

SE50-3

SERIES-3 MINI EXCAVATOR



Flywheel Horsepower;		51 hp	38 kW
Bucket Capacity;	SAE	0.23 cu.yd	0.176 m³
	CECE	0.20 cu.yd	0.150 m³
Operating Weight;		10880 lb	4935 kg



SE50-3

Series 3 Mini Excavator
combining power with a light touch



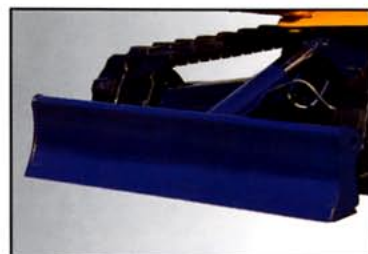
Engine

Yanmar engine is acknowledged throughout the world for its greater combustion efficiency, improved fuel economy, reliability and serviceability.



Full Opening Hood

Provides easy access for maintenance checks.



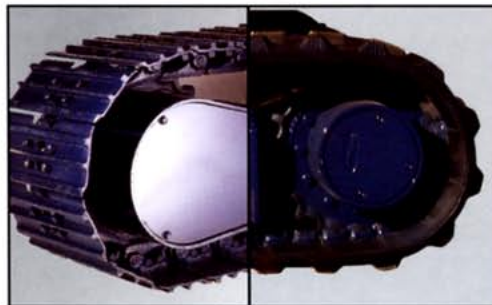
Reinforced Dozer Blade

Is useful for leveling, backfilling or clean up work. It is also helpful in improving machine stability when digging or lifting.



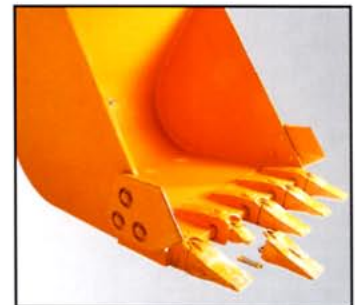
Auxiliary Hydraulic Line

For breaker piped to the end of Arm.



Extended Undercarriage Durability

Combined with the use of alloy steel idlers, rollers and track guard provides greater undercarriage durability. Rubber tracks are standard and steel tracks are offered as an option.



Easy Replacement of Bucket Teeth

Samsung provides pin mounted bucket teeth for quick replacement.

DR

1.55/2.55 mph

Superior Mobility

Provides faster movement from job site to job site.



Straight Travel Feature

System automatically maintains straight travel during implement operation.



Integrated Air Conditioning / Heating System

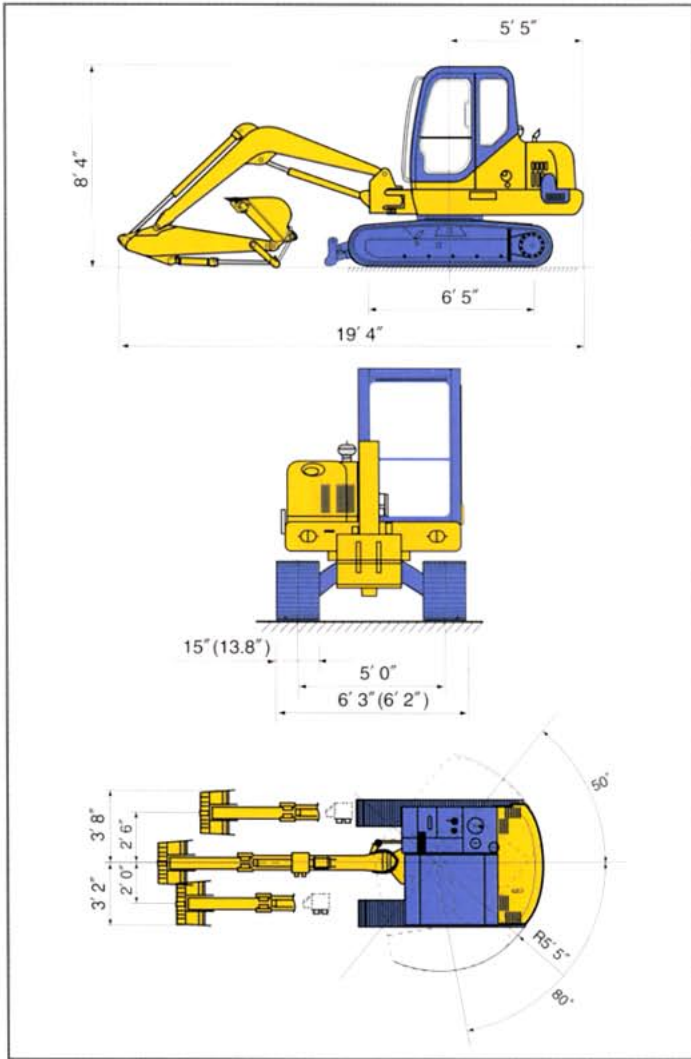
The deluxe cab features an integrated air conditioning/heating system and is pressurized to provide a dust free, climate controlled operator environment. The Roll-up front window provides excellent visibility and ventilation.



