



# PROVIDING

# BLASTHOLE DRILLING PRODUCTS

SINCE

1999



# Index

# Mammoth Technologies Company Overview

Contact Details	(11 - 111)
Company Overview	(IV)
Mammoth Services	(V)
Product Map	(VII)
Mammoth Innovative Products	
Mammoth Breakout Wrench	1-27
Mammoth Clamp Wrench	28-31
Mammoth DM30 Mast	32-35
Mammoth Crane	36-39
Mammoth Shock Sub	40-43
Mammoth Hole Sweeper	44-49
Mammoth Drill Consumables	
Mammoth Stemlock	50-59
Mammoth Deckbush	60-67
Mammoth Drill Rod	68-75
Mammoth Sub Adaptors	76-83
Top / Bottom Sub	
Saver Sub	
Mammoth Stabilizer	84-89
Mammoth Accessories	90-95
Bit Breakout Pot	
Lifting Bail	

# **Contact Details**

**Business Director** Kim Ishwarlall Mobile: +27 [0] 82 889 9992 Email: kim@mammothtech.co.za **Drafting & Design** Juan Gouws Mobile: +27 (0)72 597 2695 Email: technical@mammothtech.co.za Skype: juangouws Marketing Manager **Graham Brandling** Mobile: +27 (0)82 701 1296 Email: marketing@mammothtech.co.za Skype: graham.brandling **Product Specialist** Buks van Rooyen Mobile: +27 (0)72 580 4340 Email: buks@mammothtech.co.za buks\_45 Skype: Distributor/Agent

## **Contact Details**

## Mammoth Technologies Pretoria (Head Office)

6689 Kotzenberg Street, Rosslyn,

Pretoria, 0200, Gauteng Tel: +27 (0)12 541 4196 Fax: +27 (0)12 541 4183 www.mammothtech.co.za

## Mammoth Technologies Witbank Office

9A Chopin Street, Klarinet Business Area, eMalahleni, 1035, Mpumalanga

Tel: +27 (0)13 656 1391 Fax: +27 (0)13 690 1587

Email: enquiries@mammothtech.co.za

## Regional Joint Venture/Distributor

Mokopane Region Letona Holdings Phill Kgaphola

Cell: 078 437 6832 | Tel: (015) 280 0156 Email address: admin@letonaholdings.com Website address: www.letonaholdings.com

#### Mammoth Drill Tools - Australia Office

#### **Mammoth Drill Tools Main Warehouse**

U2/7 Mordaunt Circuit Canning Vale WA 6155 www.mammothdrilltools.com.au

#### **Mammoth Drill Tools Australia Head Office**

83 Spine street Sumner QLD 4074

Contact Person: Paul Fooks **Business Development** Mobile: 061 427 475546

Skype: paul.fooks

Email: paulf@mammothdrilltools.com.au

#### **Drilling Supply Brasil**

Address:

Rua Natal Veronez 82, Tres Barras, Contagem -Minas Gerais, Brasil

Contact Person: Celso Albuquerque

Sales Manager

Mobile: (55)(31)9884-9898/3398-9830 Email: marketing@mammothtech.co.za

## Mammoth Distributors

#### Middle East and North Africa

STS Engineering Group

Phone: +201221328311, +233541656787 Address: Building 12 Street 285, Maadi, Nasr

Road, Cairo, 11757

Website: www.stsengineeringgroup.com Email: info@stsengineeringgroup.com

# Company Overview

#### Introduction

Mammoth Technologies (Mammoth) is a design and manufacturing corporation within the mining and drilling industry, creating a dynamic presence in the international market.

The Mammoth Breakout Wrench drew attention to our innovative yet uncomplicated approach to problem-solving within the global market when we first introduced it in 1999.

Development and product refinement and improvement is a continuous process in the business.

Our product development drive has been shaped and guided by the requirements, needs and frustrations gleaned from our clients in the global market. This has led us to develop a reasonably priced range of durable, cost-effective products in the various sectors of the mining industry. They were designed for: improving safety; simplifying operation; lowering maintenance costs.

#### Vision Statement

Our vision is to be a well-established brand in the mining and drilling industry, leading the way through safety, quality, service, and price, driven by ethical standards and time tested values.

#### Mission Statement

To produce better products that are affordable, safer to use and easier to work with. Better. Affordable. Safer. Easier

#### **Expertise**

Mammoth Technologies takes responsibility for all the phases of the process including conceptualization, market research, design, manufacturing and testing, through to distribution and service.

All manufacturing (including process manufacturing) is done in-house.

## **Mammoth Services**

Mammoth Technologies offers a wide range of versatility in our field of expertise.

#### **General Services**

- R&D
- CAD drawings, 3D/solids, simulations and more
- Innovative solutions to relative problems
- Conceptualization
- Hydraulic Design
- Electrical Design
- Application Specific Hardware Design
- Application Specific Software Design
- Manufacturing
- Process Manufacturing
- Reverse Engineering
- Patent Searches / Patents Processing
- Specific problem solving and research
- Product marketing solutions

#### Innovative and Consumable Services

- Servicing and repairs of Mammoth innovative products
- Breakout benches for breaking of tight joints, due to tension build up during drilling
- Straightening and repairs of drill rods



Repairs/Services/Refurbishment repairs@mammothtech.co.za

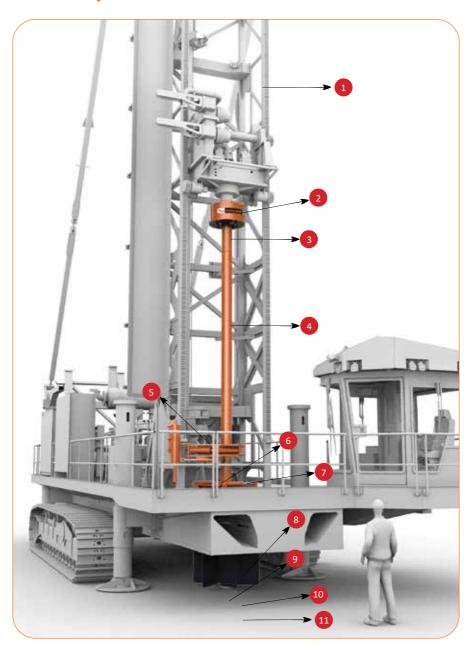
For all general repairs, services, and refurbishments on Mammoth products, including existing products, regardless of manufacturer or origin.

## **Product Quality**

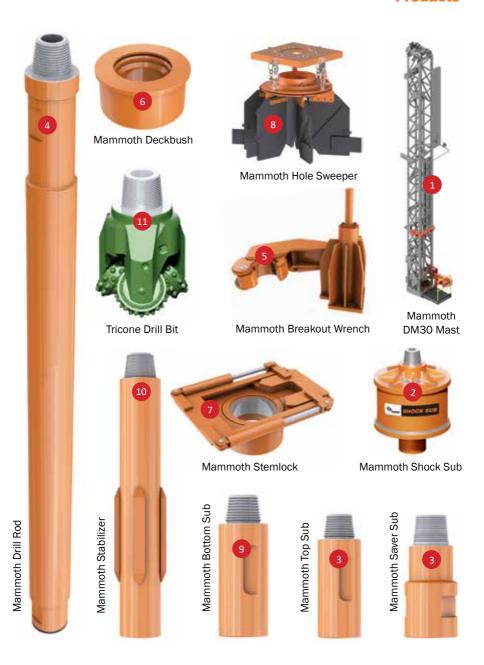
Because of our uncompromising commitment to safety, quality and functionality it is essential that only approved genuine parts and consumables are used on the Mammoth product range.



