

## TECHNICAL SPECIFICATION MODEL 204B (AIR) BEVELMASTER™ SYSTEM

The Model 204B (Air) BEVELMASTER™ Portable Lathe System is a portable ID mount machine tool for beveling, facing and counterboring the ends of pipe or tubing in preparation for welding. The Model 204B BEVELMASTER™ will secure to pipe and tubing having an inside diameter ranging from 1.25" (31.8 mm) through 4.33" (110.0 mm).

### **The Model 204B (Air) BEVELMASTER™ System comes complete with:**

- Model 204B Sub-Assembly
- Head Kit, 4" Dia. w/ cam
- Air Motor Assembly
- Mandrel Assembly
- Jaw Block Set
- Wrench Kit
- Carrying Case
- Operator's Manual

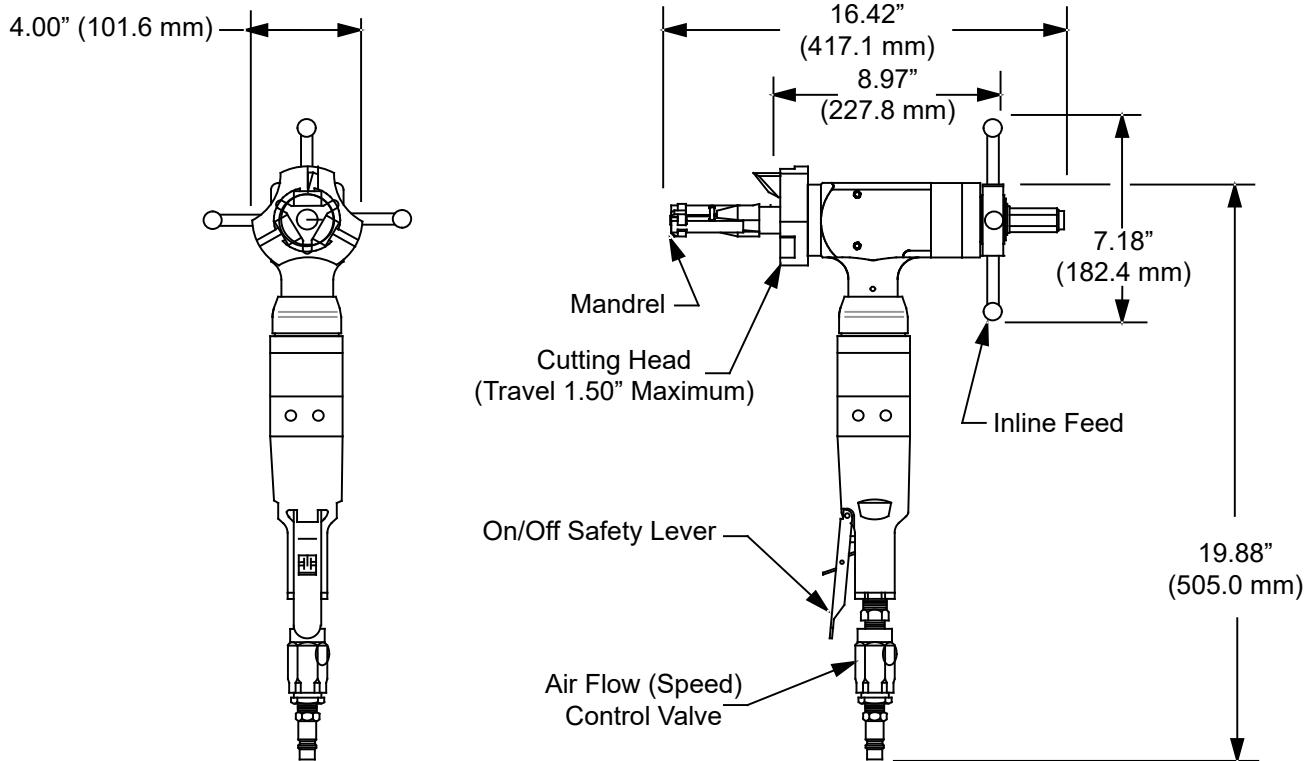
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### **Design and Operating Features**

