



# 816 USS Portable Clamshell Lathe

10 to 16 inches (254 to 406.4 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.

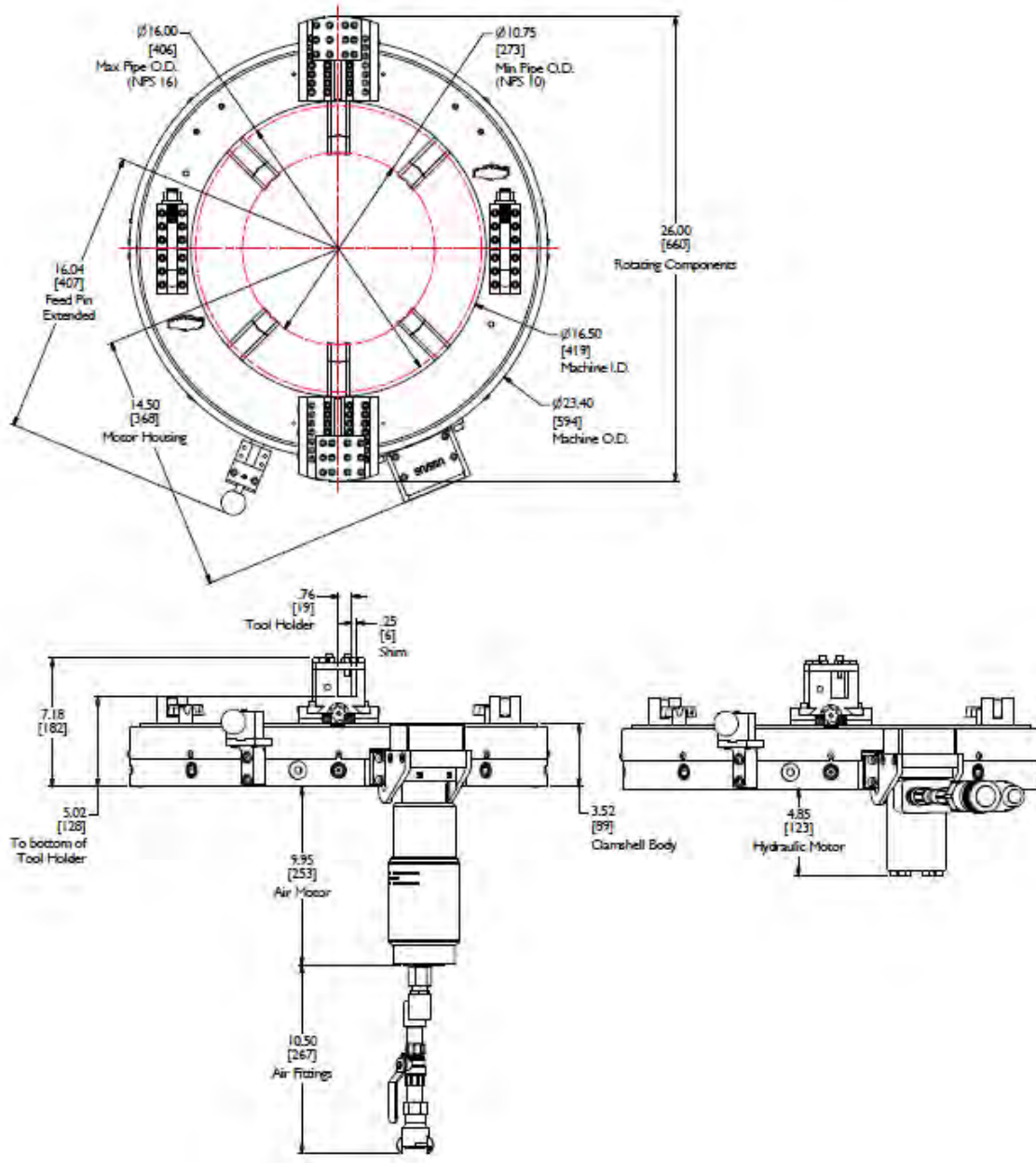
Unlike other competitive cold cutters our lathes have more bearings making it the most versatile machine in the industry to cut and bevel pipe, re-machine flanges, machine shafts and more.



## Benefits

- Sever or simultaneous Sever / Bevell 10 to 16 inches (254 to 406.4 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" (419.1 mm)	20.50" (520.7 mm)	24.50" (622.3 mm)	28.50" (723.9 mm)	30.25" (774.7 mm)	33.00" (838.2 mm)	37.00" (939.8 mm)
B - Machines O.D.	23.40" (594.36 mm)	27.40" (695.96 mm)	31.40" (797.56 mm)	35.40" (899.16 mm)	37.50" (962.50 mm)	40.00" (1016.0 mm)	44.00" (1117.6 mm)
C - #3 Slides	26.00" (660.4 mm)	30.00" (762.0 mm)	34.00" (863.6 mm)	38.00" (965.2 mm)	40.00" (1016.0 mm)	42.50" (1079.5 mm)	46.50" (1181.1 mm)
D - # 4 Slides	28.00" (711.2 mm)	32.00" (812.8 mm)	36.00" (914.4 mm)	40.00" (1016.8 mm)	42.00" (1066.8 mm)	44.50" (1130.3 mm)	48.50" (1231.9 mm)

# 816 USS Portable Clamshell Lathe Specification

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<b>Application Range</b>	10 to 16 inches (273 to 406.4mm) Nominal Bar
<b>Feed</b>	Feed Mechanism   7 Point Star Wheel & Tripper Feed Rate   0035" (0.09 mm) per revolution
<b>Drives</b>	Air Drive Requirement 100cfm @ 100 psi (2.8m <sup>3</sup> /min @ 6.9 bar) Hydraulic Drive HPU Requirement 10-15 gpm @1000 psi (38-57lpm@69 bar) continuous pressure - includes hose whips and quick connects
<b>Weights</b>	Operating Weights include tool blocks, slides and drive motor 816USS Air Drive 161 lbs (73 kg)   816USS Hydraulic Drive 162 lbs (73 kg) Shipping Weights includes equipment and shipping crate 816USS Air Drive 289 lbs (131 kg)   816USS Hydraulic Drive 277 lbs (126 kg)
<b>Options</b>	Full line of tool bits   Right angle & reversible drives   Single point machining attachment   Axial Feed   Machining Attachment   Counter bore / Facing Attachment Hydraulic Power Unit
<b>Frame</b>	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.
<b>Cutting Head Assembly</b>	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.
<b>Drive Assembly</b>	The drive motor assembly mounts to the frame and is arranged with a pinion gear on a shaft. The drive motor mount bracket is designed to accept the reaction torque generated by the drive motor.
<b>Bearings</b>	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.
<b>Tool Holder (Blocks)</b>	The tool holders mounted to the cutting head assembly are provided with automatic radial feed "star wheel" mechanisms. They are designed to maintain the radial clearance equal to the frame diameter and feature adjustable gibs for tool support.
<b>Locator Pads</b>	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. Additional sizes for each machine are available.
<b>Tool Bits</b>	Mactech tool bits are available for severing, severing and double bevelling, severing and bevelling on the 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.