# **Product Map**



# **Products**

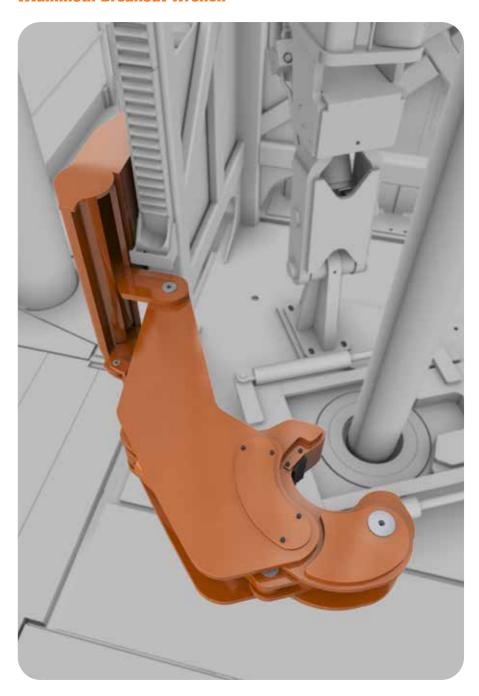




www.mammothtech.co.za







#### **Product Description**

The Mammoth Breakout Wrench was developed to meet the requirements of a hands-free breakout wrench for all conditions and any OEM Drill Rig.

## Mammoth Breakout Wrench is designed to address:

- · Locked joints found in the drill stem
- Wrench-slip when loosening drill rods, hammers and bits
- · The lack of compatible Cross-Platform Breakout Wrenches
- Unsafe breakout procedures

#### Benefits of the Mammoth Breakout Wrench

- · SAFETY: Fully automated, hands-free operation
- SAFETY: Compliance with Mine SAFETY requirements for operators
- Versatile enough to adapt and fit the requirements of an OEM Drill Rig
- Electrical controls and hydraulics integrated into the drill rig system
- The patented clamp action is slip-proof and fits any specific OD requirement
- The clamp action is unaffected by the rod wear within the design parameters
- Our patented moveable bracket allows the wrench to be set at any operating height
- It's mountable on a conveniently placed stand (stand-alone) or directly on the mast
- · It can be adapted to suit the specific requirements of angle drilling
- Deck Bush wear does not affect the breakout action
- The torque can be increased for extreme conditions and requirements
- Can be bolt mounted on either side of the column mast
- Wrenches have been designed to handle drill rod ranges from 3" to 15"
- Fully repairable



## Wrench Configuration Options

#### Complete Mammoth Breakout Wrench

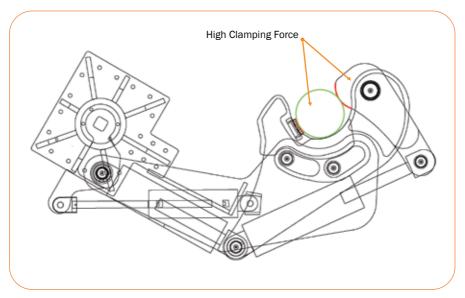
- Complete, Fully Automated Mammoth Breakout Wrench
- Automated or Manually Bolt Adjustable Mounting Bracket
  - Stand-Alone Bracket
    - Hydraulically Adjustable
    - Manually Bolt Adjustable
  - Right Mast Mounted
    - Hydraulically Adjustable
    - Manually Bolt Adjustable
  - -Left Mast Mounted
    - Hydraulically Adjustable
    - Manually Bolt Adjustable
- Full Hydraulic System
- Full Electrical System
- Jaws/Bits (First Set Only, Not Covered in Warranty)
- Installation Manual
- 12 Month Parts Replacement Warranty

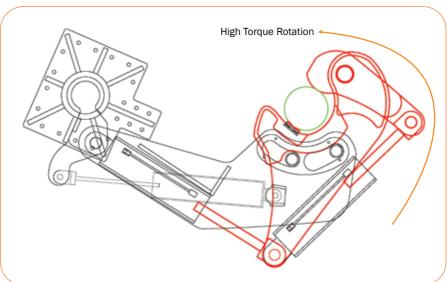
## Basic Mammoth Breakout Wrench (Optional)

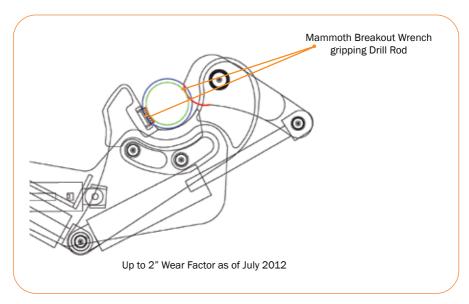
- Complete, Fully Automated Mammoth Breakout Wrench
- Manually Bolt Adjustable Mounting Bracket
  - Stand-Alone Bracket
    - Manually Bolt Adjustable
  - Right Mast Mounted
    - Manually Bolt Adjustable
  - Left Mast Mounted
    - Manually Bolt Adjustable
- No Hydraulic System
- No Electrical System
- Jaws/Bits (First Set Only, Not Covered in Warranty)
- Installation Manual
- 12 Month Parts Replacement Warranty

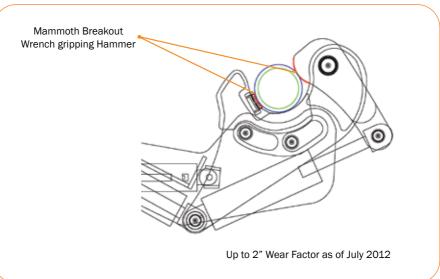
#### Price Excludes

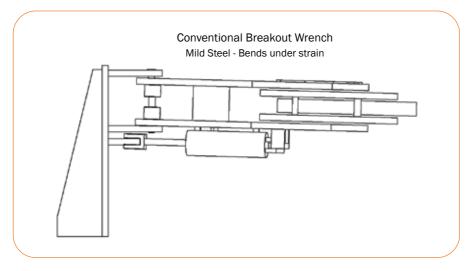
- Installation by Mammoth Technician
- Spare Parts
- **Duties and Taxes**
- Freight and Insurance