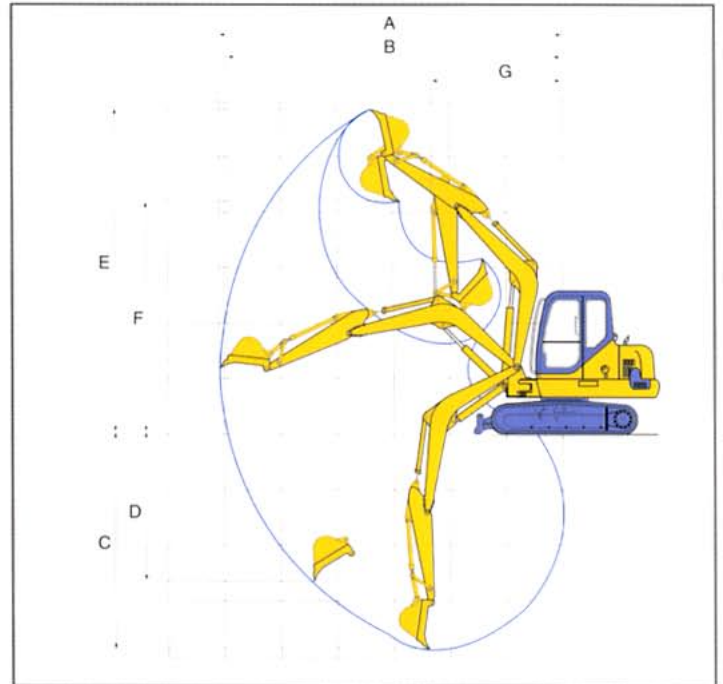
Comfortable working position for the Operator

Our ultramodern design offers highest visibility. The seat and console can be adjusted to meet the job site conditions. Cab sound level is 69dB(A) which corresponds to that of a passenger car.

DIMENSIONS



WORKING RANGES



Arm	Standard Arm 5' 1" (1.54 m)	
Max. digging reach (A)	20' 1" (6110 mm)	
Max. digging reach on ground (B)	19' 7" (5975 mm)	
Max. digging depth (C)	12' 6" (3820 mm)	
Max. vertical digging depth (D)	8' 7" (2615 mm)	
Max. cutting height (E)	18' 11" (5770 mm)	
Max. dumping height (F)	13' 5" (4090 mm)	
Min. front swing radius (G)	7' 9" (2355 mm)	
Max. digging force	Bucket	8090 lb (3670 kg)
	Arm	5970 lb (2710 kg)

UNDERCARRIAGE

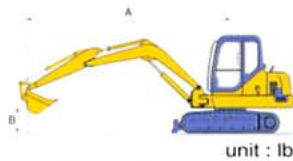
	Triple Grouser Shoe 15" (380 mm)	Rubber Shoe 15.7" (400 mm)
Overall Width	6' 3" (1900 mm)	6' 4" (1920 mm)
Operating Weight	11130 lb (5050 kg)	10880 lb (4935 kg)
Ground Pressure	4.4 psi (0.31 kg/cm ²)	4.1 psi (0.29 kg/cm ²)

BUCKET

Bucket	Standard Bucket	Narrow Bucket
Bucket Capacity(SAE/CECE)	0.23/0.20 yd ³ (0.176 / 0.150 m ³)	0.089/0.081 yd ³ (0.068 / 0.062 m ³)
Bucket Width (without/with side cutter)	26" / 28" (660 / 710 mm)	13" / 15" (320 / 370 mm)
No. of Teeth	5 EA	3 EA

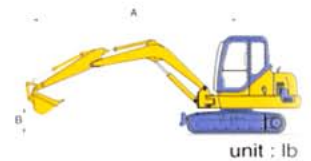
LIFTING CAPACITY

● Blade on the Ground



B	A					
	0 ft	5 ft	10 ft	15 ft	Max. Reach	
15 ft	Front Side				* 2180 2070	12' 6"
10 ft	Front Side			* 2180 1500	* 2160 1280	16' 1"
5 ft	Front Side		* 3970 2780	* 2560 1410	* 2270 1060	17' 3"
0 ft	Front Side	* 37430 * 37430	* 5200 2490	* 2910 1320	* 2450 1080	16' 9"
5 ft	Front Side		* 5220 * 5220	* 4760 2450	* 2800 1370	14' 4"
10 ft	Front Side				* 3400 * 3400	7' 6"

