

# Lightweight Excavator Tunnel Boom Short Arm Multipurpose For Easy Handling

### **Basic Information**

• Place of Origin: China

• Brand Name: **Zhonghe Machinery** . Certification: CE, patent, ISO CLB0024 . Model Number: • Minimum Order Quantity: 1 set / piece • Price: USD \$3200/sets • Packaging Details: bubble / wooden cases • Delivery Time: 20-30/works • Payment Terms: T/T, L/C . Supply Ability: 800 sets



### **Product Specification**

Material: Q355B, Q690D, Or Others As You Request

Apply To: 6-50ton Excavator
 Warranty: 6 Months
 Working Condition: Tunnel Work
 Condition: New

Color: As Customer Requires

Application: Excavator

• Type: High Reach Demolition Boom

Certification: ISO9001,ISO CE Oem: Available

Provided:

• Technique: Advanced Techniques

Oem/odm:
 Acceptable

• Highlight: Lightweight Excavator Tunnel Boom,



### More Images

· After-sales Service





Online Support, Video Technical Support







## Cost-Effective Tunnel Arm for Small Excavators Lightweight Tunnel Boom for Easy Handling Short Arm Excavator

### I. Advantages of Excavator Tunnel Arm/Short Arm

Excavator Tunnel Arm/Short Arm Advantages:

Flexible Operation: Works well in a variety of soil conditions and terrains.

Enhanced Control: Provides precise handling for detailed excavation tasks.

Rapid Project Completion: Increases efficiency, allowing for faster project turnover.

Reduced Impact on Surroundings: Minimizes disruption to adjacent structures and landscapes.

Robust Design: Engineered for longevity and durability in demanding environments. Greater Load Handling: Suitable for heavy materials, enhancing overall capability. Quick Changeover: Easy to switch between different operational modes and attachments. Optimized Power Usage: Designed to maximize the hydraulic system's efficiency. Better Operator Visibility: Improved design allows for enhanced sightlines during operation.

Improved Stability: Offers a stable platform for various excavation tasks.

#### Advantages of Zhonghe Machinery

- Professional product design team, rich experience, strong design pertinence.
   Automated processing equipment. Automatic cutting, double-sided floor-standing large boring machine, etc.
   Industry standard welding process, carbon dioxide shielded welding, good weld crack resistance.
- 4. Strict and meticulous quality inspection, ultrasonic flaw detection

excavator(to n)	total length (mm)	boom( mm)	arm(mm )	max height (mm)	max depth(mm)
20-25T	1300	3200	1900	4500	8500
30-36T	4200	4200	1900	5000	10500
40-45T	4500	4500	1900	5000	11000

### Working scene of tunnel arm

### Special design----meet customer needs !!!

#### Benefits of Altering the Tunnel Arm:

- 1. Modifications to the tunnel arm expand its operational range, ensuring it can function in various conditions without the worry of colliding with beams in tunnels or basements.
- 2. After modification, the tunnel boom allows the use of larger breakers. For example, the PC120 can accommodate a 135 breaker, while the PC200 can handle a 165 breaker, requiring adjustments in the double pump confluence to double the impact force.
- 3. A shorter boom enhances the capability to carry a larger bucket. The decrease in torque results in greater lifting force.
- 4. A stop valve is included to prevent hydraulic fluid from leaking when a bucket is used instead of a breaker.
- 5. Multi-layer welding on pipe joints reduces the risk of oil leaks significantly.
- 6. The presence of a cylinder guard is beneficial for protecting the cylinder from damage during impacts.
- 7. We offer affordable factory pricing along with options for customization, including ODM and OEM services





### Hiah effectiveness

1.On the same machine, tunnel arm can obtain greater lifting canacity than



an grouter many supusity and a standard arm.

2. Opening angle between boom and arm can reach 180 degrees

### **Robust structure**

- The upper and lower cover plates are thicker.
- 2. The arm is filled with iron sand to reduce vibration
  3. Robust cylinder guard





## **Avoid oil leakage**

- 1. Stop valves prevent oil leakage when replacing breaker by bucket.
- 2. Multi-layer welding for pipe connectors

### **Long service life**

- 1. Cylinder protective cover design
- Q355B material, high-quality accessories, full weld, reinforced stress position, etc.





### Pivot end

HD Boom with pivot end reinforcement Single piece design & thicker steel plates

### || Excavator Tunnel Arms Suitable For Application

What is the purpose of beveling the long arm/tunnel arm plate?

Most welding machines commonly used in the industry have a penetration depth of only 3mm. Since the thickness of our long arm plate is at least 8mm, without beveling, the welder would not be able to fully penetrate through the entire joint. This would result in weak welds, leading to issues such as weld cracking in the future.