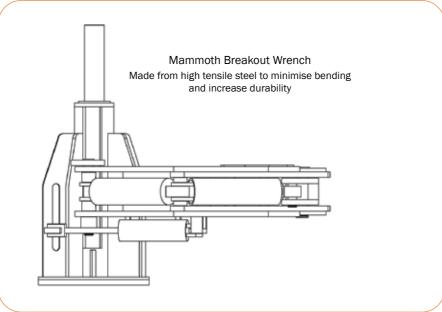


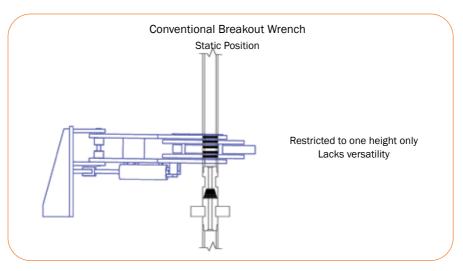


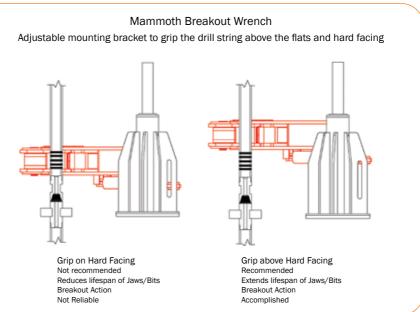












## The Mammoth Breakout Wrench manufactured to fit:

EPIROC				
DM25	DM45E	DMG	DMH	PV235
DM25SP	DM45-EMD6	DML	DMH100	PV270
DM30	DM45HP	DML-60	DMH-D	PV270SP
DM35	DM45SP	DML-HP	DMM3	PV271
DM40	DM50K	DML-LP	DM70	PV271SP
DM40SP	DM50	DML-SP	DM70E	PV275
DM45	DM50E	DML-XL	DMM	PV351
DM45/HP	DM50XL	T4BH	DMM2	PV351E
C14	DM60		DMM25SPH	

SANDVIK					
C40K	D45K	D25KS	D90KS	1190E	
C60K	D45KS	D245KS	D90K-SP	1190DSP	
C75K	D50K	D75K	D90KS-SP	DKII	
C55SP	D50KS	D75KS	D55SP	DR460	
D40K	D60K	D80K	D55SPH	D60KL	
D40KS	D60KS	D90K	D75KL	T60K	
			D75EX	T60KS	

		JOY GLOBAL (P&H)		
70HA	100B	GD70	250XP-DL	250XPC
100A	100XP	GD70H	250XP-ST	320XPC
120A		GD100		

GARDNER DENVER						
	GD45	GD60	GD80	GD120	GD130	

## The Mammoth Breakout Wrench manufactured to fit:

	CATE	ERPILLAR (Bucyrus,	Reedrill, Marion, 1	Terex)	
33HR	49HR	MII	SK25	SK60II	SKS
33HR-SP	49R	M2	SK30I	SK70	SKS-12
35HR	49RH	МЗ	SK35	SK70E	SKS-15
35R	49RII	МЗВ	SK40	SK75	SKS-16
35RII	49RIII	M4	SK40/50	SKF	SKS-W
37HR	50R	M5	SK45I	SKF-11	SKSS
39HR	55R	MD6240	SK50	SKF-11.5	SKSS-12
39R	59HR	MD6290	SK50I	SKF-12	SKSS-13
40R	59R	MD6420	SK50T	SKF-15	SKSS-15
45R	60R	MD6540	SK60		SKSS-16
47R	60RII	MD6640	SK60E		SKT
	60RIV	MD6750	SK60I		SKTT
	61R				
	67R				

		OZ	ZM	
SBSH-250	SBSH-270			

	RUDGO	RMASH	
SBSH250 MNA32			

		ROB	BINS	
RR10	RR10HD	RR11E	RR12E	

# Product Configurations - Wrench types available in:

Unit Sizes
4"
4 1/2"
5"
5 1/4"
5 ½"
6"
6 ¾"
6 ½"
7"
7 ½"
7 %"
8"
8 ½"
8 %"
9"
9 1/4"
9 ½"
10"
10 ½"
10 3/4"
11"
11 ½"
11 3/4"
12 1/4"
12 ½"
12 3/4"
13 %"



# Product Configurations - Wrench types available in:



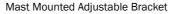
Unit	Sizes
4"	
	4 ½"
5"	
	5 1/4"
	5 ½"
6"	
	6 ¾"
	6 ½"
7"	
	7 ½"
	7 %"
8"	
	8 ½"
	8 %"
9"	
	9 1/4"
	9 ½"
10"	
	10 ½"
	10 ¾"
11"	
	11 ½"
	11 ¾"
	12 1/4"
	12 ½"
	12 ¾"
	13 %"

# **Product Configurations - Mounting Brackets**

## Mast Mounted Adjustable Bracket

- Automated Hydraulic Adjustable Bracket
- Right Mounted





- Automated Hydraulic Adjustable Bracket
- · Right Mounted





Mast Mounted Adjustable Bracket

- Automated Hydraulic Adjustable Bracket
- Right Mounted

## **Product Configurations - Mounting Brackets**



#### Stand Alone Fixed Bracket

- Manually Bolted Adjustable Bracket
- Left Mounted

Stand Alone Adjustable Bracket

- Automated Hydraulic Adjustable Bracket
- Left Mounted



## Stand Alone Adjustable Bracket

- Automated Hydraulic Adjustable Bracket
- Left Mounted



## Stand Alone Adjustable Bracket

- Automated Hydraulic Adjustable Bracket
- Right Mounted

## **Product Configurations - Mounting Brackets**

## Mast Mounted Adjustable Bracket

- Automated Hydraulic Adjustable
- Left Mounted



Mast Mounted Adjustable Bracket

- Automated Hydraulic Adjustable
- Left Mounted





## Mast Mounted Fixed Bracket

- Manually Bolted Adjustable Bracket
- Left Mounted

## The Mammoth Breakout Wrench Series



The Mammoth Breakout Wrench fitted to a DMM2 / CDM 75 Rig



The Mammoth **Breakout Wrench** fitted to a DM30II/ CDM30 Rig

# The Mammoth Breakout Wrench Series







The Mammoth Breakout Wrench fitted to a BE49R Rig





# The Mammoth Breakout Wrench fitted to a PV271 / PV275







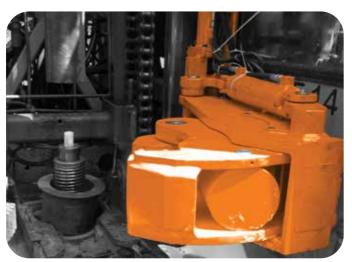


## The Mammoth Breakout Wrench Series



The Mammoth Breakout Wrench fitted to a T4BH Rig

The Mammoth Breakout Wrench Series (T4BH Rig)



The Mammoth Breakout Wrench in Parked Position

# (T4BH Rig)



The Mammoth Breakout Wrench in Engaged Position

## T4BH Rig



## **Technical Specifications**

Range One Technical Specifications	MAMMOTH TECHNOLOGIES All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.
Wrench Type	Fully-automated wrench or fully-automated basic wrench
Clamp Type	Slide Clamp or Cam Clamp
Pressure Requirements	2,500 PSI
Breakout Torque	80,120 N.M   59,09 FT/LB
Range	4" up to 9"
Bracket Mounting	Fully-Automated Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Breakout Wrench   Manually Bolted Adjustable Bracket Fully-Automated Basic Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Basic Breakout Wrench   Manually Bolted Adjustable Bracket
Adjustable Bracket Travel	250mm (Standard)
Jaw/Bit Type	Tungsten Carbide Hardened Steel Alloy (Standard)

The Mammoth Breakout Wrench can be designed to fit any OEM machine application. The Mammoth Breakout Wrench is not limited to any specific range only.

