

Mongoose MILLHOG®

I.D. Clamping
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

- Narrow Body 2.25" (27.15 mm)
- Light weight and torque free
- Interchangeable Pneumatic, Electric or Battery drives are easily switched
- Patented clamps system, allows the clamps to release from a tube as easily as they tighten without a hammer
- Permanently attached wrenches
- Bevel, face and bore simultaneously
- Rugged dual opposed tapered roller bearings support the gear drive for nonstop operation
- EscoLock cutter blade holding system reduces vibration and maximizes the number of preps per blade

Boilermaker Tested and Field Proven

This rugged, agile machine bevels tube and pipe quickly for accurate fit-up which helps ensure high quality welds. The Mongoose MILLHOG® is boilermaker tested and field proven.

Pneumatic Standard

Most popular – works well on all tube and pipe alloys including stainless steel.



Pneumatic Air Clamp

High production, quickly clamps and release from I.D., reduces cycle time between bevels.



Pneumatic High Torque Slow Speed

Best for boiler tubes with overlay, also removes membrane between tubes.



Battery

Low rpm and high torque, excellent for beveling all tube alloys including overlay and membrane removal. The battery lasts 15-30 minutes and takes 120 minutes to charge. Best of all it's hose and cord free.



Electric

Convenient plug in power and proprietary gear reduction technology produce high torque and low rpm for superior tube beveling performance on all tube alloys including boiler tube waterwall membrane and overlay removal.



Rugged, fast, reliable

The Mongoose MILLHOG® is a torque free beveling tool for tubes from .625" (15.9 mm) I.D. to 3" (76.2 mm) O.D. and is only 2.25" (57.15 mm) wide which makes it ideal for power station boiler tube work and constrained situations with limited access.

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 beveling, facing and boring on a wider range of tube and pipe alloys, the Mongoose has dual opposed tapered roller bearings and employ the rigid EscoLock blade locking system, which provides chatter-free performance and produces a thick chip without cutting fluids.

Powered by a choice of pneumatic, electric or battery motors and available with a large selection of clamping options, every Mongoose includes attached heavy duty wrenches for centering and securing the tool to the tube I.D.

Mongoose MILLHOG®

I.D. Clamping
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.

Two Mandrels are offered. The .0750" is standard and is for G-03A—G-13 Clamp Ribs and the H series wedge attaches to it for using H series clamps. The 0.625" Mandrel is for G-02A Clamp Ribs.



The G Series Clamps are used on the 0.625" Mandrel and the .0750" Mandrel.

The H Series Wedge fits the 0.750" Mandrel and is used for H-01, H-02, H-03, H-04 and H-05 Clamp Rib Sets.

Mongoose Clamp Rib Selector and corresponding spares Mandrel, Draw Rod, Actuator, Retention Bands and Springs

Clamp Rib Set	I.D. Range				Mandrel Part #	Size	Draw Rod	Actuator	Roll Pin	Retention	
	in	mm	in	mm						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-02	1.525	1.925	28.8	48.9	MG-38 & MG-59	.750	MG-16	MG-57	MG-58		H-14B
H-03	1.850	2.250	47.0	57.2	MG-38 & MG-59	.750	MG-16	MG-57	MG-58		H-14B
H-04	2.175	2.575	55.3	65.4	MG-38 & MG-59	.750	MG-16	MG-57	MG-58		H-14B
H-05	2.500	2.900	63.5	73.7	Attaches to H-02						

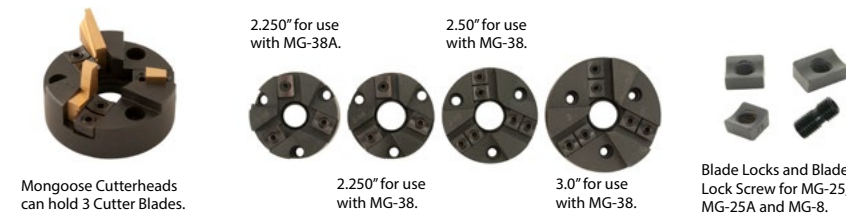


0.625" Mandrel, Actuator and Roll Pin MG-38A, MG-01A and MG-14.

