

NO JOBSITE IS TOO TIGHT!

SANY SY16C Mini Excavator

- ▶ Superb Performance
- ▶ Std. & Opt. Equipment
- ▶ Specification



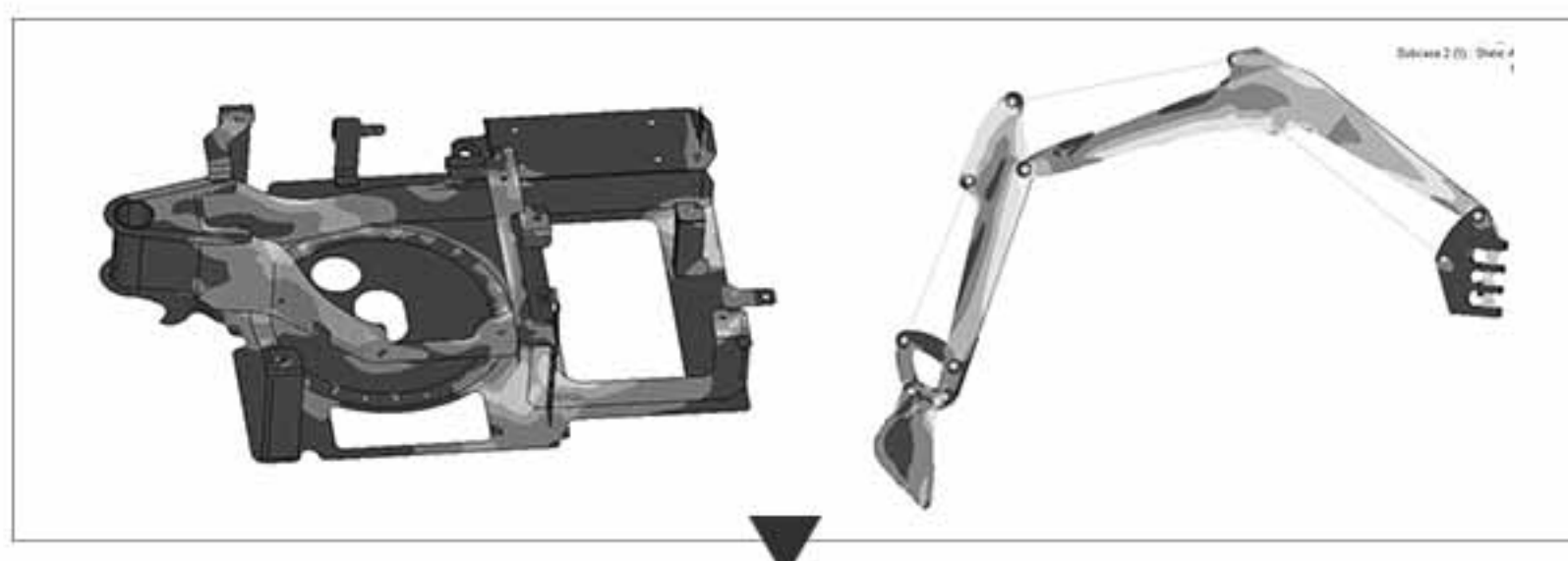
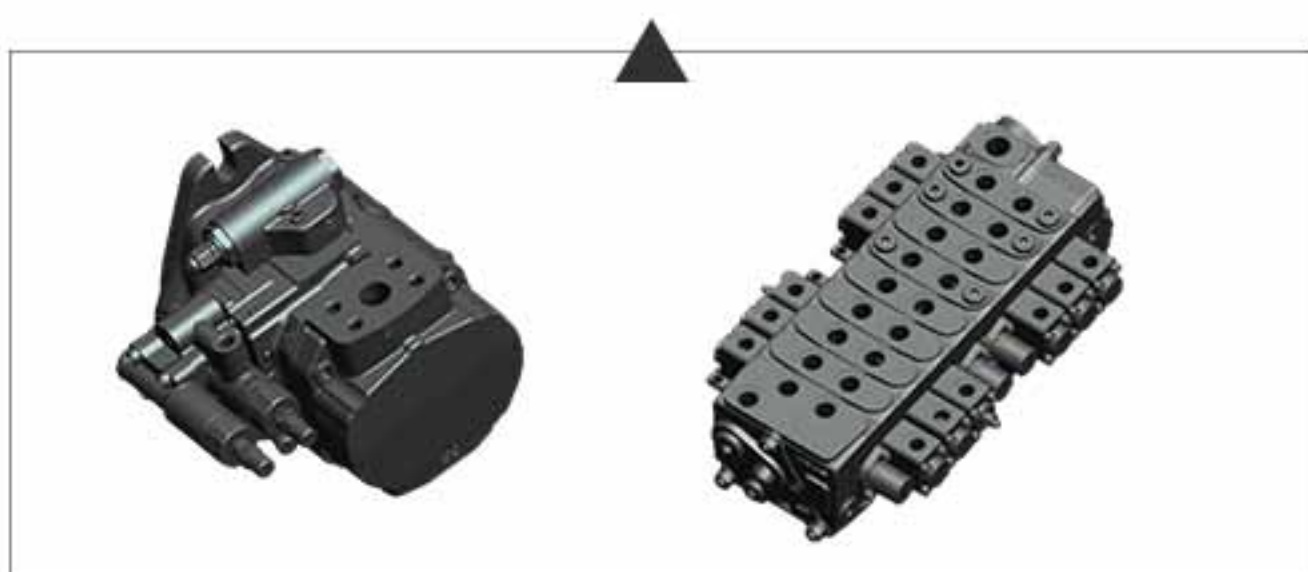
Superb Performance

