



SY20C

Engine power

14.6kW/2400rpm

Bucket capacity

* 0.04 m³

Operating weight

1975kg

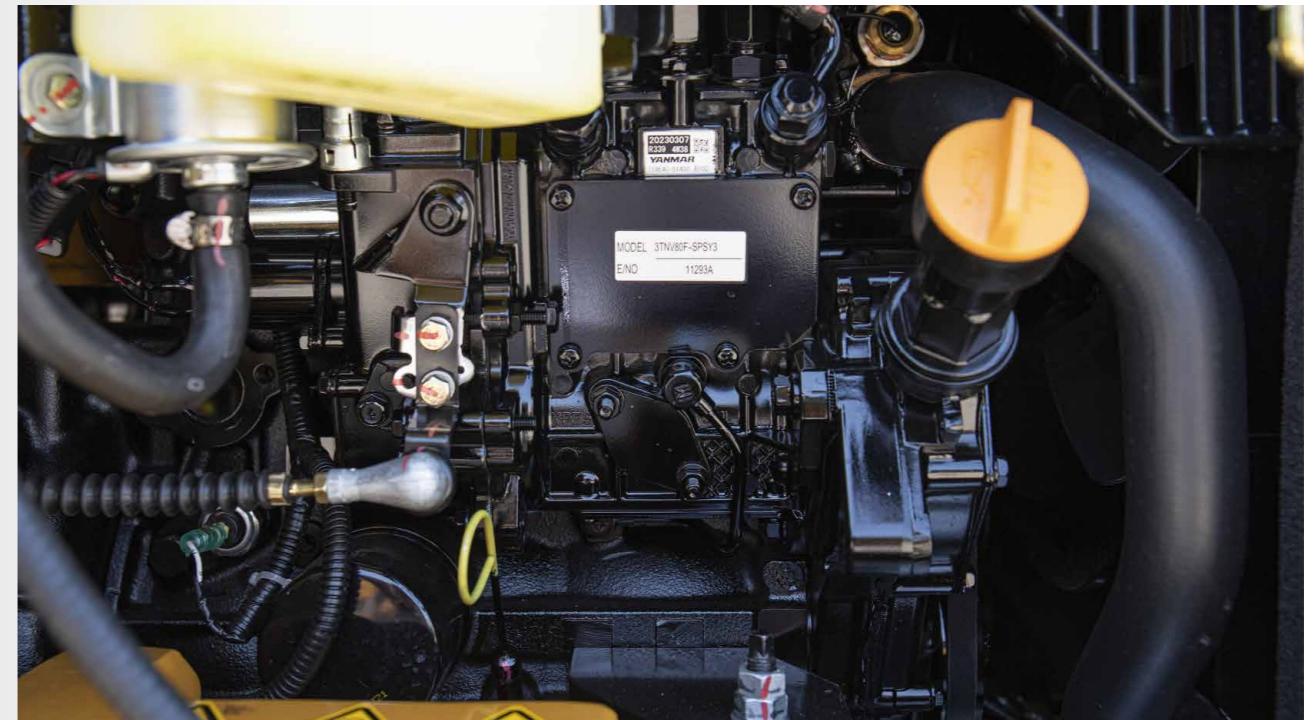


SANY HEAVY MACHINERY LTD

<http://www.sanyglobal.com>

This manual was printed in 2025. The product information may have been changed when you read it. Products (including specific configuration, detail, etc.) are based on the specific models and products applicable to markets outside China, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Ltd.

* Bucket is optional



Excellent performance



SY20C is powered by a SANY-customized Yanmar 3TNV80F engine, delivering 14.6kW of power and meeting Stage V and Tier 4f emission standards. With robust and reliable performance, it caters to diverse power needs of customers.

