FINE EQUIPMENTS

Raising Benchmarks of after sales support

Introduces a new innovation in
MINI Excavator Market



FM 20

FINE COMPACT MINI EXCAVATOR





Fine FM 20 Digger

- A 2 Ton class compact Excavator aimed for application ranging from pipeline and fibre work in cities to agricultural excavation, where both manpower and backhoe loaders have difficulty reaching.
- A strong, sturdy and feature rich 2 ton class compact excavator aimed for heavy excavation works in remote as well as urban areas.

Small in **SIZE** BIG in **POWER**

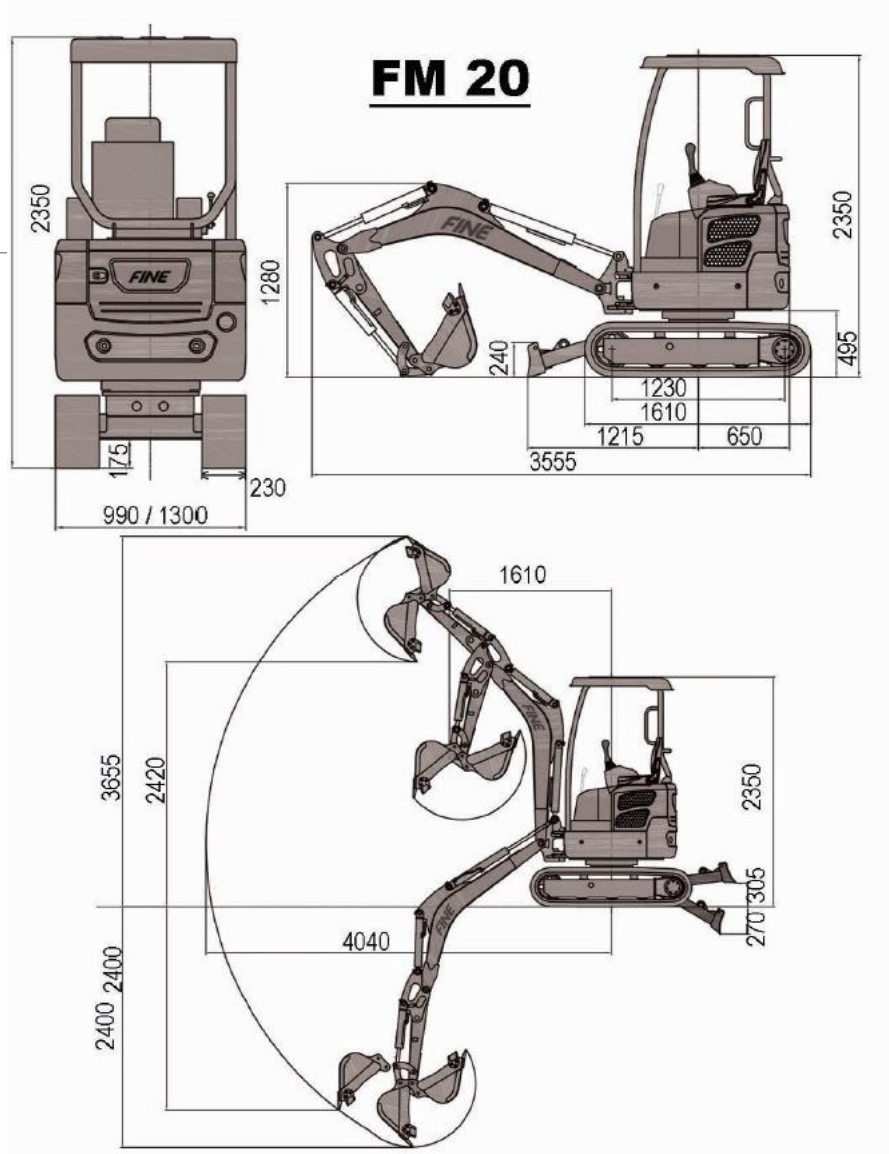
SPECIFICATION	FM 20
Operating Performance	Zero Tail Swing
Operating Weight	2000 kg
Bucket Capacity	0.07 m^3
Bucket Mass	50 kg
Bucket No.of Teeth	3 Nos
Max. Arm Digging Force	11 kN
Max. Bucket Digging Force	18 kN
Travel Speed low	2.4 km/h
Trvel Speed High	3.6 km/h
Engine	**Kubota D 1105**
HP / RPM	19 hp @ 2200 RPM
kW / RPM	14.2 kW @ 2200 RPM
Engine Coolent	8 litre
Engine Oil	5.1 litre
Diesel Tank	17 litre
Battery-1	12 V
Fuel	Diesel
Travel Reduction Gear Oil	1 Litre
Hydrauilc Pump	**Piston pump**
Hydraulic Pump Flow	39.6 L/min + 8.8 L/min
Hydraulic Pressure	21.5 Mpa
Slew Motor	Orbit type
Traction Motor	Piston pump with reducer
Hydraulic Oil System Capacity	17 Litre
Hydraulic Oil Tank Capacity	18 Litre

