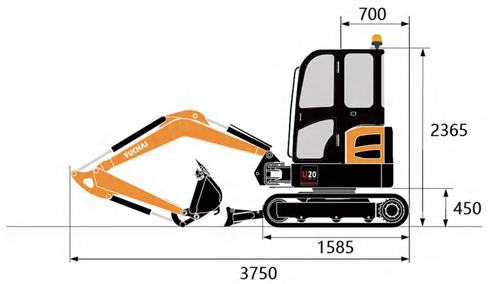
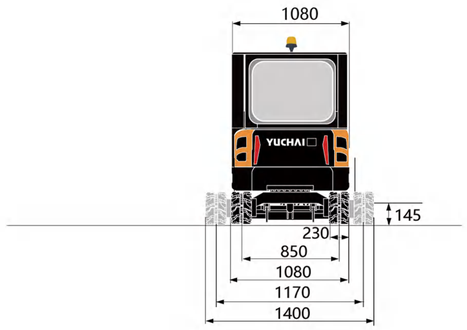
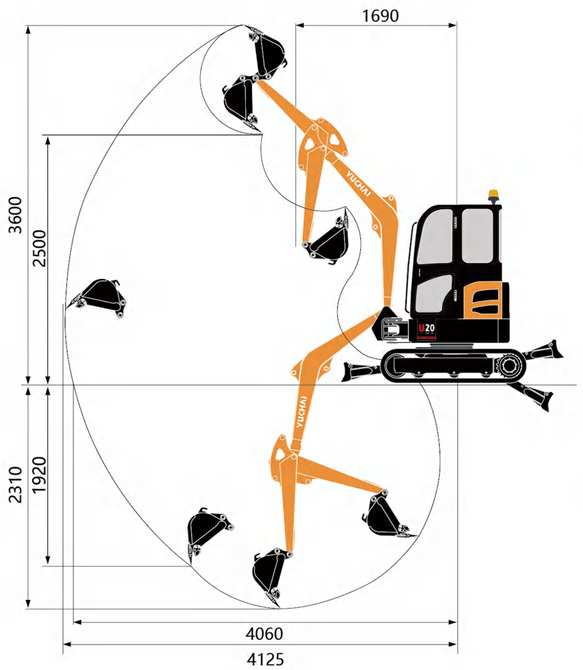






U18/U20 Technical Specification

Basic parameters	
Machine weight	1800kg(Canopy) I 2000kg(Cabin)
Bucket capacity	0.05m³
Width of bucket	450mm
Performance parameters	
Engine model	Yanmar 3TNV80F
Emission Standard	Euro V / EPA Tier 4F / CN IV
Engine power	15.2kW/2500rpm
Max. Gradeability	30 °
Max. digging force of arm	8.5 kN
Max. digging force of bucket	15.5 kN
Traveling speed	2/4 km/h
Max. hauling force	22 kN
Slewing speed of platform	8.5~10.5 rpm
Operating parameters	**Standard / Longer arm**
Max. digging height	3600 mm/3770 mm
Max. digging depth	2310 mm/2560 mm
Max. digging radius	4125 mm/4355 mm
Max. digging radius on ground level	4060 mm/4300 mm
Max. dumping height	2485 mm/2655 mm
Min. slewing radius	1690 mm/1765 mm
Max. vertical digging depth	1920 mm/2160 mm
Transportation dimensions	
Overall length	3750 mm
Overall width	1080 mm
Overall height	2335 mm(Canopy) /2345 mm(Cabin)
Other Parameters	
Width of undercarriage	1080~1400 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	700 mm
Length to center of rollers	1230 mm
Fuel tank capacity	23 L
Hydraulic oil tank capacity	20 L
Track gauge	850 mm/1170 mm
Working Pressure	24 Mpa
Flow rate	61.6 L/Min
AUX1 Pressure/ Flow rate	21 Mpa| 18/10 L/Min
AUX2 Pressure/ Flow rate	21 Mpa| 36 L/Min
Arm length (standard /longer)	950 mm /1200 mm
Boom length	1828 mm
Steering head angle	60°(L)/70° (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

Facebook

Machine weight : 1800kg(Canopy)/ 2000kg(Cabin) | Engine model : Yanmar 3TNV80F
Bucket capacity: 0.05 m³ | Engine power : 15.2 kW / 2500 rpm
Overall dimensions (L x W x H): 3750mm x 1080mm x 2345 mm(Cabin)

U20

Yuchai – Pioneering Compact Construction Solutions

- Yuchai, the manufacturer of China's first mini excavator (Model: WY4, 1990) and a professional producer of compact construction equipment, brings you the all-new Yuchai U18/U20 mini excavator.
- This powerhouse mini excavator delivers exceptional capabilities that surpass expectations – whether you're new to Yuchai or a longtime partner – redefining operational excellence on every jobsite.

