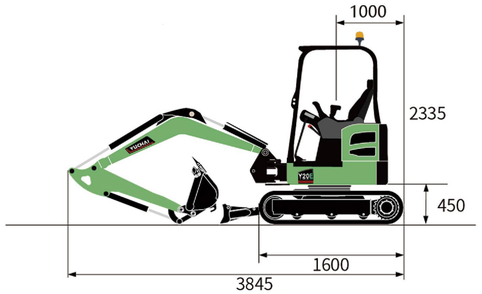

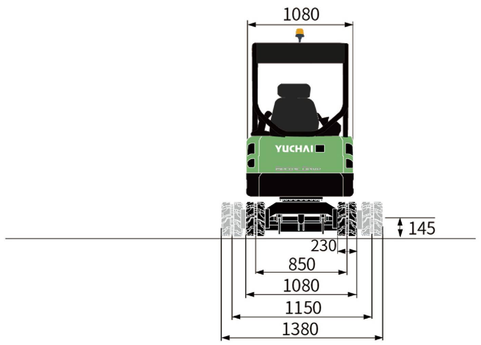

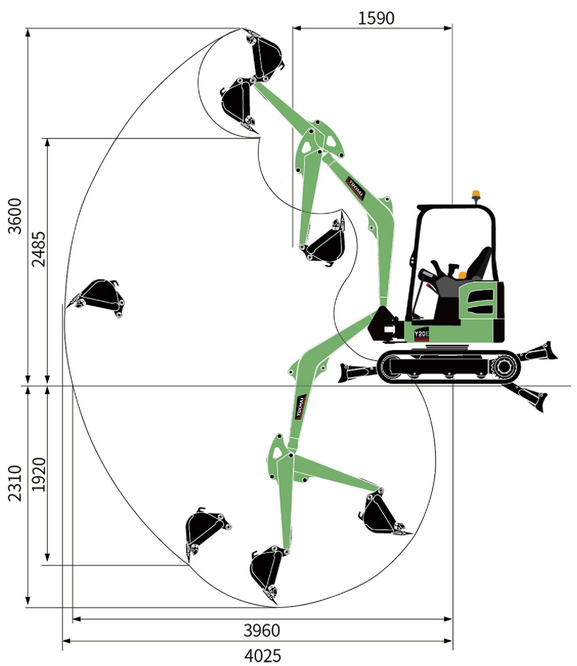

Y20E Technical Specification

Basic parameters	
Machine weight	2080 (canopy) /2200 kg (cabin)
Bucket capacity	0.05 m^3
Width of bucket	450mm
Performance parameters	
Battery Lithium Iron	33.38 kWh
Battery voltage/Current	347.76 V / 96 Ah
Motor power	12/25 kW
Standard endurance	6~8 h
Fast charging time	20%→80% in1 hours
Slow charging time	20%→80% in 4~5 hours
Max. gradeability	30 °
Max. digging force of bucket	17.2 kN
Max. digging force of arm	9.5 kN
Traveling speed	2/4 km/h
Max. hauling force	22 kN
Slewing speed of platform	8~10 rpm
Operating parameters	
Max. digging height	3600 mm
Max. digging depth	2310 mm
Max. digging radius	4025 mm
Max. digging radius on ground level	3690 mm
Max. dumping height	2485 mm
Min. slewing radius	1920 mm
Max. vertical digging depth	1590 mm
Transportation dimension	
Overall length	3845 mm
Overall width	1080 mm
Overall height	2335mm (canopy) /2345 mm (cabin)
Other parameters	
Width of undercarriage	1080~1380 mm
Length of track	1600 mm
Width of track	230 mm
Minimum ground clearance	145 mm
Height between platform and ground	450 mm
Platform tail turning radius	1000 mm
Track gauge	850/1150 mm
Hydraulic oil tank capacity	17 L
working pressure	24 MPa
Flow rate	61.6 L/min
AUX 1 Pressure / Flow rate	24 MPa / 18 /10 L/min
AUX 2 Pressure / Flow rate	21 MPa / 36 L/min
Boom length	1828 mm
Arm length (standard/longer)	950 mm
Max. Lift Height of Dozer Blade	245 mm
Steering head angle	65°(L)/55°(R)

Specifications are subject to change without prior notice .

