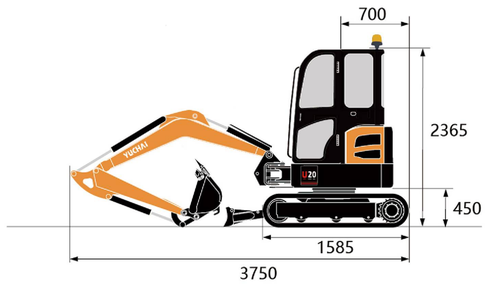


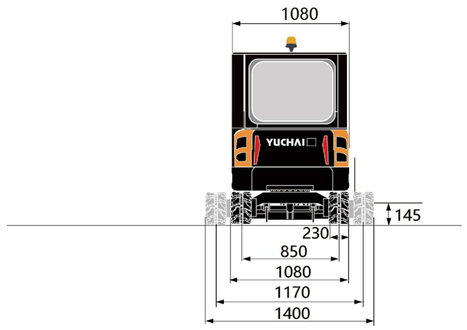


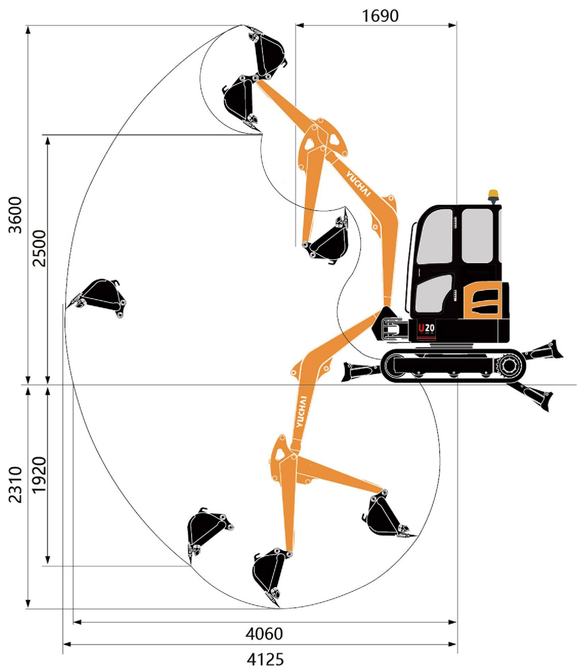


## U18/U20 Technical Specification

| | |
|---|---|
| **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 .

# MINI EXCAVATOR

# U20

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)

**GUANGXI YUCHAI EQUIPMENT TECHNOLOGY CO., LTD.**
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Facebook

# 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.

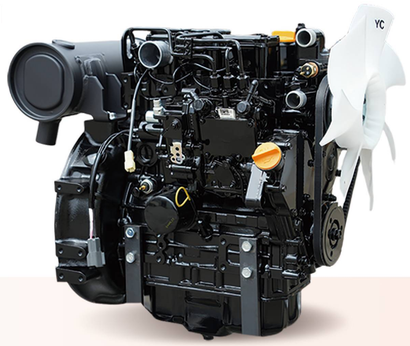
YUCHAI

# 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.

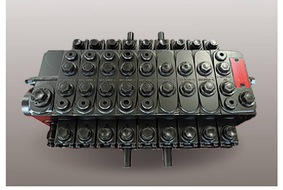
### Compact Dimensions

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

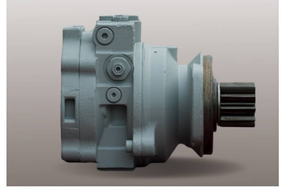
## Intelligent Pilot Hydraulic System

- **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.

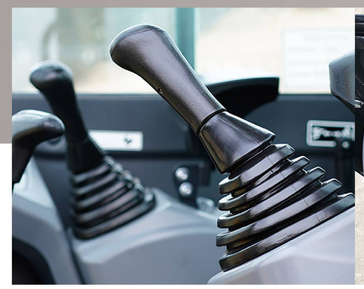
1 The cab, equipped with a Tip-Over Protective Structure (TOPS) , along with additional features such as a radio, an elastic fabric seat with a high backrest and headrest, a heater,and safety elements including seat belts and a safety hammer, offers multifaceted advantages, providing the operator with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

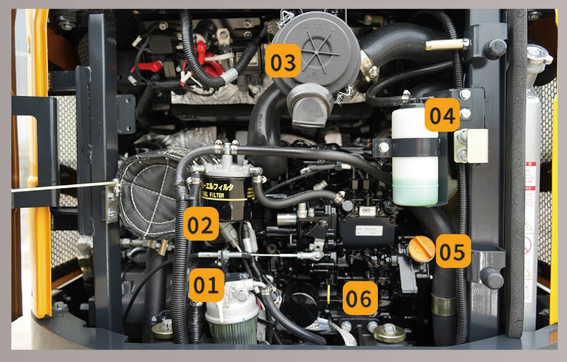
- Opening bonnet design optimum arrangement of internal parts for quick and efficient service and a shorter downtime.
- Metal covers are stronger and easier to repair.