We employ mechanical beveling, whereas other factories rely on manual beveling (as shown in the figure).

**High precision machine of Zhonghe Machinery Manufacturers** 

### Double-sided boring lathe



After the excavator boom and arm are assembled, the pins on the boom are drilled to ensure that the pins on the boom are parallel to each other and the cross section of the pin hole is perpendicular to the pin. The double -sided boring machine of the boom makes the hole position more accurate and the quality higher.



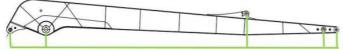






Make sure the cross section of the pin hole is perpendicular to the shaft.





Make sure the cross section of the pin hole is perpendicular to the shaft



Make sure the axis is parallel to the axis

#### Large Floor-Standing Double-Sided Boring and Milling Lathe:

Improved Accuracy and Consistency: The double-sided boring and milling lathe enhances the precision and uniformity of operations, ensuring consistent results.

Post-Welding Processing: After the welding process, the machine performs overall boring, ensuring the parallelism and perpendicularity of shaft holes.

Primary Applications: Primarily used for post-weld boring of the boom, small arm, and bucket, ensuring the accuracy and proper alignment of the boom.

Simultaneous Boring on Both Sides: The lathe performs boring on both sides at the same time, guaranteeing identical precision and consistency on both sides.

### **About Zhonghe Machinery Company Profile:**

### Kaiping Zhonghe Machinery Manufacturing Co., Ltd.

- 1. Established: Kaiping Zhonghe Machinery Co., Ltd. began operations in 2018.
- 2. Specialization: We focus on manufacturing and trading customized excavator booms and accessories.
- 3. Facility Location: Our headquarters is in Cuishan Lake New District, Kaiping City, Jiangmen, Guangdong Province, China.
- 4. Workshop Area: We maintain a 21,000 m³ steel structure workshop for our production activities.
- 5. Advanced Machinery: Our workshop is equipped with state-of-the-art high-precision processing equipment.
- 6. Workforce Details: Our skilled team includes over 100 technicians, consisting of:
- 50 welders with extensive experience (7+ years).
- 30 senior designers.
- 7. Innovation Focus: Our R&D team boasts over 10 years of customization experience and holds more than 100 patents.
- 8. Quality Control: We implement a strict production system emphasizing quality and cost control, honed over 6 years. 9. Production Capacity: We can produce up to 800 sets of various types of excavator booms annually.
- 10. Partnership Approach: We value quality and customer satisfaction, inviting collaboration from clients both domestic and international.

### CE certification & Utility model patent certificates



Our products have been exported to over 60 countries, utilizing various transportation methods such as sea, land, and air freight. For packaging, we use either wooden crates or stretch film to secure the products. Before shipment, the goods are carefully packaged and then loaded into containers to ensure their safety during transit.



### FAQ(Some frequently asked questions):

### Q1: Are you a manufacturer?

A1: Zhonghe Machinery provides a wide variety of attachments for excavators. Such as long arms, demolition arms, telescopic arms, standard buckets, rock buckets, cleaning buckets, tilt buckets, etc. We know that the perfect combination of high-quality cast steel products and moderate prices is the key to success.

#### Q2: Why is it called a tunnel arm?

A2: Tunnel arms generally refer to working devices that operate in narrow spaces. Most of them operate in tunnels, so they are called tunnel arms. Each country has a different name, but in China we call it a tunnel arm.

### Q3: What are the configurations of the tunnel arm?

A3: Depending on the height of the tunnel, the configuration that requires or does not require the boom cylinder can be designed, but the necessary configurations are: one boom cylinder, one bucket cylinder, 8 pins, 6 high-pressure hoses, one set of connecting rod assemblies, one set of crushing pipes, and 2 stop valves. The general operating height of the tunnel arm

### Q4: What are the requirements for the tunnel arm?

A4: A. It is recommended that the tunnel arm be equipped with a straight hammer. The basement height is limited. During operation, the triangular hammer part is higher than the arm plane, which will scrape the top and make the operation inconvenient. The straight hammer will not have this problem. B. The tunnel arm design does not take into account the transportation height. Generally, the transportation of large-scale mechanical tunnel arms requires the breaker to be removed before transportation. Filling materials in the forearm of the tunneling arm increases the weight of the tunneling arm, presses down the breaker, reduces the rebound force of the breaker, and increases the crushing force.

Any information, pls contact Sophia! this is my contact way directly Sophia W/A: +86 18127591702 Mail: sophia@excavatorboomarm.com



Jiangmen Kaiping Zhonghe Machinery Manufacturing Co., Ltd







excavatorlongarm.com

9 Huancui West Road, Cuishanhu New Area, Kaiping City, Guangdong Province, China