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HOW TO ORDER

CHOOSE AN AUGER

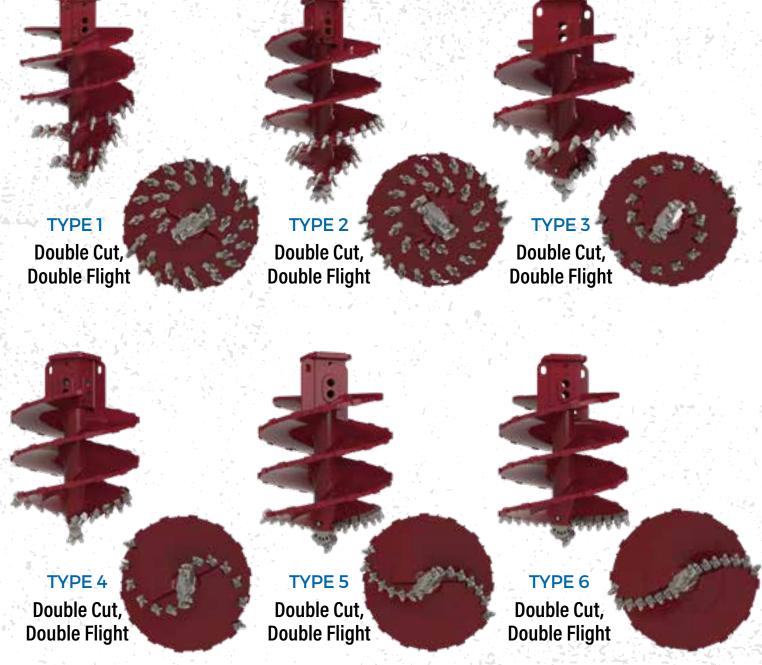
Available in sizes up to 12' in diameter. All of our augers are manufactured in house.

ROCK DIRT MULTIPURPOSE CRIMSON CRUSHER

Modification options available on page 7.

SELECT AUGER TYPE

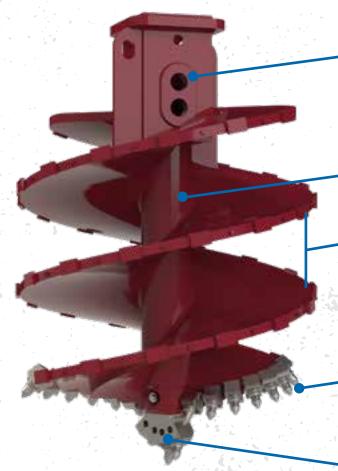
Jeffrey Machine is proud to be the "go-to" manufacturer for high quality custom-built augers. There are six basic types of spiral augers.



HOW TO ORDER

SELECT YOUR MODIFICATIONS

There are hundreds of modifications that can be made to specifically fit your application.



DRIVE BOXES

Fabricated steel boxes are available in a variety of sizes. Manufactured in-house, drive boxes are rated for maximum rotational torque & pull-out force. **SEE PAGE 63.**

CENTER SHAFT

Available from 4" OD to 13" OD.

FLIGHTING

There are multiple variants to choose from including

- Outside Diameter
- Thickness

• Pitch

- Right or Left Handed
- Inside Diameter

FOR MORE INFO, SEE PAGE 121.

TEETH & HOLDERS

For a list of all teeth and holders available, **SEE PAGE 71.**

PILOTS, ADAPTERS, AND HUBS

For a list of all available, SEE PAGE 78.

ADD-ON FEATURES

Additional features to add-on for even more customization.

WEAR PROTECTION



Wear Pads & Carbide Studs



LAMINATES



LEARN MORE ON PAGE 13.

REAMING ARMS



LEARN MORE ON PAGE 35.

Full Hard Surface Outer Edge

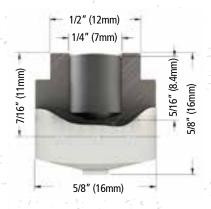
LEARN MORE ON PAGE 12.



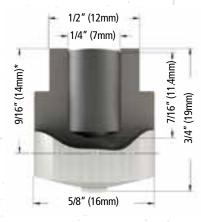
TUNGSTUDS

→ BETEK

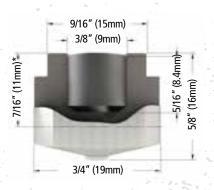
Tungstuds by **Betek** reduce wear over time due to the carbide core. Tungstuds are easy to install & quick to replace.



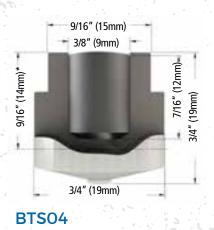
BTS01



BTS02

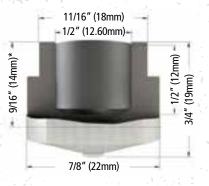


BTS03



11/16" (18mm) -1/2" (12.60mm) * (www) * (16mm) */2 (16mm)

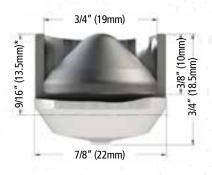
BTS05



BTS06

*Height after welding.

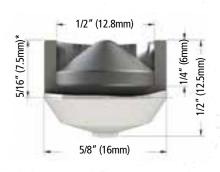




BTS07

BTS08





BTS20



BTS100



WEAR PROTECTION

Wear Protection can greatly increase the life of your drilling tools. Whether adding any of these options to a new auger or having Jeffrey Machine refurbish your used tool, it's a great way to protect your investment.



WEAR PADS

These have become extremely popular as they offer extra wear protection. When they do start to wear down, it's a simple task to weld a new pad in the available space beside it.



CARBIDE STUDS

Also known as tungstuds can be applied to any surface to add wear protection. Fast and easy to install carbide studs will add an adequate amount of wear protection extending the life of your tooling. Reference pg. 9-10.



FULL HARD SURFACE OUTER EDGE

Adding hard surface welding wire to the outside edge of your tooling will extend the life of your auger, (Most popular on dirt augers.)



FULLY HARD SURFACE

Our Fully Hard Surface option increases your protection even further by adding an extra 1" of wire to the top and bottom side of the auger flighting.

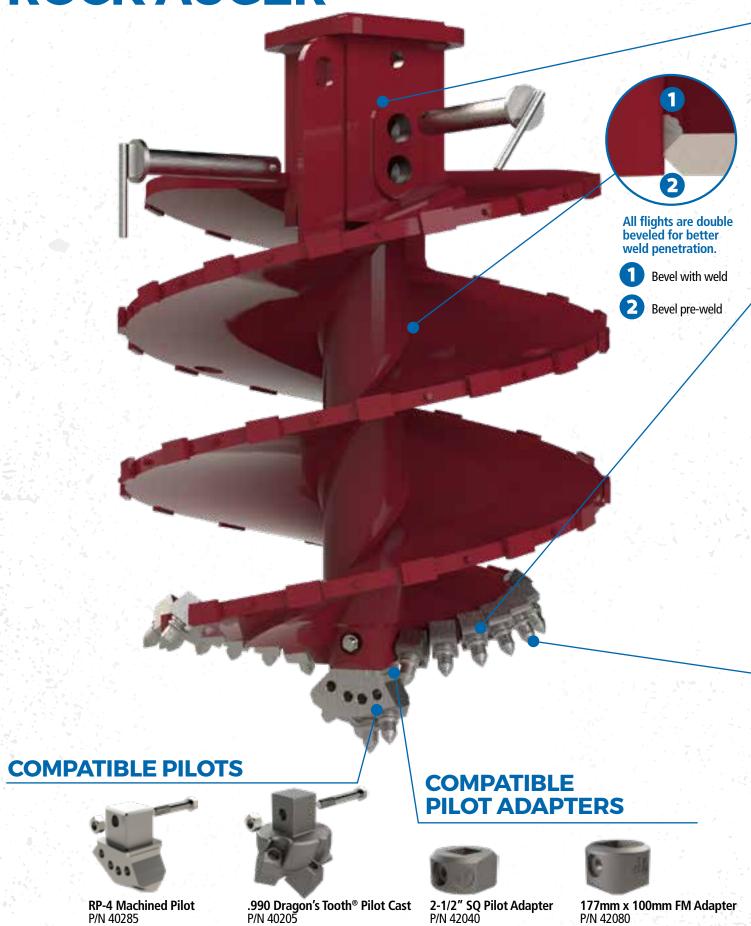


LAMINATES

Laminates have been added to all of our 30" and larger heavy duty rock augers. (Optional for dirt augers)

Laminates greatly increase the strength of flighting for crowd (pushing down), torque (twisting) and load (pulling heavy spoil up out of the ground). Jeffrey Machine has developed a reputation for building the highest quality augers in the industry. Laminates are just one more enhancement to insure our augers hold up to the ever increasing power of modern drilling rigs.

ROCK AUGER



COMPATIBLE DRIVE BOXES

P/N 43525	3" Kelly Drive Box
P/N 43535	3-1/2" Kelly Drive Box
P/N 43545	4" Kelly Drive Box
P/N 43555	4-1/4" Kelly Drive Box
P/N 43680	4-1/2" Kelly Drive Box
P/N 43560	5" Kelly Drive Box
P/N 43575	5-1/4" Kelly Drive Box
P/N 43595	130mm Kelly Drive Box
P/N 43600	6" Kelly Drive Box

150mm Kelly Drive Box
7" Kelly Drive Box
200mm Standard Tall 18"
200mm Standard Short 18"
200mm HD Tall 18"
200mm HD Short 18"
200mm HD Tall Deep 21.5"
200mm Standard Tall Deep 21.5"

38MM TEETH & HOLDERS

38mm TEETH (Only compatible with 38mm Holders)



38mm Dragon's Tooth® P/N 30188



BKH113 P/N 30225



B47K22-H P/N 30212



BFZ 100X70/2 P/N 34172











38mm Dragon's Tooth® Holder P/N 32058



38mm Tri-Holder P/N 32064



JM-48 Holder P/N 32061



JM-43 Holder P/N 32050



38mm Jeff444 Tri-Holder P/N 32102

.990 TEETH & HOLDERS

.990 TEETH (Compatible with .990 Holders)



.**990 Dirt Tooth** P/N 34380



.990HB P/N 30122



.990 Dragon's Tooth® P/N 30145



.990 HOLDERS (Compatible with .990 Teeth)



.990 Dragon's Tooth® Holder P/N 32049



.**990 Tri-Holder** P/N 32042



JM C-30 Holder P/N 32040



.990 Jeff444 Tri-Holder P/N 32104

PILOTLESS AUGER





PILOTLESS AUGER SPECIFICATIONS

Commonly Requested Diameters: 14"-144"*

Type: Type 6
Cut: DC/DF

Kelly boxes: All kelly boxes made to customer specifications

Center Shaft: 6" OD - 8" OD

Flight: 1" – 2" thickness available

All flight ID is beveled for better weld penetration

Laminate flight on all augers 30" or larger

Wear Protection: Wear Pads 2" x 3" x 1/2" (39302)

* Smaller diameters available based on Kelly box size / custom sizes greater than 144"





B47K19L P/N 30182



.990 Dragon's Tooth® P/N 30145



38mm Dragon's Tooth® P/N 30188





38mm Tri-Holder P/N 32064

All .990 and 38mm rock augers are manufactured with Tri Holders.

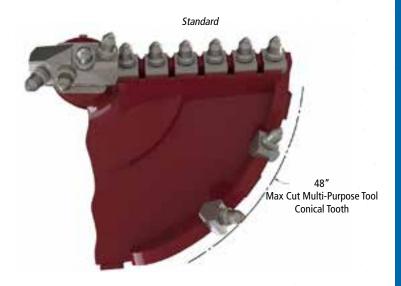
Smaller conical teeth available upon request.

MULTI-PURPOSE AUGER

Optimize your drilling tool fleet with the multi-purpose auger. This auger can be utilized as a dirt or rock auger simply by switching out the tooth & pilot

combinations.