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

Enquire for Rigs not displayed here.

## **Technical Specifications**

Range Two Technical Specifications	MAMMOTH TECHNOLOGIES  All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.
Wrench Type	Fully-automated wrench or fully-automated basic wrench
Clamp Type	Slide Clamp or Cam Clamp
Pressure Requirements	2,500 PSI
Breakout Torque	66,200 N.M   48,82 FT/LB
Range	4" up to 9"
Bracket Mounting	Fully-Automated Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Breakout Wrench   Manually Bolted Adjustable Bracket Fully-Automated Basic Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Basic Breakout Wrench   Manually Bolted Adjustable Bracket
Adjustable Bracket Travel	300mm (Standard)
Jaw/Bit Type	Tungsten Carbide Hardened Steel Alloy (Standard)

The Mammoth Breakout Wrench can be designed to fit any OEM machine application. The Mammoth Breakout Wrench is not limited to any specific range only.

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

Enquire for Rigs not displayed here.

## **Technical Specifications**

Range Three Technical Specifications	MAMMOTH TECHNOLOGIES All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.
Wrench Type	Fully-automated wrench or fully-automated basic wrench
Clamp Type	Slide Clamp or Cam Clamp
Pressure Requirements	2,500 PSI
Breakout Torque	70,131 N.M   51,72 FT/LB
Range	4" up to 9"
Bracket Mounting	Fully-Automated Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Breakout Wrench   Manually Bolted Adjustable Bracket Fully-Automated Basic Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Basic Breakout Wrench   Manually Bolted Adjustable Bracket
Adjustable Bracket Travel	300mm (Standard)
Jaw/Bit Type	Tungsten Carbide Hardened Steel Alloy (Standard)

The Mammoth Breakout Wrench can be designed to fit any OEM machine application. The Mammoth Breakout Wrench is not limited to any specific range only.

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

Enquire for Rigs not displayed here.

# **Mammoth Breakout Wrench**

### **Technical Specifications**

Range Four Technical Specifications	MAMMOTH TECHNOLOGIES  All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.		
Wrench Type	Fully-automated wrench or fully-automated basic wrench		
Clamp Type	Slide Clamp or Cam Clamp		
Pressure Requirements	2,500 PSI		
Breakout Torque	157,000 N.M   115,78 FT/LB		
Range	6" up to 12"		
Bracket Mounting	Fully-Automated Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Breakout Wrench   Manually Bolted Adjustable Bracket Fully-Automated Basic Breakout Wrench   Automated Hydraulic Adjustable Bracket Fully-Automated Basic Breakout Wrench   Manually Bolted Adjustable Bracket		
Adjustable Bracket Travel	300mm (Standard)		
Jaw/Bit Type	Tungsten Carbide Hardened Steel Alloy (Standard)		

The Mammoth Breakout Wrench can be designed to fit any OEM machine application. The Mammoth Breakout Wrench is not limited to any specific range only.

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

Enquire for Rigs not displayed here.

# **Mammoth Breakout Wrench**

# **Technical Specifications - Bit Configuration**

# Raised Tungsten Bit TI25 / 9.5B



### Tungsten Inserted Jaws/Bits Used for:

- Hardened Casing Hammers
- Alloy Steel Pipes

# Normal Bit B21L / B21R



### Hardened Alloy Steel Jaws/Bits Used for:

- Normal Steel Pipes (ST80)
- Alloy Steel Pipes

# **Mammoth Breakout Wrench**

### The Mammoth Breakout Wrench works with the Flanders Automation System















# **Mammoth Clamp Wrench**

### **Product Description:**

The Mammoth C 14 Clamp Wrench with enhanced safety features is a well-designed, robust and compact unit for the break-out of drill rods/pipes. This uniquely designed wrench excels when it comes to providing a solution that can assist with faster and more sufficient breakouts.

### Technical Specifications - Mammoth Clamp Wrench

Technical Specifications	All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.
Wrench Type:	Clamp Wrench
Clamp Type:	Slide Clamp
Pressure	2500 Psi
Requirements:	
Range:	2"-3.5"
Bracket Mounting:	Floating Pivot Bracket
Bracket Travel:	70mm
Wrench Pivot	70 Degrees
(Rotation):	
Jaws:	Bits Hardened Steel Alloy

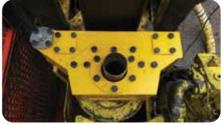
The Mammoth Clamp Wrench can be designed to fit any OEM machine application. The Mammoth Clamp Wrench is not limited to any specific range only.

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

Enquire for Rigs not displayed here.

### The Mammoth Clamp Wrench fitted to an Epiroc C14





# **Mammoth Clamp Wrench**







# **Mammoth**Mast





### **Mammoth Mast**

### **Product Description**

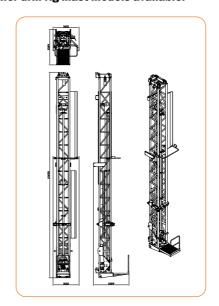
The Mammoth DM30 Mast has been designed and engineered with several improvements, providing a higher level of durability and ease to service.

### **DM30 Mast Technical Specifications**

The Mammoth DM30 Mast is designed for multi-pass drilling, capable of holding a 30 ft (9.1m) drill pipe, a 2-rod carousel (optional 4-rod carousel), with a total depth capacity of 150 ft (45.7m). The DM30 Mast comes standard with a safety Rod Catcher.

Additional Extras:	2-Rod Carousel/4-Rod Carousel DM30 Stemlock DM30 Top Rod Support DM30 Rod Guide		
Technical Data:			
Drilling Method:	Rotary or DTH - Multi Pass		
Suitable Pipe Sizes:	4 ½" - 6 ¾" (114mm - 171mm)		
Estimated Weight:	7055 Lb (3200kg)		
Dimensions:			
Length:	7 ft	2.16 in	(2.19m)
Height:	41 ft	6.4 in	(12.66m)
Width:	5 ft	3 in	(1.6m)

Please enquire for other drill rig mast models available.



