

830 USS Portable Clamshell Lathe

24 to 30 inches (609.6 to 762 mm) Nominal Bore

Mactech Europe offer portable pipe cutting machines for On-Site precision cutting and bevelling of most pipe sizes, schedules and materials.

The Clamshell Lathes cover a wide range of pipe sizes from 2" to 110" Nominal Bore and are designed so that minimal radial and axial clearance are required for easy installation on in-line closed loop pipe.

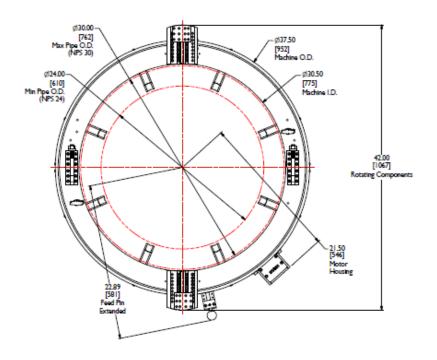
Unlike other competitive cold cutters our lathes have more bearings making it the most versatile machine in the industry to cut and bevel pipe, re-machine flanges, machine shafts and more.

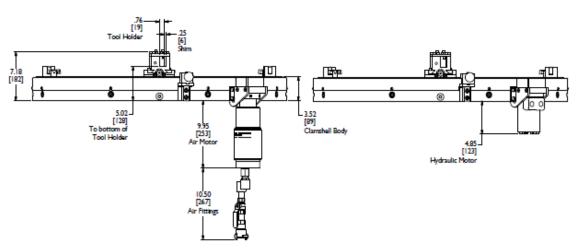


Benefits

- Sever or simultaneous Sever / Bevell 24 to 30 inches (609.6 to 763 mm) NB
- Cold Cutting in hazardous environments.
- Exceptionally rigid, split-frame for precise on-site machining.
- Tool Holder accepts standard 3/4" or 1" (19.05mm or 25.4mm) tool bits.
- Lightweight, low clearance design for easy handling in tight workspaces.
- Air Caddy (air filter & oiler) included with air drive systems
- Customer setups and drives available for your application.







USS Portable Clamshell Lathe Dimensions							
Dimensions	816 USS	820 USS	824 USS	828 USS	830 USS	832 USS	836 USS
A - Machine I.D.	16.50"	20.50"	24.50"	28.50"	30.25"	33.00"	37.00"
	(419.1 mm)	(520.7 mm)	(622.3 mm)	(723.9 mm)	(774.7 mm)	(838.2 mm)	(939.8 mm)
B - Machines O.D.	23.40"	27.40"	31.40"	35.40"	37.50"	40.00"	44.00"
	(594.36 mm)	(695.96 mm)	(797.56 mm)	(899.16 mm)	(962.50 mm)	(1016.0 mm)	(1117.6 mm)
C - #3 Slides	26.00"	30.00"	34.00"	38.00"	40.00"	42.50"	46.50"
	(660.4 mm)	(762.0 mm)	(863.6mm)	(965.2 mm)	(1016.0 mm)	(1079.5 mm)	(1181.1 mm)
D - # 4 Slides	28.00"	32.00"	36.00"	40.00"	42.00"	44.50"	48.50"
	(711.2 mm)	(812.8 mm)	(914.4 mm)	(1016.8 mm)	(1066.8 mm)	(1130.3 mm)	(1231.9 mm)

830 USS Portable Clamshell Lathe Specification

Application

Range

24 to 30 inches (609.6 to 762 mm) Nominal Bar

Feed

Feed Mechanism | 7 Point Star Wheel & Tripper

Feed Rate | 0035" (0.09 mm) per revolution

Air Drive Requirement 100cfm @ 100 psi (2.8m3/min @ 6.9 bar)

Drives Hydraulic Drive HPU Requirement 10-15 gpm @1000 psi (38-57lpm@69 bar) continuous pressure - includes

hose whips and quick connects

Operating Weights include tool blocks, slides and drive motor

830USS Air Drive 256 ibs (116 kg) | 830USS Hydraulic Drive 257 lbs (117 kg) Weights

Shipping Weights includes equipment and shipping crate

830USS Air Drive 439 lbs (199 kg) | 830USS Hydraulic Drive 427 lbs (194 kg)

Full line of tool bits | Right angle & reversible drives | Single point machining attachment | Axial Feed | **Options**

Machining Attachment | Counter bore / Facing Attachment Hydraulic Power Unit

The aluminium frame is a split ring assembly capable of being disassembled to be installed around in-line

piping.

The frame has bearing mountings for the rotating head, a drive motor mount, locator pads for mounting to

the pipe, and a gear cover.

Cutting Head Assembly

Frame

The cutting head assembly is a heat treated 4140 alloy steel split ring gear assembly, which aligns with the split lines of the frame enabling the machine to be split in half.

The cutting head has an integral spur gear on the outside diameter, and mounting devices for tool holders.

The drive motor assembly mounts to the frame and is arranged with a pinion gear on a shaft.

Drive Assembly

Bearings

(Blocks)

The drive motor mount bracket is designed to accept the reaction torque generated by the drive motor.

The cutting head runs on precision bearings that provide for both axial and radial force reactions experienced in pipe machining. Mactech utilises two separate radial bearing arrangements in every

machine, providing maximum rigidity of operation.

They are designed so that adjustments are not required.

The tool holders mounted to the cutting head assembly are provided with automatic radial feed "star wheel"

mechanisms.

Tool Holder

They are designed to maintain the radial clearance equal to the frame diameter and feature adjustable gibs

for tool support.

Adjustable locator pads are actuated by jack-screws from the outside of the frame.

A set of locator pads with extensions to cover the machine's operating range is provided with each machine. **Locator Pads**

Additional sizes for each machine are available.

Mactech tool bits are available for severing, severing and double bevelling, severing and bevelling on the **Tool Bits** side of the cut on which the clamshell is mounted (right hand), severing and bevelling on the opposite

side of the cut (left hand), counter boring, socket weld removal, etc.

