

# 824 USS Clamshell Lathe

18 to 24 inches (457.2 to 609.6mm) 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 90" Nominal Pipe OD 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 18 to 24 inches (457.2 to 609.6mm) NB.
- Cold Cutting in hazardous environments.
- Exceptionally rigid, split-frame for precise on-site machining.
- Tool Holder accepts standard 3/4" or 1" 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.



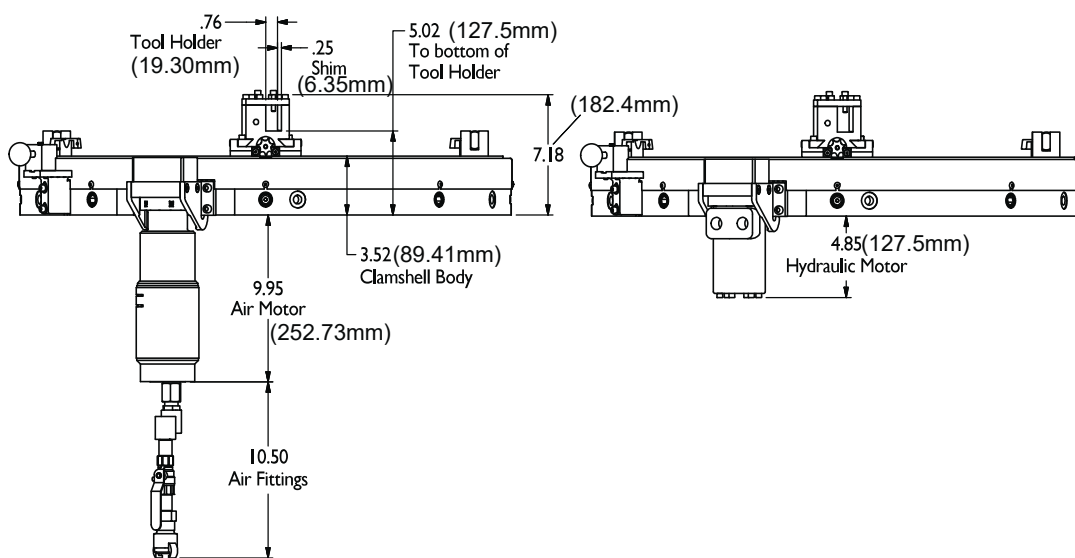
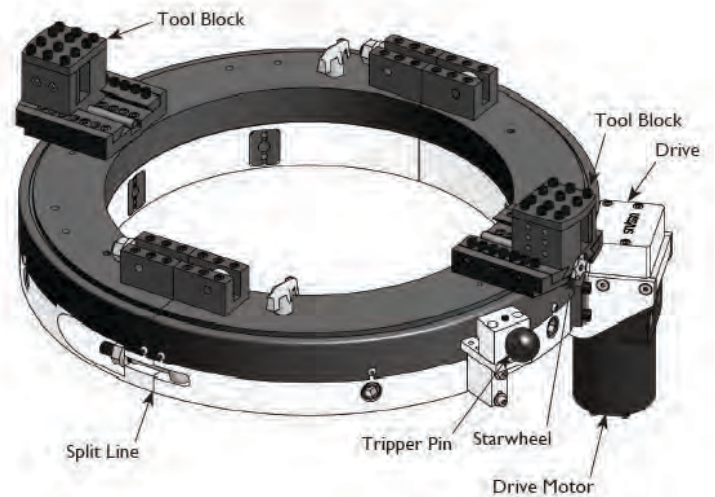
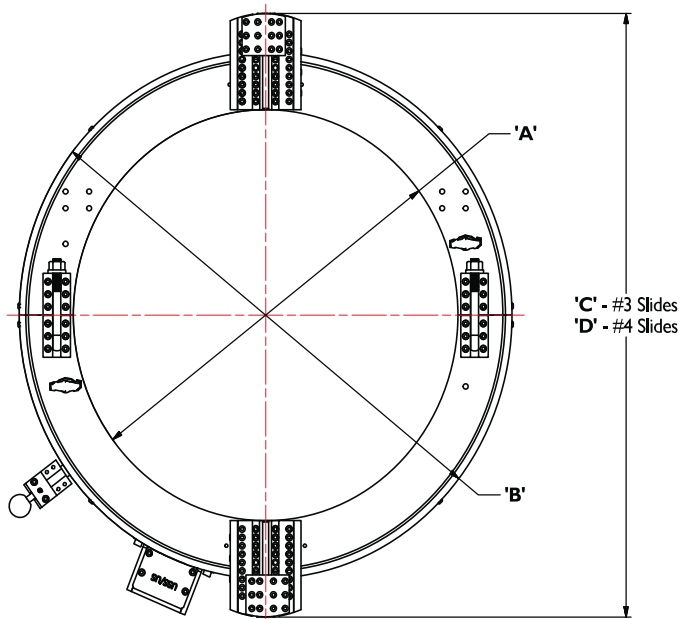
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USS CLAMSHELL PORTABLE LATHE DIMENSIONS

Dimensions	816 USS	820 USS	824 USS	828 USS	830 USS	832 USS	836 USS
A - Machine I.D	16.50" (419.1mm)	20.50" (520.7mm)	24.50" (622.3mm)	28.50" (723.9mm)	30.50" (774.7mm)	33.00" (838.2mm)	37.00" (939.8mm)
B - Machine O.D	23.40" (594.36mm)	27.40" (695.96mm)	31.40" (797.56mm)	35.40" (899.16mm)	37.50" (952.50mm)	40.00" (1016.mm)	44.00" (1117.6mm)
C - # 3 Slides	26.00" (660.4mm)	30.00" (762.0mm)	34.00" (863.6mm)	38.00" (965.2mm)	40.00" (1016,0mm)	42.50" (1079.5mm)	46.50" (1181.1mm)
D - # 4 Slides	28.00" (711.2mm)	32.00" (812.8mm)	36.00" (914.4mm)	40.00" (1016.8mm)	42.00" (1066.8mm)	44.50" (1130.3mm)	48.50" (1231.9mm)

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## USS CLAMSHELL PORTABLE LATHE SPECIFICATIONS

Application Range	18 to 24 inches (457.2 to 609.6 mm)	
Feed	Feed Mechanism	7 Point Star Wheel & Tripper
	Feed Rate	.0035" (0.09 mm) per revolution
Drives	<ul style="list-style-type: none"><li>Air Drive Requirement 100cfm @ 100 psi (2.8m3/min @ 6.9 bar)</li></ul>	
	<ul style="list-style-type: none"><li>Hydraulic Drive HPU Requirement 10-15 gpm @1000 psi (38-57lpm@69 bar) continuous pressure - includes hose whips and quick connects</li></ul>	
Weights	Operating Weights include tool blocks, slides and drive motor 824USS Air Drive: 227 lbs. (102 kg)   824USS Hydraulic Drive: 228 lbs. (103 kg)	
	Approximate Shipping Weights includes equipment and shipping crate 824USS Air Drive: 355 lbs. (161 kg)   824USS Hydraulic Drive: 343 lbs. (156 kg)	
Options	Full line of tool bits   Right angle & reversible drives   Single point machining attachment   Axial Feed Machining attachment   Counterbore / 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 jackscrews 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), counterboring, socket weld removal, etc.	