- The lathe accepts its own torque through the mandrel.
- The expanding mandrel provides fast, accurate self-centering and alignment.
- All wrenches needed for operation are provided with the system.
- The lathe is lightweight, at less than 18 lbs. (8.16 kg).
- Easily handled by one operator.
- Mandrel shaft head treated to Rc 50 for maximum strength and to minimize wear damage.
- Heavy duty tapered mandrel and spindle bearings.
- Mandrel shaft seal to keep coolants out of the gears.
- Heat treated mandrel mounting blocks for maximum life and secure mounting.
- Heavy duty air motor and gear reduction for optimum performance.

## Specifications

Reference Envelope Drawing No. 77-1557



## Clearance and Dimensions

Weight

18.0 lbs. (8.1 kg)

## Pipe Cutting Capacities

### Basic Pipe Sizes

All schedules of 1 1/4" through 4" pipe. Some schedules may require optional equipment.

### Basic Tube Sizes

Up to .531" (13.5 mm) wall tubing with a maximum OD of 4.50" (114.3 mm) and a minimum I.D. of 1.25" (31.7 mm) may be beveled with standard mandrel.

### Wall Thickness Capacity (Limitations)

Wall thickness of all standard pipe schedules (.531" [13.5 mm] maximum) in the range listed. Contact Tri Tool Technologies for heavier wall procedures.

### Counterboring Operations

The tool will counterbore pipe and tubing with an ID range of 1.50" (38.1 mm) to 4.33" (110.2 mm).

## Material Cutting Capabilities

Mild steels, chrome steels (Rc 35 max.), stainless steel, copper-nickel alloys and aluminum without limitations except size and wall thickness as specified.

Inconel and some other high temperature alloys may require special procedures as a function of wall thickness and type of end preparation. Contact Tri Tool Technologies for more information.

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## Cutting Head Speeds

Maximum Cutting Head speed	162 RPM
Cutting Head speed @ maximum HP	82 RPM
Functional speed range	20-100 RPM
RPM @ 300 surface inches per minute	4.50" (114.3 mm) / 21 RPM 1.25" (31.8 mm) / 76 RPM

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## Drive System

Final Drive	Gear Driven
Pneumatic Motor	
Free speed	325 RPM
Max. HP Speed	162 RPM

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## Power Requirements

Pneumatic motor requires 55 cfm (26 L/s) air supply at 90 psi (621 kPa) for maximum horsepower delivery.

*Note: Air Supply must have a filter/regulator/lubricator (FRL) system to protect the warranty on the air motor.*

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## Speed Control

On/off safety lever valve and twist-type air flow control valve.

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## Feed

Manual Feed Handle is in line at the back of the machine. Feed rate is .100" (2.5mm) per revolution of the feed handle.

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## Mounting

Manually actuated draw rod expands mandrel ramps and jaw blocks.

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## Accessories

- Mandrel Assembly, Reduced DIA., 1.00" (25.4 mm) to 1.25" (31.8 mm) range.
- Mandrel Assembly, Reduced DIA., .610" (15.5 mm) to 1.00" (25.4 mm) range.
- Flange Facer Kit
- Elbow Mandrel Kit
- Pointer Kit, Elbow Mandrel
- Mandrel Assembly, Small Elbows
- Air Caddy, FRL

### Note To The Customer

Spare Parts and Standard Tool Bits are available from stock. Engineering design services for custom tool bits and special function modifications are available from the factory.

All Tri Tool Technologies and allied equipment products are subject to design improvements and specification changes at any time with no obligation to units already sold.

Warranty (limited): Parts and equipment are warranted against defects in material and workmanship for a period of one (1) year from date of purchase. Full details supplied on request and/or with the tools.

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