GUANGXI YUCHAI EQUIPMENT TECHNOLOGY CO. , LTD.
Address: Yuchai Engineering Machinery Industry Center, Luchuan, Guangxi,China
Email: dig@yuchai.com,ychi-export@yuchai.com | Website: www.yuchaicm.com
Tel: +86-775-3223503 | Fax: +86-775-3223503

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YUCHAI

ELECTRIC EXCAVATOR

Machine weight : 2080 kg (Canopy) | Battery Lithium Iron : 33.38 kWh
20%→80% in 1 hours | Standard endurance: 6~8 h
Overall dimensions (L x W x H): 3845mm x 1080mm x 2345mm

Y20E

Yuchai Y20E Lithium-Battery Compact Excavator

Keeping pace with industry trends and meeting the new demands of market growth, this 2-ton class lithium-battery compact excavator represents a major step forward in the electrification of construction machinery. Powered by clean electric energy, it delivers zero emissions, low noise and high operating efficiency, making it ideal for urban construction, indoor applications and environmentally sensitive projects.
Its compact design, combined with reliable performance, provides customers with a smarter, greener and more cost-effective solution.

Superior Performance

- Equipped with a high-torque travel motor and has excellent climbing capability.
- The machine is designed with a forced-air cooling system, which will keep the machine in a low temperature during operation.
- A fully electronic control version can be customized.

The Y20E is more than a conventional mini excavator—its exceptional productivity will boost your bottom line.
Discover its technical features now and contact us to unlock further advantages.

The Y20E comes standard with 3 auxiliary hydraulic circuits 4 auxiliary hydraulic circuits for option, enabling quick-connect compatibility with a range of attachments such as buckets, hydraulic breakers, augers, and log grapples.
Combined with the electronically proportional joysticks（Optional）, operation becomes exceptionally smooth and effortless.

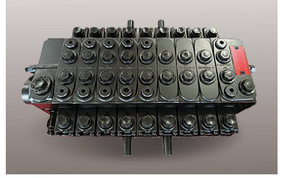
Intelligent Pilot Hydraulic System

With soft and coordinated composite movements (boom/arm/bucket/travel), precise micro-control down to millimeter level.

High-Reliability Structure

Upgraded cast steel steering head boasts a lifespan of 8,000-10,000 hours,three times longer than welded counterparts.

Distributor



Pump

Traveling motor

Slewing motor

Outstanding Hydraulic Design

| Operating pressure of 24 Mpa with max.
| Flow rate of 61.6 L/min.
| Key specs: 0.05 m^3 bucket capacity.
| 8 ~10 rpm swing .
| 17.2 kN bucket digging force.

Compact Dimensions

- Space-optimized design for operation in confined spaces.
- Transportable via standard light-duty trailers across Europe.

High-Capacity LFP Battery

Via its inverter, the machine transforms into a large power bank capable of 220V/10A output to support various electric tools. With 5,000 charge cycles (equivalent to 16 years of service) and ≤6% performance degradation over 8 years, its intelligent overload protection safeguards the battery/motor system. Yuchai further backs the battery with a 5-year warranty, eliminating traditional engine reliability concerns.

Stable and Reliable Battery, Motor & Control System

The Y20E Electric Mini Excavator hares identical battery and electronic control systems with Yuchai's S150 skid steer loader. Its supply chain leverages top-tier enterprises from China's EV industry. Having undergone rigorous long-term testing in China's demanding operational environments, the electrical systems of both Y20E Electric Mini Excavator have proven their stability and reliability.

Yuchai– Y20E Electric Mini Excavator

90% Lower Operating Costs Than Conventional Fuel-Powered Models

By adopting a pure electric direct-drive design, the Y20E eliminates traditional engine + gearbox transmission systems. With 2,000 operating hours, its combined operating and maintenance costs are 90% lower than diesel equivalents (calculation based on China's electricity and fuel prices).

AC/220V

AC Charging Station

Convenient and Rapid Charging

Equipped with a high-capacity 33.38 kWh lithium iron battery, the machine delivers 4–5 hours of continuous operation on a single charge, ensuring stable performance throughout demanding working cycles. Featuring the largest battery capacity in the 2-ton class electric mini excavator segment, it minimizes charging downtime, enhances jobsite productivity, and provides operators with greater flexibility and reliability.

Premium Cab
Where safety meets comfort

Ergonomically Engineered Cab

- Incorporates 36 years of European users feedback to optimize Seat Index Point (SIP) positioning, delivering superior seating comfort.
- The ergonomically designed bilateral armrests significantly reduce hand fatigue during prolonged operation.

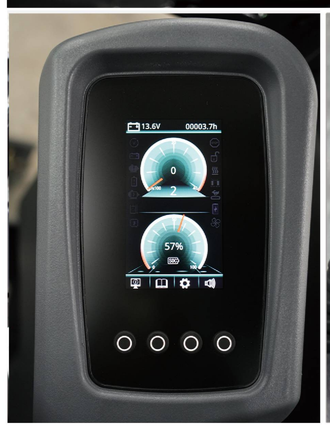
1 The cab, equipped with a Tip-Over Protective Structure (TOPS) , along with additional features such as a radio, an elastic fabric seat with a high backrest and headrest, a heater,and safety elements including seat belts and a safety hammer, offers multifaceted advantages, providing the operator with both comfort and safety.

