



# SE50-3

MINI EXCAVATOR SERIES-3



Flywheel Horsepower ;	<b>52 ps</b>	<b>38 kW</b>
Bucket Capacity ; SAE	<b>0.176 m<sup>3</sup></b>	<b>0.23 cu.yd</b>
	CECE <b>0.150 m<sup>3</sup></b>	<b>0.20 cu.yd</b>
Operating Weight ;	<b>4935 kg</b>	<b>10880 lb</b>





# SE50-3

**Mini Excavator, Series 3**  
*combining power with a light touch*



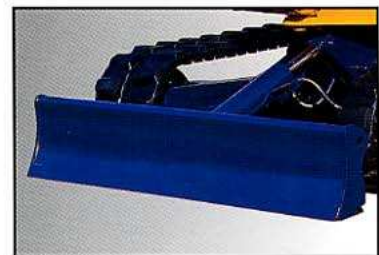
## Engine

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



## Full Opening Hood

Provides easy access for maintenance checks.



## Reinforced Dozer Blade

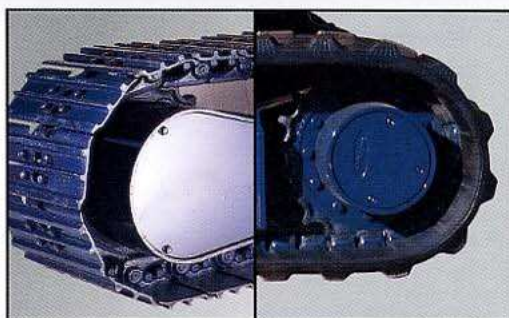
Is useful for leveling, backfilling or clean up work. It is also helpful in improving machine stability when digging or lifting.





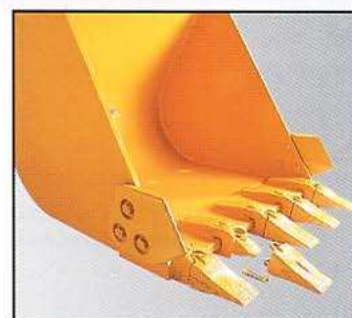
#### **Auxiliary Hydraulic Line (option)**

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 and steel tracks are offered as an option.



#### **Easy Replacement of Bucket Teeth**

Samsung provides pin mounted bucket teeth for quick replacement.



# TOR

2.5/4.1 km/h

### Superior Mobility

Provides powerful drawbar pull and effective working speed.