High Performance & Reliability



Yanmar Customized Engine: Strong power ensures reliability in various working conditions;

Unique SLSS-Load Sensitive Hydraulic System: Perfect synergism between the engine and the main pump, improving work efficiency and reducing fuel consumption; full hydraulic control of deflectable boom and auxiliary line, achieving precise positioning and high productivity.



Reinforced Structure: reinforced work device and frame, based on ANSYS platform, optimizing structure, reducing stress concentration and extending the service life by 30% on average.

Strict Field Test: More than 2000 hours excavation field experiment, over 800,000 times key components fatigue test, proving its superior performance.

Compact Design for Narrow Zone Operation



Retractable Undercarriage: Width adjustable between 980mm-1350mm, guaranteeing its access to tight space narrower than 1m while improving the stability of the machine.

Deflectable Boom: SY16C boom swing left 600mm, right 350mm, able to reach outer edge of the track, and work in limited space such as near the wall and wall corner.



Strong Adaptability to Various Situations

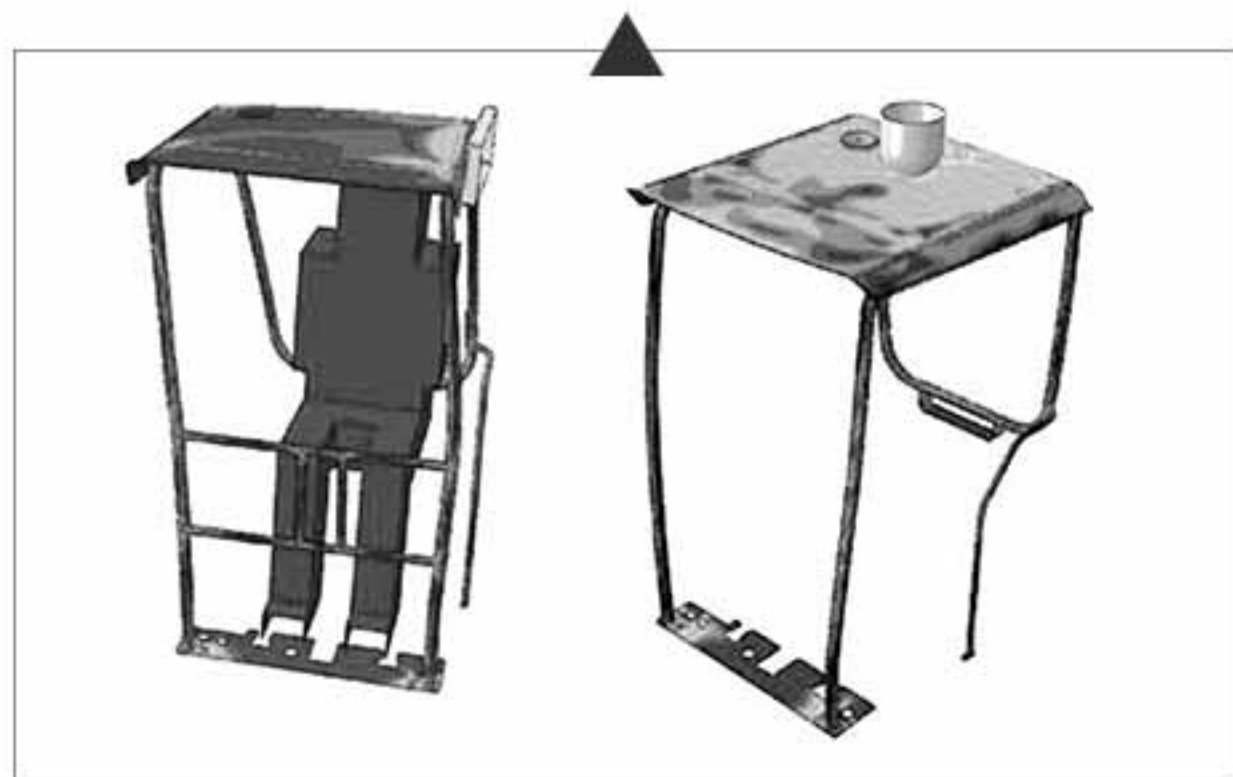
Changeable Steel Track/ Rubber Track: Steel Track for off-road working, and rubber track for on-road driving;

Multifunctional Design: With the single and two-way switch line, the flow rate reaches to 30L/min, available for various attachments, including Jackhammer, Hydraulic shear, Grapple etc. The hydraulic pilot control is used to improve the operating precision and efficiency.

Long Arm to achieve balanced performance: 1130mm ultra-long arm, providing larger excavation range.

Safe & Environmentally Friendly

SY16C adopts anti-tipping & anti-falling objects design for the cab, and has obtained ROPS/FOPS certification. For the canopy, it's also TOPS and ROPS certificated, fully taking the operators' safety into consideration.



Safe Driving Experience: traveling alarming device (optional), main switch, when the hydraulic pilot lock is at the lock position, the handle fails to operate; adjustable seat belt, various safety signs, fire extinguisher (optional), providing you a safe and comfortable working environment.

Environmentally Friendly: All the covering parts are made metal, durable and recyclable. It doesn't use FRP and other materials that have short service life and often cause pollution.

