

CLAMSHELL PORTABLE LATHES

MACTECH PORTABLE MACHINING SOLUTIONS

Cold Cut and Bevel Pipe

Mactech Clamshell Lathes are portable pipe cutting machines for in-situ precision cutting and beveling of all pipe sizes, schedules and materials. Our line covers wide range of pipe sizes from 2 inches to 80 inches outside diameter. The clamshells lathes are designed so that minimal radial and axial clearance is required for easy installation on in-line pipe. A variety of attachments and accessories are available to utilize the versatility of our industry-leading clamshell lathes.

Mactech models available for rent or purchase:

LC Clamshell Lathe

The LC low clearance series are designed to fit into tight working areas, as well as minimize machine weight. These clamshells are lightweight, but retain rigidity during operation.

USS Clamshell Lathe

The USS series combines the low clearance of the LC clamshell lathes, while providing additional thickness and strength. Larger diameter clamshells must be rigid to maintain a consistent and accurate machining process. The USS clamshell lathes offer heavy-duty construction for even greater rigidity during operation.

WD Clamshell Lathe

The WD series worm drive system provides the necessary power to cut extra heavy wall, and is capable of cutting pipe greater than 40 inches diameter. Mactech's large diameter clamshells lathes are exceptional OD mount facing tools for heat exchanger resurfacing.



MACTECH

ON-SITE MACHINING SOLUTIONS

Mactech, Inc. • 4079 Pepin Ave. • Red Wing, MN 55066
PH: 651-388-7117 • TOLL FREE: 800-328-1488 • FAX: 651-388-0337
www.mactechonsite.com

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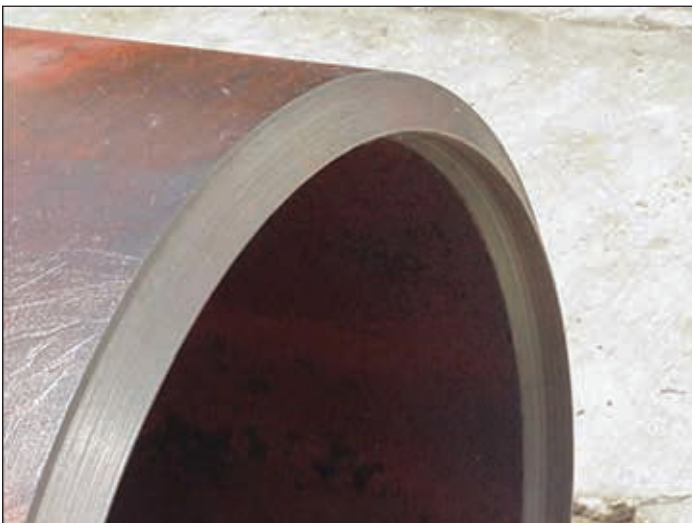
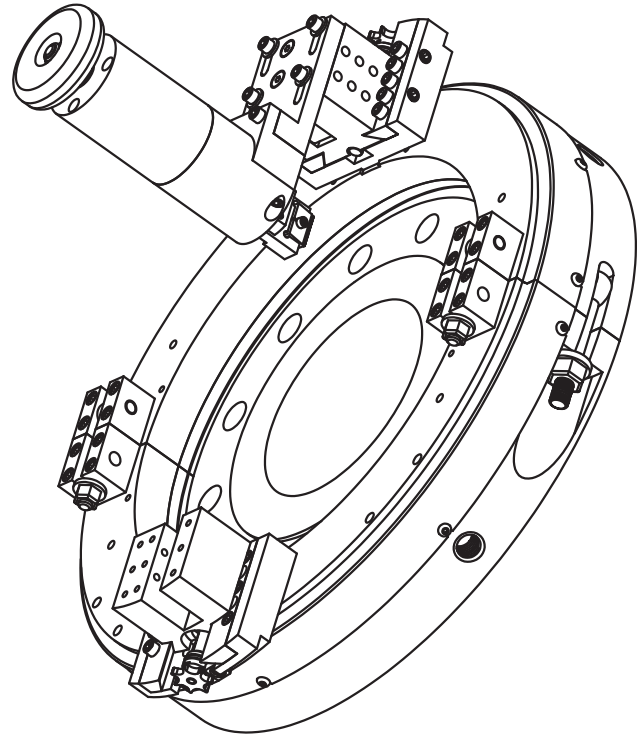
GENERAL INFORMATION

