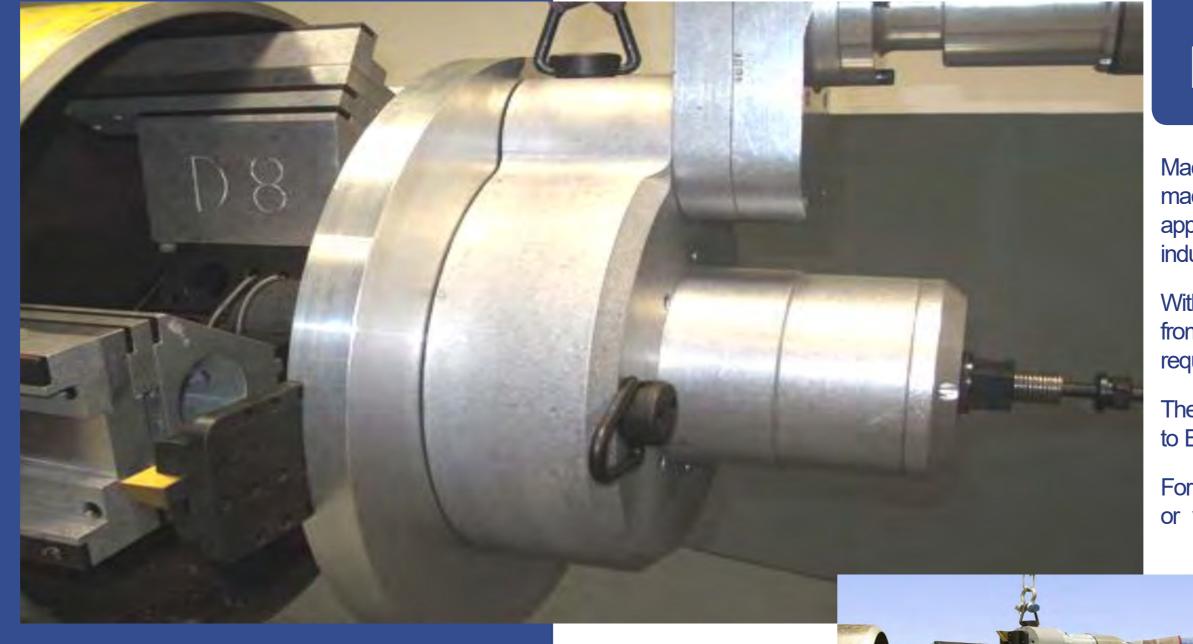


Pipe End Preparation



#### Why Choose Mactech?

- Mactech makes a total and commitment to safe working practices, both in equipment design and services performed
- Focus on providing the best end prep tools available
- Emphasis on reliability and consistency, giving operators confidence and confirmation in cuts
- Tools, procedures and problem-solving techniques incorporate hands-on technician input and experience
- Best practices approach under continual scrutiny and revision
- OEM in-house product development breeds innovation
- Providing solutions for complicated technical problems
- Broad and deep range of pipe preparation machines
- Made in the USA



# Pipe End Prep Tools

Mactech europe's pipe end preparation machines can be used in a wide variety of applications across a number of different industries.

With 12 choices of machine that can prep pipes from 1/2 to 36 inch diameters all your requirements are covered.

The complete range of machines are available to BUY or RENT

For additional information see the follow pages or visit our website to download the PDF's



## End Prep Tools

End Prep Tools can be used in a wide variety of applications across a number of different industries. Our end prep tools and cutting saws are perfect for the following applications

#### PORTABLE BEVELING TOOLS FOR ON-SITE MACHINING OF PIPE

- End Prep High Alloy Pipe Including Super Duplex
- Precision Weld Joint Preparation
- J Bevel, Face and Bore for Automatic Welding
- Compound Bevel of Heavy Wall Pipe
- Out of Round Pipe Inside Diameter Tracking
- Pipe Weld Preparation up to 36" Outside Diameter
- Pipe Cutting to 60"O.D.
- Concrete Lined Pipe Cutting
- End Prepping Concrete Lined Pipe
- Bobtail Trucks
- Sturdy Gear Drives
- Rigid I.D. Clamping
- Esco Lock Blading System
- Superior Bevel Blade Design
- Rent or Purchase





















