DESCRIPTION
E.H. Wachs End Mill System is an accessory for the DynaPrep MDSF™ that provides an alternative solution to traditional lathe machining for pipe cutting, beveling and weld excavation. Suitable for field machining or fab shops, the end mill system converts the MDSF into an advanced milling machine tool. It’s ideal for compression cuts on spring tensioned pipe, where a workpiece under load can shift during machining causing stalling, binding or breaking of traditional tooling. The End Mill Systems powerful 360 degree cutting action allows the milling head to “cut itself out of a bind.”

The end mill system comes complete with three major assemblies: the heavy duty milling head, a low speed hydraulic drive motor, and a dual circuit hydraulic control panel. All are equipped with 25in (635mm) hose whips with standard OD connections to an available hydraulic power supply (HPU). A tooling package consisting of three .75in end mill tools is also included.

The milling head attaches to the DynaPrep MDSF Split Frame without any modifications, using the standard mounting points. The drive motor utilizes the standard MDSF 6B spline drive with the quick connect latch feature. The DynaPrep MDSF Split Frame (not included) serves as the milling system platform, rotating the milling head circumferentially around the workpiece. The end mill system can be fitted to any DynaPrep MDSF split frame 28 inch or larger.

CONTROL & OPERATION
The dual circuit control panel has separate controls for feed rate (drive motor) and cutting (spindle) speed. The milling module utilizes a hydraulic drive motor for long life, precise results and greater control.

The end mill system is designed for MDSF Split Frames 28in and larger, and can machine the full range of the DynaPrep MDSF used as the platform. A benefit of the end mill system is, if beveling is required, the cut line of the milling head matches the bevel tooling cut line when using standard MDSF tool slides. No repositioning of the split frame is necessary.

SELECTIVE MACHINING
The milling head is engineered to withstand loads in multiple directions for extended duty cycles and demanding applications. A manual handwheel is used for plunge control and to set the cutting depth. The milling head is secured with brackets that use the standard mounting points, and can be radially positioned in the bracket. The plunge depth handwheel offers a total travel of 4.3in (110mm), and is secured at the desired depth with two locking brackets.

Unlike traditional lathe pipe cutting solutions that machine the entire circumference, Wachs End Mill System offers the ability to selectively machine a specific area, such as a porous or failing area of an otherwise properly performing weld. Compound-angle double bevel end milling tooling, combined with the module’s precise feed and depth control, allows for highly targeted weld evacuation.
STANDARD FEATURES

- End Mill System adapts to 28 inch and larger DynaPrep MDSF Split Frames
- Mounts without modifications to the DynaPrep MDSF
- Compatible with a wide range of pipe diameters, wall thickness and materials
- Rugged construction for performance and durability
- Separate controls for rotational speed and spindle motor cutting speed
- Easy setup and operation, fine control over feed rate and cutting speed
- Milling and optional beveling cut lines match, no repositioning needed
- Includes 25in (635mm) hydraulic hose whips on milling head and drive motor

SPECIFICATIONS:

- Control Panel: dual circuit hydraulic controls for feed rate and spindle speed
- Drive Motor: Low speed hydraulic drive motor with 6B spline quick connect feature
- Feed Rate: 0-2 Inches per minute variable, user controllable
- Cutting Tool Speed: variable, user controllable
- Cutter Plunge Depth: 0 to 4.3in (0-110mm) variable, user adjustable
- Cutting Tool Size: .75in (19mm) roughing end mill
- Hydraulic Drive Unit requirements: 15 gpm @ 1,500 psi (57 lpm @ 103 BAR)
- Finish: Milling N8 to N9, Beveling 250 to 125 (6.3 to 3.2)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DIM “A” RADIAL CLEARANCE</th>
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<tbody>
<tr>
<td>MDSF 2228</td>
<td>30.09in (764.2mm)</td>
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