Each Mactech Clamshell comes complete with:

- In-line air, right angle air, or hydraulic drive
- Air Caddy (lubricator and filter)
- Complete set of Tool Blocks & Slides
- Locator pad set to cover entire machining diameter range
- All required hand tools
- Gang box for machine storage
- Operating manual

Special Options:

- Hydraulic Power Supply 10 or 20 hp
- Counterbore Module
- Single Point Module
- Axial Feed Weld Overlay Removal Module



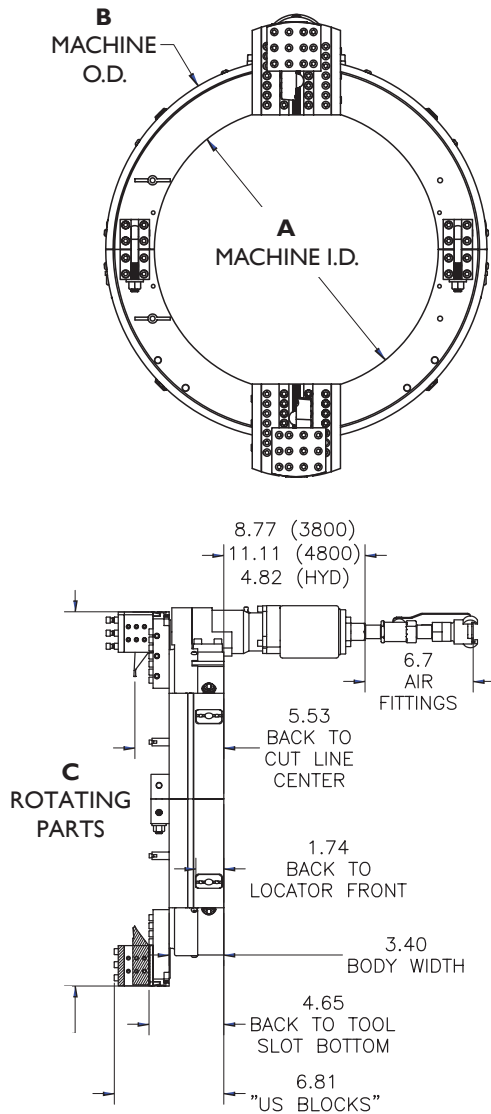
DRIVE OPTIONS

In-line Air Drive:	105 rpm, 1.45 hp. Standard for 2-12 inch Clamshell cutting tools. Mactech models 802-812
In-line Air Drive:	97 rpm, 3.5 hp. Standard for 14-60 inch Clamshell cutting tools. Mactech models 814-860
Right Angle and Reversible Drives:	Fixes clearance issues. Available in several variations and sizes.
Hydraulic Drive:	Available for all Clamshells.