# PORTABLE BOILER TUBE END PREPPING AND CUTTING SAWS FOR PRECISION ON-SITE MACHINING OF TUBE AND PIPE

- Beveling Pipe Ends, 37 1/2°
- 30° Bevel
- Flat Facing
- Inside Diameter Boring for Matching Tube Wall Thickness
- Bevel, Face and Bore Simultaneously
- High Chrome Tubes
- Boiler Tube Membrane Removal
- Weld Overlay Removal from Tube O.D.
- Peel Back of Clad Boiler Tubes
- Step Bevel for Composite Tubes
- J Prep for Orbital Welding
- Tangent Tube End Prep
- Flat Facing
- Tube Seal Weld Removal
- Tube Stub Removal
- Tube Sheet Weld Removal
- Fin Fan Tube Facing
- Tube Stub Boring
- Rifled Tube I.D. Bore
- Header Tube I.D. Bore
- High Speed Hand Held Bevel
- High Speed Track Mounted Bevel
- Boiler Tube Panel Cutting Track Mounted Saws
- Boiler Tube Membrane Removal
- Boiler Tube Expanders
- Rolling Motors for Tube Expanders
- Warped Waterwall Flex Track for Curved Surfaces
- Membrane Slotting Between Boiler Tubes
- Pendent Tube Cutting with Track Mounted Saw
- Storage Tank Dismantling Precision Cutting
- Boiler Tube Expanders
- Rolling Motors for Tube Expanders
- Orifice Unions for Precision Flow Control
- And many more...

# Ground Millhog

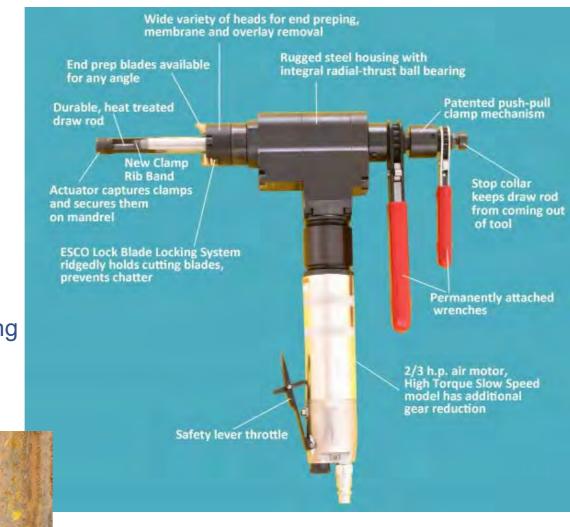
Right Angle I.D. Clamping Tube and Pipe Beveling Tool 0.5" I.D. to 2.25" O.D. 12.7 mm I.D. to 57.15 mm O.D.

- Push-pull clamping and release system
- Self-centering torque-free operation
- Permanently attached clamps and wrenches
- Rigidly mounts to tube I.D., easy to release
- Sealed construction allows use in any orientation
- Produces a smooth, continuous chip
- Compact, low-maintenance end prep tool
- Performs any angle of bevel
- Steel housing with integral radial-thrust ball bearing
- Chatter-free cutter blade locking design
- Uses TiN coated cutter blades

