816 USS Clamshell Lathe

10 to 16 inches (273 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 (273 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.



Mactech (Europe) Ltd
Mactech House
Riverdane Road
Eaton Bank Trading Estate
Congleton
Cheshire
CW12 1PN
+ 44 (0) 1260 281431

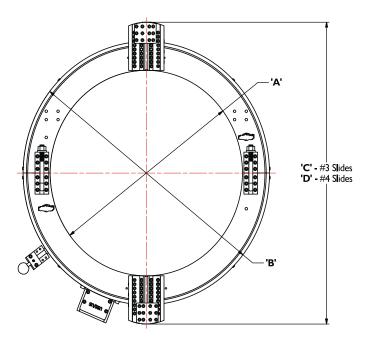
Mactech (Europe) Ltd.
Mactech House
Howe Moss Drive
Dyce
Aberdeen
Scotland
AB21 0GL
+ 44 (0) 1224 722666

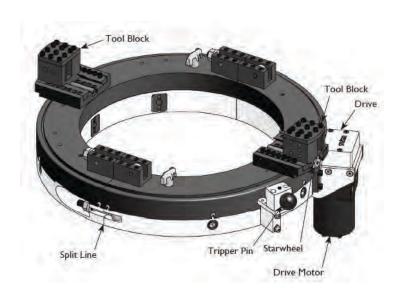
Mactech (Europe) BV Moerbei 16 3371 NZ Hardinxveld-Giessendam Netherlands

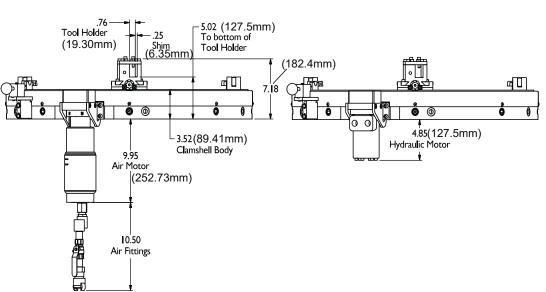
+31 (0) 184 633 953

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

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| | USS CLAMSHELL POR | TABLE LATHE SPECIFICATIONS | | | | |
|--------------------------|--|---|--|--|--|--|
| Application Range | 10 to 16 inches (273 to 4 | 906.4 mm) | | | | |
| Feed | Feed Mechanism | 7 Point Star Wheel & Tripper | | | | |
| | Feed Rate | .0035" (0.09 mm) per revolution | | | | |
| | Air Drive Requireme | nt 100cfm @ 100 psi (2.8m3/min @ 6.9 bar) | | | | |
| Drives | | Requirement 10-15 gpm @1000 psi (38-57lpm@69 bar) cludes hose whips and quick connects | | | | |
| Weights | | de tool blocks, slides and drive motor (73 kg) 816USS Hydraulic Drive: 162 lbs. (73 kg) | | | | |
| | | eights includes equipment and shipping crate (131 kg) 816USS Hydraulic Drive: 277 lbs. (126 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. | | | | | |