# 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.

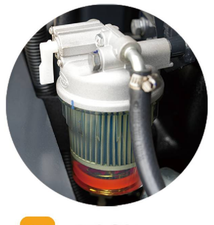
## Optimal Maintenance Points

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



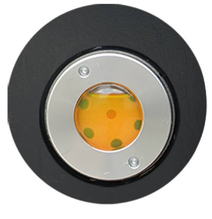
11 Hydraulic Quick Coupler Adapter

10 Holding Valve

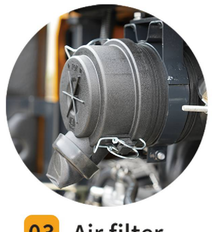


01 Oil filter

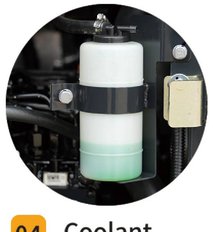
02 Fuel filter



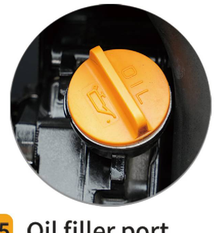
09 Hydraulic Oil Gauge



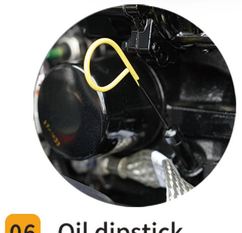
03 Air filter



04 Coolant



05 Oil filler port



06 Oil dipstick

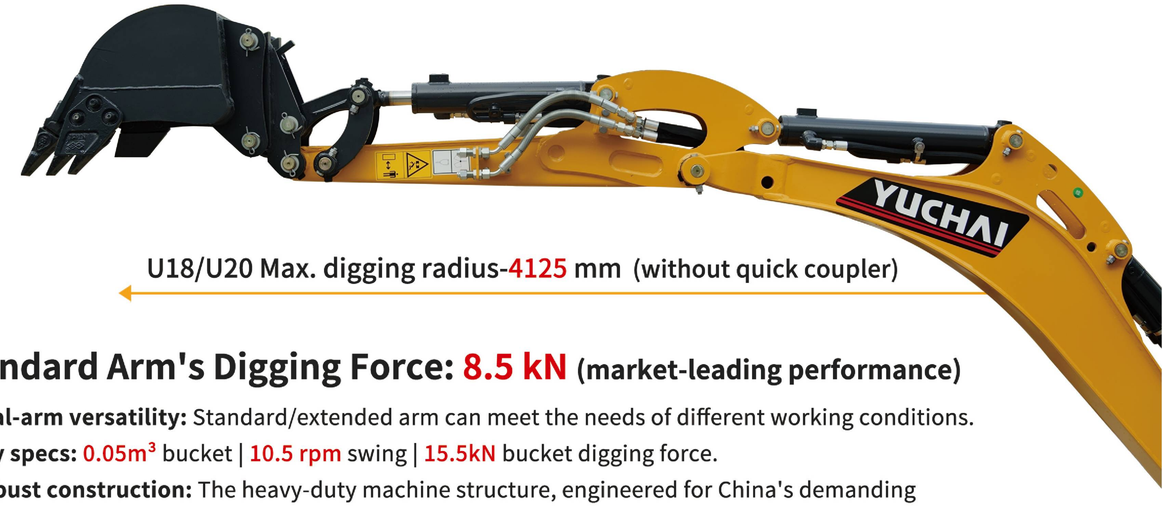
07 Centralized lubrication points

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.

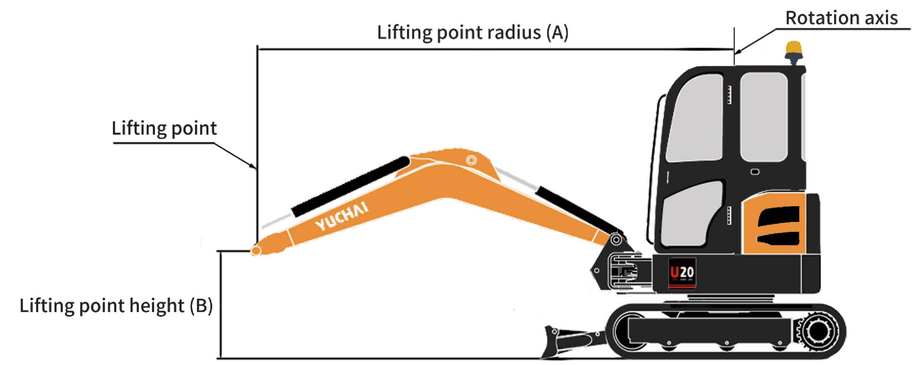
| Component Part | Description | Standard | Optional |
|---|---|---|---|
| Cabin/Canopy | LCD instrument | • | |
| | High-back suspension seat | | • |
| | FOPS | | • |
| | TOPS | • | |
| | Heater （For cabin only) | • | |
| | Fan （For cabin only) | • | |
| | Radio （For cabin only) | • | |
| | USB port （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.