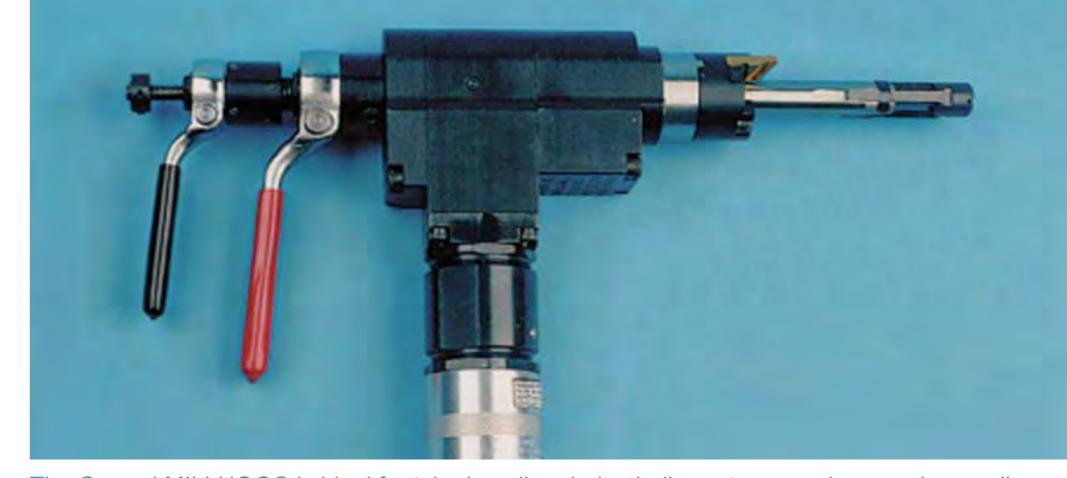












The Ground MILLHOG® is ideal for tube beveling during boiler outages and can end prep all boiler tube materials. The critical width dimension is only 1.500in wide for accessing single tubes in a boiler tube waterwall and it can be equipped with a Membrane Removal Head for removing membrane from boiler tubes from .875in o.d. to 1.250in o.d.

The available automatic air activated clamping system instantly clamps and releases the beveling tool to and from the tube i.d. This reduces cycle time between end preps and can increase tube beveling production by 300% or more.

The Ground Millhog can also be equipped with either a 950 watt electric motor 18 volt battery powered 18 volt when air is not available or desired.

# Mongoose Millhog

Tube and Pipe Beveling Tool 0.625" I.D. to 3.0" O.D. 15.9 mm I.D. to 76.2 mm O.D.







#### **Key Features**

- Critical width 2.25in (57.2mm) for single tube "Dutchman" boiler tube repair.
- Bevels, faces and bores stainless steel and other highly alloyed tubing.
- Patented, self-centering, push-pull clamp and release mechanism has permanently attached wrenches.
- Only 2-1/4" wide.
- Rugged with torque-free operation.
- Powerful pneumatic motor needs only 25 cfm air flow.
- Produces a thick chip without cutting oils.
- Easy-to-change mandrels.

• EscoLock blade locking system.

### **MOONGOOSE**

The Mongoose is ideal for beveling all boiler tube alloys and is only 2.250in wide for accessing single tubes in a boiler tube waterwall. It can also be equipped with a boiler tube membrane removal head that removes membrane from between boiler tubes or a boiler tube overlay removal head that removes membrane as well as overlay, cladding or any other type of protection from the tube o.d

Unlike some beveling tools that require a hammer to release the clamps from the tube i.d. the Mongoose incorporates our patented clamp release mechanism that pushes the clamps down the tapered mandrel when releasing the tool from the tube i.d. This maintains clamp assembly integrity and helps prevent the possibility of them detaching in the tube. Permanently attached wrenches provide all operational needs and support maximize efficiency.



## Tube Weasel Millhog

Right Angle I.D. Clamping Beveling Tool 0.750" I.D. to 3.0" O.D. 19.1 mm I.D. to 76.2 mm O.D.

The Tube Weasel beveling tool is ideal for end prepping all boiler tube materials and is only 3in wide for accessing single tubes in a boiler tube waterwall (Dutchman).

The rugged gear drive is the same one we use in the Wart MILLHOG® and driven by a 2/3hp motor for efficient shop and field use.







#### **KEY FEATURES**

- Right angle tool rigidly mounts to tube ID.
- Sealed construction allow use in any orientation.
- Fits a "Dutchman" and handles hard alloys.
- Clamping system is self-centering and easy to use.
- EscoLock blade lock system securely holds cutting blades.
- Chatter-free end preps produce thick continuous chip.
- Torque-free operation with TiN coated cutting bits.
- Requires only (25 cfm), 708 lt./min. air flow.
- Gear head design has performed millions of end preps.
- Field proven and simple to operate and maintain.