2 The Y20E offers both regular joysticks and proportional joysticks (for Premium model)(optional).

- The proportional joystick is with thumb roller operation, delivering intuitive and precise hydraulic control.
- The option of ISO/SAE modes adapts to global operation habits.

3 Y20E(canopy) Detachable Canopy: Two-section design for easy transportation and disassembly, suitable for low-clearance spaces (such as basement construction).

Concise user interface



- LCD instrument
- Wide and comfortable foot space

- Spacious and comfortable cabin

Simple and Convenient Maintenance

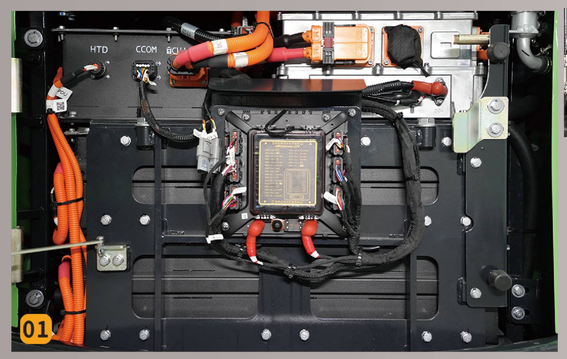
- Opening bonnet design optimum arrangement of internal parts for quick and efficient service and shorter downtime.
- Metal covers are stronger and easier to repair.

Cost-Performance

- The Y20E mini excavator delivers exceptional cost-performance. With its heavy-duty structure, powerful engine, and versatile capabilities, the Y20E maximizes your investment return.
- Its efficient and reliable performance enables you to complete construction and excavation projects with the lowest operating costs and highest productivity. More than just a purchase, the Y20E is a long-term investment in your operational efficiency and profitability.

Optimal Maintenance Points

- The Y20E mini excavator's centralized maintenance points enable quick and efficient maintenance, maximizing uptime and minimizing maintenance



06 Detachable Canopy

- Modular integrated design with only four bolts for fastening — no cutting or welding required during the entire disassembly and assembly process. The cab can be removed and reinstalled in just 7 minutes, improving efficiency by 70%.

Y20E Canopy

03 Hydraulic oil gauge

04 Radiator

05 Centralized lubrication points

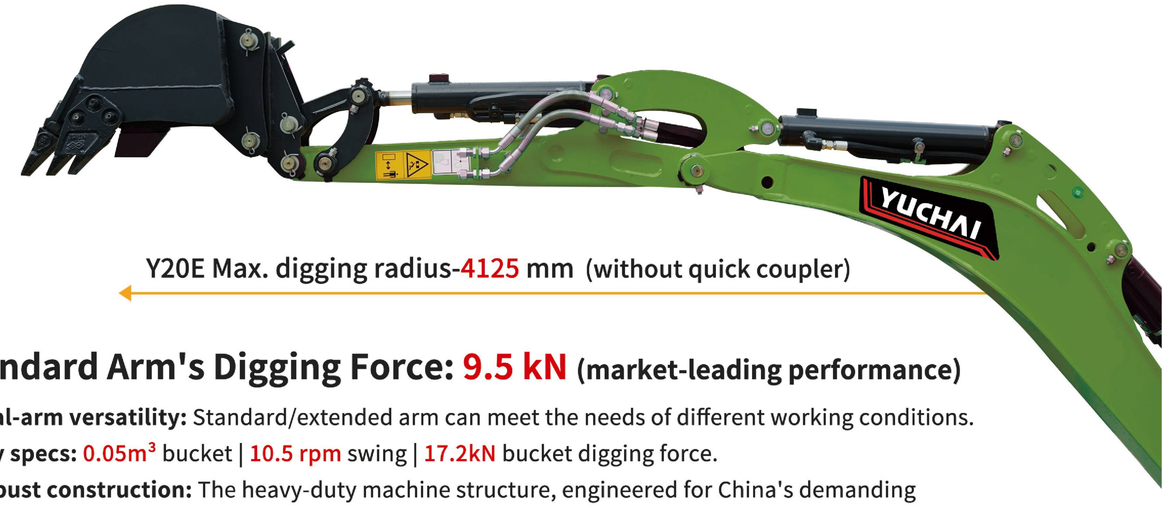
05 Hydraulic oil gauge

06 Canopy fixing bolts

Equipment

- Standards and requirements for special equipment vary by country.
- For more details on equipment options, please feel free to contact us.

