.

Equipped with an Isuzu AL-4HK1X engine and improved hydraulic systems, this machine performs at the peak of efficiency. An automatic deceleration system facilitates fuel savings of 5-10% as it brings the engine down to idle mode after 3.5 seconds, after operations stop. With the Isuzu diesel engine with Stage IIIB Emission Standards, SANY is conscious of the environmental responsibility to reduce emissions and fuel consumption.





ROOM WITH A VIEW
Vision for safe operation.



EASY ACCESS
Access and Egress made easy.



THE PLACE TO BE.

ERGONOMIC AND COMFORTABLE WITH LOW CABIN NOISE
SANY's optimized cabin enables an all-round visibility and is designed to support the operator's natural range of action. Spacious leg room and an adjustable seat are at the center of comfort, supporting an excellent working environment and increased productivity.



HIGH TECH
Control at your fingertips.



TOP PERFORMER
in all conditions.

A STRUCTURE THAT KEEPS ALL PROMISES.

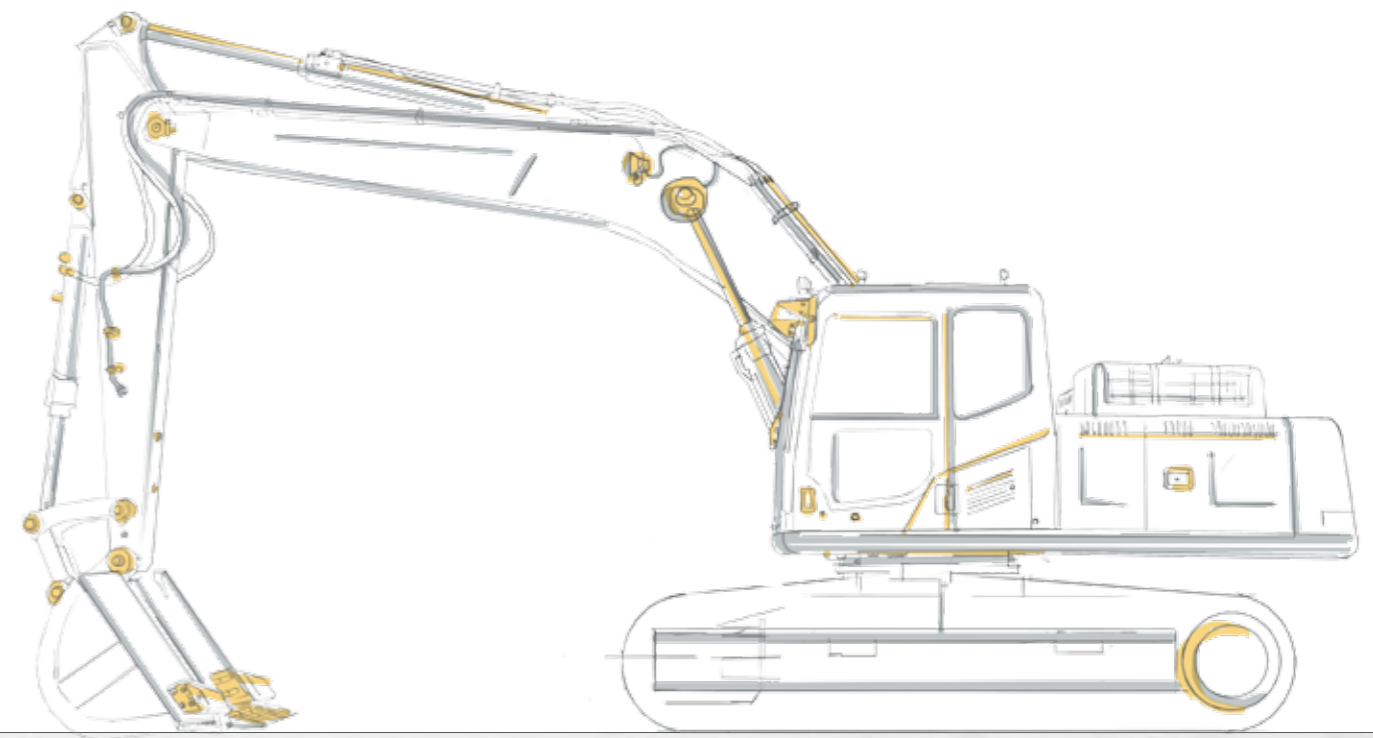
SANY Hydraulic Excavators are designed and developed to perform in the toughest working conditions. A robot welding process ensures the precise production of a strong and durable machine. In intensive testing sequences, the products have to pass rigorous test procedures and prove their reliability, durability and longevity before being delivered to the customer.