#### **TUBE WEASEL**

# C-HOG Millhog

Tube and Pipe Beveling Tool 0.50" I.D. to 3.0" O.D. 12.7 mm I.D. to 76.2 mm O.D.

Secures to the tube O.D. and is easy to use

The C-HOG beveling tool securely attaches to the tube O.D. with a huge clamp that minimizes chatter and vibration and is well suited for small bore tubes because there is no I.D. clamp or mandrel to interfere. The I.D. clearance gained also allows for large, tough I.D. boring blades that increase Cutter Blade endurance.

Designed for maximum operator comfort, efficiency and ease of use, the C-HOG's attached feed wrench lets the operator comfortably feed the tool as it bevels the tube with minimal fatigue. Constructed to deliver reliable performance on the toughest applications, the C-HOG is a rugged tool that is light in weight and compact. Highly engineered, it incorporates state of the art materials and heat treated components.

**KEY FEATURES** 

C-HOG

- Key Features
- Narrow body only 1.75" (44.45 mm) wide
- Large clamping surface rigidly holds tool for chatterfree bevels
- Powerful pneumatic, electric and battery motor choices
- No I.D. mandrel makes this tool perfect for boring
- Robust ratchet wrenches are securely attached
- Changing clamps and other tooling is easy
- Low maintenance
- Compact, light weight and rugged



# Wart Millhog

Right Angle I.D. Clamping Tube and Pipe Beveling Tool 0.750" I.D. to 4.5" O.D. 19.1 mm I.D. to 114.3 mm O.D.

The Wart MILLHOG® I.D. Clamping beveling tool is ideal for end prepping all boiler tube and pipe metal and is only 2.625in wide for use in tight working environments, like beveling a single tube in a boiler tube waterwall.

The Wart has a powerful 1.25hp motor and heavy duty gear reduction system that delivers a perfect combination of speed and torque which easily handle difficult to machine pipe and tube alloys and make the Wart a favorite choice with boilermakers and pipefitters for preparing pipe and tube ends for welding.

Like other MILLHOG® pipe and tube beveling tools the Wart can bevel, face and bore simultaneously. It can also be equipped with a Membrane Head for removing membrane from boiler tube, or a Membrane/Overlay Head for removing membrane as well as weld overlay from boiler tube O.D., all while beveling the tube end at the same time.

Other popular applications include seal weld removal, tube stub removal, "J" prep for orbital welding, I.D. boring for tube rifle removal or for smoothly transitioning pipe or tube I.D.'s with different wall thicknesses to mention a few.









#### **KEY FEATURES**

- Only 2.625in wide.
  - Powerful 1.25hp motor delivers the perfect combination of speed and torque for beveling all alloys of pipe and tube.
  - Heavy duty clamping system is ideal for limited access areas.
  - Mounts rigidly to produce a clean, continuous chip.
- Requires no cutting lubricant.
- Simultaneously bevels, faces, and bores.
- Removes boiler tube membrane and or overlay while beveling the tube end.
- Lightweight and requires no special training.
- Efficient chatter-free cutter blade locking design.
- Torque-free operation prevents operator fatigue.
- Low maintenance, compact, air-powered tool or optional electric drive.

#### **WART**

# Mini Millhog

i.D. Clamping Pipe and Tube Portable Beveling Tool 1.25" I.D. to 6.625" O.D. 31.8 mm I.D. to 168.3 mm O.D.

#### **KEY FEATURES**

- Tool rigidly mounts to pipe or tube ID.
- Self-centering draw rod assembly.
- Single gear drive system for optimum performance.
- One mandrel covers a majority of the cutting range.
- Cutter blade locking design eliminates chatter.
- Cutter blades index easily for proper set up.
- Pneumatically powered with torque-free operation.
- Removes tube stub welds and prepares the header.
- Automatically squares off the end of pipe or tube.
- Produces clean, continuous chip without cutting oils.
- Lightweight and simple to operate without special training.



Bevels heavy wall pipe or tube, is fast, chatter-free and easy to use...