FM 20 Inside



FM 20 INSIDE

Machine Overall Length	3555 mm
Overall Width	990 / 1300 mm
Overall Height	2350 mm
Tumbler Length	1230 mm
Minimum Ground Clearance	175 mm
Tail Swing Radius	650 mm
Track Shoe Width	230 mm
Overall Width Crawler	990 mm
Arm Length	950 mm
Boom Length	1850 mm
Left Side	62°
Right Side	56°
Max Digging Depth	2400 mm
Max. Height of cutting Edge	3655 mm
Max. Dumping Height	2420 mm
Max. Vertical Digging Depth	2025 mm
Max. Digging Radius	4040 mm
Max. Digging Height	3655 mm
Track Length	1610 mm
Dozer Blade	Hydraulic lifting type
Blade Width	990~1300mm
Blade Height	240 mm
Blade Cutting Angle	40°
Max dozer Blade Lifting Dist.	305 mm
Max dozer Blade Cutting Dist.	270 mm
Cabin Type	Canopy



Operating Weight

2000 Kg



BIGGEST IN ITS CLASS

KEY AREAS

1.Zero Tail



2.STRUCTURE



3.UNDER CARRIAGE





4.CANOPY

5.Engine



ENGINE

Features	Benefits	Advantages
•World class Kubota Engine. •Provided with heater plug. •Less noise.	•Powerful than KUBOTA •Helpful in Cold starting.	•Availability of spares parts. •Can work in cold climate. •Can work in high populated residential area.

Kubota 1105



19 HP

Double Element air filtration, Fuel-water separator with filter screen, safety grill for radiator & hassle free fuel-air bleeding system are equipped as per Indian machine operating conditions.

ZERO Tail Swing

Features	Benefits	Advantages
•Zero tail swing structure.	•When the machine is swiveling, •the tail always remains within the track width	•Worry free operation in tight places



STRUCTURE-Bucket

Features	Benefits	Advantages
•Digging power of bucket.	•Greater digging power helps to work on hard surface.	• Bigger bucket with more digging power hence more productivity.



Bucket Capacity

Max Dig power of Bucket – **18Kn**

BIGGER BUCKET FOR MAXIMUM PRODUCTION

TRACKS

Features	Benefits	Advantages
•Long life steel tracks. •Retractable tracks.	•More stability. •More maneuver in close quarter.	•Easy travel in confined terrain. •Stability in critical application work.