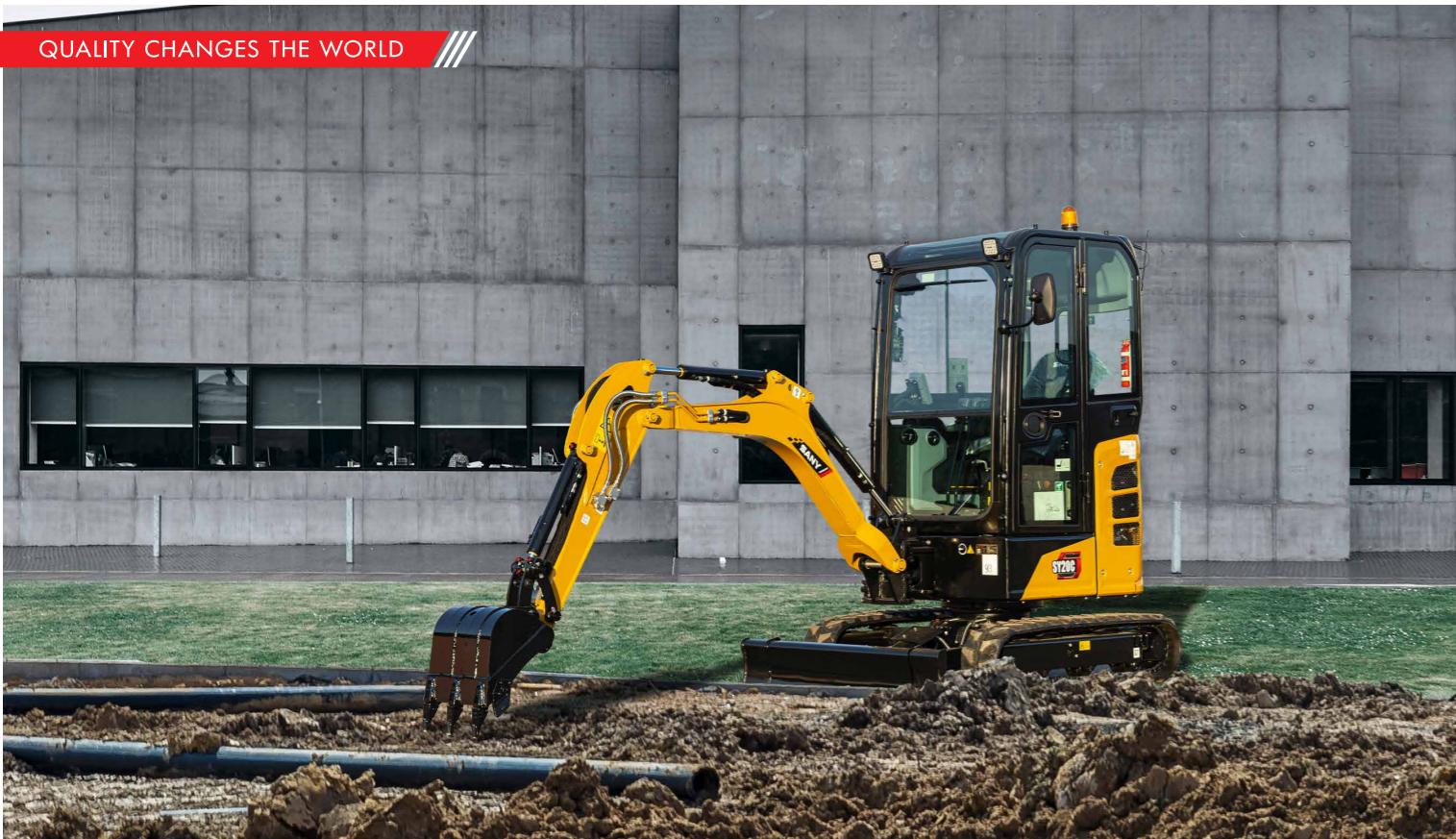
The SY20C is equipped with a 30cc large-displacement main pump, a high-torque travel motor, and strong power engine providing the machine with superior performance.



Load-sensing hydraulic system



Load-sensitive flow distribution system: It can provide and distribute flow according to the need of the system for flow, meeting the requirements of speed regulation and compound actions of executing components. Through hydraulic system optimization, precise engine matching ensures accurate and smooth control of machine operations.



Adjustable track frame to suit all your requirements and increase stability

When things get really tight, the SY20C makes itself very small – with a width of just 980 mm, it can even fit through a garden gate, a door opening or onto a trailer for transport.

If stability is required, the undercarriage can be hydraulically adjusted to a width of 1 350 mm. The dozer blade can also be adjusted to varying widths as needed.



Brand new upgrade of cab

Protection for people and machines

Thanks to the ROPS or FOPS-tested operator's platform, SANY's smallest model also performs well in terms of safety. To ensure that people and machines, tools and buildings and the environment are optimally protected, the standard equipment includes a battery disconnection switch and an emergency stop button. The warning beacon alerts work zone personnel to maintain safety awareness.