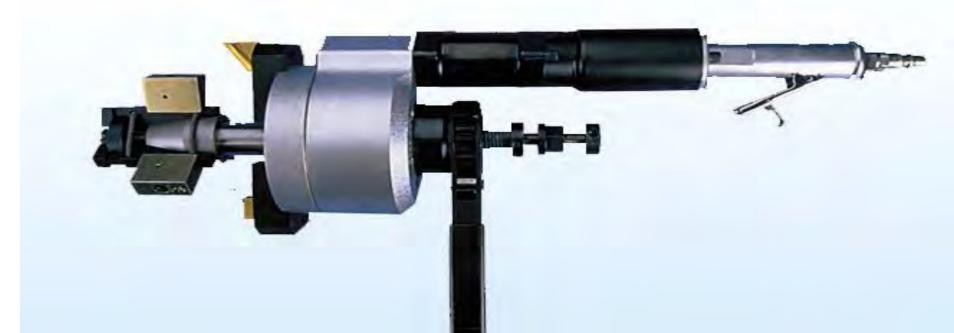






The Mini MILLHOG® pipe beveling machine delivers a lot of punch in a small light package that is easy to handle. The standard range is 1.800in I.D. to 6.625in O.D. and can be increased with the optional 1.250in Mandrel. It is available with a rugged 1.25hp pneumatic motor or 1800 watt electric motor that connect to a large driven gear to deliver low rpm and high torque which is ideal for a wide variety of applications including end prepping heavy wall pipe and tube, even stainless steel.

The Tool Post can handle two Cutter Blades at a time and a second Tool Post can be added for increased machining functions. Additionally, it for can be set up for boiler tube membrane and overlay removal, boiler tube stub removal and tube beveling.



## Tube Fin Removal Millhog

Right Angle I.D. Clamping Boiler Tube Fin Removal Tool 1.25" I.D. to 2.5" 63.5 mm O.D. 31.8 mm I.D. to 63.5 mm O.D.

The MILLHOG boiler tube Fin Removal Tool removes 4in (102mm) of spirally wound boiler tube fin from the tube O.D.in one to two minutes. Its rack and pinion feed permits it to rapidly advance for aggressive fin removal and retract to remove the detached fin from the work area. Available for both right and left hand spirally wound boiler tubes.

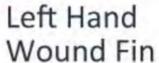
#### **Key Features**

- Quick, removes 4in (101mm) of fin from the tube O.D. in 1 2 minutes.
- Pneumatically powered with no reaction torque to the operator.
- Rigidly clamps to the tube I.D.
- High grade tool steel cutter can be re-sharpened.
- Heavy-duty rack and pinion feed mechanism assures a smooth operation for greater fin removal control.
- Works in any position to separate the boiler tube fin from core tube
   O.D.
- Available for right and left hand spirally wound boiler tubes.
- Saves a lot of time by eliminating chipping and grinding.













Right Hand Wound fin



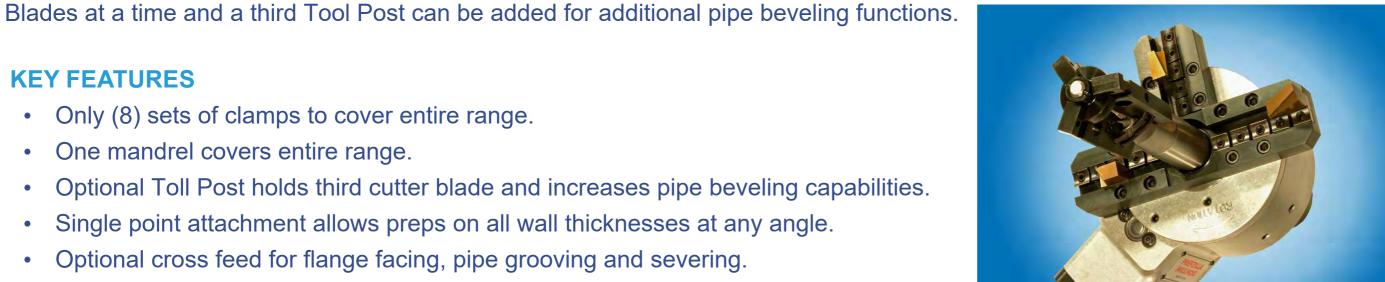
## Prepzilla Millhog

II..D.Clamping Bevelin Tool 1.575" I.D. to 8.625" O.D. 40 mm I.D. to 219.1 mm O.D.