UNDERCARRIAGE

X-beam design, using a box-section structure with high strength and durability, provide excellent torsion and bending resistant performance. Track rollers, carrier rollers and idlers use seal-in lubrication that provides higher longevity. The triple grouser track shoes rolled with a high-strength alloy provide excellent contact, stability and durability. The track links have additional reinforced ribs to increase their strength and absorb shock when travelling on rough surface.

REINFORCED BOOM AND ARM

The structure of the boom and arm of SY235C has been totally redesigned. With the emphasis on reducing stress points to a minimum, both boom and arm go through rigorous fatigue and field testing. With this, SANY has the confidence to apply their machines in any demanding working environment.

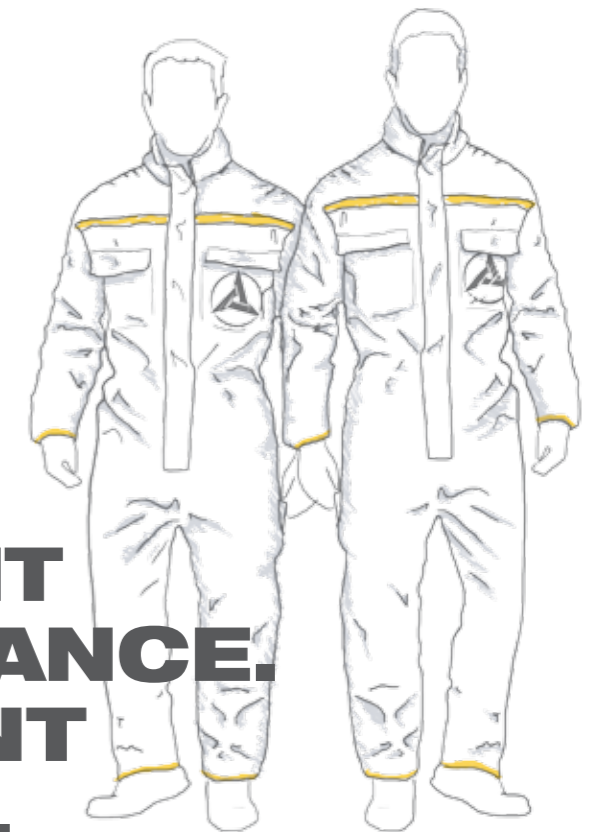


SIMPLIFIED SERVICEABILITY
with ground level doors.



THE EASE OF MAINTENANCE.

Comfort and safety of the operator are attributes that SANY places a lot of emphasis on, always aiming at creating the optimum working atmosphere for the customer. Simplified maintenance and service of SANY's Hydraulic Excavator has an effective impact on reduced time and cost. The design of SY235C allows you to safely service from ground level. The grouped filters are accessible with only one door.



EXCELLENT PERFORMANCE. EXCELLENT SUPPORT.

The purchase of your SANY Excavator SY235C is just the beginning of a close relationship with SANY and its authorized dealers. SANY Germany understands the importance of an excellent After Sales Support to the customer, the organization is committed to minimize down-time and maximize the value of the products. SANY Germany's dealers are carefully selected and trained to provide the best Aftersales service in the earthmoving machinery sector. Their service teams are there to support you, anytime, anywhere your SANY equipment is working. SANY Germany is backing up all service partners with a huge parts inventory in Germany, ensuring parts availability and short lead times. Employing most modern communication and administration systems, SANY allows an easy approach to address any request our customers have. SANY provides space for individual solutions and strives to grow with its customers' businesses.

YOUR VALUE IS OUR COMMITMENT.

VALUE PLUS

SANY offers customized services and products to fulfill highest demands. We understand value as our commitment to you which we aim to reflect in everything we do.