The individual that already has everything

The SY20C comes with many standard features that are highly beneficial. For instance, it includes bi-directional switchable circuits, autoshifting travel motors, LED work lights, rearview mirrors, and an externally mounted main power switch.



*Some country configurations



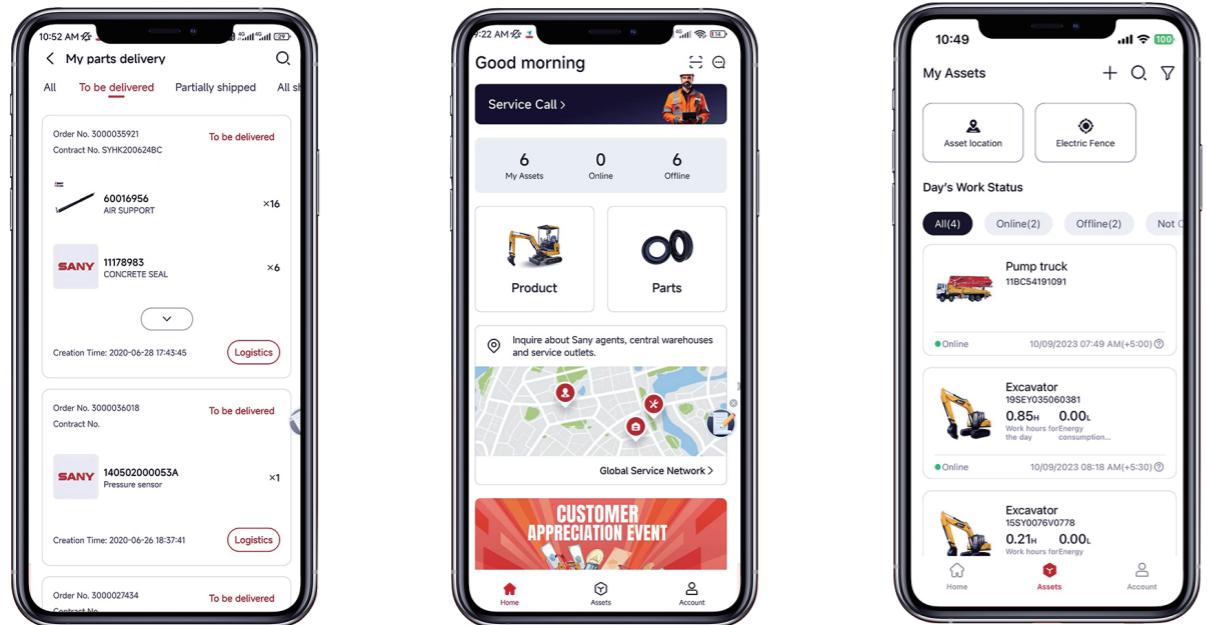
Comfortable working environment

The sealed and enlarged operator's cab, air conditioning, suspension seat, advanced operator display, and multi-function proportional joysticks collectively ensure ergonomic comfort for prolonged operation.



MySANY APP

Easy use, quick response



Quick Parts Access

- View parts manuals
- View parts availability
- Check equipment & parts order status

Fleet Management

- Check equipment working condition
- Monitor equipment energy consumption
- Set up e-fence

Streamlined Service

- One-click to initiate service request
- Check global service network
- View local service team's phone number & email



Scan to download!

Complete research & development and test system

SANY 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 components like working device, cab and hydraulic components etc. must be subject to fatigue test over 800,000 times.



Advanced manufacturing technology

SANY has RGV assembling line and fullautomatic welding robots, and possesses high precision machining equipment and precise machining center.

SANY's manufacturing and assembling lines won five-star national site in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.



Convenient maintenance

Electrical components are centrally installed, allowing for easy maintenance by simply opening the front cover.

Full-open covering parts enable maintenance and service directly from the ground, ensuring convenience and easy accessibility.

Air filters, oil-water separators, fuel filters, oil filters, fuse boxes, and other components are easily reachable, making maintenance exceptionally convenient.

Lubricating grease is added through a grease nozzle conveniently arranged on the same side as the excavator, ensuring easy lubrication and maintenance.