# **Mammoth Mast**











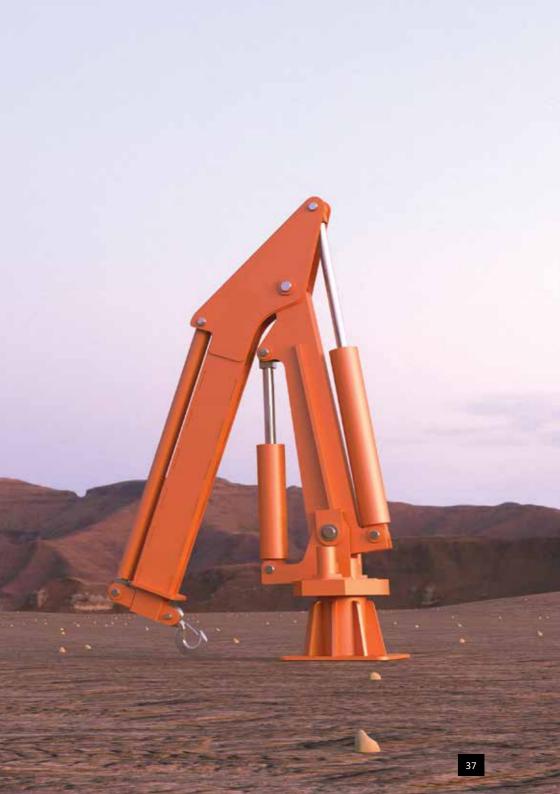






# **Mammoth**Crane





### **Mammoth Crane**

### **Product Description**

The Mammoth Crane is a lifting device designed to hoist drilling tools or components onto the drill rig. The device gets mounted on an opencast drill rig of any size and model.

### The benefits of using the Mammoth Crane:

- SAFETY: Fully automated, hands-free operation.
- SAFETY: Compliance with mine safety requirements for operators.
- Versatile enough to customise, adapt and fit, most OEM drill rig models and customerspecific applications.
- Eliminates the necessity of manual labour used to pick up heavy components onto the rig.
- Decrease downtime on changing of drill tools or other components.
- Specialised lifting attachments for lifting drill bits, stabilizers, top and bottom subs, shock sub, Mammoth breakout wrench with the additional option of a lifting hook used for other applications.

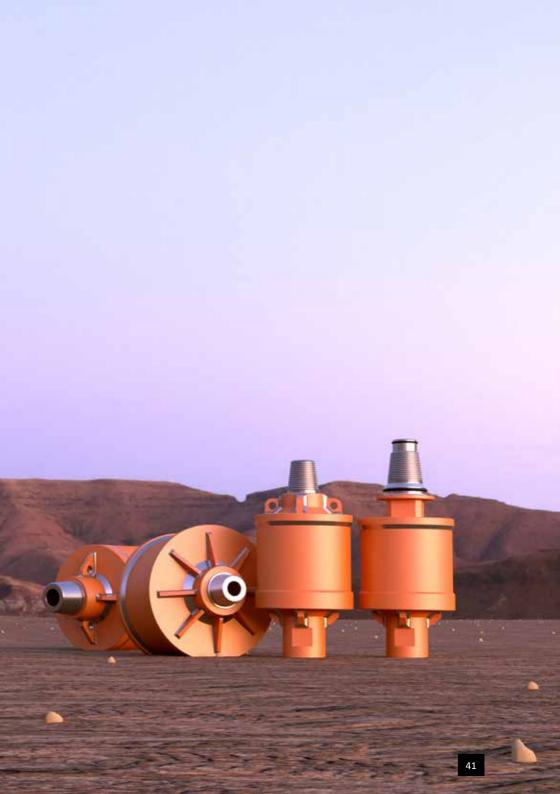


# **Mammoth Crane**









# **Mammoth Shock Sub (Sealed)**

### **Product Description**

The Mammoth Non-Repairable Shock Sub is designed to reduce vibration and shock by absorbing these energies from being transferred to the powerhead during rotational pulldown and pullback operations.

Mammoth Non-Repairable Shock Subs are manufactured from superior quality materials and are subjected to specific heat treatment processes to maximize the lifespan of the tooling and increase drilling productivity.

### The Mammoth Shock Sub is designed to address:

- Wear and tear on conventional shock sub systems
- Multidirectional absorbency limitations
- Inadequate seal characteristics
- Need for enhanced safety features

### **Drill Rig Benefits**

- Reduces drill rig maintenance by dampening torsional and axial shock loads.
- Increases penetration rates by keeping the bit in more uniform contact with ore formation.
- Allows use of higher pull-down force and increased rotary speeds in demanding drilling
- Increases bit life by dampening repeated shock loads normally transmitted to the bit bearings and cutting structure
- Decreases noise levels by eliminating metal to metal contact between rotary drive and drill pipe
- Rotary and DTH compatible





Actual product may vary from images

# **Mammoth Shock Sub Technical Specifications**

### **Technical Specifications**

Mammoth aims to reduce the shock and vibration transmitted to the powerhead during normal drilling operational practices, with no maintenance required between service/repair intervals. Patent Pending



<sup>\*</sup>The percentages and figures reflected are estimates based on testing of the product and are not guaranteed results. The percentages of improvement will vary depending on factors such as rock type, rock abrasiveness, groundwater and drilling parameters.

### Technical Specifications - Standard Range

Specifications	MAMMOTH TECHNOLOGIES  All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.				
Model	Diameter Element	Shoulder to Shoulder Size (Standard)	Drill Pipe OD (For Guidance Only)	Pull Down Force (LBS)	Approx Weight
10	10	Per customer request	3½ - 7"	30 000 - 55 000	100
15	15"	Per customer request	4½" - 7½"	30 000 - 60 000	350
18	18"	per customer request	6" - 75⁄8"	50 000 - 121 000	450
22	22"	per customer request	7%" - 8 %"	50 000 - 121 000	700
24	24"	per customer request	7%" - 8 %"	50 000 - 121 000	800
28	28"	per customer request	8 5/8" - 10 3/4"	100 000 - 150 000	1050
34	34"	per customer request	8 %" - 13%"	100 000 - 150 000	1500

All Mammoth Shock Subs are based on a standard shoulder to shoulder length. Mammoth Shock Subs are not restricted to standard shoulder to shoulder lengths, as we can customize the shoulder to shoulder dimension according to client specifications.

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

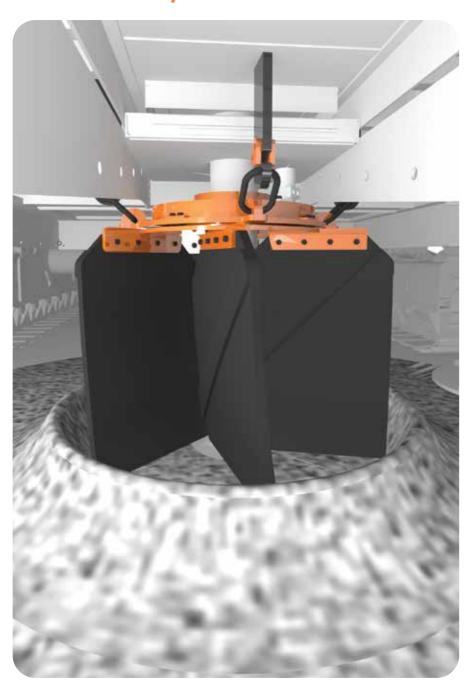
Enquire for Rigs not displayed here.

# **Mammoth**Hole Sweeper





# **M**ammoth Hole Sweeper



# **Mammoth Hole Sweeper**

### **Product Description**

The Mammoth Hole sweeper is a device fitted to the undercarriage of a drill rig with the function addressing chippings ejected from a blasthole and cleaning the collar of a blasthole with no manual labour.