### 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.

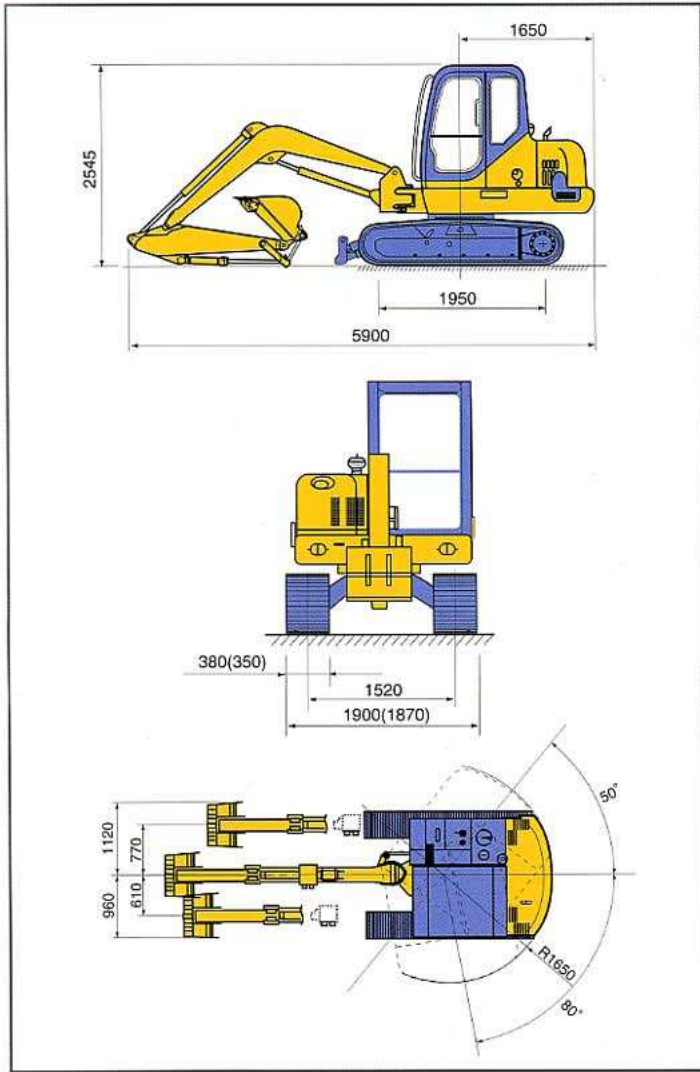


### Comfortable working position for the Operator

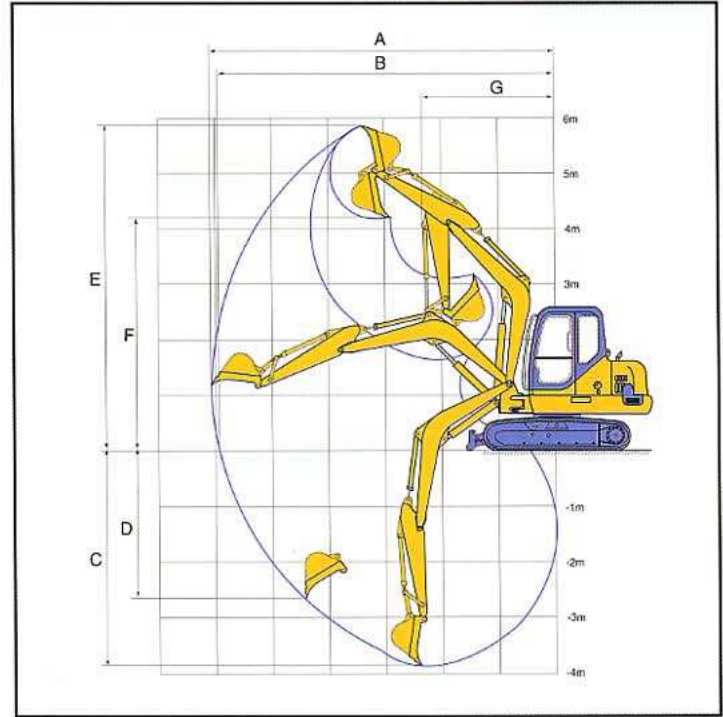
Our ultramodern design offers highest visibility. The seat and console can be adjusted to meet the job site conditions. Cab sound level is 69dB(A) which corresponds to that of a passenger car.



## DIMENSIONS



## WORKING RANGES



Arm	Standard Arm 1.54 m	
Max. digging reach (A)	6110 mm	
Max. digging reach on ground (B)	5975 mm	
Max. digging depth (C)	3820 mm	
Max. vertical digging depth (D)	2615 mm	
Max. cutting height (E)	5770 mm	
Max. dumping height (F)	4090 mm	
Min. front swing radius (G)	2355 mm	
Max. digging force	Bucket	3670 kg
	Arm	2710 kg

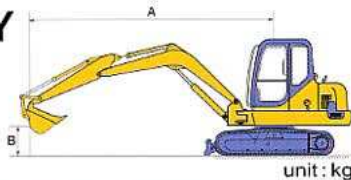
## UNDERCARRIAGE

	Triple Grouser Shoe		Rubber Shoe	Swamp Shoe
	350 mm	380 mm	400 mm	550 mm
Overall Width	1870 mm	1900 mm	1920 mm	2070 mm
Operating Weight	5025 kg	5050 kg	4935 kg	5135 kg
Ground Pressure	0.34 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>	0.29 kg/cm <sup>2</sup>	0.21 kg/cm <sup>2</sup>