Dirt

MULTI-PURPOSE AUGER SPECI

Commonly Requested Diameters: 16"-144"*

Type: Type 3 - 6

Cut: DC/DF

Kelly boxes: All kelly boxes made to customer specifications

Center Shaft: 4'' OD - 12'' OD (Solid shaft available in some sizes)

Flight: 1" – 2" thickness available

All flight ID is beveled for better weld penetration

Laminate flight on all augers 30" or larger

Wear Protection: Wear Pads 2" x 3" x 1/2" (39302)







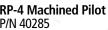




38mm Tri-Holder P/N 32064



RP-4 Machined Pilot



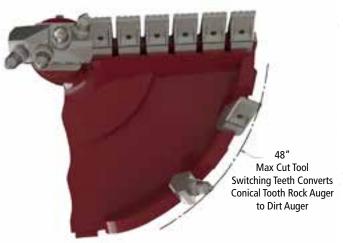


JMI 113×70/D P/N 34241

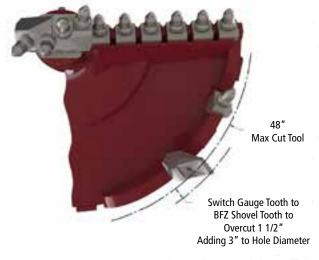


BFZ 100×70/2 P/N 34172

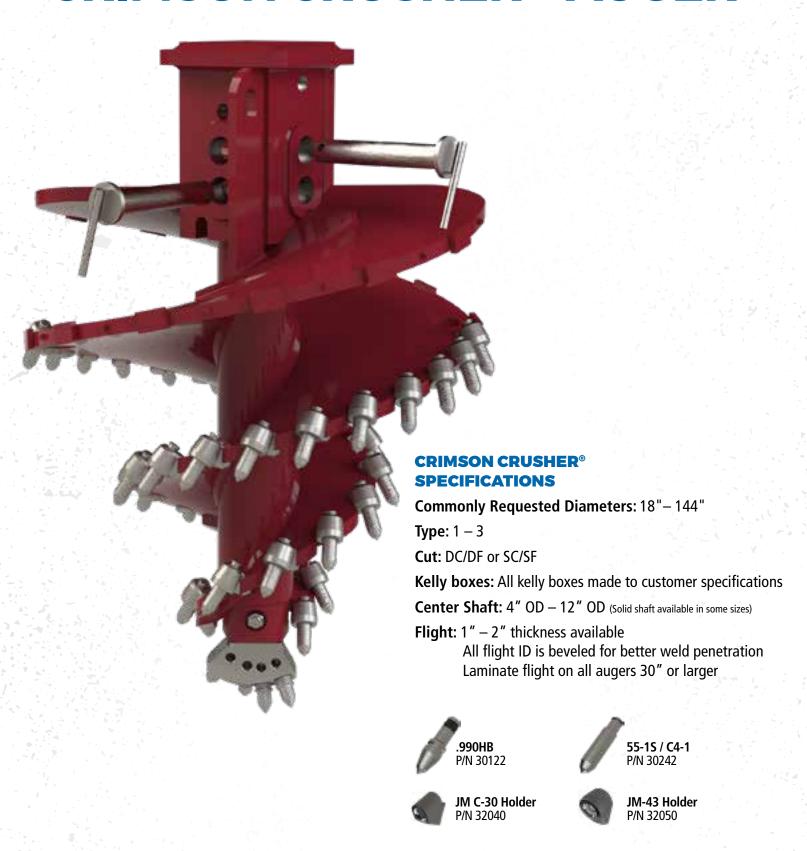
4" SQ. JM 8" Dirt Pilot P/N 40260



Overcut



CRIMSON CRUSHER™ AUGER



CHRISTMAS TREE™ AUGER



CHRISTMAS TREE™ AUGER SPECIFICATIONS

Commonly Requested Diameters: 24" – 60"

Type: Christmas Tree **Cut:** DC/DF or SC/SF

Kelly boxes: All kelly boxes made to customer

specifications

Center Shaft: 4'' OD - 12'' OD (Solid shaft available in some sizes)

Flight: 1" – 2" thickness available

All flight ID is beveled for better weld penetration Laminate flight on all augers 30" or larger





55-1S / **C4-1** P/N 30242



JM C-30 Holder P/N 32040



JM-43 Holder P/N 32050

PRESSURE AUGER



Standard Height: 36" – 42"

Commonly Requested Diameters: 24" – 60"

Type: Types 4 – 6
Cut: DC/DF or SC/SF

Kelly boxes: 3" - 4" box

Center Shaft: 4'' OD - 8'' OD (Solid shaft available in some sizes)

Flight: 1" thickness available

All flight ID is beveled for better weld penetration Laminate flight on all augers 30" or larger





.990 Dirt Tooth P/N 34380





.990 Tri-Holder P/N 32042



JM C-30 Holder P/N 32040

ECONO AUGER™



Commonly Requested Diameters: 18"-60"

Type: 4 & 5 Cut: DC/DF

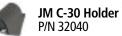
Kelly boxes: All kelly boxes made to customer specifications

Center Shaft: 4'' OD - 6'' OD (Solid shaft available in some sizes)

Flight: 1" thick flights only

All flight ID is beveled for better weld penetration





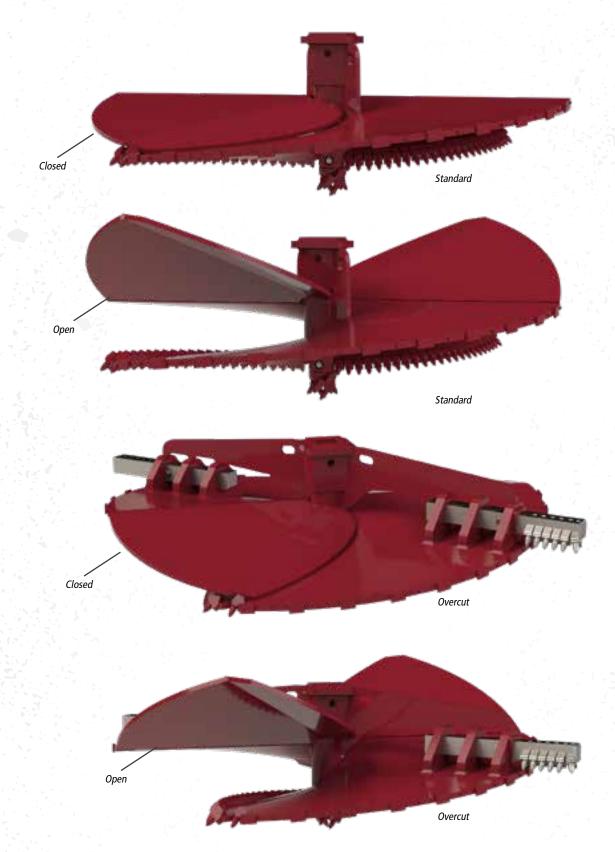


55-1S / **C4-1** P/N 30242

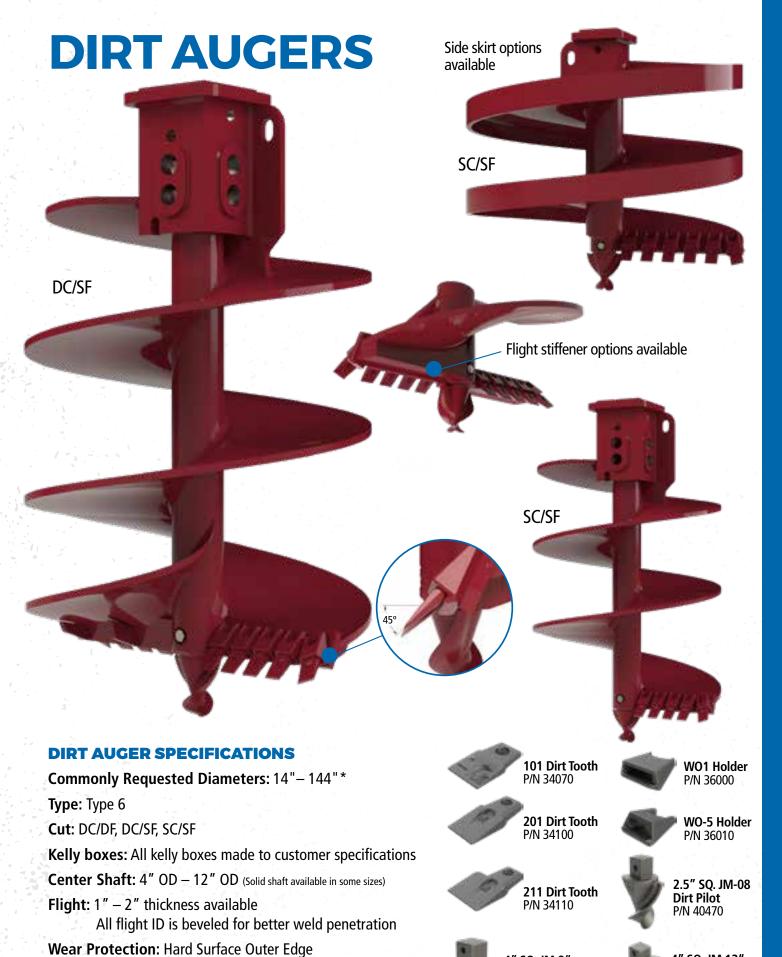


JM-43 Holder P/N 32050

SPOON™ AUGER



Spoon™ Augers are best used in applications when overhead space is restricted. Flaps increase the ability to hold loose spoil on the auger flights preventing material from falling back into the shaft. If you have questions regarding the spoon or bow tie augers, please contact a Jeffrey Machine Inc. representative.



 $^{^{\}star}$ Smaller diameters available based on Kelly box size / custom sizes greater than 144 $^{\prime\prime}$

4" SQ. JM 12"

Dirt Pilot

P/N 40264

4" SQ. JM 8"

Dirt Pilot

P/N 40260

SLURRY AUGER



Standard Height: 24"-96"

Commonly Requested Diameters: 24" - 60"

Type: Types 5-6Cut: DC/DF or SC/SF

Kelly boxes: All Kelly boxes made to customer specifications

Center Shaft: 14" - 24"

Flight: 1" to 1-1/2" thick available

Wear Protection: Hard Surface outside edge or

fully hard surface







4 gallon square buckets weighing 22 pounds per bucket

POLY-BORE

POLY-BORE polymer is a free flowing, water-soluble, easy mixing, 100% dry granular polymer. When mixed with fresh water, a small quantity of POLY-BORE polymer provides a clear, solid-free, viscous borehole stabilizing fluid for use in drilled shaft, auger drilling, horizontal directional boring, trenching excavation and reverse circulation (RC) rotary drilling. POLY-BORE polymer is not designed to be used in conjunction with bentonite-based fluids.

P/N 799-7004

EZ-MUD

EZ-Mud is a clay and shale stabilizer provides inhibition of clay and shale formations in water-based drilling fluids without substantially increasing viscosity. EZ-MUD GOLD stabilizer, when added to a QUIK-GEL® or BORE-GEL® slurry, yields an inhibitive drilling fluid system while maintaining manageable and effective fluid properties. EZ-MUD GOLD stabilizer can be mixed easily at minimal shear thereby eliminating the need for liquid emulsions.

P/N T799-2000

QUIK-GEL

Quik-Gel is a viscosifier is an easy-to-mix, finely ground (200-mesh), premium-grade, high-yielding Wyoming sodium bentonite. QUIK-GEL viscosifier imparts viscosity, fluid loss control and gelling characteristics to freshwater-based drilling fluids.

P/N T799-1000

CASING





Casing Driver

CASING CAPABILITIES

Inner Diameters: 22"-144"

Wall: 3/8" - 1" thick available



CJ2 Holder P/N 36070



CJ2 Tooth P/N 34220



3/4" Hex Weld Bars P/N 34350



1 1/8" Hex Weld Bars P/N 34340



1 3/8" Hex Weld Bars P/N 34330

Custom sizes available.

CASING TWISTERS







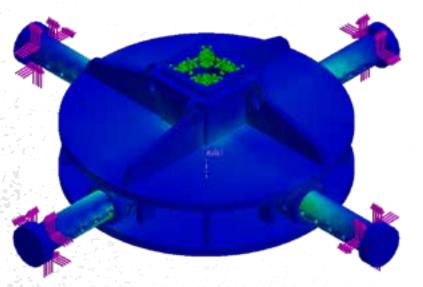
**Other sizes and 2 way are available.