The Mammoth Hole Sweeper is designed with rotating sweeping flaps to deflect chippings ejected from the blasthole - thus preventing them from accumulating around the collar of the hole.

### The Mammoth Hole Sweeper is designed to address:

- Clogging below deck on the drill rig
- Chippings re-entering the blast hole
- Time lost due to slowed penetration rates
- Increased wear on the drill string
- Lock up of bits due to blocked holes

### Benefits of the Mammoth Hole Sweeper

- Eliminates the necessity for manually cleaning the border of the holes
- Prevents chippings from piling up around the hole
- Increased penetration rates
- Increased bit life
- Increased drill steel life
- Increased life of the deckbush
- Decreased deck contamination

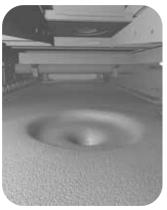
### The Mammoth Hole Sweeper works with the Flanders Automation System





# **Mammoth Hole Sweeper**







Pressure Requirements: 1500-2800 PSI

Range: 4.5" up to 15" Rotation: Gear drive

Power: 2 x Hydraulic Motors

Hole Without Sweeper



Hole With Sweeper



# PERFORMANCE EVALUATION OF THE MAMMOTH HOLE SWEEPER

Here are some results of a test with the Hole Sweeper fitted to a PV351 Machine on a Platinum mine.

Pattern:

326-085

Rig	Holes	Penetration (m/h)
PV149	16	14.06
PV141	27	13.46
PV143 (Hole Sweeper fitted)	4	22.63
PV144 20		20.60
Total Average	16.28	
Average	15.88	
% improvement with sweeper		42.54



PV143 included in Average PV143 not included

Pattern:

329-043

Rig	Holes	Penetration (m/h)
PV145	PV145 37	
PV141	25	21.18
PV144	5	14.23
PV143 (Hole Sweeper fitted) 85		24.46
Total Average	22.32	
Average	19.57	
% improvement with sweeper		25.01

PV143 included in Average PV143 not included

Pattern:

326-050

Rig	Holes	Penetration (m/h)
PV143 (Hole Sweeper fitted)	55	27.95
PV144	19	18.97
PV145	49	22.07
Total Average	23.49	
Average		21.20
% improvement with sweeper		31.81

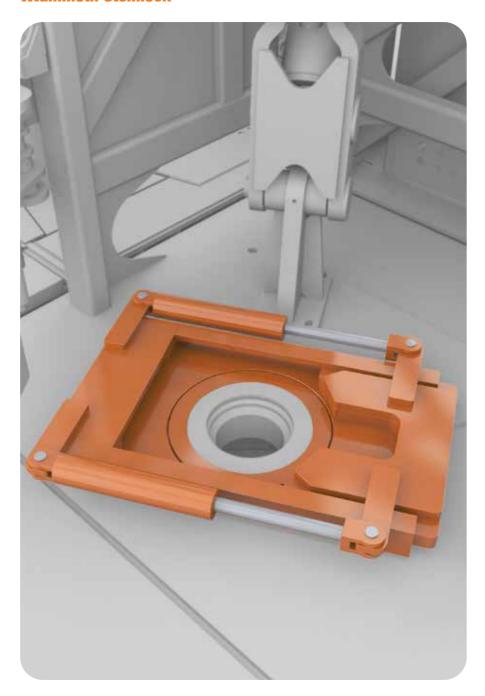
PV143 included in Average PV143 not included

It is recommended that only genuine OEM spare parts and consumables are used on the Mammoth product range, to ensure full performance and operational stability. Utilising unauthorised spare parts and consumables can result in injury and potentially void warranty claims.

Enquire for Rigs not displayed here.







### **Product Description**

The Mammoth Stemlock is designed and manufactured to secure the drill string securely, enabling the breakout of the drill rod and bit.

The Mammoth Stemlock can be manufactured to individual requirements and specifications.

### Requirements from Customer

- Drill manufacturer
- Drill model
- · Drill rod diameter
- Spanner-flat size

### Benefits of the Mammoth Stemlock

- Quality manufacturing
- Durability for best performance
- Produced to our standard quality manufacturing procedures
- · Fully repairable

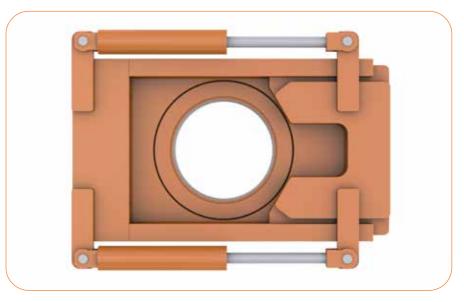
### The Mammoth Stemlock works with the Flanders Automation System



### **Technical Specifications**

PV351 Stemlock in the Open Position

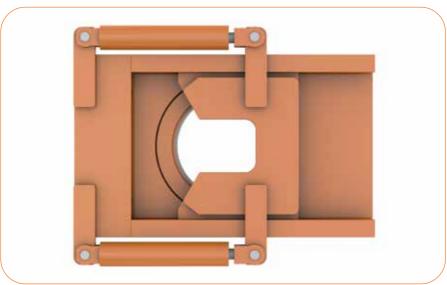




### **Technical Specifications**

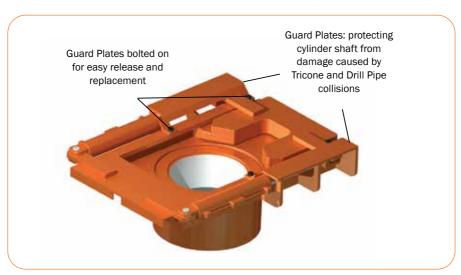


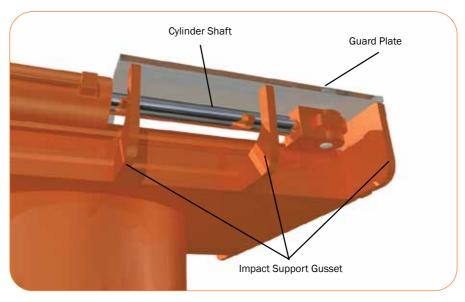




### **Technical Specifications**

PV351 Stemlock with Guard Plates in the Open Position





### The Mammoth Stemlock Operating Sequence



Stemlock Rest Position



Align Drill Rod Flats With Fork



Engage Stemlock



Rotate Drill Rod, Separate Connection

# PV351 Type Stemlock



# DM30 Type Stemlock



# PV271 / PV275 Type Stemlock



# **Mammoth Deckbush**







# **Product Description**

The Mammoth Deckbush is used for the purpose of stabilizing the centre of the drill rod. The Mammoth Deckbush can be manufactured to individual requirements and specifications.