Retractable tracks



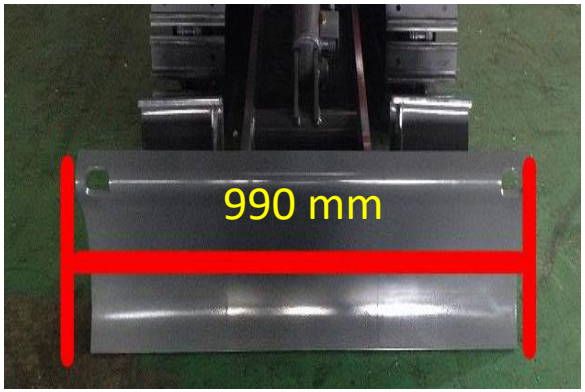


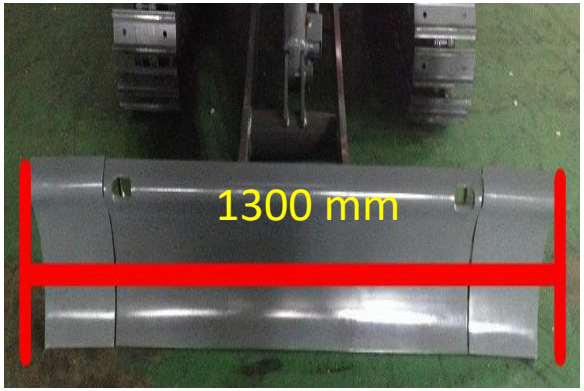
Tight Space, no problem

STRUCTURE-Dozer

Features	Benefits	Advantages
•Variable blade width. •Wider Blade.	•Easy traveling through confine doorways. •Ease of transportation •Wider blade gives stability while working.	•Productive at working in close quarters.

Dozer Blade







Changing the blade width can be done by removing one pin by hand.

STRUCTURE

Features	Benefits	Advantages
•Long and strong structured arm.	•More digging depth. •More dumping height	•Maximum reach of arm gives more versatility



Working Range

Digging Depth – **2400 mm**
Dumping Height – **2440 mm**

STRUCTURE-Piping

Features	Benefits	Advantages
•Machine is equipped with Breaker piping adaptation kit as standard accessories.	•It can be used for one way & two way hyd oil flow attachments.	•More productivity & uptime of machine can be achieved. •Multiple applications use.

Breaker adaptation kit

Standard



CANOPY

Features	Benefits	Advantages
•Strong & Rigid Canopy. •ROPS/FOPS structure. •Four corner support. •Headlights provided on canopy.	•Protective canopy. •Better support from all corners-Reliability & Longer life. •Better enhanced visibility at night time	•More safety to operator. •Can work better at Night gives more safe working hours.



Canopy

FM 20 is more spacious

STRUCTURE

Features	Benefits	Advantages
•Boom swing feature	•More area covered without moving machine. •Excavation closer to walls & corner.	•It helps in working at close /Confine quarter. •More productivity area coverage. •Reduced multiple handling.

Boom Swing

Swing angle of Boom
Right Side – 45°
Left side - 75°





Strong & Rigid collar – More life & durability

TRACKS

Features	Benefits	Advantages
•Steel tracks. •Retractable tracks. •Optional rubber track.	•Long Life •More maneuver in close quarter. •More ground clearance.	•Better stability while working hence more lifting capacity hence productivity.



Track Length – 1610 mm
Track width – 240 mm
Ground Clearance – 175 mm
Dozer blade lifting – 305 mm

ENGINE- Access

Features	Benefits	Advantages
•Wider rear bonnet.	•Access to all service points	•It helps in less service time and more productive hours.