## BUCKET

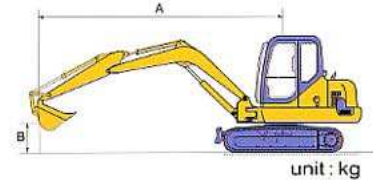
Bucket	Standard Bucket	Narrow Bucket
Bucket Capacity(SAE/CECE)	0.176 / 0.150 m <sup>3</sup>	0.068 / 0.062 m <sup>3</sup>
Bucket Width (without/with side cutter)	660 / 710 mm	320 / 370 mm
No. of Teeth	5 EA	3 EA

## LIFTING CAPACITY



### ● Blade on the Ground

B	A	Reach				Max. Reach
		0 m	1.5 m	3 m	4.5 m	
4.5 m	Front Side					* 990 940
	Side					3815 mm
3 m	Front Side				* 990 680	* 980 580
	Side					4895 mm
1.5 m	Front Side			* 1800 1260	* 1160 640	* 1030 480
	Side					5263 mm
0 m	Front Side	* 16980 * 16980		* 2360 1130	* 1320 600	* 1110 490
	Side					5107 mm
1.5 m	Front Side		* 2370 * 2370	* 2160 1110		* 1270 620
	Side					4358 mm
3 m	Front Side					* 1540 * 1540
	Side					2290 mm



### ● Blade off the Ground

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		0 m	1.5 m	3 m	4.5 m	
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3 m	Front Side					* 1540 * 1540
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- 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	52ps (51hp/38kW) at 2200rpm
Max. torque	18.5 kg-m at 1600rpm
Displacement	2776 cc
Bore and stroke	94 mm × 100 mm

## HYDRAULIC SYSTEM

### Pumps

#### Main pump:

Type	2 variable displacement piston pumps +1 gear pump
Oil flow	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	210 kg/cm <sup>2</sup>
Travel circuit	210 kg/cm <sup>2</sup>
Swing circuit	190 kg/cm <sup>2</sup>
Pilot circuit	33 kg/cm <sup>2</sup>

#### Hydraulic cylinders

Boom	1- ∅ 105 × 720 mm
Arm	1- ∅ 90 × 825 mm
Bucket	1- ∅ 80 × 660 mm
Boom swing	1- ∅ 90 × 570 mm
Blade	1- ∅ 105 × 230 mm

## SWING

Swing brake	automatic mechanical brake with hydraulic control
Swing reduction	2 stage planetary reduction gear
Swing speed	10.0 rpm
Swing circle lubrication	grease bath

## TRANSMISSION

### Travel speed

1st	2.5 km/h
2nd	4.1 km/h
Gradeability	35° (70%)
Max. tractive effort	4360 kg

## UNDERCARRIAGE

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

## COOLANT & LUBRICANT CAPACITIES

Engine	10.2 l
Coolant	5.0 l
Swing drive	1.1 l
Swing grease bath	6.0 l
Track motor	1.7 l
Hydraulic tank	90 l
Fuel tank	90 l

## ELECTRICAL SYSTEM

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

## OPERATING WEIGHT

Triple grouser shoes 380mm	5050 kg
Rubber shoes	4935 kg

# STANDARD EQUIPMENT

- Adjustable monitor
- Air cleaner
- Alternator(40A)
- Batteries
- Boom holding valve
- Cab, all-weather sound suppressed, includes:
  - Ashtray
  - Cigar lighter
  - Door locks
- Floormat
- 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
- Starting motor(12 volt, 2.3kW)
- Straight travel Circuit
- Tool box

# OPTIONAL EQUIPMENT

- Air conditioner
- Air heater
- Fuel filler pump
- Heater
- Precleaner
- Rubber track
- Spare parts
- Stereo cassette radio (AM/FM)
- Tops CAB
- Tool kit

*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

Volvo Construction  
Equipment Group

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