4-Way Adjustable Casing Twister Ratings

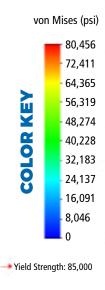
30"- 42"			
Maximum Torque			
Extended	Retracted		
200,000ft-lbs.	425,000ft-lbs.		
Maximum Lift			
Extended Retracted			
308,108lbs.	737,864lbs.		

48"- 72"			
Maximum Torque			
Extended	Retracted		
485,714ft-lbs.	485,714ft-lbs.		
Maximum Lift			
Extended	Retracted		
182,138lbs.	760,000lbs.		

78"- 122"		
Maximum Torque		
Extended	Retracted	
485,714ft-lbs.	680,000ft-lbs.	
Maximum Lift		
Extended	Retracted	
126,666lbs.	950,000lbs.	





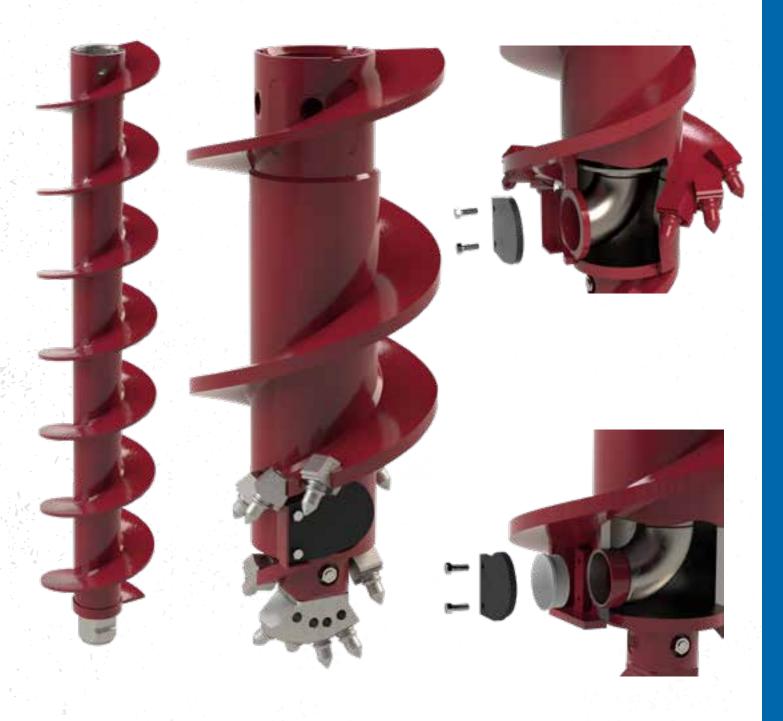


P.E. certified ratings include but are not limited to computer simulated torque and lifting analysis. These simulations allow our engineers and designers to identify and improve upon higher stress areas in our tools to ensure maximum production and safety.

CONTINUOUS FLIGHT AUGERS (CFA'S)







CFA SPECIFICATIONS

Commonly Requested Diameters: 8"-48" *

Cut: DC/DF, DC/SF, SC/SF

Grout Port: Side discharge

Type: 3, 4, 5, 6

Connections:

Spline & Hex Couplers

• API & ACME Threaded Couplers

Cutter Head Length: 5', 10', 20'

Flight Body: 5', 10', 20'

Wear Protection or Hard Surface Options Available. SEE PAGE 12



SIZE 42 CORK P/N 39200

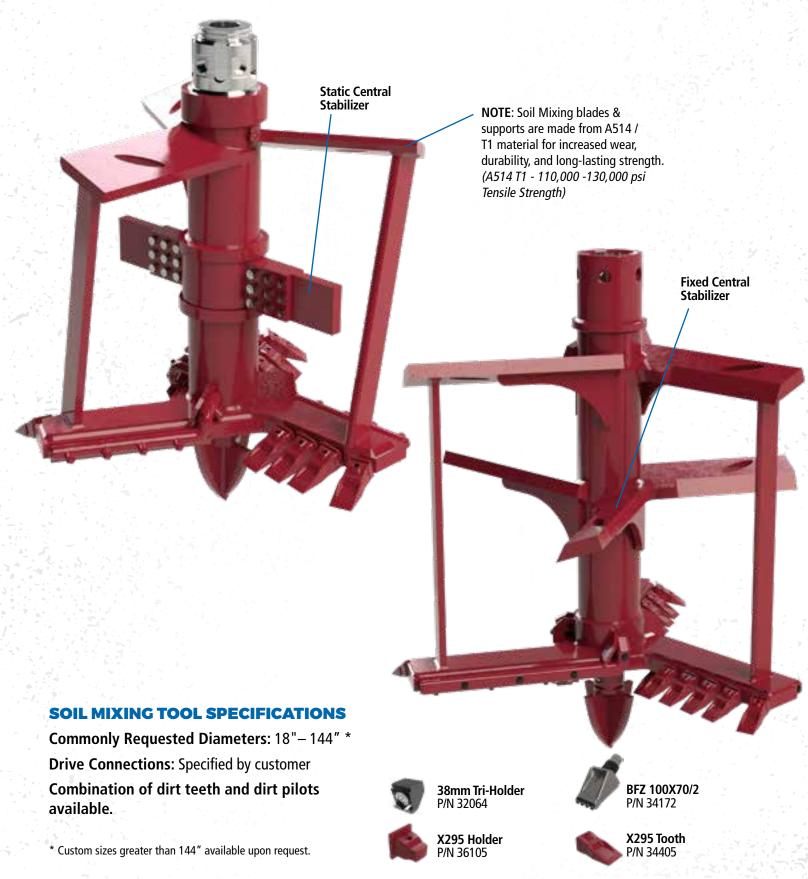
SIZE 44 CORK P/N 39201

SIZE 46 CORK P/N 39202

SIZE 48 CORK P/N 39203

SOIL MIXING TOOL

Shown as a 3-blade soil mixing tool.



SPLINE COUPLERS

Coupler Assembly

9.250in Spline Coupler 11.000in Spline Coupler 14.000in Spline Coupler

Maximum Torque

130,000 ft-lbs 262,000 ft-lbs 672,000 ft-lbs

Maximum Pull-Out Force

1,040,000 lbs 1,160,000 lbs 1,550,000 lbs

9.25" Spline Coupler Set Max. Torque: 130,000 ft-lbs Max. Pull-Out Force: 1,040,000 lbs P/N 27920

9.25" Spline O Ring & Set Screw Kit P/N 27925









11" Spline Coupler Set Max. Torque: 262,000 ft-lbs Max. Pull-Out Force: 1,160,000 lbs P/N 27930

11" Spline O Ring & Set Screw Kit P/N 27935









14" Spline Coupler Set Max. Torque: 672,000 ft-lbs Max. Pull-Out Force: 1,550,000 lbs P/N 27940

14" Spline O Ring & Set Screw Kit P/N 27945









Jeffrey Machine manufactures CFA Spline Couplers, CFA Hex Couplers, ACME Threaded Couplers as well as API Couplers. We operate state-of-the-art machines at our Birmingham facility to provide a timely source of supply. This enables us to make customer requested modifications.

*PE Certified

^{*}Male/female sold separately upon request.

CFA HEX COUPLERS

Couplers and adapters are manufactured in-house to any shape or design required.

٥	Coupler Assembly	Maximum Torque	Maximum Pull-Ou	t Force
	80mm Hex Coupler	19,300 ft-lbs	96,400 lbs	
	120mm Hex Coupler 150mm ABI Hex Coupler	65,000 ft-lbs 263,000 ft-lbs	217,000 lbs 805,000 lbs	
	160mm Hex Coupler	154,000 ft-lbs	386,000 lbs	
	200mm Hex Coupler	292,000 ft-lbs	560,000 lbs	-
	80mm Hex Coupler Set Torque: 19,300 ft-lbs	66 66 A	-	·
	Max. Pull-Out Force: 96,400 lbs P/N 27500		Man >	3
	80mm Hex Locking Pin Set		0	and the second
	P/N 27530			
	120mm Hex Coupler Set	10 10		
	Torque: 65,000 ft-lbs Max. Pull-Out Force: 217,000 lbs P/N 27570		The second	
	120mm Hex Locking Pin Set P/N 27600			-
	150mm ABI Hex Coupler Set Torque: 263,000 ft-lbs	4		
	Max. Pull-Out Force: 805,000 lbs P/N 27850		Ma Di	350
	150mm Hex Locking Set Screw		(2) 7 ·	4
	P/N 27853			
	160mm Hex Coupler Set Torque: 154,000 ft-lbs	A		
	Max. Pull-Out Force: 386,000 lbs P/N 27640		37 W	
	160mm Hex Locking Pin Set			
	P/N 27670			-596
	200mm Hex Coupler Set Torque: 292,000 ft-lbs			
	Max. Pull-Out Force: 560,000 lbs P/N 27710		S. 7. 1. 8	
	200mm Hex Locking Pin Set			

*PE Certified

P/N 27740

THREADED COUPLERS FOR CFA

Couplers and adapters are manufactured in-house to any shape or design required.



3" ACME Threaded Coupler Set P/N 27430

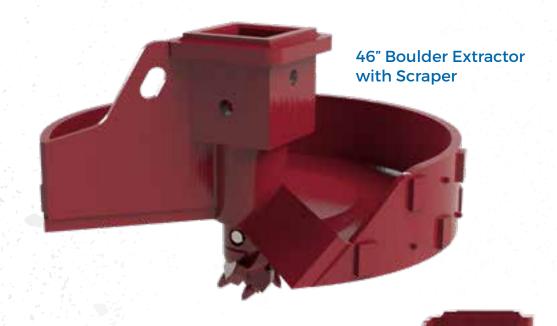


4" ACME Threaded Coupler Set P/N 27400

Other sizes available.

All Jeffrey Machine couplers are manufactured from alloy steel material for increased strength, weldability, and machinability. Due to the high carbon content of this alloy steel, special welding procedures are required to minimize cracks in the heat affected zones. Please contact your Jeffrey Machine Representative today if you have any questions regarding this procedure or would like any further information in reference to our extensive line of couplers.

BOULDER EXTRACTORS





36" Boulder Extractor with .990

BOLDER EXTRACTOR SPECIFICATIONS

Commonly Requested Diameters: 16"-144"

Kelly boxes: All kelly boxes made to customer

specifications

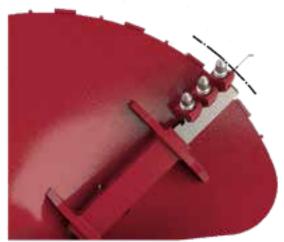
Flight Thickness: 11/2"

Options:

- Pitched or Flat
- Rock or Dirt Pilot Optional

AUGER HD REAMING ARMS

3" reaming arms increase the max total cut by 6" total. 6" reaming arms increase the max total cut by 12" total. Only available for augers 72" and larger.



When the over cuter arm is set at the inner most adjustment the outside tooth will be cutting at the same diameter as the max cut of the auger.

No extension

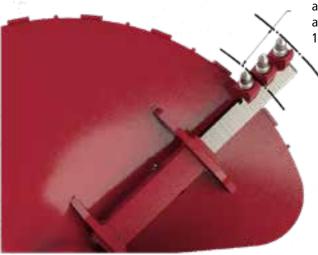
6" HD 38mm Rock P/N 39354P



When the over cutter arm is set at the center adjustment the outside tooth will be cutting at 3" over the max cut of the auger. This will add 6" to the overall diameter of the auger.

Increases max cut by 6"

6" HD 38mm Rock P/N 39354P



When the over cutter arm is set at the center adjustment the outside tooth will be cutting at 6" over the max cut of the auger. This will add 12" to the overall diameter of the auger.

Increases max cut by 12"

6" HD 38mm Rock P/N 39354P

AUGER STANDARD REAMING ARMS

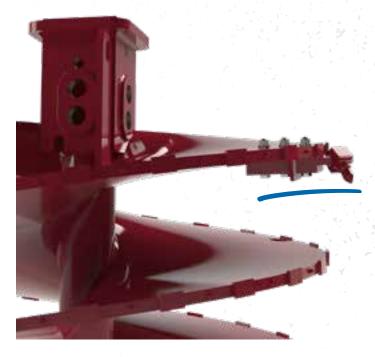
Available for augers 30" or larger diameter.