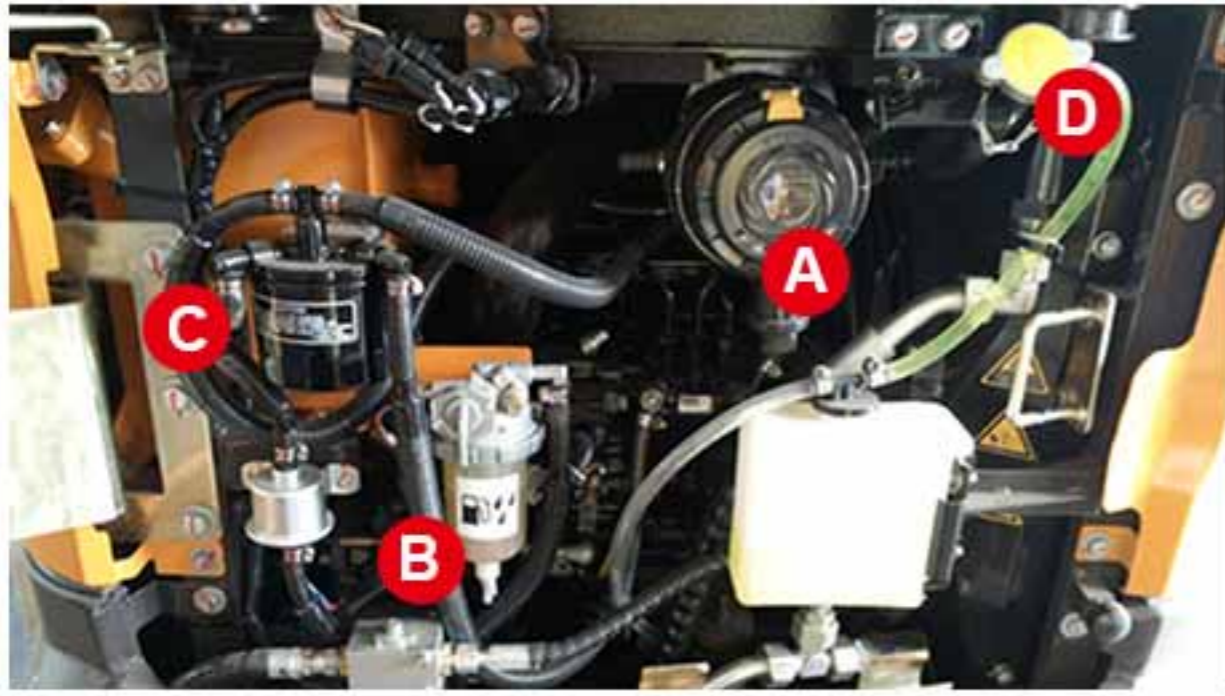
Tier 4 Final Engine: Environmentally friendly, reducing emissions harm.



Easy Maintenance



Large Engine Hood: Easier way to be opened, enables the operator to complete daily maintenance on the ground.



A. Air Cleaner **B.** Water Separator
C. Fuel Filter **D.** Water Tank Filler

Centralized Inner Structure: All key parts gathered in the back of the excavator, including air filter, oil filter, water separator, oil dipstick, expansion tank, oil filling mouth etc. reducing maintenance difficulty.

Easy Tool Placing: The grease gun can be attached on the counter-weight.

Detachable Parts: Detachable Radiator air filter, easy to wash.

Equipment

Standard Equipment

Power System

- Yanmar 3TNV70-SSU Tier 3
- Double-layer Air Filter
- External Air Filter Alarm
- Parallel Radiator
- Engine Preheating
- External Electronic Pump
- Mechanical Stepless Speed Shifting

Working Device

- Deflectable Working Device
- 1130mm Standard Stick
- Oil Cylinder Plate
- Auxiliary Lines

Undercarriage

- 230mm Steel Track
- Retractable Undercarriage
- Adjustable Front Blade
- Extended Undercarriage for High Stability
- Two-Speed Travel
- Extra-large Slewing Bearing

Optional Equipment

- 230mm Rubber Track
- FOPS/ROPS Cabin + Heater
- Multi-functional Handle
- Electrical Interface
- SAE/BHL Pattern Switch

Hydraulic System

- Main Pump CASAPPA MVP 30,28,5D
- Main Valve Walvoil DPX050-9
- Traveling Motor NACHI PHV-1B-12B
- Swing Motor NACHI PCR-1B-05A
- Accumulator
- Hydraulic Traveling Control
- Two-way and One-way Line Switch Valve