Technical specifications

Specification		Main performance	
Overall Weight	1975 kg	Traveling Speed	4.0/2.8(km/h) AC Off 3.0/2.1(km/h) AC On
*Bucket Capacity	0.04m ³	Gyration Speed	10rpm
Engine	Yanmar 3TNV80F	Grade Ability	58%
Engine Power	14.6kW/2400rpm(SAEJ1995)	Ground Pressure	32 kpa
Main Pump Flow	66L/min	Digging Force of Bucket	16.6 kN
Maximum Torque	65.3Nm/1800rpm	Digging Force of Arm	8.3/9.2 kN
Displacement	1.267L		

Lift capacities of lower dozer blade

(m) (ft)	Load point height (1160mm Arm)								
	1.5 4.9		2.0 6.6		2.5 8.2		3.0 9.8		Maximum
	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket
3.0 9.8									*287 *633
2.0 6.6									*222 *490
1.0 3.3			*549 *1210	*549 *1210	*446 *983	415 915	*394 *869	315 695	*222 490
0 0	*680 *1499	*680 *1499	*812 *1790	533 1175	*571 *1259	388 855	*436 *961	300 662	*257 *567
-1.0 -3.3			*677 *1493	527 1162	*487 *1074	381 840	*350 *772	298 657	291 642

Service Refill Capacities		Traveling part	
Fuel tank	25 L	Number of track rollers	2
Hydraulic oil tank	21 L	Roller on each side	3
Engine oil	3.4 L	Track width	230mm
Antifreeze coolant	5.4 L		
Traveling reducer gear oil	2X0.33 L		

Lift capacities of upper dozer blade

(m) (ft)	Load point height (1160mm Arm)								
	1.5 4.9		2.0 6.6		2.5 8.2		3.0 9.8		Maximum
	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket	Bucket	*287 *633
3.0 9.8									*222 *490
2.0 6.6									*222 *490
1.0 3.3			514 1133	*549 *1210	366 807	415 915	278 613	315 695	*222 465
0 0	*680 *1499	*680 *1499	466 1027	533 1175	339 747	388 855	262 578	300 662	241 463
-1.0 -3.3			460 1014	527 1162	333 734	381 840	260 573	298 657	291 642

1. The lifting capacity is calculated in accordance with ISO10560 and SAEJ1097, where the limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75;

2. Item with * is limited by hydraulic pressure and item without ** is limited by stability;

3. Lifting point is front support hole of arm (excluding the weight of the bucket). It is necessary to deduct from the above lifting capacity if additional accessory is installed, such as bucket;

Lift capacities of lower dozer blade

Load point height (960mm Arm)										
(m) (ft)	1.5 4.9		2.0 6.6		2.5 8.2		3.0 9.8		Maximum	
										
3.0 (kg)										
9.8 (lb)										
2.0					*329	*329	*329	326	*322	*322
6.6					*725	*725	*725	719	*710	*710
1.0			*666	576	*502	415	*424	318	*322	266
3.3			*1471	1270	*1107	915	*935	701	*710	587
0	*667	*667	*809	538	*577	392	*438	305	*365	266
0	*1471	*1471	*1784	1186	*1272	864	*966	663	*805	587
-1.0			*639	538	*460	390			*361	333
-3.3			*1409	1186	*1014	860			*796	734

Lift capacities of upper dozer blade

Load point height (960mm Arm)										
(m) (ft)	1.5 4.9		2.0 6.6		2.5 8.2		3.0 9.8		Maximum	
										
3.0 (kg) 9.8 (lb)										
2.0 6.6					*329 *725	*329 *725	289 637	326 719	284 626	*322 *710
1.0 3.3			510 1125	576 1270	367 809	415 915	280 617	318 701	234 516	266 587
0 0	*667 *1471	*667 *1471	472 1041	538 1168	345 761	392 864	268 591	305 673	234 516	266 587
-1.0 -3.3			472 1041	538 1168	343 756	390 860			292 644	333 734

1. The lifting capacity is calculated in accordance with ISO10560 and SAEJ1097, where the limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75;