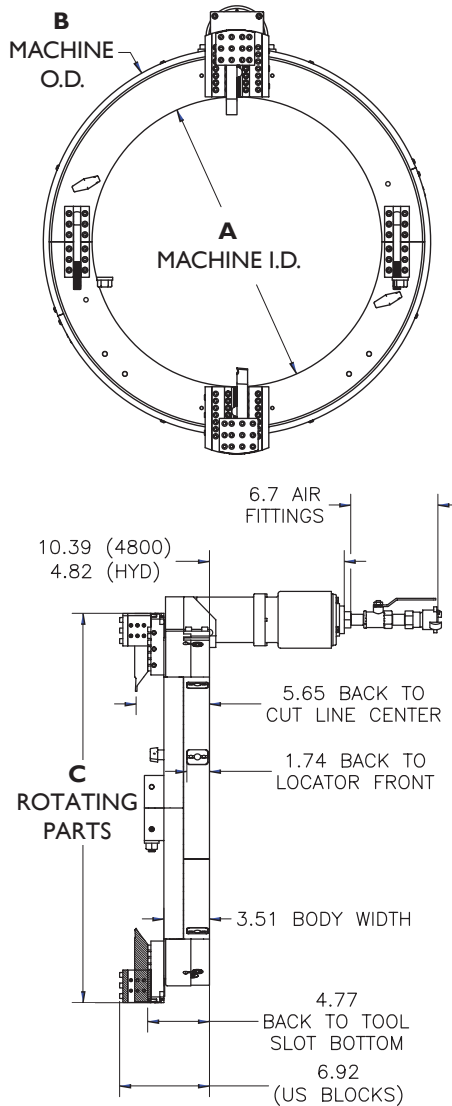
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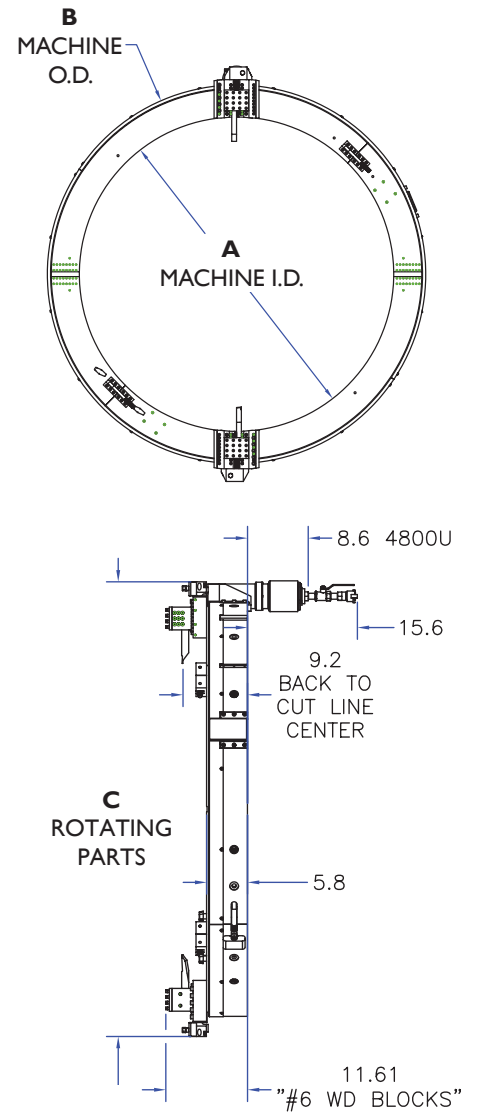
LC CLAMSHELL



USS CLAMSHELL



WD CLAMSHELL



LC CLAMSHELL	Clamshell Model	802LC	804LC	806LC	808LC	810LC	812LC	814LC	816LC
	A - Machine I.D.	2.88	5.00	7.12	9.12	11.25	13.25	14.50	16.50
	B - Machine O.D.	7.10	9.98	12.10	14.10	16.23	18.21	19.48	21.48
	C - #2 Slides	11.13	12.75	14.87	16.87	19.00	21.00	22.25	24.25

USS CLAMSHELL	Clamshell Model	816USS	820USS	824USS	828USS	830USS	832USS	836USS
	A - Machine I.D.	16.50	20.50	24.50	28.50	30.50	33.00	37.00
	B - Machine O.D.	23.40	27.40	31.40	35.40	37.50	40.00	44.00
	C - #3 Slides	26.00	30.00	34.00	38.00	40.00	42.50	46.50

WD CLAMSHELL	Clamshell Model	832WD	836WD	843WD	848WD	860WD
	A - Machine I.D.	33.00	37.00	44.00	49.00	61.00
	B - Machine O.D.	43.00	47.00	54.00	59.00	71.00
	C - #6 WD Slides	48.61	52.61	59.61	64.61	76.61

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SPECIFICATIONS

Frame:

The aluminum 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 utilizes two separate radial bearing arrangements in every machine, providing maximum rigidity of operation. They are designed so that adjustments are not required.

Tool Holders (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 beveling, severing and beveling on the side of the cut on which the clamshell is mounted (right hand), severing and beveling on the opposite side of the cut (left hand), counterboring, socket weld removal, etc.



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