- European R&D
- First Class After Sales Support
- Best return on investment
- Fast and customized solutions
- Premium distribution network
- Selected and market proven components
- Continuous improvement and development
- Quality driven production processes
- Manufacturing expertise
- Deep Industry knowledge
- Commitment to environmentally friendly and safe solutions



DIMENSIONS

ENGINE	
Model	AL-4HK1X
Displacement (l)	5.193
Engine power at rated engine speed (kW/rpm)	140/2000
Max. Torque (N-M @ rpm)	676/1800

HYDRAULIC SYSTEM	
Type	Positive control system
Number of selectable working modes	4
Main pump	
Type	Variable-capacity piston pumps
Maximum flow (l/min)	2*252
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/cm ² 4.974psi
Travel circuit	34.3mpa 336kg/cm ² 4.974psi
Swing circuit	27.5mpa 269kg/cm ² 3.988psi
Pilot circuit	3.9mpa 38kg/cm ² , 565psi
Hydraulic cylinders	
Boom cylinder diameter x stroke (mm)	130*1295
Arm cylinder diameter x stroke (mm)	140*1675
Bucket cylinder diameter x stroke (mm)	130*1156
Blade cylinder diameter x stroke (mm)	130*145

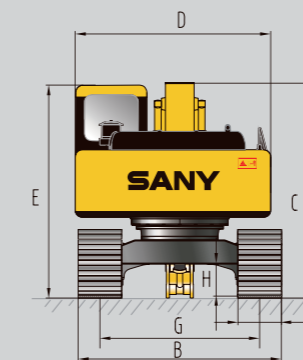
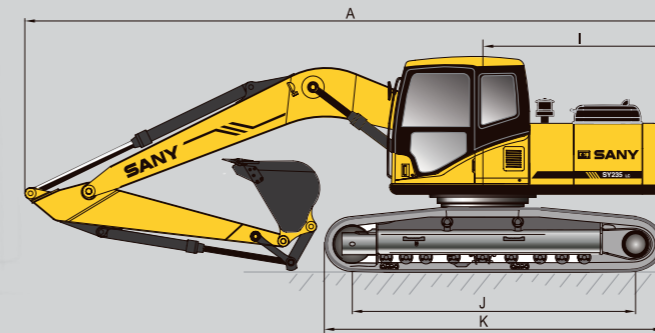
SERVICE REFILL CAPACITIES (l)	
Fuel tank	340
Engine coolant	20
Engine oil	21.5
Swing drive	4
Final drive (each side)	5.5
Hydraulic oil tank	340

OPERATING WEIGHT	
Operating weight with standard bucket, fully serviced, +75 kg operator (ISO)	
Operating weight (kg)	25375
Ground Pressure (kPa)	30.4

Drive	
Travel Speed (Low/High) (km/h)	3.5/5.4
Maximum Travel Force (kN)	209
Gradeability	35°

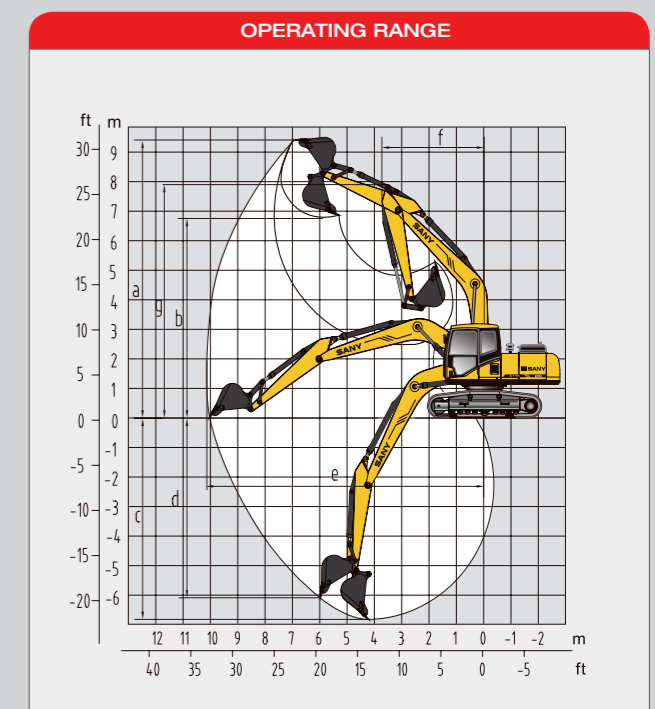
Swing	
Swing Speed (rpm)	11

Digging Force	
Bucket Digging Force (kN)	175
Arm Digging Force (kN)	122



ITEM	mm
A Transport Length	9920
B Transport Width	3390
C Transport Height	3550
D Upperstructure Width	2710
E Cab Height	2990
F Standard Track Shoe Width	700
G Track Gauge	2380
H Minimum Ground Clearance	440
I Tail Swing Radius	2960
J Center distance of tumbler	3640
K Overall length of crawler	4445
Boom Length	5900
Arm Length	2950

UNDERCARRIAGE	
Track shoe width (mm)	700
Number of track shoes (per side)	51
Carrier roller (per side)	2
Track roller (per side)	9