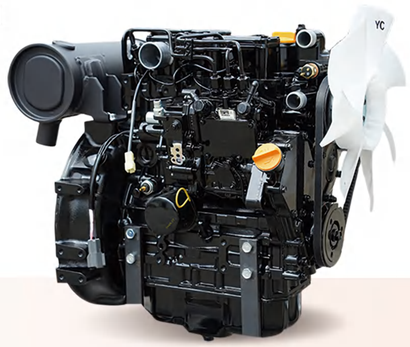
YUCHAI

Yuchai U18/U20 Mini-Excavator

The U18/U20 is designed to be compact yet robust, powered by a Yanmar engine that meets the Euro V emission standard, delivering exceptional power performance. Meticulously engineered by Yuchai's hydraulic design team, the load-sensing hydraulic system ensures efficient, reliable, and smooth hydraulic movements even in demanding working conditions, making it ideal for both construction and landscaping applications.

Compact Design, Superior Performance

- The U18/U20 mini excavator is powered by a Japanese-engineered Yanmar 3TNV76 or 3TNV80F engine, complying with the strictest Euro V and EPA T4F emission standards.
- Exceptional reliability with superior fuel efficiency.
- Substantial low-speed torque delivery for digging and heavy lifting operations.
- Globally established service network ensuring readily available spare parts.



The U18/U20 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 U18/U20 comes standard with 3 pcs auxiliary hydraulic circuits, enabling quick-connect compatibility with a range of attachments such as buckets, hydraulic breakers, augers, and log grapples.
- Combined with the electronically proportional joysticks, operation becomes exceptionally smooth and effortless.

High-Reliability Structure

Upgraded cast steel steeringhead boasts a lifespan of 8,000-10,000 hours,three times longer thanwelded counterparts.

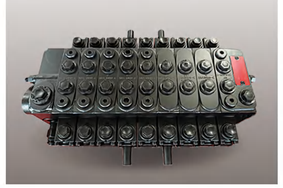
Compact Dimensions

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

Intelligent Pilot Hydraulic System

- **With soft and coordinated composite movements (boom/arm/bucket/travel), precise micro-control down to millimeter level;**
- **Load-sensing technology adjusts power output in real time, reducing fuel consumption compared to similar products.**

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.
| 8.5~10.5 rpm swing .
| 15.5 kN bucket force.

U18 Detachable Canopy

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.

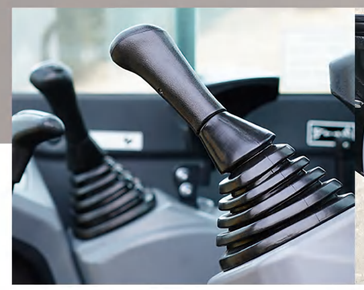
1 The cab, equipped with a Tip-Over Protective Structure (TOPS) , along with additional features such as a radio, an elastic fabric seat with a high backrest and headrest, a heater,and safety elements including seat belts and a safety hammer, offers multifaceted advantages, providing the operator with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

2 The U18/U20 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 U18 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

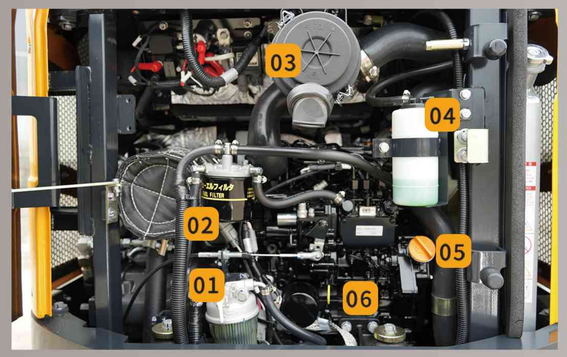
- Opening bonnet design optimum arrangement of internal parts for quick and efficient service and a shorter downtime.
- Metal covers are stronger and easier to repair.