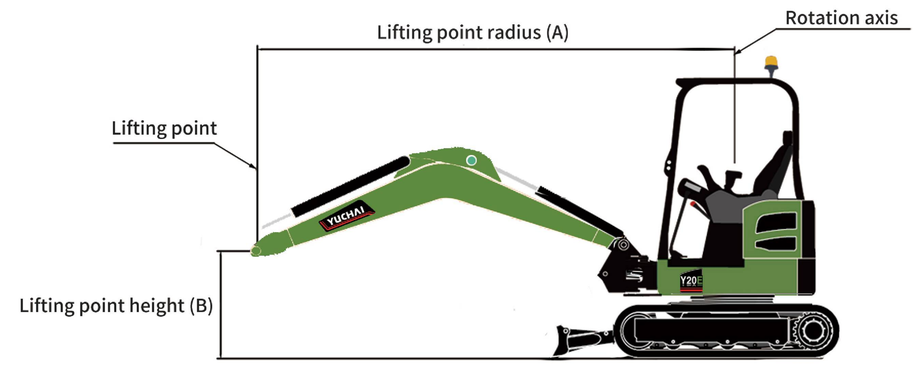
Component Part	Description	Standard	Optional
Cabin/Canopy	LCD instrument	•	
	High-back suspension seat		•
	FOPS	•	
	TOPS	•	
	Heater （For cabin only)	•	
	Fan （For cabin only)	•	
	Radio （For cabin only)	•	
	USB port （For cabin only)	•	
	Rearview mirror （For cabin only)	•	
Working device	Steering head	•	
	Quick connector for AUX. pipes		•
	Mechanical quick coupler	•	
	Hydraulic quick coupler Lines		•
	Hydraulic quick coupler		•
	Tilt rotator		•
	250mm Bucket		•
	450mm Bucket	•	
	1,000mm Ditch cleaning bucket		•
	950mm Arm	•	
	1,200mm Arm		•
	AUX 1 + hammer line	•	
	Hydraulic hammer		•
	Auger		•
	Thumb		•
	Dozer blade	•	
	Dozer cylinder protection plate	•	
	Arm cylinder protection plate		•
	Bucket cylinder protection plate		•
	Boom holding valve		•
	Arm holding valve		•
Tracks	230mm Rubber tracks	•	
	230mm Steel tracks		•
	Telescopic chassis	•	
Hydraulic system	Single electric proportional control joystick		•
	Load-sensing hydraulic system	•	
	ISO&SAE control switch		•
	AUX1	•	
	AUX2		•
Lighting	2 LED Work lights at the Front	•	
	1 Rear LED work light	•	
	1 Boom work light	•	
	Beacon on the Cabin/canopy	•	
Others	Extra counterweight		•



Y20E Max. digging radius-4125 mm （without quick coupler)

Standard Arm's Digging Force: 9.5 kN (market-leading performance)

- **Dual-arm versatility:** Standard/extended arm can meet the needs of different working conditions.
- **Key specs:** 0.05m³ bucket | 10.5 rpm swing | 17.2kN bucket digging force.
- **Robust construction:** The heavy-duty machine structure, engineered for China's demanding applications, handles North American and European job sites with ease.



Standard arm, standard counterweight(C=kg) ---Cabin/Canopy(Track width 1400mm)											
A	Arm	Max.		2.0 m		1.5 m		—		—	
B	(A=)										
2.0 m	950mm	—	—	270/270	270	—	—	—	—	—	—
	1100mm	—	—	—	—	—	—	—	—	—	—
1.5 m	950mm	—	—	390/350	320	450/450	450	—	—	—	—
	1100mm	—	—	310/310	310	—	—	—	—	—	—
0.5 m	950mm	280/160	150	590/310	290	—	—	—	—	—	—
	1100mm	250/140	130	550/300	280	—	—	—	—	—	—
0 m	950mm	—	—	560/310	280	—	—	—	—	—	—
	1100mm	—	—	540/290	270	510/440	400	—	—	—	—
0.5 m	950mm	—	—	500/300	280	690/470	430	—	—	—	—
	1100mm	—	—	490/290	260	710/440	400	—	—	—	—
-1.5 m	950mm	—	—	320/310	290	460/460	440	—	—	—	—
	1100mm	—	—	330/290	270	480/450	400	—	—	—	—

Explain

The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They don' t include the weight of the bucket and correspond to 75% of the maximum static tipping load or 87% of the hydraulic lifting power.
Data marked * are the hydraulic limits of the lifting power.