

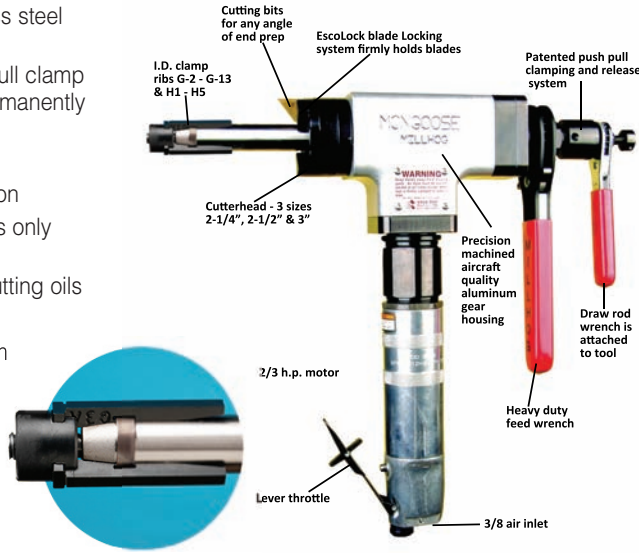
# "Mongoose" MILLHOG®

Right Angle I.D. Clamping End Prep Tool  
Operating Range  
5/8" I.D. to 3" O.D.  
15.9mm to 76.2mm

## Key Features

- 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

Available in three styles;  
**Standard**  
**Air Clamp**  
**High Torque Slow Speed**



The new improved G Series Retention Band for G-01A, G-02A & G-03A Clamp Ribs is captured within the Clamp Ribs is extremely durable, will not slip off and is unaffected by repetitive cycling.

## Rugged, fast, and field-proven

The ESCO "Mongoose" MILLHOG®, is a lightweight, small diameter end prep tool for beveling tubes from 5/8" I.D. to 3" O.D. Featuring a patented push-pull clamp and release mechanism, it allows the clamps to release from a tube as easily as they tighten. Ideal for performing bevel facing and boring on a wide range of tube and pipe alloys, the Mongoose has dual opposed tapered roller bearings and employs the rigid EscoLock™ blade locking system to provide chatter-free performance and produce a thick chip without cutting fluids.

Available with 5/8" and 3/4" mandrels and a 1-1/4" wedge, every Mongoose includes attached heavy-duty mandrel wrenches for centering and securing the tool to the I.D. The 1-1/4" wedge attaches to the 3/4" mandrel and uses the H series Wart MILLHOG® clamp ribs with nearly 1/2" expansion, making it easy to clamp-up and release while requiring a minimum of ribs to cover a range of 1.375" i.d. to 3" o.d.

## Standard



The Standard Mongoose is ideal for end prepping all boiler tube materials and is only 2.25" wide for accessing single tubes in a boiler tube waterwall. It can also be equipped with a membrane removal head for removing membrane from boiler tubes.



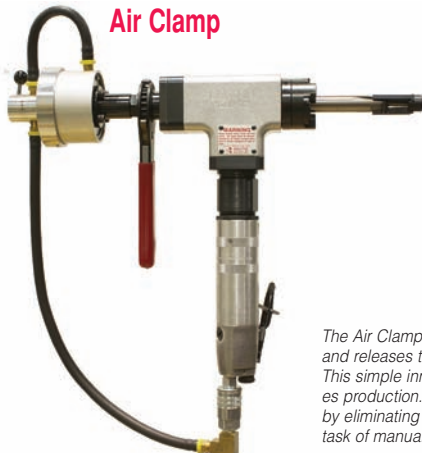
The ESCO patented membrane and overlay removal heads use round, tapered inserts that easily install with a tap of a hammer.



## Mongoose Standard Kit includes:

Gear Head, 1-1/14 Pneumatic HP Motor, Draw Rod Assembly, .750in Mandrel (.625in Mandrel may be substituted; consult factory), Hose with couplings, dirt stopper and oiler, and Carrying Case.

## Air Clamp



The Air Clamp Mongoose instantly clamps and releases the tool from the tube or pipe i.d. This simple innovation is easy to use, increases production, and minimizes operator fatigue by eliminating the tedious and time consuming task of manual clamping.

## Mongoose Air Clamp Kit includes:

Air Clamp Assembly, Gear Head, 2/3 Pneumatic HP Motor, Draw Rod Assembly, .750in Mandrel (.625in Mandrel may be substituted; consult factory), Hose with couplings, dirt stopper and oiler, and Carrying Case.



© U.S. Patent 5,531,550 - 7,938,047

# "Mongoose" MILLHOG®

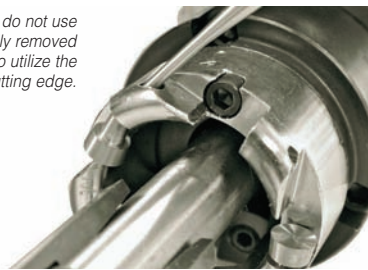
## High Torque Slow Speed



The High Torque Mongoose is equipped with a powerful 1.25 hp Slow Speed motor. Its narrow 2.25" wide gear head and wide range of mandrels make it ideal for removing boiler tube Membrane as well as Overlay from 1.187" i.d. to 2.00" i.d.



