



# 836 USS Portable Clamshell Lathe

30 to 36 inches (762 to 914.4) Nominal Bore

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

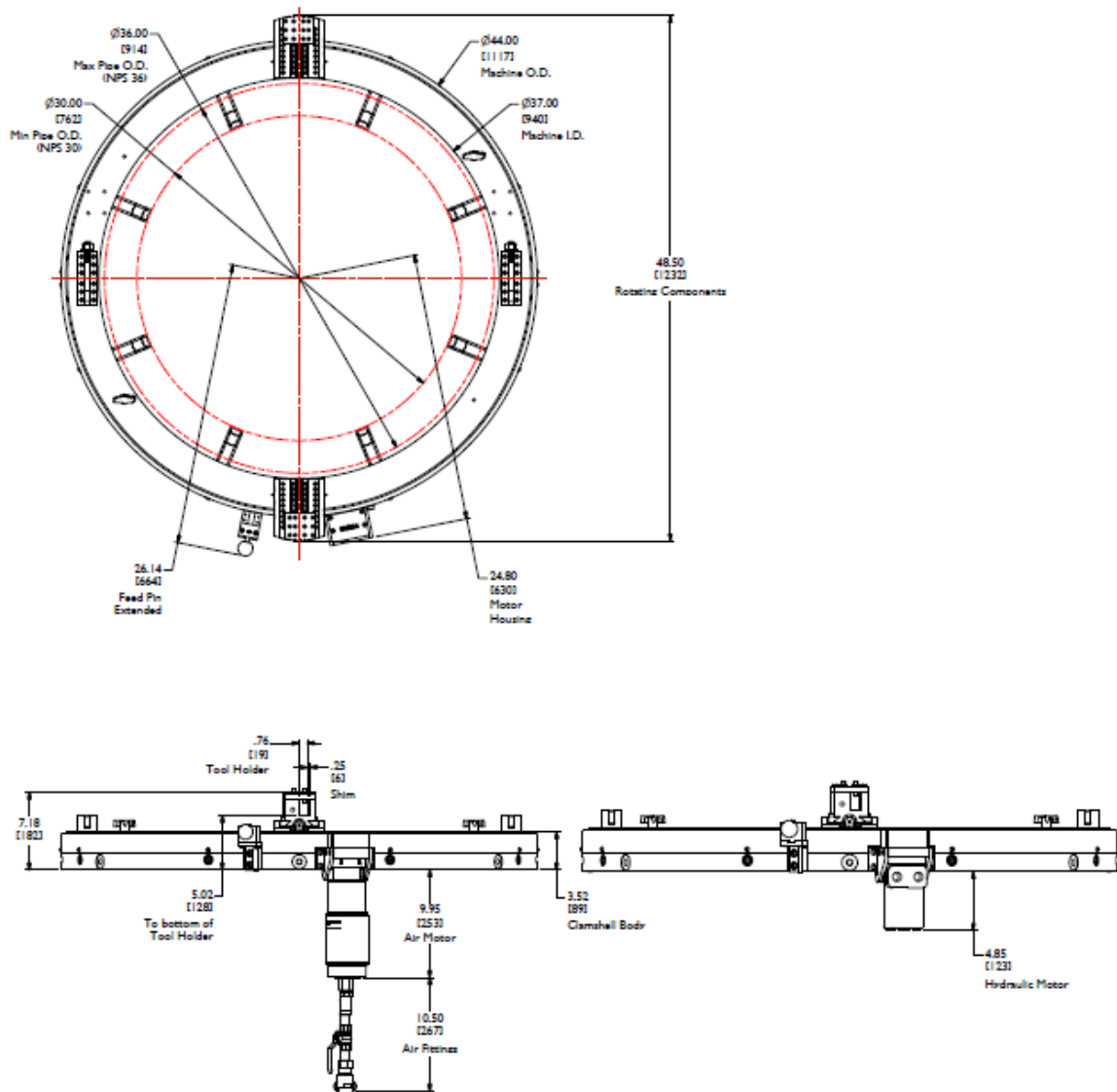
The Clamshell Lathes cover a wide range of pipe sizes from 2" to 110" Nominal Bore and are designed so that minimal radial and axial clearance are required for easy installation on in-line closed loop pipe.

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 / Bevel 30 to 36 inch Nominal Bore
- Cold cutting in hazardous environments
- Exceptionally rigid, split frame for precise on-site machining
- Lightweight, low clearance design for easy handling in tight working spaces
- Tool holder accepts standard 3/4 or 1 inch square tool bits
- Air Caddy (air filter and oiler) included with air drive systems
- Custom 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" (863.6mm)	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)

# 836 USS Portable Clamshell Lathe Specification

Application Range	30 to 36 inches (762 to 914.4 mm) Nominal Bar
Feed	Feed Mechanism   7 Point Star Wheel & Tripper Feed Rate   0035" (0.09 mm) per revolution
Drives	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
Weights	Operating Weights include tool blocks, slides and drive motor 836USS Air Drive 305 lbs (138 kg)   836USS Hydraulic Drive 306 lbs (139 kg) Shipping Weights includes equipment and shipping crate 836USS Air Drive 448 lbs (221 kg)   836USS Hydraulic Drive 476 lbs (216kg)
Options	Full line of tool bits   Right angle & reversible drives   Single point machining attachment   Axial Feed   Machining Attachment   Counter bore / Facing Attachment Hydraulic Power Unit
Frame	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	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.
Drive Assembly	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.
Bearings	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.
Tool Holder (Blocks)	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.
Locator Pads	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.
Tool Bits	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.