#### Benefits of the Mammoth Deckbush

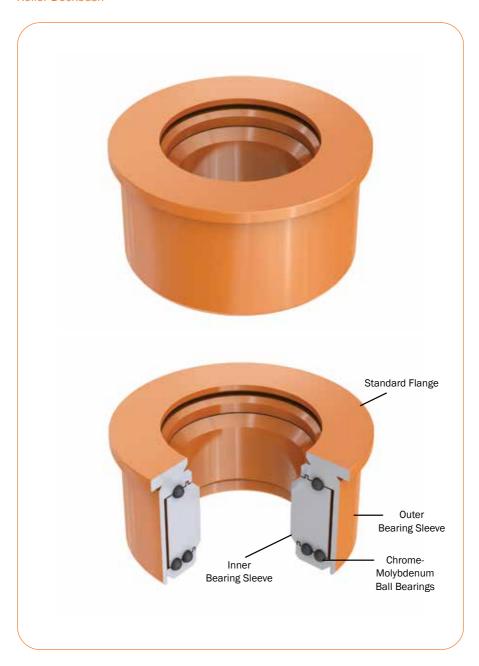
- Quality manufacturing
- Durability for the best performance
- Produced to our standard quality manufacturing procedures



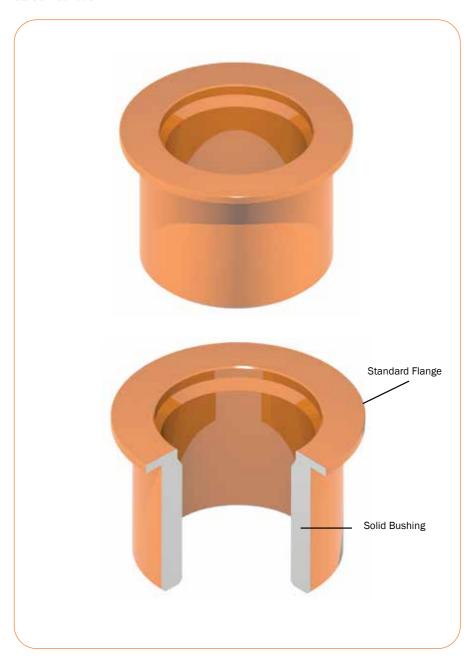
### Roller Deckbush



### Roller Deckbush



### Static Deckbush



Specifications	MAMMOTH TECHNOLOGIES All designs, specifications and components of the equipment described herei are subject to change at the manufacturer's discretion at any time without prior notice.								
Rotary Deckbush	2 or 3 Row, Solid Ball Races								
OEM Machines	Epiroc								
The Mammoth	DM25 DM30 DM45 DM50	DML DMM2 DMM3							
Deckbush can be designed to fit any OEM	DMLSP PV271 PV275 PV352	L T4BH							
machine application.	Tamrock - Drilltech								
The Mammoth		D55SP D60K D75K							
Deckbush is not limited to the specified range to the right.	D80K   D90K   1190E								
the right.	Reedrill								
	SKF SKT SK35 SK40 SK45	SK50 SK55							
	Gardner Denver								
	DG70 GD CL90 GD100 GD120 DD100 GD250XP								
	Bucyrus  BE-35R 45R 47R 55R 49F	8 59R 60R							
	BE 3311 4311 4711 3311 431	3311 0011							
	Revathi P&H								
	35HR 37HR C750 120 250 320								
Requirements from customer	Drill manufacturer Drill model Deck opening Drill rod diameter Top flange dimensions Deck top slot dimensions								

The Mammoth Deckbush can be manufactured to customer specifications



www.mammothtech.co.za







#### **Product Description**

The Mammoth Drill Rod is an addition to increasing the length of the drill bit depth to extend drilling penetration.

The Mammoth Drill Rod can be manufactured to individual requirements and specifications.

#### Benefits of the Mammoth Drill Rods

- Quality manufacturing
- Durability for the best performance
- Produced to our outstanding quality control
- Fully repairable dependant on wall thickness



Soft Rock Drilling

Shallower Drilled Holes

Repairability

High Wear

Cost Efficient

Solaris Drill Rods constructed from:

Graded Mild Steel Typically used in Nonabrasive Soft Rock Drilling Formations.

Tool joints are manufactured from selected heat-treated alloy steel for the greatest wear resistance and prolonged life.



Hard Rock Drilling

Deeper Drilled Holes

Repairability

Low Wear

Production Efficient

Meteor Drill Rods constructed from:

High Grade Alloy typically used in Abrasive Hard Rock Drilling Formations.

Tool joints are manufactured from selected heat-treated alloy steel for the greatest wear resistance and prolonged life.









Common Specific	cations	MAMMOTH TECHNOLOGIES  All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.						
Outside Diameter (in)	Outside Diameter (mm)	Wall Thickness (in)	Wall Thickness (mm)	Recommended Connection				
4½"	114.0mm	0.500"	13	3½" API & 3" BECO				
5"	127.0mm	0.500"	13	3½" BECO				
5"	127.0mm	0.750"	19	3½" BECO				
5½"	139.7mm	0.500"	13	3½" BECO				
5½"	139.7mm	0.750"	0.750" 19					
6"	152.4mm	0.750"	19	4" BECO				
6½"	158.8mm	0.500"	13	4" BECO				
61/4"	158.8mm	0.750"	19	4" BECO				
6½"	158.8mm	1.000"	25	4" BECO				
65/8"	168.3mm	0.864"	22	4½" BECO				
7"	177.8mm	0.500"	13	4½" BECO				
7"	177.8mm	0.750"	19	4½" BECO				
7"	177.8mm	1.000"	25	51/4" BECO				
7½"	190.5mm	1.000"	25	51/4" BECO				
75/8"	193.7mm	0.500"	13	51/4" BECO				
75/8"	193.7mm	0.750"	19	51/4" BECO				
75/8"	193.7mm	1.000"	25	51/4" BECO				
85/8"	219.1mm	0.750"	19	6" BECO				
85/8"	219.1mm	0.906"	23	6" BECO				
85/8"	219.1mm	1.000"	25	6" BECO				
10¾"	273.1mm	1.000"	25	8" BECO				
10¾"	273.1mm	1.250"	32	8" BECO				

Mammoth Drill Rods can be manufactured to customer specifications. All thread types are available to suit your application.

www.mammothtech.co.za







#### **Product Description**

The Mammoth Top Sub is a short length of drill collar that has male threads on one end and female on the other. It is screwed into the bottom of the top drive (rotary head) or shock sub and onto the drill rod. It serves as a crossover between the top drive (rotary head) or shock sub connections and the rod connection.

The Mammoth Bottom Sub is a short length of drill collar that has male threads on one end and female on the other. It is screwed onto the bottom of the drill rod and onto the drill bit. It serves as a crossover between the drill rod connections and the bit connection.