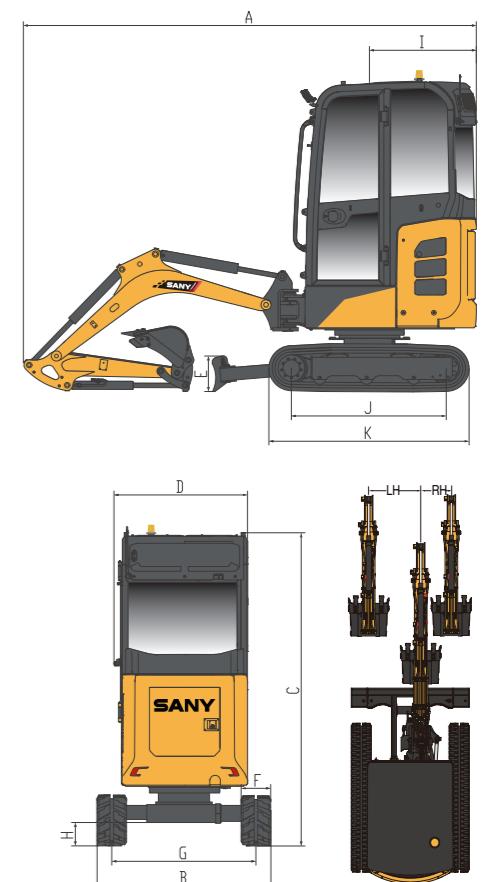
2. Item with * is limited by hydraulic pressure and item without “*” is limited by stability:

3. Lifting point is front support hole of arm (excluding the weight of the bucket)

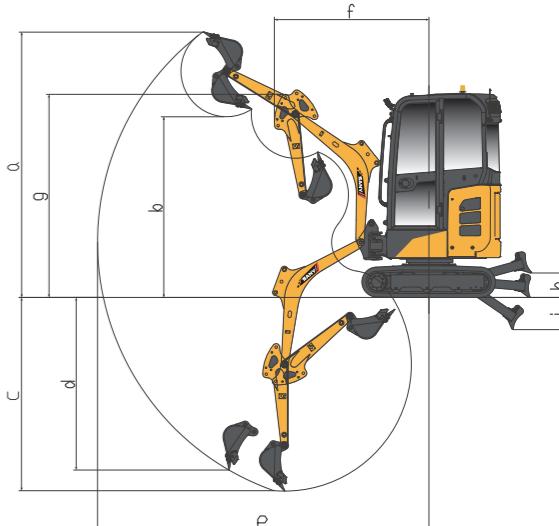
It is necessary to deduct from the above lifting capacity if additional accessory is installed, such as bucket:

Machine dimensions

DIMENSIONS (TRANSPORT) (mm)	SY20C
A. Total length (during transportation)	3695
B. Total width (during transportation/operation)	1040/1350
C. Total height (during transportation)	2430
D. Upper width	1040
E. Blade height	270
F. Width of standard track shoe	230
G. Track gauge (during transportation/operation)	750/1120
H. Minimum ground clearance	150
I. Gyration radius of tail	905
J. Grounding length of track	1220
k. Track length	1585



Working Area (mm)		Arm 960/1160	SY20C
a. Maximum digging height		3410/3530	
b. Maximum unloading height		2350/2475	
c. Maximum digging depth		2385/2585	
d. Maximum digging depth with vertical boom		2100/2205	
e. Maximum digging radius		3955/4080	
f. Minimum gyration radius		1650/1660	
g. Max. height at Min. gyration radius		2550/2545	
h. Maximum lifting height of blade		290	
i. Maximum lowering depth of blade		375	
rh/lh. Maximum bucket offset		400/625	



Standard configuration

Engine	Hydraulic system	Cab	
3TNV80F	● Pilot switch control lever	● Retractable seatbelt	●
12V-55A Alternator	● Single/double acting switch valve	● Adjustable suspension seat	●
25L fuel tank	● Accumulator	● Openable front window	●
	AUX1 lines	● Cup holder	●
	Hydraulic oil cooling	● Storage pocket	●
	21L hydraulic oil tank	● Air conditioning	●

Alarm system	Others
Engine oil pressure is too low	● 60Ah battery
The fuel level is too low	● Lockable rear engine cover
Coolant temperature is too high	● Travel direction markings on traveling frame
	● Working indicator

Lower traveling body	Electrical control system
230mm wide rubber tracks	● 12V power interface
Two-speed travel	● Main power switch
Retractable lower assembly	● Multi-functional Display

Monitoring system instrument	Optional accessories
Hour gauge, fuel tank level gauge	● Arm 960mm
Engine coolant temperature	● Steel tracks
	● 0.04m ³ bucket
	● AUX2 hydraulic lines
	● QC hydraulic lines

● stands for standard configurations ○ stands for optional configurations