● Blade off the Ground



B	A					
	0 ft	5 ft	10 ft	15 ft	Max. Reach	
15 ft	Front Side				* 2180 2070	12' 6"
10 ft	Front Side			2140 1500	1850 1280	16' 1"
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5 ft	Front Side		* 5220 * 5220	* 3680 2450	2030 1370	14' 4"
10 ft	Front Side				* 3400 * 3400	7' 6"

- Notes : 1. The above loads are in compliance with SAE and ISO Hydraulic Excavator Lift Capacity Standards.
 2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

SPECIFICATIONS

ENGINE

Model	Yanmar 4TNE94
Type	Water cooled 4 cylinders
Flywheel horsepower	51 hp(52 ps/38 kw) at 2200 rpm
Max. torque	133.8 lb-ft (18.5 kg-m) at 1600 rpm
Displacement	169 in ³ (2776 cc)
Bore and stroke	3.7" × 3.9" (94 mm × 100 mm)

HYDRAULIC SYSTEM

Pumps

Main pump:

Type	2 variable displacement piston pumps +1 gear pump
Oil flow	2 × 13.8 + 9.4 gpm (2 × 52.4 + 35.6 lpm)

Pilot pump gear pump

Hydraulic motors

Travel	variable displacement axial piston motor
Swing	fixed displacement piston motor

Relief valve setting

Implement	2990 psi (210 kg/cm ²)
Travel circuit	2990 psi (210 kg/cm ²)
Swing circuit	2700 psi (190 kg/cm ²)
Pilot circuit	470 psi (33 kg/cm ²)

Hydraulic cylinders

Boom	1-∅ 4.1" × 28.3" (1-∅ 105 × 720 mm)
Arm	1-∅ 3.5" × 32.5" (1-∅ 90 × 825 mm)
Bucket	1-∅ 3.1" × 26.0" (1-∅ 80 × 660 mm)
Boom swing	1-∅ 3.5" × 22.4" (1-∅ 90 × 570 mm)
Blade	1-∅ 4.1" × 9.1" (1-∅ 105 × 230 mm)

SWING

Swing brake	automatic mechanical brake with hydraulic control
Swing reduction	2 stage planetary reduction gear
Swing speed	10 rpm
Swing circle lubrication	grease bath

TRANSMISSION

Travel speed	
1st	1.55 mph (2.5 km/h)
2nd	2.55 mph (4.1 km/h)
Gradeability	35 (70 %)
Max. tractive effort	9610 lb (4360 kg)

UNDERCARRIAGE

No. of links	2 × 39
No. of track rollers	2 × 5
No. of carrier rollers	2 × 1

COOLANT & LUBRICANT CAPACITIES

Engine	2.7 gal (10.2 l)
Coolant	1.3 gal (5.0 l)
Swing drive	0.3 gal (1.1 l)
Swing grease bath	1.6 gal (6.0 l)
Track motor	0.4 gal (1.7 l)
Hydraulic tank	23.8 gal (90 l)
Fuel tank	23.8 gal (90 l)

ELECTRICAL SYSTEM

Voltage	12 V
Battery	12V-100 Ah
Alternator	40 Ah
Starter	2.3 kW

OPERATING WEIGHT

Triple grouser shoes 15" (380mm)	11130 lb (5050 kg)
Rubber shoes	10880 lb (4935 kg)

STANDARD EQUIPMENT

- Adjustable monitor
- Air cleaner
- Air conditioner
- Alternator(40A)
- Auxiliary hydraulic line
- Batteries
- Boom holding valve
- Cab, all-weather sound suppressed, includes:
 - Ashtray
 - Cigar lighter
 - Door locks
- Floor mat
- Heater
- Horn
- Pull-up type front window
- Safety glasses
- Seat
- Seat belt
- Windshield wiper with intermittent feature
- Counterweight
- Dozer blade
- Hydraulic track adjusters
- Joysticks, pilot-operated
- Light:
 - Frame mounted, two
 - Boom mounted, two
- Mirrors
- Offset boom
- Rubber track
- Starting motor(12 volt)
- Stereo cassette radio(AM/FM)
- Straight travel circuit
- Tool box

Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

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