0.750" Mandrel, Actuator and Roll Pin MG-38, MG-01 and MG-57.

Draw Rod is made of Heat Treated High Strength Steel for maximum durability, MG-16.

Retention Band and Springs G-14F, G-14 and H-14B.



Mongoose Cutterheads can hold 3 Cutter Blades.

2.250" for use with MG-38A.

2.50" for use with MG-38.

2.250" for use with MG-38.

3.0" for use with MG-38.

Blade Locks and Blade Lock Screw for MG-25, MG-25A and MG-8.

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-25	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

Blade Locks and double threaded screws to reduce Cutter Blade vibration and control heat for long life.



Boiler tube membrane removal and bevel.

The ESCO patented membrane and overlay removal heads use round tapered inserts that can be rotated when worn and install and removed with a tap from a hammer.

Base Head with O.D. bevel Cutter Blade.

Membrane and Overlay Heads look similar. Overlay Heads have a slightly smaller circumference.

Membrane and Overlay Heads attach to the Base Head.



Boiler tube membrane overlay removal and bevel.

Standard membrane/overlay heads cut to a depth of 0.75" before the bevel blade begins to prep the tube. Pictured is a custom head that removes 4.0".

Mongoose Membrane Removal Heads

Membrane Head Size	Part #	Base Head Part #	Inserts	
			Part #	Qty
1.187	MO-103	MGB-103	MRB-8	4
1.250	MO-104	MGB-104	MRB-8	4
1.375	MO-105	MGB-105	MRB-8	4
1.500	MO-106	MGB-106	MRB-8	5
1.625	MO-107	MGB-106	MRB-8	5
1.750	MO-108	MGB-106	MRB-8	5
2.000	MO-109	MGB-106	MRB-8	6

Mongoose Overlay Removal Heads

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

Specifications: Mongoose MILLHOG®

Working Range	.625in (15.9 mm) I.D. to 3in (76.2 mm) O.D.				
	Pneumatic	Pneumatic Air Clamp	High Torque Slow Speed	Electric	Battery / *Charger
Motor	1.07 hp (800 W) 90 psi (6.2 bar) 35 cfm (990 lt/min) 108 rpm	1.07 hp (800 W) 90 psi (6.2 bar) 35 cfm (990 lt/min) 108 rpm	1.25 hp (932 W) 90 psi (6.2 bar) 40 cfm (990 lt/min) 100 rpm	120 V 8.5 A 50/60 Hz 950 W, or 220 - 240 V 4.4 A 50/60 Hz 950 W	18V Li-Ion - up to 5.2 Ah *115V / 60 Hz, or *220 - 240 V 50-60 Hz 43 rpm
Speed	2.25in (57.2 mm)	3.625in (92.1 mm)	2.25in (57.2 mm)	14 rpm - 58 rpm	2.25in (57.2 mm)
Minimum Width Clearance	15.25in (387.4 mm)	18.5in (470 mm)	15.25in (387.4 mm)	15.25in (387.4 mm)	15.25in (387.4 mm)
Head Length	14.8 lbs (6.7 kg)	17.1 lbs (7.75 kg)	15.9 lbs (7.21 kg)	15.9 lbs (7.21 kg)	16.4 lbs (7.44kg)
Working Weight	32.05 lbs (14.53 kg)	41.95 lbs (19.02 kg)	32.85 lbs (14.9 kg)	40 lbs (18.14 kg)	40.6 lbs (18.41 kg)
Shipping Weight	20in x 18in x 5in	24in x 20in x 7in	20in x 18in x 5in	24in x 20in x 6in	24in x 20in x 6in
Shipping Dimensions	508 mm x 457 mm x 127 mm	610 mm x 51 mm x 178 mm	508 mm x 457 mm x 127 mm	610 mm x 508 mm x 152 mm	610 mm x 508 mm x 152 mm