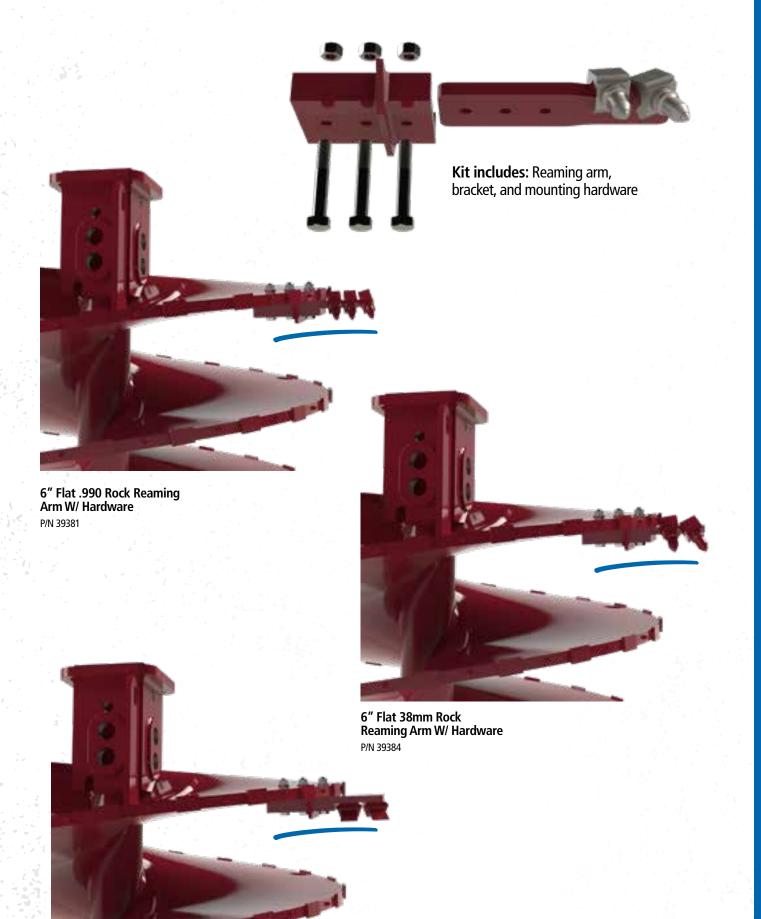
3" Flat .990 Rock Reaming Arm W/ Hardware P/N 39380



3" Flat Dirt Tooth Reaming Arm W/ Hardware P/N 39386



3" Flat 38mm Rock Reaming Arm W/ Hardware P/N 39383



6" Flat Dirt Tooth Reaming Arm W/ Hardware

P/N 39387





CORE BARRELS & BUCKETS

WE MANUFACTURE OUR CORE BARRELS AND BUCKETS ANY WAY YOU WANT.

Although our factory has grown in size, we still maintain a machine shop mentality where every order is considered custom. As we've grown we've invested heavily in top-of-the-line machinery. These tools help us craft high quality solutions individually suited to our customers' needs on a timely basis.

By manufacturing everything in-house we have complete control of all aspects of design, quality, and cost.

CORE BARRELS

Barrels over 60" are built with cross tops.



CORE BARREL SPECIFICATIONS

Commonly Requested Diameters: 16"-156"

Kelly boxes: All kelly boxes made to customer specifications

Gussets: 1" thick gussets standard

Barrels:

Up to 2" thick

2" undersize (.990 teeth)

3" undersize (38mm teeth)

Height specified by customer

Wear Protection: Available upon request

Hardened holders available upon request.













B40HDS

.990HB

.990 Dragon's Tooth®











38mm Dragon's Tooth®

BKH113

B47K22-H

B47K19L

B47K19H

Layout Pattern Options:

3 TOOTH



5 TOOTH



48" MC Core Barrel







ROLLER CONE BARREL

Best used on rock conditions over 14,500 psi.

Recommended maximum crowd is 10,000 lb. per roller.





Quick Change 2 Bolt Roller Cone

Quick Change 2 Bolt Roller Cone Holder

ROLLER CONE BARREL SPECIFICATIONS

Commonly Requested Diameters: 16"-144"

Kelly boxes: All kelly boxes made to customer specifications

Gussets: 1" thick gussets standard

Barrels: Up to 2" thick

Height specified by customer





CORE RINGS & CUSTOM PLATE ROLLING



CORE RINGS SPECIFICATIONS

Replacement core rings are available upon request, or can be ordered as a separate item. All core rings are quoted as a minimum of 12" overall height.

Specifications needed to quote

- Max Cut requirement
- OD of existing barrel
- Tooth pattern: 3, 5, or 7
- Thickness of ring

Custom Plate Rolling

- A-36 rated steel plate standard
- OD x ID x W Specifications needed to quote
- Diameters: 24" 156"
- Thickness: up to 2" thick mild steel

BELLING TOOL



NOMINAL SIZE			
Dia.	Bell Dia.	Angle	
12	36	45° or 60°	
14	42	45° or 60°	
16	48	45° or 60°	
18	54	45° or 60°	
20	60	45° or 60°	
24	72	45° or 60°	
30	90	45° or 60°	
36	108	45° or 60°	
42	126	45° or 60°	
48	144	45° or 60°	
54	162	45° or 60°	
60	180	45° or 60°	
66	198	45° or 60°	
72	216	45° or 60°	

Belling tool wings & wing supports are made from A514 / T1 material for increased wear, durability, and long-lasting strength. (A514 T1 - 110,000 -130,000 psi Tensile Strength)



*Barrel diameters are actual sizes.

BELLING TOOL SPECIFICATIONS

Available sizes: 12"-72"

Wings:

- · 3:1 ratio of cylinder
- 45 or 60 degree
- T1 Material

Most Commonly Used Teeth:

- .990 series
- · 201 dirt teeth



CROSS-CUT CORE BARRELS



96" Cross-Cut **Core Barrel**

Cross-Cut cutter bars are made from A514 / T1 material for increased wear, durability, and long-lasting strength. (A514T1 - 110,000 -130,000 psi Tensile Strength)



CROSS-CUT CORE BARREL SPECIFICATIONS

Commonly Requested Diameters: 20"-144"

Kelly boxes: All kelly boxes made to customer specifications

Gussets: 1" thick gussets standard

Barrels:

- Up to 2" thick
- 2" undersize (.990 teeth)
- 3" undersize (38mm teeth)

Cutter Bar: .990 or 38mm options available

Cutter Bar Material: A514 T1 (110,000- 130,000 psi Tensile Strength)

Height specified by customer

Wear Protection: Available upon request



990 JeffCut®



B40HDS



B47K19L P/N 30182



55-1S / C4-1 P/N 30242



38mm Dragon's Tooth® Holder P/N 32058



.990 Dragon's Tooth® P/N 30145



.990 Dragon's Tooth® Holder P/N 32049

TEETH & HOLDERS FOR OUTSIDE DIAMETER



38mm JeffCut® Holder with:



38mm Dragon's Tooth®





.990HB



.990 Dragon's Tooth®





BKH113



B47K22-H

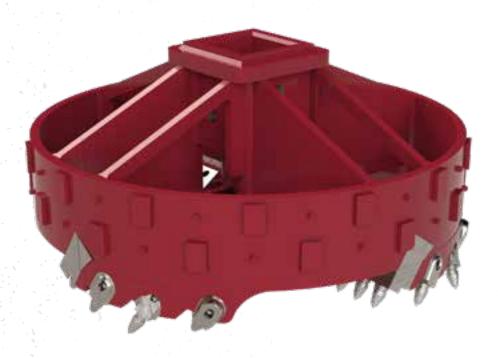


B47K19L



B47K19H

ROCK MILLS







ROCK MILL SPECIFICATIONS

Diameters: 24"-144"

Ring: 1" thick

Cutter Bar: 4140 Annealed (95,000 psi Tensile Strength)

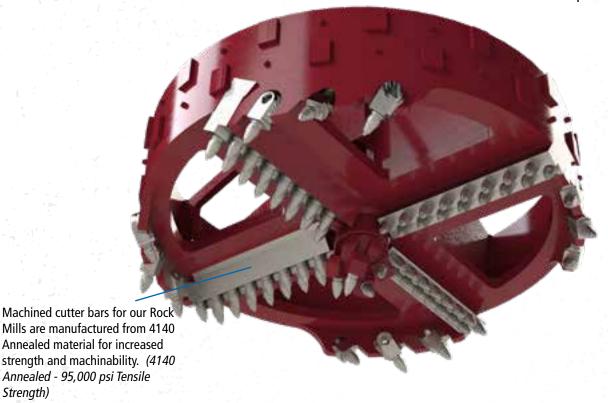
Teeth: Double row configuration:

· .990 Standard (30122)

38mm B47K19LK80-H (30182)

Wear Protection:

2" x 3" x ½" wear pads (39302)



SINGLE OPEN DIRT DRILLING BUCKET









Exploded View



J-Hook



SINGLE OPEN DIRT DRILLING BUCKET **SPECIFICATIONS**

Recommended Diameters: 24"-60"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page 58 for material specifications and pin-on

options.

Dump Bottom System (Auto or Manual) Custom sizes greater than 144" available upon request.



201 Dirt Tooth P/N 34100



2.5" SQ. JM-08 Dirt Pilot P/N 40470



WO-5 Holder P/N 36010



4" SQ. JM 8" Dirt Pilot P/N 40260

DOUBLE OPEN DIRT DRILLING BUCKET





Exploded View



Bottom View



Arrowhead Single

Arrowhead Double



J-Hook Single

J-Hook Double

DOUBLE OPEN DIRT DRILLING BUCKET SPECIFICATIONS

Recommended Diameters: 60" - 144"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page 58 for material specifications and pin-on

options.

Dump Bottom System (Auto or Manual) Custom sizes greater than 144" available upon request.

Double dump mechanism recommended on barrels 100" diameter and greater.



201 Dirt Tooth P/N 34100



2.5" SQ. JM-08 Pilot P/N 40470



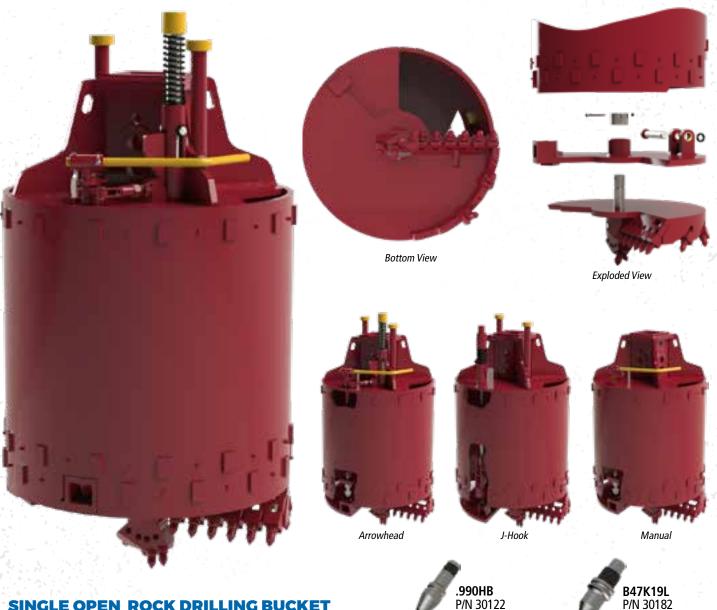
WO-5 Holder P/N 36010



4" SQ. JM 8" Dirt Pilot P/N 40260

*Not all drive boxes available on all sizes. Please contact us to find out if a particular drive box will fit in this application.

SINGLE OPEN ROCK **DRILLING BUCKET**



SINGLE OPEN ROCK DRILLING BUCKET **SPECIFICATIONS**

Recommended Diameters: 24" - 60"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page 58 for material specifications and pin-on

options.

Dump Bottom System (Auto or Manual)



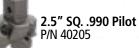
P/N 30122













38mm Tri-Holder

P/N 30188

38mm Dragon's Tooth®





RP-4 Machined Pilot



DOUBLE OPEN ROCK DRILLING BUCKET







Exploded View





Arrowhead Double





J-Hook Double



Bottom View

DOUBLE OPEN ROCK DRILLING BUCKET SPECIFICATIONS

Recommended Diameters: 60" - 144"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page 58 for material specifications and

pin-on options.