MRB-8 inserts do not use screws, are easily removed and rotated to utilize the 360 deg. cutting edge.



## Mongoose High Torque Slow Speed Kit includes:

Gear Head, 1-1/14 Pneumatic HP Motor, Draw Rod Assembly, .750in Mandrel (.625in Mandrel may be substituted; consult factory), Hose with couplings, dirt stopper and oiler, and Carrying Case.

## Mongoose Clamp Rib Selector and corresponding spares

Mandrel, Draw Rod, Actuator, Retention Band and Springs

Clamp Set	I.D. Range		Mandrel		Draw Rod	Actuator	Roll Pin	Retention		
	in	mm	Part #	Size				Band	Spring	
G-02A	.625	.780	15.9	19.8	MG-38A	.625	MG-16	MG-01A	MG-14	G-14F
G-03A	.750	.905	19.1	22.9	MG-38	.750	MG-16	MG-01	MG-14	G-14F
G-04	.875	1.030	22.3	26.1	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-05	1.000	1.155	25.4	29.3	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-06	1.125	1.280	28.6	32.5	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-07	1.250	1.405	31.8	35.6	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-08	1.375	1.530	35.0	38.8	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-09	1.500	1.655	38.1	42.0	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-10	1.625	1.780	41.3	45.2	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-11	1.750	1.905	44.5	48.3	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-12	1.875	2.030	47.7	51.5	MG-38	.750	MG-16	MG-01	MG-14	G-14
G-13	2.000	2.155	51.0	54.7	MG-38	.750	MG-16	MG-01	MG-14	G-14
H-01	1.375	1.600	34.9	40.6	MG-38 & MG-59	.750	MG-16	MG-58	MG-57	H-14B
H-02	1.525	1.925	28.8	48.9	MG-38 & MG-59	.750	MG-16	MG-58	MG-57	H-14B
H-03	1.850	2.250	47.0	57.2	MG-38 & MG-59	.750	MG-16	MG-58	MG-57	H-14B
H-04	2.175	2.575	55.3	65.4	MG-38 & MG-59	.750	MG-16	MG-58	MG-57	H-14B
H-05	2.500	2.900	63.5	73.7	Attaches to H-02					



## Mongoose H Series Wedge Clamps

The H Series Wedge Kit maximizes the top end range of the Mongoose with the proven stability of the H Series Clamps that are also used on the Tube Weasel, Wart and Mini. Featuring a wedge that attaches to the .75" Mandrel it attains a range of 1.375in to 2.900in with only (5) sets of Clamps.

## Specifications

Working Range:	.625" (15.9 mm) I.D. to 3" (76.2 mm) O.D.
Motor, pneumatic	2/3 h.p. (.497 kw)
Air Pressure	90 psi (6.2 bar)
Air Volume	25 cfm (708 lt/min.)
Speed	200 RPM
Minimum Clearance	2-1/4" (57.2 mm)
Head Length	15" (381 mm)
Working Weight	13 lbs. (5.9 kg)
Shipping Weight	30 lbs. (14 kg)
Shipping Dimensions	20" x 18" x 5" (508 mm x 457 mm x 127 mm)

Manufacturer reserves the right to change specifications without notice.

© U.S. Patent 5,531,550

## Membrane Removal Heads

For the Mongoose Std and Mongoose High Torque Slow Speed

Membrane Head					Overlay Head				
Size	Part#	Base Head Part#	Inserts Part#	Qty	Size	Part#	Base Head Part#	Inserts Part#	Qty
1.187	MO-103	MGB-103	MRB-8	4	1.187	MO-203	MGB-103	MRB-8	4
1.250	MO-104	MGB-104	MRB-8	4	1.250	MO-204	MGB-104	MRB-8	4
1.375	MO-105	MGB-106	MRB-8	4	1.375	MO-205	MGB-106	MRB-8	4
1.500	MO-106	MGB-106	MRB-8	5	1.500	MO-206	MGB-106	MRB-8	5
1.625	MO-107	MGB-106	MRB-8	5	1.625	MO-207	MGB-106	MRB-8	5
1.750	MO-108	MGB-106	MRB-8	5	1.750	MO-208	MGB-106	MRB-8	5
2.000	MO-109	MGB-106	MRB-8	6	2.000	MO-209	MGB-106	MRB-8	6

## Overlay Removal Heads

For the Mongoose High Torque Slow Speed

(also removes membrane)

## Mongoose Cutterhead Blade Lock and Screws

Cutterhead Part #	Size	Mandrel Part #	Size	Blade Lock		Lock Screw	
				Part #	Per Head	Part #	Per Lock
MG-28C	2.250	MG-38A	.625	MG-25	3	MG-24	1
MG-28	2.250	MG-38	.750	MG-25A	3	MG-24	1
MG-28A	2.500	MG-38	.750	MG-25A	6	MG-24	1
MG-28B	3.000	MG-38	.750	MG-25B	6	MG-24	1