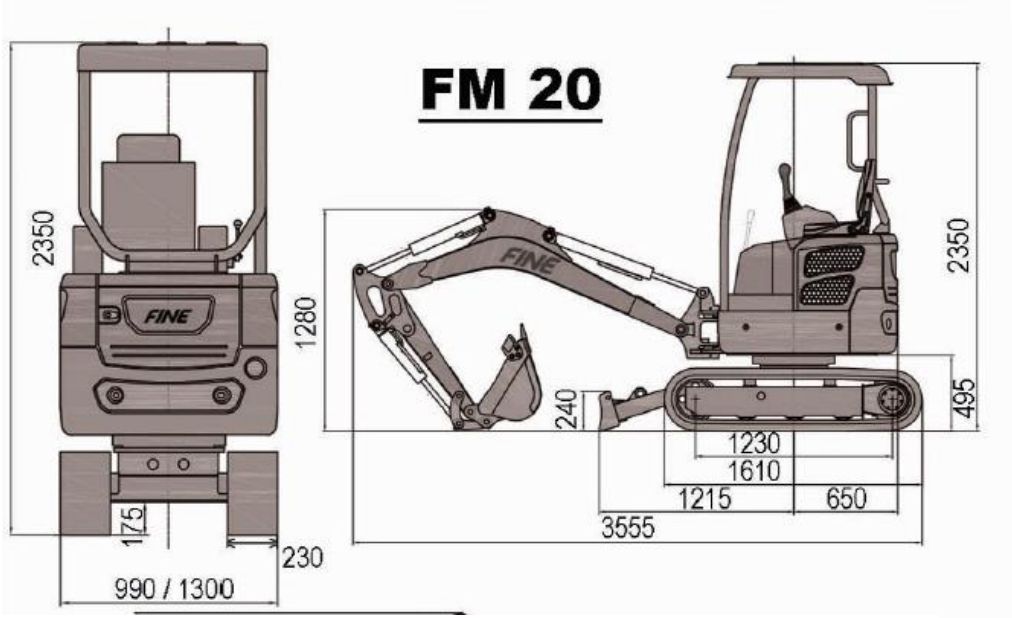
Serviceability

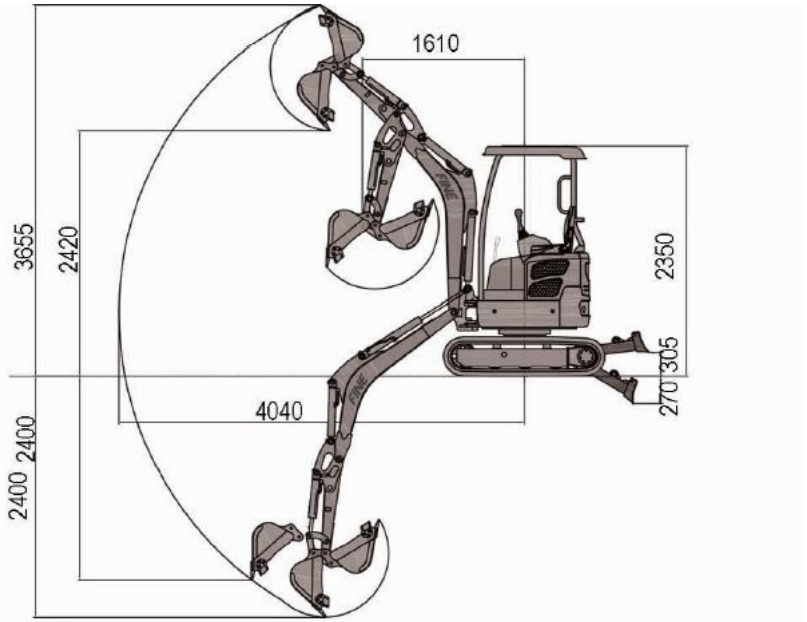
Bigger & Enclosed hood gives safety to all Engine equipments.
Ease of access to filters & other service points.

STRUCTURE-Boom reach

Features	Benefits	Advantages
•Long arm	•Maximum reach , height, depth and area coverage.	•More productivity

Operating Ranges





FEATURES – Mini FM 20 Digger

- ✓Canopy as standard
- ✓Breaker adaptation kit as standard accessory
- ✓1 X Variable piston pump for increased efficiency
- ✓Bigger bucket capacity and maximum reach
- ✓Fuel efficient
- ✓Re adjustable tracks

Optional



Rubber Pads



Rubber Tracks

Attachments

Grading Bucket



Riddle Bucket



Rock Breaker



Auger



Thank You!