Arrowhead Single

Dump Bottom System (Auto or Manual) Custom sizes greater than 144" available upon request.

Double dump mechanism recommended on barrels 100" diameter and greater.



.990HB P/N 30122



B47K19L P/N 30182





38mm Dragon's Tooth® P/N 30188



.990 Tri-Holder P/N 32042



38mm Tri-Holder P/N 32064



2.5" SQ. .990 Pilot P/N 40205



RP-4 Machined Pilot P/N 40285



BFZ 100X70/2

HD DRILLING BUCKET CUTTER BAR STYLE









HD DRILLING BUCKET CUTTER BAR STYLE SPECIFICATIONS

Diameters: 60" - 144"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page 58 for material specifications and pin-on

options.

Dump Bottom System (Auto or Manual) Custom sizes greater than 144" available upon request.





38mm Dragon's Tooth®



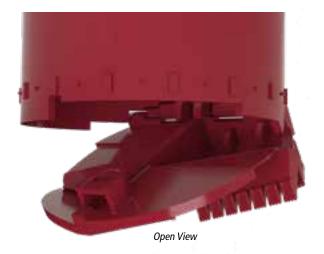
38mm Tri-Holder P/N 32064



RP-4 Machined Pilot P/N 40285

TAPERED BOTTOM DRILLING BUCKET





Tapered bottom drilling buckets are designed to trap spoil using a simple hinged door that opens while down pressure is being applied. Emptying the bucket is hassle free with our automatic or manual dumping mechanism. For more information contact one of our sales representatives today.

TAPERED BOTTOM DRILLING BUCKET SPECIFICATIONS

Commonly Requested Diameters: 36" – 144"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Dump Bottom System (Auto or Manual) Custom sizes greater than 144" available upon request.



SINGLE OPEN CLEAN OUT BUCKET







Exploded View



Flat Bottom View

SINGLE OPEN CLEAN OUT BUCKET SPECIFICATIONS

Recommended Diameters: 24" - 60"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page 58 for material specifications and pin-on

options.

Dump Bottom System (Auto or Manual)

DOUBLE OPEN CLEAN OUT BUCKET







Exploded View

DOUBLE OPEN CLEAN OUT BUCKET SPECIFICATIONS

Recommended Diameters: 60" - 144"

Kelly boxes: All kelly boxes made to customer specifications

Barrels: Cylinders up to 2" wall available

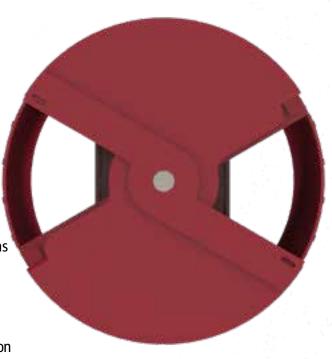
Barrels undersized to meet max cut specifications

Barrel height: Specified by customer

Barrel details: See page **58** for material specifications and pin-on

options.

Dump Bottom System (Auto or Manual)
Custom sizes greater than 144" available upon request.



Flat View - Bottom

DRILLING BUCKET PARTS

ARROWHEAD DUMP ASSEMBLY



Arrowhead Male LARGE P/N 10865 **MEDIUM P/N 10864 SMALL P/N 10863**



Clevis End P/N 10899 & 10900



Plunger Cap P/N 10890



Plunger Pin P/N 10892 & 10894



Plunger Shaft P/N 10891 & 10893



Plunger Spring P/N 10895



Plunger Tube P/N 10889



Pull Handle Receiver P/N 10867 & 10886



Slide Wedge P/N 10896, 10897, 10898 & 10901



Spring P/N 10883





HINGES



Barrel Hinge Plates LARGE P/N 10841 & 10845 MEDIUM P/N 10840 & 10843



Bottom Hinge Plates Large P/N 10813 & 10814



Bottom Hinge Plates Medium P/N 10811 & 10812



Hinge Assembly - Small







Guide Sleeve P/N 10918



Hook P/N 10920



Hook Pin P/N 10919 & 10925



Hook Shaft P/N 10917



Plunger Pin P/N 10909 & 10916



Plunger Shaft P/N 10908 & 10938



Plunger Spring P/N 10914



Plunger Tube P/N 10906



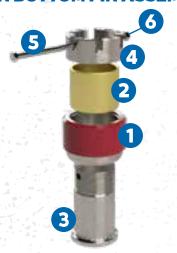


Side Plate P/N 10905



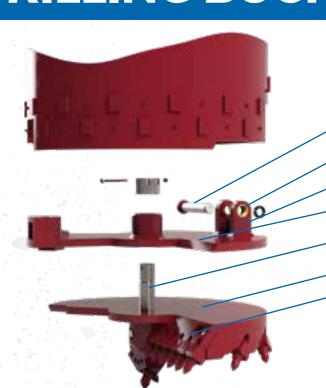
Wrench for Spin Bottom Pin Assembly LARGE P/N 10838 MEDIUM P/N 10837

SPIN BOTTOM PIN ASSEMBLY



ITEM	LARGE P/N	MEDIUM P/N	SMALL P/N
1 Boss	10819	10818	10817
2 Manganese Bronze Bushing	10822	10821	10820
3 Spin Bottom Pin	10825	10824	10823
Castle Nut	10828	10827	10826
5 Hex Bolt	10831	10830	10829
3 Hex Nut	10834	10833	10832

DRILLING BUCKET PARTS



ROCK DRILLING BOTTOM

Hinge Pin – High Strength Alloy

Hinge Bushings – Manganese Bronze

Hinge Plates – *A514 T1*

Mid Plate - A572 GR50

Spin Bottom Pin – 4140 Annealed

Bottom Plate – A572 GR50

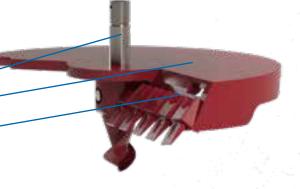
Cutter Bar - A514 T1

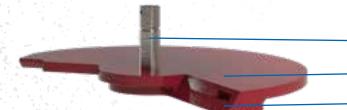


Spin Bottom Pin – 4140 Annealed

Bottom Plate – *A572 GR50*

Dirt Cutter Bar - A514 T1





CLEAN OUT BOTTOM

Spin Bottom Pin – 4140 Annealed

Bottom Plate – A572 GR50

Scraper Blade – A514 T1

Material Grade	Tensile Strength
A572 GR50	58,000 – 80,000 psi
A514T1	110,000 – 130,000 psi
4140 Annealed	95,000 psi
High Strength Alloy	175,000 psi
Manganese Bronze	66,700 psi

Pin-on style bottoms allow any of the three options shown above to be used with the same JM bucket. Please contact a Jeffrey Machine Representative with any questions regarding our Drilling & Cleanout Buckets.



OPEN TOP SPIN BOTTOM CLEAN OUT BUCKET



Commonly Requested Diameters: 24"-144" *

Kelly boxes **: All kelly boxes made to customer specifications

Barrels: Up to 2" thick

Barrel height specified by customer

Top Plate: 1" thick material with 1" gussets

- Double stop
- Solid center shaft
- 1½" T-1 scraper blade

Wear Protection: Available upon request

*Custom sizes greater than 144" available upon request



Bottom View

TWIST-LOCK RETRIEVAL BUCKET







TWIST-LOCK RETRIEVAL BUCKET SPECIFICATIONS

Available sizes: 24"-120"

TEETH & HOLDERS FOR OUTSIDE DIAMETER



.990 JeffCut® Holder with:



B40HDS



.990HB



.990 Dragon's Tooth®



38mm JeffCut® Holder with:



38mm Dragon's Tooth®



BKH113



B47K22-H



B47K19L



B47K19H



DRIVE BOXES

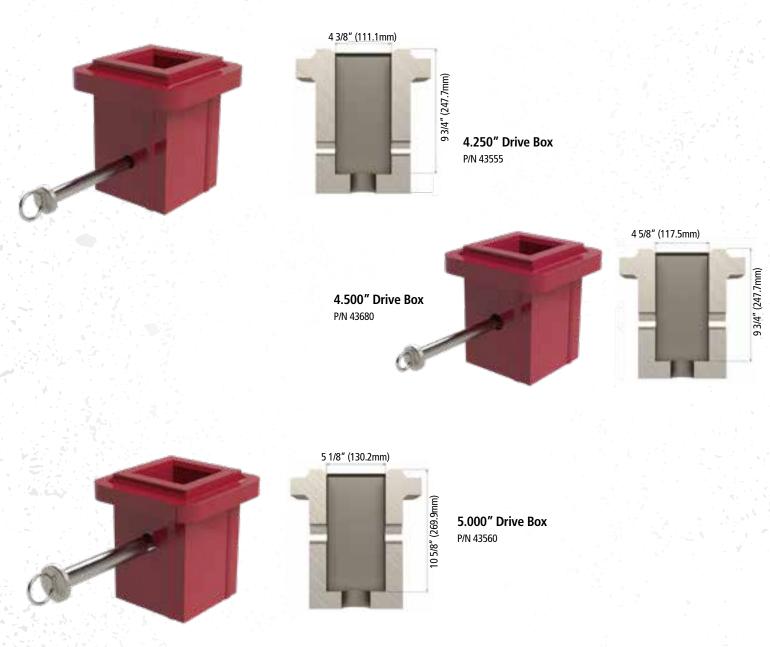
FABRICATED DRIVE BOX RATINGS

Drive Box	Standard Pin Diameter	Maximum Torque	Maximum Pull-Out Force
3.000in Drive Box	7/8"	40,800 ft-lbs	54,100 lbs
3.500in Drive Box	7/8"	52,500 ft-lbs	54,100 lbs
4.000in Drive Box	7/8"	65,500 ft-lbs	54,100 lbs
4.250in Drive Box	1"	123,000 ft-lbs	70,700 lbs
4.500in Drive Box	1."	135,000 ft-lbs	110,000lbs
5.000in Drive Box	1 1/2"	160,000 ft-lbs	159,000lbs
5.250in Drive Box	1 1/2"	174,000 ft-lbs	159,000lbs
6.000in Drive Box	1 1/2"	217,000 ft-lbs	159,000lbs
7.000in Drive Box	(2x) 1 1/2"	284,000 ft-lbs	(Double Pin) 318,000lbs
130mm Drive Box	1 1/2"	167,000 ft-lbs	159,000lbs
150mm Drive Box	1 3/4"	210,000 ft-lbs	216,000lbs
200mm Drive Box 18in Short Hole	2 3/8"	359,000 ft-lbs	(Double Pin) 797,000lbs
200mm Drive Box HD 18in Short Hole	2 3/8"	511,000 ft-lbs	(Double Pin) 797,000lbs
200mm Drive Box 18in Tall Hole	2 3/8"	359,000 ft-lbs	(Double Pin) 797,000lbs
200mm Drive Box HD 18in Tall Hole	2 3/8"	511,000 ft-lbs	(Double Pin) 797,000lbs
200mm Drive Box 21.500in	2 3/8"	359,000 ft-lbs	(Double Pin) 797,000lbs
200mm Drive Box HD 21.500in	2 3/8"	511,000 ft-lbs	(Double Pin) 797,000lbs

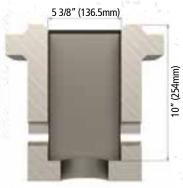


Jeffrey Machine Drive Boxes are *PE Certified.