The PrepZilla's MILLHOG powerful 2hp pneumatic or 1800 watt electric motor and tough gear reduction create a perfect combination of speed and torque. Both the pneumatic and electric drives deliver plenty of power and can perform any angle of end prep on all types of pipe and tube alloy including P-91 and Super Duplex. Eight sets of Clamp Ribs and Pads achieve an I.D. clamping range of 1.575in I.D. to 8.625in O.D. The Tool Post can handle up to two Cutter

#### **KEY FEATURES**

- Only (8) sets of clamps to cover entire range.
- One mandrel covers entire range.
- Optional Toll Post holds third cutter blade and increases pipe beveling capabilities.
- Single point attachment allows preps on all wall thicknesses at any angle.
- Optional cross feed for flange facing, pipe grooving and severing.
- EscoLock blade locking system for maximum blade life.
- Dual opposed tapered roller bearings deliver rock solid performance.
- Heavy duty clamping system does not break.
- Directional exhaust.
- Low R.P.M. with tremendous torque.
- Produces thick chips on all highly alloyed tube and pipe, without cutting fluids.



#### **PREPZILLA**

Ruggedly built and bevels highly alloyed pipe for fast fit-up and precision welds



## Commander Millhog

I.D. Clamping Pipe Beveling Tool 3.75" I.D. to 14" O.D. 95.25 mm I.D. to 355.6 mm O.D.

The Commander MILLHOG pipe beveling tool is an excellent choice for end prepping all types of pipe alloy in the shop or on the jobsite. Oversize dual opposed tapered roller bearings combined with its sturdy gear drive give it the stability to perform compound end preps with formed tool bits on pipe wall thickness in excess of 1.500in. The optional Gear Box reduces the rpm and increases the torque at the Cutter Blade and is ideal for Super Duplex and other difficult alloys. One Mandrel covers the entire range of 3.750in I.D. to 14in O.D. and a combination of only seven sets of Clamp Ribs and Clamp Pads are needed.









- One mandrel and 7 sets of clamps cover entire range.
- Wide clamp ribs spread the contact force for superior clamping.
- 3hp pneumatic straight drive motor (Hydraulic motor drive with speed control available, consult factory)
- Available off-set gear box reduces the rpm and multiplies the torque.
- Motor drive options are easily changed and are interchangeable with the "Dictator".
- Ultra rugged gears and dual opposed tapered bearing set-up deliver, produces a low maintenance tool designed for years of trouble free service.
- Fully Portable for on-site use.
- Available for sale or rent.

## Dictator XL Millhog

## DICTATOR XL EXTENDS MACHINING UP TO 24" (609.6MM) BUILT FOR DURABLE PERFORMANCE AND HIGH ACCURACY



#### **KEY FEATURES**

- Larger diameter faceplate fitted to reach the larger pipe sizes
- Mandrel End Cap which is fitted with internal keys
- Two additional Actuators to cover the size range standard Dictator Draw
   Rod are used with these actuators
- Dictator Clamp Pads and Ribs are utilised for the Dictator XL
- Mactech Reduction Gearbox is fitted between the motor and machine
- Mandrel End Cap can be removed, machine can be used on smaller pipe