#### Benefits of the Mammoth Sub Adaptors

- Quality manufacturing
- Durability for the best performance
- Produced to our standard quality manufacturing procedures
- Fully repairable



Common Spe	cifications	MAMMOTH TECHNOLOGIES  All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.											
Outside Diameter (in)	Outside Diameter (mm)	Top Sub Pin: API Box: BECO/API	Bottom Sub Pin: API/BECO Box: API	Recommended Connection									
4½"	114.0mm				3½" API & 3½" BECO								
5"	127.0mm		3½" BECO										
5"	127.0mm			3½" BECO									
5½"	139.7mm	Di	£	3½" BECO									
5½"	139.7mm	Requirements     Drill man	from customer	3½" BECO									
6"	152.4mm	Drill mod		4" BECO									
61/4"	158.8mm	Drill rod o		4" BECO									
61/4"	158.8mm	Snoulder     Actual thi	to shoulder leng read size	4" BECO									
61/4"	158.8mm	Spanner	flat position	4" BECO									
65/8"	168.3mm			4½" BECO									
7"	177.8mm			4½" BECO									
7"	177.8mm				4½" BECO								
7"	177.8mm	The Mammoth designed to fit	51/4" BECO										
7½"	190.5mm	dooignou to iit	5¼" E										
75/8"	193.7mm			Sub   Bottom Sub is not ific range only.									
75⁄8"	193.7mm	minited to any s	specific rafige of	iiy.	51/4" BECO								
75/8"	193.7mm		5½" BE										
85/8"	219.1mm												
85/8"	219.1mm			6" BECO									
85/8"	219.1mm								6" BEC				
10¾"	273.1mm			8" BECO									
10¾"	273.1mm			8" BECO									

Mammoth Top Subs | Bottom Subs can be manufactured to customer specifications and thread requirements.

# The Mammoth Standard Bottom Sub



# The Mammoth Bottom Sub with Hard Facing





#### **Product Description**

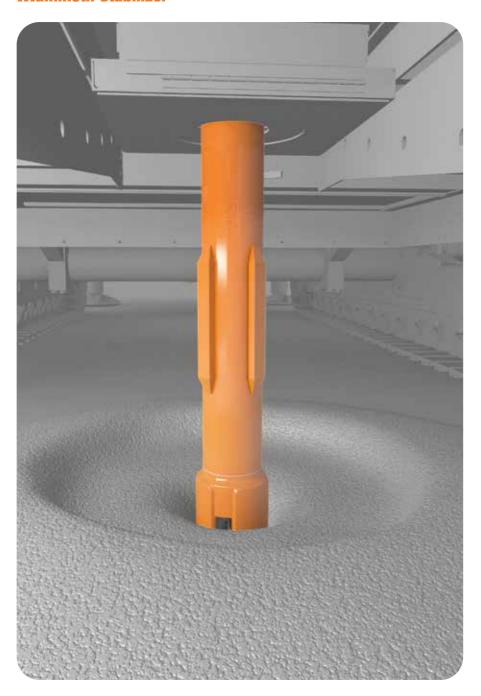
When rods must be added to increase the depth of drilling, the loosening of the threads are now performed at the bottom end of the saver sub as opposed to the bottom of the top drive (rotary head) which is the most expensive part of the drill string. This means that the connection between the top end of the saver sub and top drive (rotary head) is seldom used, and suffers minimal wear and tear, whereas the lower connection is used in almost all cases displacing the most wear and tear from the rotary head connection to the much lower cost, saver sub which is expendable and does not represent a major investment. The top drive or rotary head component, on the other hand represent a significant capital outlay and considerable downtime when it needs to be replaced.



www.mammothtech.co.za







#### **Product Description**

The Mammoth Stabilizer is key to provide lateral stability to the drill bit during the drilling process.

Lateral stability is a key component to ensure optimal functioning of the drill bit. Stabilizers add to the efficient utilization of energy and force by limiting lateral movement of the drill bit.

#### Benefits of the Mammoth Stabilizer

- Quality manufacturing
- · Durability for best performance
- Produced to our standard quality manufacturing procedures
- · Fully repairable





Common Sp	pecifications	MAMMOTH TECHNOLOGIES  All designs, specifications and components of the equipment described herein are subject to change at the manufacturer's discretion at any time without prior notice.				
Outside Diameter (in)	Outside Diameter (mm)	Recommended Connection				
4½"	114.0mm	3½" API & 3½" BECO				
5"	127.0mm	3½" BECO				
5"	127.0mm	3½" BECO				
5½"	139.7mm	3½" BECO	Requirements from customer			
5½"	139.7mm	3½" BECO	Drill manufacturer			
6"	152.4mm	4" BECO	Drill model			
61/4"	158.8mm	4" BECO	<ul><li>Drill rod diameter</li><li>Shoulder to shoulder length</li></ul>			
61/4"	158.8mm	4" BECO	Actual thread size			
61/4"	158.8mm	4" BECO	<ul><li>Spanner flat position</li><li>Wear strips</li></ul>			
65%"	168.3mm	4½" BECO	wear surps			
7"	177.8mm	4½" BECO				
7"	177.8mm	4½" BECO				
7"	177.8mm	51/4" BECO	The Mammoth Stabilizer can be designed to fit any OEM machine			
7½"	190.5mm	51/4" BECO	application.			
75⁄8"	193.7mm	51/4" BECO	The Mammoth Stabilizer is not limited			
75⁄8"	193.7mm	51/4" BECO	to any specific range only.			
75⁄8"	193.7mm	51/4" BECO				
85/8"	219.1mm	6" BECO				
85/8"	219.1mm	6" BECO				
85/8"	219.1mm	6" BECO				
10¾"	273.1mm	8" BECO				
10¾"	273.1mm	8" BECO				

Mammoth Stabilizers can be manufactured to customer specifications. All thread types are available to suit your application.



www.mammothtech.co.za





## **Product Description**

The Mammoth Bit Breakout Pot is used for the purpose of breaking the drill bit loose from the stabilizer or bottom sub. Our design allows for easy operation and removal of tricone and DTH drill bits.

#### Benefits of the Mammoth Bit Breakout Pot

- Quality manufacturing
- Durability for the best performance
- Produced to our outstanding quality control
- Fully repairable



Specifications	MAMMOTH TECHN All designs, specifi subject to change	catio	ns and co								
OEM Machines The Mammoth Bit	Epiroc										
Breakout Pot can be designed to fit any OEM machine application.		DM30 PV271		5	DM50 PV351		T4BH		DMM2		DMM3
The Mammoth Bit Breakout Pot is not limited	Tamrock - Drilltech										
to the specified range to the right.	D80K D90K	1	190E								
		SK35	SK4	0	SK4	5   9	SK50	SK	.55		
	Gardner Denver							)XP			
	Bucyrus           BE-35R         45R         47R         55R         49R         59R         60R										
	Revathi P&H										
	35HR 37HR	1	C750		120		250	32	20		
Common Sizes											
Requirements from customer	Drill manufactor Drill model Deck opening Drill rod diame Top flange dim Deck top slot d	ter ensi									

The Mammoth Bit Breakout Pot can be manufactured to customer specifications.

# Mammoth Tricone Bit Breakout Pot



# Mammoth DTH Bit Breakout Pot



# The Mammoth Male Lifting Bail

### **Product Description**

The Lifting Bail or Lifting Cup is used to lift the drill rod, sub adaptors, and stabilizer when they are changed on the drill rig.

# The Mammoth Male Lifting Bail



# The Mammoth Female Lifting Bail





PROVIDING

# BLASTHOLE DRILLING PRODUCTS

SINCE

1999