High Cost-Performance

- The U18/U20 mini excavator delivers exceptional cost-performance. With its heavy-duty structure, powerful engine, and versatile capabilities, the U18/U20 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 U18/U20 is a long-term investment in your operational efficiency and profitability.

Optimal Maintenance Points

- The U18/U20 mini excavator's centralized maintenance points enable quick and efficient maintenance, maximizing uptime and minimizing maintenance



11 Hydraulic Quick Coupler Adapter

10 Holding Valve

01 Oil filter

02 Fuel filter

09 Hydraulic Oil Gauge

03 Air filter

04 Coolant

05 Oil filler port

06 Oil dipstick

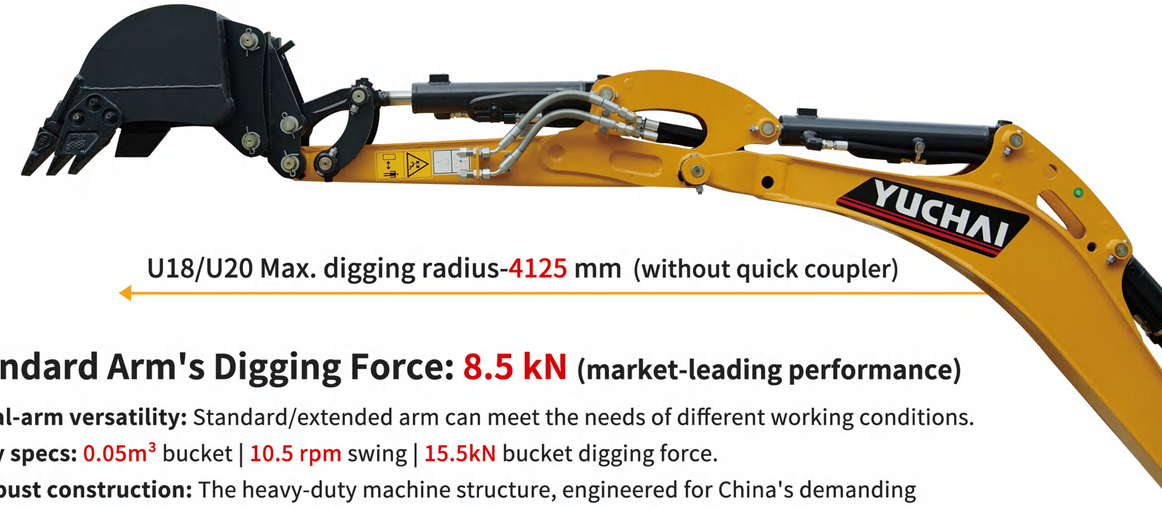
07 Centralized lubrication points

08 Fuel filler port

Equipment

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

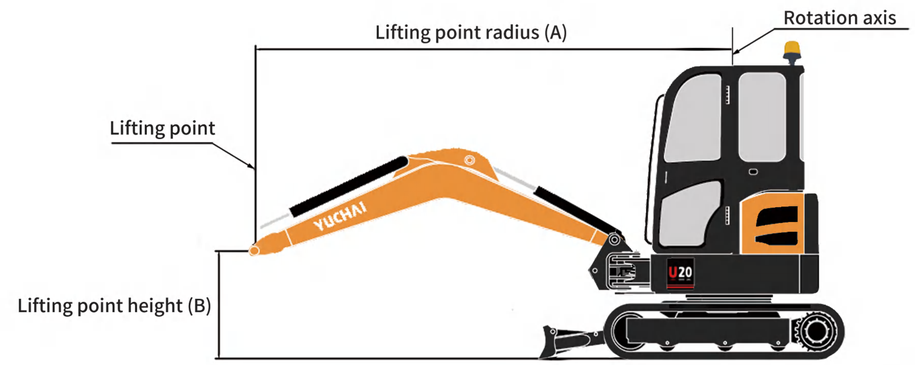
Component Part	Description	Standard	Optional
Cabin/Canopy	LCD instrument	•	
	High-back suspension seat		•
	FOPS		•
	TOPS	•	
	Heater (For cabin only)	•	
	Fan (For cabin only)	•	
	Radio (For cabin only)	•	
	USB port (For cabin only)	•	
	Rearview mirror (For cabin only)	•	
Working device	Steering head	•	
	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		•



U18/U20 Max. digging radius-4125 mm (without quick coupler)

Standard Arm's Digging Force: 8.5 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 | 15.5kN 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(width of undercarriage)											
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	—	—	—	—

Explanation

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.