Upperstructure

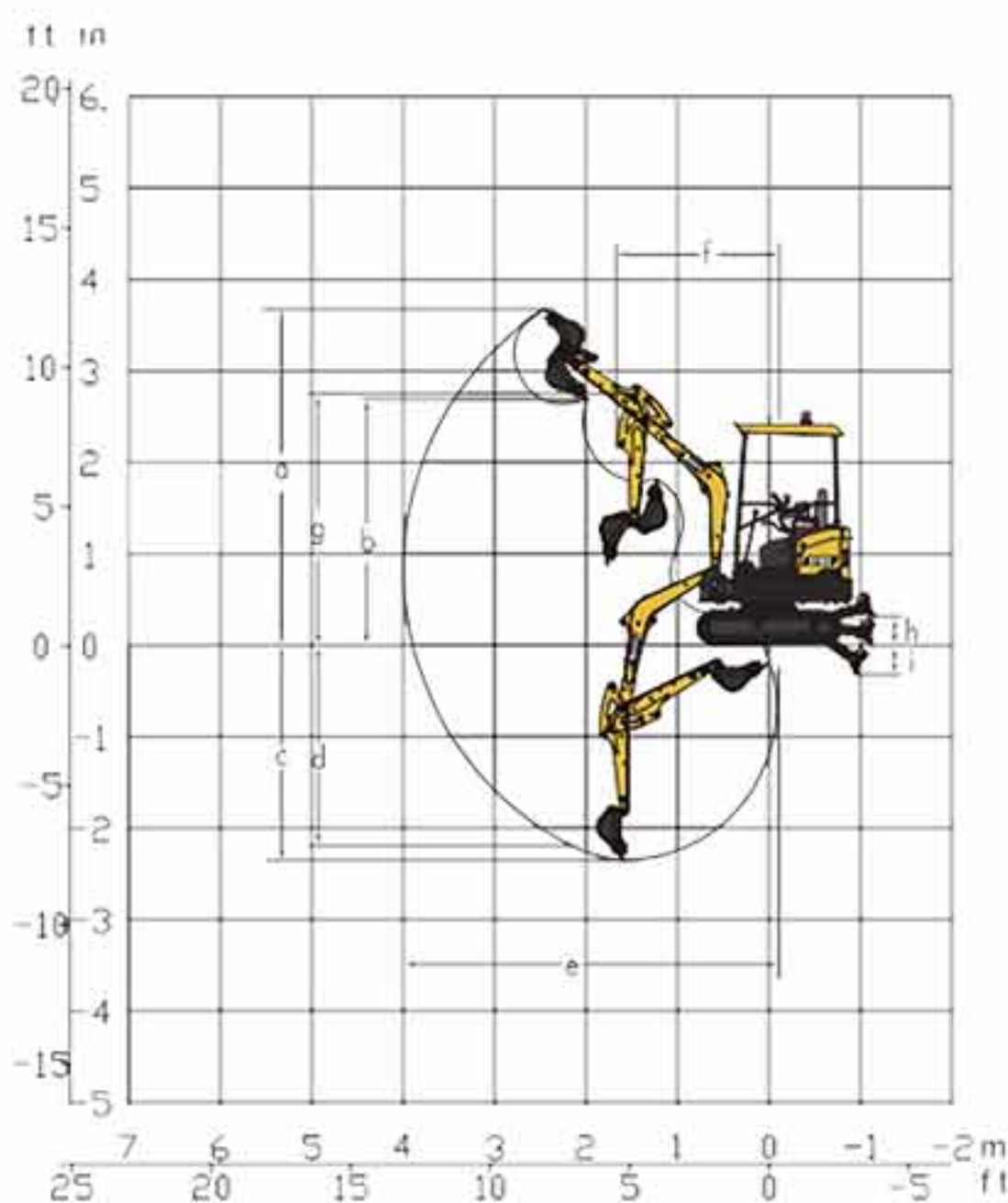
- 920mm Small Tail Swing Radius
- FOPS/TOPS Canopy
- Adjustable Seat
- Retractable Seat Belt
- Grease Gun Holder