DRIVE BOXES



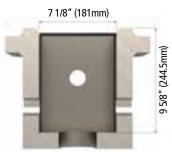






6.000" Drive Box P/N 43600





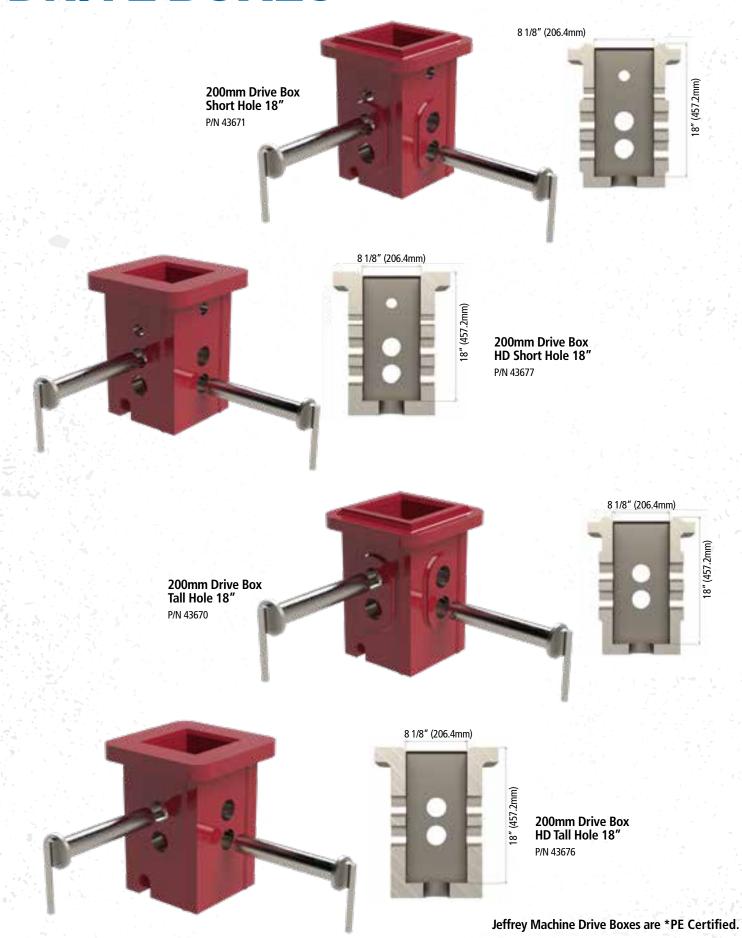


130mm Drive Box P/N 43595





DRIVE BOXES







200mm Drive Box HD 21.5" P/N 43679



DRIVE BOX ADAPTERS



5.000in Drive Box to 4.000in Sq. Male Adapter P/N 28500DBX400SM



200mm Drive Box to 7.000in Sq. Male Adapter P/N 28200DBX700SM

ADAPTER DISCLAIMER: This adapter exceeds the torque rating. Failure can and may occur. Jeffrey Machine will not be held responsible for failure due to over torque. Jeffrey Machine reserves the right to inspect if failure occurs.

Jeffrey Machine Drive Boxes are *PE Certified.



SHIM BOXES

If you have multiple size kelly bars you can buy 1 tool and 3 shim boxes instead of buying 4 different tools.

Part Number	Description
98525X350SB	5-1/4" to 3-1/2" SHIM BOX
98525X400SB	5-1/4" to 4" SHIM BOX
98525X425SB	5-1/4" to 4-1/4" SHIM BOX
98700X130SB	7" to 130mm SHIM BOX
98700X525SB	7" to 5-1/4" SHIM BOX
98700X600SB	7" to 6" SHIM BOX
98200SX700SB	200mm to 7" SHIM BOX
98200TX700SB	200mm TALL SHIM BOX



7" to 130mm Shim Box P/N 98700X130SB





200mm to 7" Shim Box P/N 98200SX700SB



SHIM BOX CLAUSE: Shim boxes are made to fit Jeffrey Machine manufactured Kelly Drive boxes. Our shim boxes are fabricated then machined for a precise fit. Jeffrey Machines shim boxes are not guaranteed to fit in other manufactures boxes, for true measurements on shims please contact one of our sales representatives for more information.



TEETH

.990 Teeth



.990HB Conical Tooth

P/N 30122

1" (25mm)

1 5/16" (33mm)







P/N 34380

ooth 12

38mm Teeth





38mm Teeth















Hard Surfaced Teeth



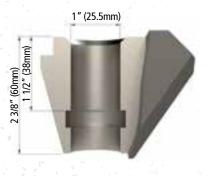


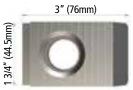




HOLDERS

.990 Holders





.990 Dragon's Tooth® Holder P/N 32049







.990 Machined Holder P/N 32045

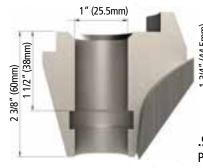






.990 JeffCut® Holder P/N 32150





1 3/4" (44.5mm) 2 3/4" (70mm)

.990 Tri-Holder P/N 32042







.990 Jeff444 Tri-Holder P/N 32104



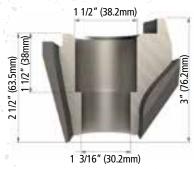


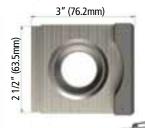


C-30 .990 Holder P/N 32040



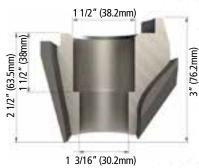
38mm Holders





38mm Jeff444 Tri-Holder P/N 32102



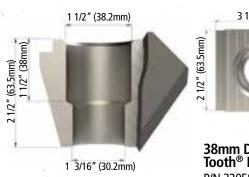




38mm Tri-Holder P/N 32064

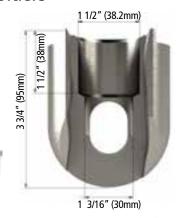


38mm Holders



2 1/2" (63.5mm)

38mm Dragon's Tooth® Holder P/N 32058

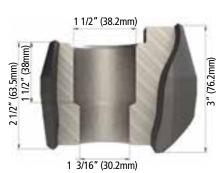




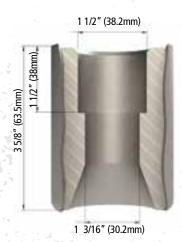
JeffCut® 38mm Holder P/N 32152







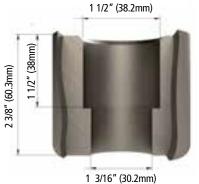






JM85 Machine Holder P/N 32060





JM85 Machine Holder for C4-1 P/N 32092





DIRT TEETH & HOLDERS





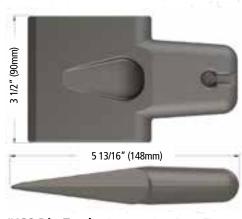






#134 Dirt Tooth P/N 34255

5 7/8" (149mm)



#132 Dirt Tooth P/N 34251













PILOT BITS



7 1/4" (184mm) CUT DIAMETER

2 1/2" SQ. .990 Dragon's Tooth® Pilot P/N 40216



7 1/4" (184mm) CUT DIAMETER

2 3/8" Reg API .990 Pilot P/N 40410





3 1/2" Reg API .990 Pilot P/N 40460





2 7/8" IF .990 Pilot P/N 40500





3 1/2" IF .990 Pilot P/N 40520





2 1/2" SQ. DB-6 Pilot P/N 40220





2 1/2" SQ. BP-08 Pilot P/N 40470





2 1/2" SQ. Pilot Adapter P/N 42040















RP-4 Machined Pilot P/N 40287





177mm SQ. Pilot Adapter P/N 42080

MISCELLANEOUS PARTS



BULLET TOOTH PULLERS



123 Bullet Tooth Puller P/N 30542

.990 Bullet Tooth Puller P/N 30512

38mm Series Puller P/N 30524



JEFFREY MACHINE WARRANTY DISCLAIMER

Products manufactured by Jeffrey Machine are subject to wear; and occasional breakage should, therefore, be expected.

Jeffrey Machine products are warranted from defects in material and workmanship for a period of 30 days from the date of invoice.

Jeffrey Machine reserves the right to inspect all failure that may occur before any repairs or modifications from original manufacturing design are performed.

Any repairs or modifications performed without written permission from Jeffrey Machine will void all warranty.

In no event shall Jeffrey Machine be liable for consequential or incidental damages.



DERRICK AUGER FEATURES & BENEFITS

It's important to note that we manufacture all of our own tools so we can tightly control the quality.

We can also customize as needed.

Derrick augers come equipped with heavy duty hex collars

D.O.M. Hydraulic Tube 85,000 P.S.I.

Gusset (extra flighting start) for better balanced cut and added strength means less wear and tear on your rig.



HOW TO ORDER

SELECT YOUR MODIFICATIONS

Mix and match shanks, bits and pilots for a large number of possibilities that can be made to specifically fit your application.

HEX COUPLERS, HUBS & ADAPTERS

Available in multiple sizes, SEE PAGE 94.

AUGER LENGTH

Overall length of 104".

FLIGHTING

40" to 60" of 3/8" flighting available. SEE PAGE 121.

MEDIUM DUTY CENTER HEADS

Available from 8" to 48", SEE PAGE 95.

SHANK PLATES

Available in multiple teeth type and quantitites, **SEE PAGES 96-97.**

TEETH

For a list of available teeth for Derrick Augers, SEE PAGE 99.

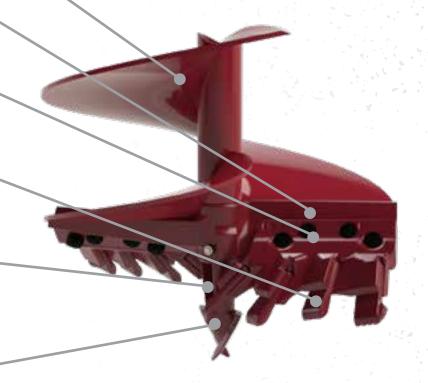
PILOT ADAPTERS

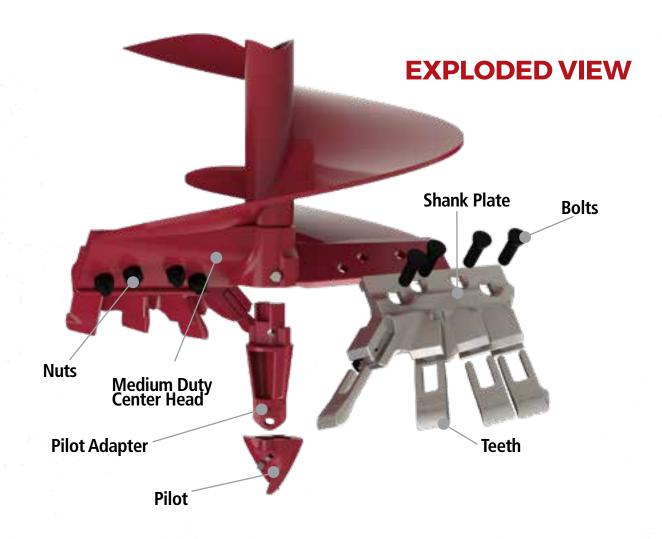
For a pilot adapter available, SEE PAGE 105.

PILOT BITS

For a list of all available, **SEE PAGES 104-105**.

Custom orders cannot be refunded, canceled, or returned for any reason.





4 BASIC SET-UPS

MEDIUM DUTY DIRT

Loose and compacted soils, stiff clays and soft shelves. (SHOWN ABOVE)

MEDIUM DUTY BOLT-ON BULLET

Limestone, lava rock, medium sand stone and frozen materials. Medium to hard formations. (SEE PAGE 90)

MEDIUM DUTY CARBIDE

High abrasion, frozen soil, low impact. (SHOWN ABOVE)

MEDIUM DUTY BOLT-ON DRAGON'S TOOTH®

Aggresively cuts through limestone, coral, lava rock, medium sand stone and frozen materials. Medium to hard formations. (SEE PAGE 91)

UTILITY DIRT TOOTH AUGER

The right tool for loose and compacted soils, stiff clays, and soft shales.



UTILITY DIRT AUGER WITH FH-205 DIRT PILOT

- · 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of 3/8" thick flighting.



1652 Gauge Dirt Tooth P/N 34010



FH-205 Dirt Pilot



1650 Dirt Tooth P/N 34000

Diameter	Part No.
9"	9-104-60DA
10"	10-104-60DA
12"	12-104-60DA
14"	14-104-60DA
16"	16-104-60DA
18"	18-104-60DA
20"	20-104-60DA
22"	22-104-60DA
24"	24-104-60DA
30"	30-104-48DA
36"	36-104-48DA
42"	42-104-48DA
48"	48-104-48DA

MEDIUM DUTY BOLT-ON CARBIDE AUGER

The right tool for high abrasion, frozen soil, and low impact.



EDIUM DUTY BOLT-ON CARBIDE **AUGER WITH FH-205HFTC CARBIDE PILOT PILOT**

- 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of 3/8" thick flighting.