STANDARD EQUIPMENT

ENGINE

- Mode control (H, S, L and B)
- Starter motor 24V/4.5KW
- Alternator 24/50A
- Air pre-cleaner
- Dry double-filtering air cleaner
- Cartridge type engine oil filter
- Engine oil cooler
- Radiator with protective screen
- Auxiliary water tank for radiator
- Fan guard
- Separately installed engine
- Automatic idle system

OPERATOR STATION

- ROPS compliant cab
- Noise proof steel-structured cab
- Laminated glass
- 6 silicone rubber damping support
- Openable roof hatch, upper front and left window
- Rear window escape exit
- Window wiper with washer
- Adjustable inclined seat with adjustable armrest
- AM-FM radio with digital clock
- Foot rest and floor mat
- 2 speakers
- Rear view mirror
- Seat belt
- Cup holder and Ashtray
- Cab light
- Storage box, literature bag
- Hydraulic lockout control
- Fully automatic air-conditioner
- Cab visor
- 12 v socket

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
- Hose rupture valve boom
- Hose rupture valve arm

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
- 700 mm track shoe
- Bottom cover plate

SWING PLATFORM

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

FRONT WORK EQUIPMENT

- Flanged pin
- Bucket clearance adjustment
- Welded bucket link
- Central lubrication point
- Dust ring-seal of bucket pin
- 5.9 m fully-welded box boom
- 2.95 m fully-welded box arm
- 1.2 m³ standard bucket

ALARM & INDICATOR LIGHTS

- Engine oil pressure
- Engine coolant temperature
- Fuel low level
- Voltage higher than specification
- Engine over speed
- Auto-idle engine warm up
- Hi/Lo speed
- Throttle position fault
- Overload Warning Device

MONITORING SYSTEM

- Hour meter
- Fuel tank level gauge
- Engine coolant thermometer
- Engine oil pressure gauge

OTHERS

- Standard battery
- Lockable engine hood
- Lockable fuel filler cap
- Anti-skid film
- Handrail walkway
- Travel direction mark
- Hand grease gun

LIFTING CAPACITY

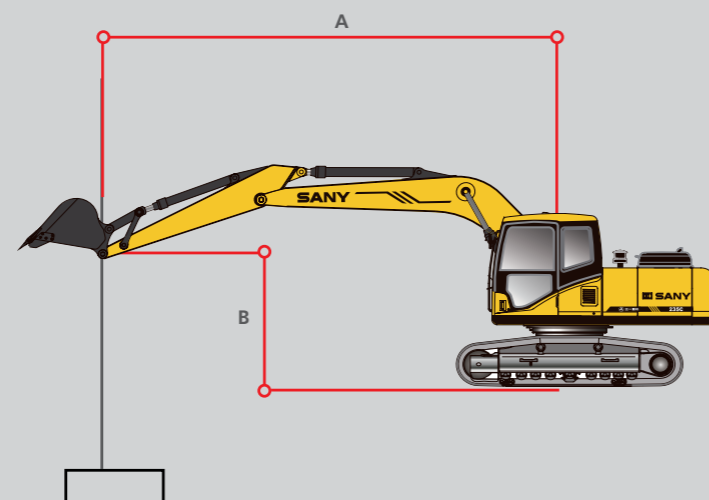
Arm Length: 2950 mm



Rating Over Side



Rating Over Front



B \ A	3.0m		4.5m		6.0m		7.5m		9.0m		MAXIMUM		mm
	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side	Front	
7.5m					5103.7	5103.7					5181.5	5065.4	6150
6.0m					5231.3	5221.8	5477.9	3569.7			5444	3546.7	7525
4.5m					7088	4990.7	5398.1	3497.9			4739.7	3064.5	8100
3.0m			8996.4	7079.33	7088	4679	5237.7	3353.5			4739.4	2799	8400
1.5m			11177.6	6455.1	7099.7	4384	5069.7	3202.2			4372.4	2661.5	8500
0			10842.1	6183.4	6865.4	4180.4	4944.7	3089.7			4198.5	2707.9	8260
-1.5m	11090.6	11090	10738.9	6099.8	6765.3	4093.3	4900.3	3049.7			4730.9	2991.7	7750
-3.5m	17169.8	11810	10823.7	6168.5	6804.9	4127.8					5613.7	2532.7	6910
-4.5m	14747.7	12219	10544.9	6403.4							8000.2	4845.1	5510

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