Electrical System

- Travel Alarm
- Maintenance-free Accumulator
- Power Main Switch
- 12V Outlet
- Display Board
- Boom Light
- Roof Light
- Alarm Light

Specification

Basic	Operating Weight	kg	1750	
	Bucket Capacity (Std.)	m ³	0.04	
	Max.Torque	N·m/rpm	52.4/1600	
Engine	Model	\	Yanmar 3TNV70-SSU	
	Rated Power	kW/rpm	10.3/2200	
	Emission Standard	\	Tier 3	
	Displacement	L	0.854	
Performance	Travel Speed	km/h	3.7/2.1	
	Swing Speed	rpm	10	
	Gradeability	%	58	
	Ground Pressure	kPa	29,1	
	Motor	V/kw	12/1.1	
	Generator	A	40	
	Tractive Force	kN	15.6	
	Max.Digging Force	Bucket	kN	15.2
		Arm	kN	9.2
	Bore x Stroke	Boom Cylinder	mm	55×387
Arm Cylinder		mm	55×480	
Bucket Cylinder		mm	50×355	
Blade Cylinder		mm	75×120	
Service Refill Capacities	Fuel Tank	L	23	
	Hyd Tank	L	21	
	Engine Oil	L	2	
	Engine Coolant	L	3.8	
	Final Transmission	L	2×0.4	
	Swing Drive	L	\	



Working Range	a	Max. Digging Height	mm	3665
	b	Max. Dumping Height	mm	2635
	c	Max. Digging Depth	mm	2360
	d	Max. Vertical Digging Depth	mm	2215
	e	Max. Digging Reach	mm	4000
	f	Min. Swing Radius	mm	1655
	g	Height at Min. Swing Radius	mm	2745
	h	Max. Clearance when Blade up	mm	310
	i	Max. Depth of Blade down	mm	320

Dimensions	Transport Length	mm	3575
	Transport Width	mm	980/1350
	Transport Height	mm	2420
	Blade Height	mm	270
	Track Shoe Width (Std.)	mm	230
	Track Gauge	mm	750/1120
	Minimum Ground Clearance	mm	180
	Tail Swing Radius	mm	920
	Track Ground Length	mm	1220
	Track Length	mm	1585
	Track Height	mm	375
	Upperstructure Width	mm	980
	Sight Line Height	mm	2085
	Cabin Top Length	mm	1200
	Tail Length	mm	20
	Counterweight Clearance	mm	470
	Overall Length (excl.working device)	mm	1690
	Length on the Ground	mm	2255
	Overall Height of Engine Hood	mm	1270
Overall Height of Counterweight	mm	\	
Structural Components	Number of Track Shoes	\	Std.Rubber Track
	Carrier Roller	\	2
	Track Roller	\	3
	Boom	m	1.81
	Arm	m	1.13

Lifting capacities

Lifting Point Height(m)		Lifting Point Radius						Lifting Point Radius (Max)				
		1.5m		2.0m		2.5m		3.0m		Lifting Capacity		Reach
		Over-front	Over-side	Over-front	Over-side	Over-front	Over-side	Over-front	Over-side	Over-front	Over-side	(m)
3m	kg									*285	*285	2.466
2m	kg					*267	*253	*271	*271	*278	*278	3.211
1m	kg			*483	*483	*371	*370	*316	*306	*288	*244	3.458
0m	kg	*826	*826	*631	*528	*456	*383	*357	*295	*304	*252	3.342
-1	kg	*819	*819	*563	*529	*407	*382			*318	*318	2.81

1, The lifting capacities are based on ISO10560 and SAEJ1097 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacities of the machine.

2, The data with * are hydraulic lifting capacities of the machine.

3, The excavator bucket weight is not included on this chart.