



# TRI TOOL INC.

3041 Sunrise Blvd. • Rancho Cordova, CA 95742-6502 • (888) TRITool • MAIN (916) 288-6100 • FAX (916) 288-6160  
[www.tritool.com](http://www.tritool.com) [customer.service@tritool.com](mailto:customer.service@tritool.com)

## TRI TOOL INC. TECHNICAL SPECIFICATION MODEL 214B BEVELMASTER® HYDRAULIC OCTOBER 2010

### Model 214B BEVELMASTER® Hydraulic

The Model 214B BEVELMASTER® Hydraulic is a portable lathe ID mount machine tool for beveling, facing and counterboring 4" through 14" pipe. The tool is configured with an in line feed knob and pneumatic drive motor at a right angle to the lathe head.

The Model 214B BEVELMASTER® System comes complete with:

- |                                   |       |
|-----------------------------------|-------|
| ▪ Model 214B Subassembly          | 1 ea. |
| ▪ Tool Holder Assembly (Aluminum) | 2 ea. |
| ▪ Tool Holder Assembly (Steel)    | 1 ea. |
| ▪ Mandrel Assembly                | 1 ea. |
| ▪ Hydraulic Motor Assembly        | 1 ea. |
| ▪ Jaw Block Assembly Sets         | 1 ea. |
| ▪ Wrench Kit                      | 1 set |
| ▪ Operator's Manual               | 1 ea. |

### Design and Operating Features

1. The lathe accepts its own torque through the mandrel.
2. The expanding mandrel provides fast, accurate self-centering and alignment.
3. All wrenches needed for operation (less tool bits) are provided with the system.
4. The lathe, at 100 lbs. (45.4 kg) approx., is lightweight and easily handled by one operator.

## Specifications

1. Reference Envelope Drawing No.: 77-1729
2. Weight (Approx.)
  - A. 100 lbs (45.4 kg)
3. Clearance and Dimensions
  - A. Maximum Rotating Head DIA 15.35" (389.9 mm)
  - B. Length (parallel to axis of pipe) 21.25" (539.8 mm)
  - C. Length Over Motor 13.57" (344.7 mm)
  - D. Maximum width 10.60" (269.3 mm)
4. Cutting Capacities
  - A. Basic pipe sizes
    - i. 4" - Schedules 5 and 160
    - ii. 5" through 14" – All Schedules
  - B. Basic Tube Sizes
    - i. Up to 1.32" (33.5 mm) wall tubing with a maximum OD of 14.00" (355.6 mm) and a minimum ID of 3.44" (87.4 mm) may be beveled with standard mandrel.
  - C. Wall Thickness Capacity
    - i. Wall thickness of all standard pipe schedules, 1.32" (33.5 mm) maximum, in the range listed. Tubing with greater wall thickness may be handled provided the ID is greater than 3.44" (87.4 mm) and the OD is less than 14.00" (355.6 mm). Contact TRI TOOL Inc. for heavier wall procedures.
  - D. Counterboring Operations
    - i. The tool will counterbore pipe and tubing with an ID range of 3.328" (84.6 mm) to 14.00" (355.6 mm).

5. Material Cutting Capabilities

- A. Mild steels, chrome steels (Rc 35 max.), stainless steel, copper-nickel and aluminum without limitations other than size and wall thickness as specified.
- B. 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's Engineering Department for details.

6. Mounting

- A. Manually actuated draw rod expands mandrel ramps and jaw blocks.

7. Drive System

- A. Gear Driven
- B. Hydraulic Motor
  - i. Free speed 550 RPM
  - ii. Max H.P. speed 155 RPM

8. Power Requirements

- A. Requires separate hydraulic power supply.
  - i. Reference the Tri Tool Inc Model 765RVC.

9. Flow

- A. 3 gpm (.19 L/s) - 15 gpm (.94 L/s) @ 1500 PSI (10.342 kPa)
- B. 15 gpm (.94 L/s) - 20 gpm (1.265 L/s) @ 1000 PSI (6895 kPa)

10. Temperature

- A. Maximum Operating Temperature
  - i. 180° F (82° C)

11. Cutting Head Speeds

- A. Maximum Head Speed
  - i. 37 RPM

B. Cutting head speeds @ maximum H.P.

i. 10 RPM

C. Functional Head Range

i. 1 - 37 RPM

D. RPM @ 200 surface in/min

i. 14.00" (355.6 mm) DIA

a. 5 rpm

ii. 4.00" (101.6 mm) DIA

a. 16 rpm

## 12. Feeds

A. Manual-Feed handle is in line at the back of the machine. Feed rate is .083" (2.1 mm) per revolution of the feed handle.

B. Maximum Feed Travel

i. 2.00" (50.8 mm)

## Accessories (Optional)

1. Flange Facer Kit
2. Elbow Mandrel Kit
3. Elbow Mandrel Pointer Kit
4. Mandrel Assembly, Small Elbow
5. Elbow Mandrel Squaring Plate Kit
6. Adjustable Pin Kit, Elbow Mandrel
7. Dial Indicator Kit
8. Miter Mandrel Kit
9. Sleeve Mandrel Kit
10. ID Tracking Module Kit

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 Inc. 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.

Filter, regulator and lubricator are required to protect the warranty on air powered tools.