Diameter	Part No.
9"	9-104-60CA
10"	10-104-60CA
12"	12-104-60CA
14"	14-104-60CA
16"	16-104-60CA
18"	18-104-60CA
20"	20-104-60CA
22"	22-104-60CA
24"	24-104-60CA
30"	30-104-48CA
36"	36-104-48CA
42"	42-104-48CA
48"	48-104-48CA

9"	9-104-60CA
10"	10-104-60CA
12"	12-104-60CA
14"	14-104-60CA
16"	16-104-60CA
18"	18-104-60CA
20"	20-104-60CA
22"	22-104-60CA
24"	24-104-60CA
30"	30-104-48CA
36"	36-104-48CA
42"	42-104-48CA
48"	48-104-48CA

MEDIUM DUTY BULLET TOOTH AUGER

The right tool for solid rock, fracturable rock, and compacted soils.





2 3/8" Reg API .765 Pilot P/N 40100



1 3/4" Square Pilot P/N 40180



.765CB Conical Tooth P/N 30042

MEDIUM DUTY BULLET TOOTH AUGER WITH 1 3/4" SQUARE ROCK PILOT OR API ROCK PILOT

- · 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of flighting.
- 1" thick lower flight, 3/8" upper flight, and standard pilot bit.

Diameter	Part No.
9"	9-104-60BA
10"	10-104-60BA
12"	12-104-60BA
14"	14-104-60BA
16"	16-104-60BA
18"	18-104-60BA
20"	20-104-60BA
22"	22-104-60BA
24"	24-104-60BA
30"	30-104-48BA
36"	36-104-48BA
42"	42-104-48BA
48"	48-104-48BA

MEDIUM DUTY DRAGON'S TOOTH® AUGER

The right tool for solid rock, fracturable rock, and compacted soils.





- · 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of 3/8" thick flighting.
- 1" thick lower flight, 3/8" upper flight, and standard pilot bit.



1 3/4" Square Dragon's Tooth® .875 Pilot P/N 40239



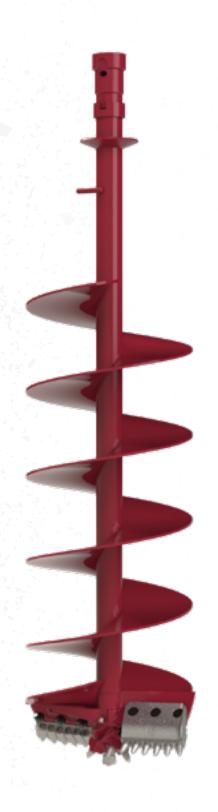
.875 Dragon's Tooth® P/N 30112

Diameter	Part No.
9"	9-104-60DRA
10"	10-104-60DRA
12"	12-104-60DRA
14"	14-104-60DRA
16"	16-104-60DRA
18"	18-104-60DRA
20"	20-104-60DRA
22"	22-104-60DRA
24"	24-104-60DRA
30"	30-104-48DRA
36"	36-104-48DRA
42"	42-104-48DRA
48"	48-104-48DRA

^{*} The Dragon's Tooth® is an original design of Jeffrey Machine, Inc.

MEDIUM DUTY BOLT-ON BULLET TOOTH AUGER

The right tool for limestone, lava rock, medium sand stone, and frozen materials. Best used in medium to hard formations.



UTILITY BOLT-ON BULLET AUGER WITH RCP-6.5 ROCK PILOT

- 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of 3/8" thick flighting.
- · RCP-6.5 Rock Pilot

Diameter	Part No.
16"	16-104-60BOB
18"	18-104-60BOB
20"	20-104-60BOB
24"	24-104-60BOB



RCP-6.5 Pilot P/N 40240





Rock Shank Plate

Reference page 96 for available sizes

MEDIUM DUTY BOLT-ON DRAGON'S TOOTH® AUGER

Consumes limestone, lava rock, coral, medium sand stone, and frozen materials. Excels in medium to hard formations.



UTILITY BOLT-ON DRAGON'S TOOTH® WITH DCP-6.5 ROCK PILOT

- 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of 3/8" thick flighting.

Diameter	Part No.
16"	16-104-60BOD
18"	18-104-60BOD
20"	20-104-60BOD
24"	24-104-60BOD



DCP-6.5 Pilot P/N 40238



Dragon's Tooth® Shank Plate

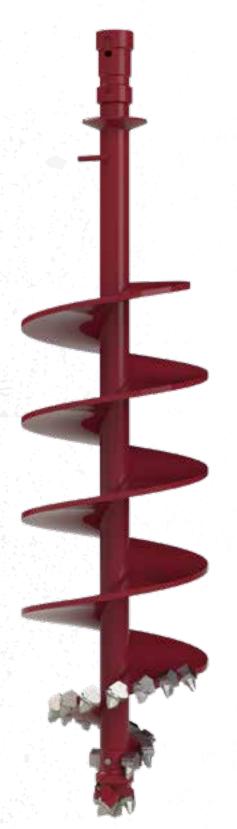
Reference page 96 for available sizes



*The Dragon's Tooth® is an original design of Jeffrey Machine, Inc.

SPIRAL DRAGON'S TOOTH® ROCK AUGER

The right tool for solid rock, fracturable rock, and compacted soils.



SPIRAL DRAGON'S TOOTH® ROCK AUGER

- · 2", 2 1/2", and 2 5/8" hex hubs.
- Overall length of 104", with 40" to 60" of 3/8" thick flighting.
- 1" thick lower flight, 3/8" upper flight, and standard pilot bit.



1 3/4" Square Dragon's Tooth® .875 Pilot P/N 40239



.875 Dragon's Tooth® P/N 30112

Diameter	Part No.
9"	9-104-60SDA
10"	10-104-60SDA
12"	12-104-60SDA
14"	14-104-60SDA
16"	16-104-60SDA
18"	18-104-60SDA
20"	20-104-60SDA
22"	22-104-60SDA
24"	24-104-60SDA
30"	30-104-48SDA
36"	36-104-48SDA
42"	42-104-48SDA
48"	48-104-48SDA



HEX COUPLERS, HUBS & ADAPTERS

HEX ADAPTERS



2.5" Hex Hub X 2" Hex Male P/N 28000



2.5" Hex Hub X 2.625" Hex Male P/N 28002



2" Hex Hub X 2.5" Hex Male P/N 28003



2.625" Hex Hub X 2.5" Hex Male P/N 28004

HEX COUPLERS



2" Hex X 2" **Hex Coupler** P/N 27000F



2.5" Hex X 2" **Hex Coupler** P/N 27010



2.625" Hex X 2.625" Hex Coupler P/N 27020F



2.625" Hex X 2" Hex Coupler P/N 27030



2.625" Hex X 2.5" **Hex Coupler** P/N 27040



2.5" Hex X 2.5" Hex Coupler P/N 27050

HEX HUBS



2" Hex Hub P/N 43030



2 1/2" Hex Hub P/N 43050



2 5/8" Hex Hub P/N 43070



3" Hex Hub P/N 43080

MEDIUM DUTY CENTER HEADS

Description	Part Number
8" MD Center Head	38000
9" MD Center Head	38010
10" MD Center Head	38020
12" MD Center Head	38030
14" MD Center Head	38040
16" MD Center Head	38050
18" MD Center Head	38060
20" MD Center Head	38070
22" MD Center Head	38080
24" MD Center Head	38090
30" MD Center Head	38100
36" MD Center Head	38110
42" MD Center Head	38120
48" MD Center Head	38130



8" MD Center Head P/N 38000



12" MD Center Head P/N 38030



18" MD Center Head P/N 38060



24" MD Center Head P/N 38090



30" MD Center Head P/N 38100



SHANK PLATES

Part Number	Teeth Quantity
37000	1
37020	2
37040	2
37050	2
37060	2
37070	3
37080	3
37090	3
37100	3
37110	3
37120	3
37130	3
37140	4
37150	4
37160	4
37170	4
37180	4
37190	4
37200	4
37210	5
37220	5
37230	2
37240	3
	37020 37040 37050 37060 37070 37080 37090 37100 37110 37120 37130 37140 37150 37160 37170 37180 37190 37200 37220 37230



810x Teeth Quantity: 1 P/N 37000



16 x 1Teeth Quantity: 2
P/N 37050



18 x 2 Teeth Quantity: 3 P/N 37080



267 x 1Teeth Quantity: 4
P/N 37150



42 x 1Teeth Quantity: 5
P/N 37210



48 x 2Teeth Quantity: 3
P/N 37240



C016 Blank P/N 37310



C018 Blank P/N 37320



C020 Blank P/N 37330



C024 Blank P/N 37340

^{*}Only outside shank. Must be used with a 36 x 1 or 36 x 2 shank sold separately.

ROCK SHANK KITS

Includes shank plates for bullet teeth and Dragon's Teeth®, the teeth and pilots.



Description	Quantity of Teeth per Shank
RSK16 Shank Plate Kit & Pilot (37900)	4
RSK18 Shank Plate Kit & Pilot (37910)	5
RSK20 Shank Plate Kit & Pilot (37920)	5
RSK24 Shank Plate Kit & Pilot (37930)	6



Description	Quantity of Teeth per Shank
DSK16 Dragon's Tooth® Shank Plate Kit (37940)	4
DSK18 Dragon's Tooth® Shank Plate Kit (37950)	5
DSK20 Dragon's Tooth® Shank Plate Kit (37960)	5
DSK24 Dragon's Tooth® Shank Plate Kit (37970)	6

TWIN HELIX AUGER





TWIN HELIX AUGER SPECIFICATIONS

Commonly Requested Diameters: 18" – 36"

Type: Medium Duty Boring Head (type-6)

Cut: DC/DF or DC/SF

Kelly boxes: All kelly boxes made to customer specifications

Center Shaft: 4" Solid Shaft

Flight: 3/8" - 1" thickness available



1650 Dirt Tooth P/N 34000



1656 Carbide Tooth P/N 34030



Tooth



1652 Gauge

1658 Carbide Tooth P/N 34040



CONSOLIDATED ROCK / ABRASIVE SOIL PILOT

Carbide - 1656 / 1658 teeth

P/N 40050 (P1656)

Dirt - 1650 / 1652 teeth

P/N 40040 (P1650)

UTILITY DRILLING TOOLS

TEETH & HOLDERS

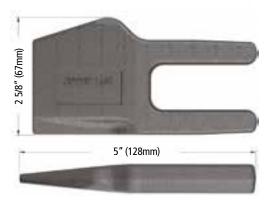
16 Series



Standard Digging 1650 Dirt Tooth

P/N 34000





Standard Digging 1652 Gauge Tooth

P/N 34010





5" (128mm)

Tungsten Carbide Tooth 1656

- · Highly abrasive soil
- · Low mpact

P/N 34030





Carbide Gauge Tooth 1658

· Highly abrasive soil

P/N 34040







1650 HFFTC Tooth

- Abrasive soil
- Impact, hard faced with carbide chips on two sides

P/N 34002





1ft. Length Rubber Lok P/N 39110



1 X S Holder P/N 36040





WT50 Holder



TEETH & HOLDERS

20 Series



5" (128mm)

2077 Carbide Tooth

P/N 34050





2078 Carbide Tooth

P/N 34060





WA-70 P/N 36030



TEETH & HOLDERS

CARBIDE FACED TOOTH

- · Carbide faced tooth for the step rock auger
- · Best used in solid, non-fracturable rock





PFC-5H P/N 36020











ACCESSORIES



39110	1 ft. Length Rubber Lock
39150	Soft Hammer

BULLET TOOTH PULLERS



TEETH & HOLDERS















.**735 Holder** P/N 32011





.**765 Holder** P/N 32021





.875 Holder P/N 32035





.875 JeffCut® Holder P/N 32004



DRAGON'S TOOTH® NON-ROTATING TOOTH

- · Fits .875 Dragon's Tooth® holder
- Non-rotating design

- · Large long-life carbide
- · Shank plates and pilots available



2 1/2" (63.5mm) 2 1/2" (63.5mm)

.875 Machined Dragon's Tooth® Holder P/N 32000







PILOT BITS & ADAPTERS



RCP 6.5 BOLT-ON AUGER PILOT

6 1/2" Cut Diameter

.875 Bullet Teeth and CP-18 Carbide Pilot Tip



CP-18 PILOT 1 1/8" - 4 UNC

P/N 40390



STANDARD DIRT PILOT - FH205

Best utilized in standard dirt applications P/N 40000



43/4" CARBIDE PILOT (23/8" API THREAD)

Best used in solid, non-fracturable rock P/N 40080 (P6000)



CONSOLIDATED ROCK/ ABRASIVE SOIL PILOT

Carbide - 1656 / 1658 teeth P/N 40050 (P1656)

Dirt - 1650 / 1652 teeth P/N 40040 (P1650)



1 3/4" SQUARE .765 **ROCK PILOT**

Works well on fractured to nonfractured rock. Also available with 2 3/8" API thread.

