



TRI TOOL INC.

TRI TOOL INTERNATIONAL INC.

3806 Security Park Dr., Rancho Cordova, CA 95742-6990 U.S.A. 916-351-0144 800-345-5015 Fax 916-351-0372 ttcustserv@aol.com www.tritool.com

TRI TOOL INC. TECHNICAL SPECIFICATION MODEL 212B BEVELMASTER™ SYSTEM APRIL, 2000

MODEL 212B BEVELMASTER™ PORTABLE LATHE SYSTEM

The Model 212B BEVELMASTER™ is a portable I.D. mount machine tool for beveling , facing and counterboring 4” through 12” pipe. The tool is configured with an in-line feed knob and pneumatic drive motor at a right angle to the lathe head.

Design and Operation Features:

1. The lathe accepts it's own torque through the mandrel.
2. The expanding mandrel provides fast, accurate self-centering and alignment.
3. All tools needed for operation (less tool bits) are provided with the system.
4. The lathe, provided with a convenient handle, is lightweight at less than 80 lbs. (36.3 Kg.) and easily handled by one operator.

The Model 212B BEVELMASTER™ System comes complete with:

- a. Model 212B Subassembly
- b. Tool Holder Assembly (aluminum) (2) ea.
- c. Tool Holder Assembly (steel) (1) ea.
- d. Mandrel Assembly
- e. Air Motor Assembly
- f. Wrench Kit
- g. Carrying Case
- h. Operator's Manual

Optional Accessories:

Flange Facer Kit
Elbow Mandrel Kit
Elbow Mandrel Pointer Kit
Dial Indicator Kit
Miter Mandrel Kit
Sleeve Mandrel Kit
I.D. Tracking Module Kit
Air Caddy, FRL

Specifications:

1. Reference Envelope Drawing No. 77-0937
2. Pipe Cutting Capacities:
 - a. Basic pipe sizes:
4" schedule 5 through schedule 160
All schedules of 5" through 12" pipe
 - b. Basic Tube Sizes:
Up to 1.32" (33.4mm) wall tubing with a maximum O.D. of 12.75" (323.9mm) and a minimum I.D. of 3.44" (87.4mm) may be beveled with standard mandrel.
 - c. Wall Thickness Capacity:
Wall thickness of all standard pipe schedules 1.32" (33.4mm) maximum in the range listed. Tubing with greater wall thickness may be handled provided the I.D. is greater than 3.44" (87.4mm) and the O.D. is less than 12.75" (323.9mm).Contact Tri Tool for heavier wall procedures.
 - d. Counterboring Operations:
The tool will counterbore pipe and tubing with an I.D. range of 3.44" (87.4mm) to 12.44" (316.0mm).
3. Material Cutting Capabilities:
 - a. Mild steels, chrome steels (Rc 35 max), stainless steel, copper-nickel alloys and aluminum without limitations except 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.
4. Clearances and Dimensions:

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- a. Maximum Rotating Head Dia. 13.41" (340.6mm)
 - b. Length over motor 29.18" (741.2mm)
 - c. Length (parallel to axis of pipe) 21.25" (539.8mm)
5. Drive System:
- a. Final Drive: Gear Driven
 - b. Pneumatic Motor:
 - Free Speed 410 rpm
 - Maximum H.P. Speed 205 rpm
 - c. 110V and 220V Electric Drive and Hydraulic Motor Drive are also available.
6. Power Supply:
- a. Pneumatic motor requires 85 cfm (40 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.
7. Cutting Head Speeds:
- a. Maximum cutting head speed 22 rpm
 - b. Cutting head speed @ maximum H.P. 11 rpm
 - c. Functional speed range 5 -22 rpm
 - d. RPM at 200 surface inches per minute:
 - 12.75" (323.9mm) diameter 6 rpm
 - 4.00" (101.6mm) diameter 16 rpm
8. Speed Control:
- a. On/off safety lever valve and twist-type air flow control valve.
9. Mounting:
- a. Manually actuated draw rod expands mandrel ramps and jaw blocks.
10. Feed:

- a. Manual-Feed handle is in line at the back of the machine. Feed rate is .083" (2.1mm) per revolution of the feed handle .
- b. Maximum available feed travel is 2.00" (50.8mm).