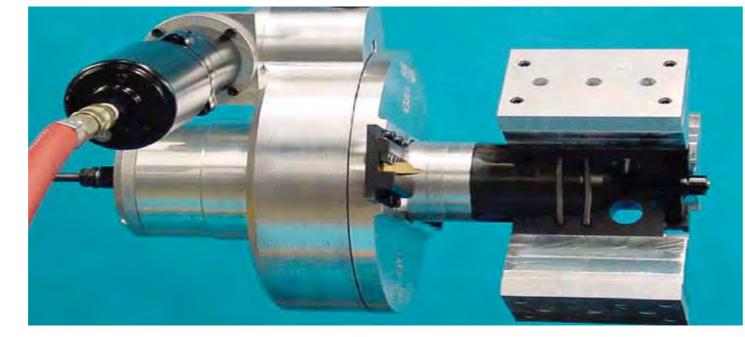
The Mactech (Europe) Dictator XL has been introduced to extend the range of pipe sizes covered by the standard Dictator End Prep Machine. The Dictator XL is now available as a new machine or as a conversion of an existing one and enables the machining of up to 24" (609.6mm) pipe as opposed to the 20" (508mm) of the standard machine.

### Dictator Millhog

I.D. Clamping Pipe Beveling Tool 4.5" I.D. to 18" O.D. 114.3 mm I.D. to 457.2 mm O.D.

The Dictator MILLHOG bevels pipe at any angle on wall thickness in excess of 1.75in using formed Cutter Blades. Like all Millhogs the Dictator runs smooth and is made to last. The Gear Head housing is made of aircraft quality aluminum and contains a huge driven gear that is supported by two oversized tapered roller bearings. The standard drive is a 3hp pneumatic motor that offers plenty of power for the most demanding applications, like compound angle end preps.

For Super Duplex and similar hard to machine alloys, we offer a torque multiplying Gear Box which decreases the rpm and increases the torque at the Cutter Blade. The Gear Box is easily attached and can also be used with the available hydraulic motor that offers even greater control of speed and torque.



One Mandrel and a combination of only eight sets of Clamp Ribs and Clamp Pads are needed to cover the entire range of 4.5in I.D. to 18in O.D. Two Tool Posts each hold one Cutter Blade and additional Tool Posts can be added for increased machining function.

#### **KEY FEATURES**

- One mandrel and 8 sets of clamps needed to cover entire range.
- Three powerful drive motors:
- 3 hp pneumatic straight drive motor
- 1800 watt electic motor
- Hydraulic motor drive with speed control
- Available off-set gear box reduces the rpm and multiplies the torque.
- Motor drive options are easily changed and are interchangeable with the "Commander".
- Self-centering draw rod actuated clamping system.
- Wide Clamps produce superior clamping force for chatter free end preps.
- Uses standard MILLHOG cutter blades.
- All gear drives are interchangeable with "Commander".
- Fully portable for on-site and shop work.
- Available for sale or rent

#### **DICTATOR**

Bevels heavy wall pipe, is easy to use offering affordable alternative to specialised machines

PNEUMATIC & HYDRAULIC



# Terminator Millhog

I.D. Clamping Pipe Beveling Tool 4.5" I.D. to 18" O.D. 114.3 mm I.D. to 457.2 mm O.D.



The "Terminator" MILLHOG® is a powerful, easy to use ID clamping beveling machine capable of performing precision end preps on pipe of all alloys including Super Duplex and has a working range of 8-5/8" ID to 36" OD pipe.

A powerful 5 h.p. pneumatic motor or available hydraulic motor provide smooth quite operation and are easily interchanged. The Terminator rigidly mounts to the pipe ID and uses formed tool bits for wall thicknesses in excess of 2.5in.

The available ID Tracker creates precision symmetrical end preps on out of round pipe at any angle including "J".

ESCO Millhog pipe beveling tools have been around for over 50 years and have a reputation for being rugged, reliable and easy to use. Our experienced personnel are committed to help you get the tool you need to get the job done efficiently.

#### **TERMINATOR**

#### **KEY FEATURES**

- Rigidly clamps to pipe ID up to 36"
- All angels of end prep attainable
- Formed tool bits for m.w.t. in excess of 2.5"
- Pneumatic or Hydraulic Driven
- ID tracker produces symmetrical end preps
- Performs any angle of prep
- Only eight sets of clamps and two wedges required to cover entire range
- Simple to operate, quick set-up
- Preps all pipe alloys
- Patent pending safety chain lanyard and a dual spring hangers makes tool alignment easy and safe.



PNEUMATIC & HYDRAULIC



















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