Spare parts and standard tool bits are available from stock.

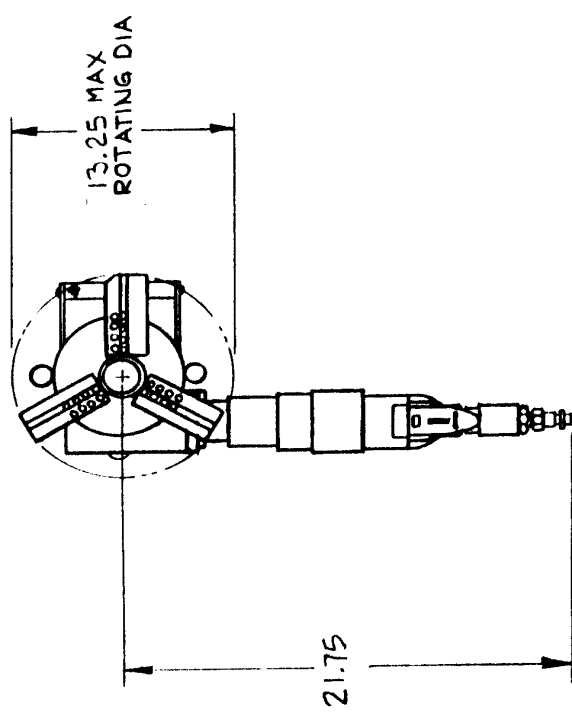
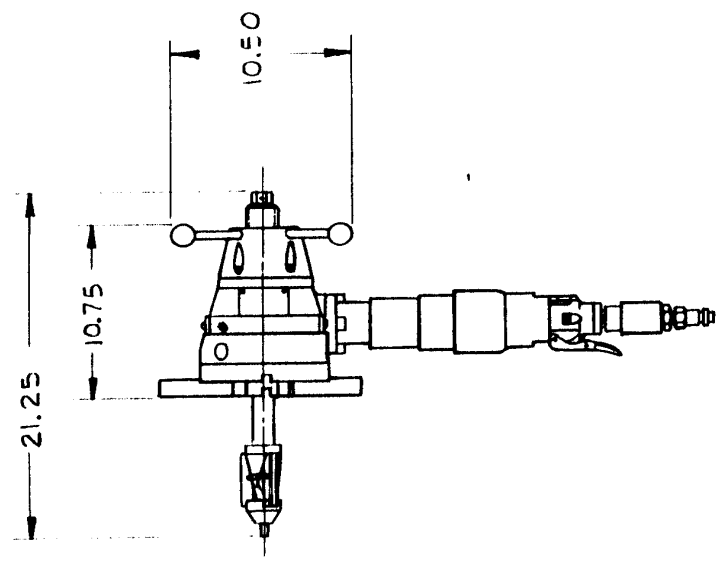
Engineering design services for custom tool bits and special function modifications are available from the factory.

All Tri Tool 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/or equipment are warranted against defects in material and workmanship for a period of one year from date of purchase. Full details supplied on request and/or with tools.

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

REVISIONS		
REV	DESCRIPTION	DATE
A	DIM. CHANGE PER PROD. DATA	7-5-96



QTY REQD	PCH NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
			TT 2126	TRI TOOL INC. 308 SECURITY PARK DRIVE, PACHICO, CALIFORNIA, CA 95742
MATERIAL		PARTS LIST		
FINISH		CONTRACT NO.	MODEL 212 B ENVELOPE DRAWING	
USED ON		APPROVALS	DATE	REV.
UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES		JRALEY	5/17/90	A
TOLERANCES ARE:		CHECKED	5/16/90	
DECIMALS ±.03		DRN	7/5/90	
FRACTIONS ± 1/16		APP		
ANGLES 0° 30'		DES		
MACHINED SURFACES 125°		CHK		
±.010		APP		
C. TO BE CONCENTRIC WITHIN .010 TIR		APP		
FLATNESS TO WITHIN .010 TIR		APP		
BREAK ALL SHARP EDGES .005-.015		APP		
FILLET RADI TO BE .050 MAX		APP		
C/SINK THD HOLES TO MAJ DIA X 2P		APP		
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		DO NOT SCALE DRAWING		

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