P/N 40180



CONSOLIDATED ROCK/ ABRASIVE SOIL PILOT

- Impact possible

P/N 40010 (FH205-HFTC)



5" CARBIDE TIPPED DRILL HEAD 5.0-TCH-171

5" diameter carbide tipped drill head is best used in concrete, stone, and frozen ground

P/N 40060



PILOT ADAPTER PA-183-L

Comes with a bolt and nut P/N 42010



2 3/8" Reg API Pilot .875 Dragon's Tooth® P/N 40131



2 3/8" Reg API .875 Pilot P/N 40122



.875 Dragon's Tooth® Pilot Standard Blank P/N 40234



(TPB-2) 1-3/4" SQ .765 Pilot Blank (Short) P/N 40170S



.875 1 3/4" Square Dragon's Tooth® Pilot Blank P/N 40235



1 3/4" Cast MM1 Pilot P/N 40192



FH-105 Pilot P/N 40020



1-3/4" SQ. DB-175 Adapter P/N 42020



1-3/4" SQ. DB-175-A Adapter P/N 42030



3 1/2" Reg API Male Pin P/N 40430



3 1/2" Reg API Pilot FM Adapter P/N 42090



2 3/8" API Pilot FM Adapter P/N 42050



2 3/8" Reg API Male Pin P/N 40420



2 7/8" Reg API Pilot FM Adapter P/N 42060



2 7/8" IF FM Pilot FM Adapter P/N 42070

KELLY BARS



1	Part No.	Hub Size	Bar Size	Bar Length
	25025	2"	2"	72"
	25075	2 1/2"	2 1/2"	72"
	25130	2 5/8"	2 5/8"	72"
	25140	3"	3"	72"



KELLY BAR HEX EXTENSION SHAFTS WITH HOLES

Part No.	Bar Size	Bar Length
25005	2"	72"
25055	2 1/2"	72"
25095	2 5/8"	72"
25145	3"	72"

^{*}Custom lengths and combinations of hubs and kelly bars available

DERRICK CORE BARREL

DERRICK CORE BARREL SPECIFICATIONS

Common Diameters: 16", 18", 20", 24" (Other sizes available upon request.)

Hex Hubs: 2", 2 1/2", 2 5/8" and 3"

Extensions: Standard length approx. 83". Hex connecting pin and hard-

ware included. (Length can be specified by customer.)

Barrels: 1" wall. Solid, single or double window available.

Barrel Height: Standard height is 36". (Height can be specified by customer.)



.735CB Conical Tooth P/N 30012



.765CB Conical Tooth P/N 30042





.**875 Dragon's Tooth®** P/N 30112-N

* .990 Conical and .990 Dragon's Tooth® available for Derrick Core Barrels using 3" Hex.



.**735 Holder** P/N 32011



.765 Holder P/N 32021



.875 JeffCut® Holder P/N 32004

107

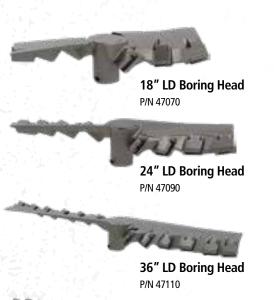
LIGHT DUTY AUGERS

Available in sizes 6" to 48"

LIGHT DUTY ROCK AUGER

WITH 134" SQUARE ROCK PILOT WITH .765 TEETH

- · 2", 2 1/2", 2 5/8" hex hubs
- · 2", 2 9/16" round hubs
- Overall length of 42" 48"
- 1" thick lower flight, 3/8" upper flight





Diameter	Part No.
6"	9706LDRA
8"	9708LDRA
9"	9709LDRA
10"	9710LDRA
12"	9712LDRA
14"	9714LDRA
16"	9716LDRA
18"	9718LDRA
20"	9720LDRA
22"	9722LDRA
24"	9724LDRA
30"	9730LDRA
36"	9736LDRA
42"	9742LDRA
48"	9748LDRA



42" LD Boring Head P/N 47120



48" LD Boring Head P/N 47130

LIGHT DUTY DIRT/CARBIDE AUGER

WITH 35 SERIES DIRT OR CARBIDE TEETH

- · 2", 2 1/2", 2 5/8" hex hubs
- · 2", 2 9/16" round hubs
- · Overall length of 42" 48"
- · 3/8" thick flighting



Diameter	Dirt P/N	Carbide P/N
6"	9706LDDA	9706LDCA
8"	9708LDDA	9708LDCA
9"	9709LDDA	9709LDCA
10"	9710LDDA	9710LDCA
12"	9712LDDA	9712LDCA
15"	9715LDDA	9715LDCA
16"	9716LDDA	9716LDCA
18"	9718LDDA	9718LDCA
20"	9720LDDA	9720LDCA
24"	9724LDDA	9724LDCA
30"	9730LDDA	9730LDCA
36"	9736LDDA	9736LDCA
42"	9742LDDA	9742LDCA
48"	9748LDDA	9748LDCA

LIGHT DUTY TEETH, PILOTS & ACCESSORIES

13 Series



1335 Dirt ToothApplication: Ordinary digging P/N 45000



1335-HFF Carbide Hard Faced Tooth Application: Abrasive frozen soil P/N 45020



1336 Carbide Insert Tooth Application: Abrasive frozen soil P/N 45030





1337 Gauge Dirt Tooth Application: Ordinary digging P/N 45040





1338 Carbide Gauge ToothApplication: Abrasive frozen soil
P/N 45110





5T30 Chisel Point Tooth Application: Loose rock, compacted P/N 45070





5T30-C Chisel Point Tooth with Carbide

Application: Compacted rock, abrasive soil - no impact P/N 45080



BC58F Dirt Tooth Application: Ordinary digging P/N 45102





1.250in Dirt Pilot (82-P2-35)P/N 46070



82-P2-34 LD 1.250in Sq. Pilot Adapter P/N 46090



2 9/16in Round Hex Hub

P/N 43060



0.625in Plow Bolt and Nut P/N 45125



The light duty auger rack can hold up to eight augers in sizes ranging from a 3" Hex Hub to a 2" Hex Hub. Also, if you need storage space you can have up to six drawers installed for parts and pieces. It is meant to be mobile, so put it in the back of your work truck to have all your tools and pieces ready to go at the jobsite.



ANCHOR PLACEMENT TOOLS & ACCESSORIES

5 1/4" BOLT CIRCLE KELLY BAR ADAPTERS

For 10,000 ft. lb. maximum installing torque

Each of these Kelly bar adapters has six holes for $\frac{1}{2}$ " bolts on a 5 $\frac{1}{4}$ " bolt circle and comes with six $\frac{1}{2}$ " grade 5 bolts, nuts and lock washers, and bent arm pin with coil lock.



2" Kelly Bar Adapter Shape: Hex Weight: 10 lb. Dimensions: X: 2" Y: 5" Z: 6 1/8" P/N 20350



2 1/2" Kelly Bar Adapter Shape: Hex Weight: 10 lb. Dimensions: X: 2 1/2" Y: 4 1/4" Z: 8 1/4" P/N 20040



2 5/8" Kelly Bar Adapter Shape: Hex Weight: 10 lb. Dimensions: X: 2 5/8" Y: 4 1/4" Z: 8 1/4" P/N 20050

STANDARD LOCKING DOG ASSEMBLY

For 10,000 ft. lb. maximum installing torque



Has six ½" holes on 5¼" bolt circle, and includes six ½" grade 5 bolts, nuts and lock washers.

Standard Locking Dog
P/N 20090



FOR SS HELICAL PIER ANCHORS

These drive tools require the appropriate Kelly bar adapter. Each comes with bolts, nuts and lock washers, and a bent arm retaining pin with coil lock.



SS5/SS150 Anchor Series

Bolt Circle: 5 1/4" 6 Holes: 1/2" Approx. Weight: 7 lb. P/N 20030

SS175 Anchor Series

Bolt Circle: 7 5/8" 12 Holes: 5/8" Approx. Weight: 18 lb. P/N 20131



SS5/SS150/RR Drive Tool Fits 6 Bolt Locking Dog

Approx. Weight: 8 lb. P/N 20081

SS5/SS150/RR Drive Tool Fits 12 Bolt Locking Dog

Approx. Weight: 11 lb. P/N 20231

75/8" BOLT CIRCLE KELLY BAR ADAPTERS

For 15,000 ft. lb. maximum installing torque

Each of these Kelly Bar Adapters has twelve holes for 5/8" bolts on a 7 5/8" bolt circle and comes with twelve 5/8" grade 2 bolts, nuts and lock washers, and bent arm pin with coil lock.





2 1/2" Kelly Bar Adapter Shape: Hex Weight: 23 lb.

Dimensions: **X**: 2 1/2" **Y**: 4 3/8" **Z**: 8 1/4" P/N 20140



2 5/8" Kelly Bar Adapter

Shape: **Hex**Weight: 23 lb.
Dimensions: **X**: 2 5/8" **Y**: 4 3/8" **Z**: 8 1/4"
P/N 20150



3" Kelly Bar Adapter

Shape: **Hex**Weight: 27 lb.
Dimensions: **X**: 3" **Y**: 3 1/2" **Z**: 8"
P/N 20411



3" Kelly Bar Adapter

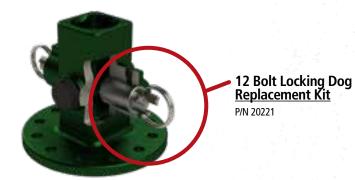
Shape: Square
Weight: 23 lb.
Dimensions:
X: 3" Y: 3 1/2" & 2 1/16" Z: 7"
P/N 20451

STANDARD LOCKING DOG ASSEMBLY

For 15,000 ft. lb. maximum installing torque



12 Bolt Locking Dog P/N 20170



ANCHOR INSTALLATION TOOLS



SAT-1 P/N 20345



SAT-80 P/N 20340

7 FT. DRIVE-END WRENCH



4	Part No.	Description	Weight, ea.
The state of the s	20190	Installs 15,000 ft.lb. (large hub) drive string system anchors 8,000 ft.lb. (large hub) drive string system and all 11/2" core anchors	73 lb.
100000	20250	Hybrid drive-end wrench installs 8,000 ft.lb. (large hub) anchors, 6,000 ft.lb. anchors, 7,000 ft.lb. anchors	64 lb.
The second second	20060	Standard drive-end wrench installs 8,000 ft.lb. (small hub) anchors, 10,000 ft.lb. (small hub) anchors, 4,000 ftlb. anchors, 6,000 ft.lb. anchors	57 lb.
	20321M	Reduced drive-end wrench installs 8,000 ft.lb. (small hub) anchors, 10,000 ft.lb. (small hub) anchors, 4,000 ft.lb. anchors, 6,000 ft.lb. anchors (Fits 12 Bolt Locking Dog)	73 lb.



31/2 FT. DRIVE-END WRENCH



Part No.	Description	Weight, ea.
20180	Installs 15,000 ft.lb. (large hub) drive string system anchors 8,000 ft.lb. (large hub) drive string system and all $1^{1}/_{2^{n}}$ core anchors	36 lb.
20240	Hybrid drive-end wrench installs 8,000 ft.lb. (large hub) anchors, 6,000 ft.lb. anchors	28 lb.
20070	Standard drive-end wrench installs 8,000 ft.lb. (small hub) anchors, 10,000 ft.lb. (small hub) anchors, 4,000 ft.lb. anchors, 6,000 ft.lb. anchors	29 lb.

EXTENSION WRENCHES

3 1/2 ft. Extension Wrench

Red Bar Weight: 53 lb. P/N 20200

3 1/2 ft. Extension Wrench

Orange Bar Weight: 42 lb. P/N 20010

7 ft. Extension Wrench

Red Bar Weight: 89 lb. P/N 20210

7 ft. Extension Wrench

Orange Bar Weight: 70 lb. P/N 20020

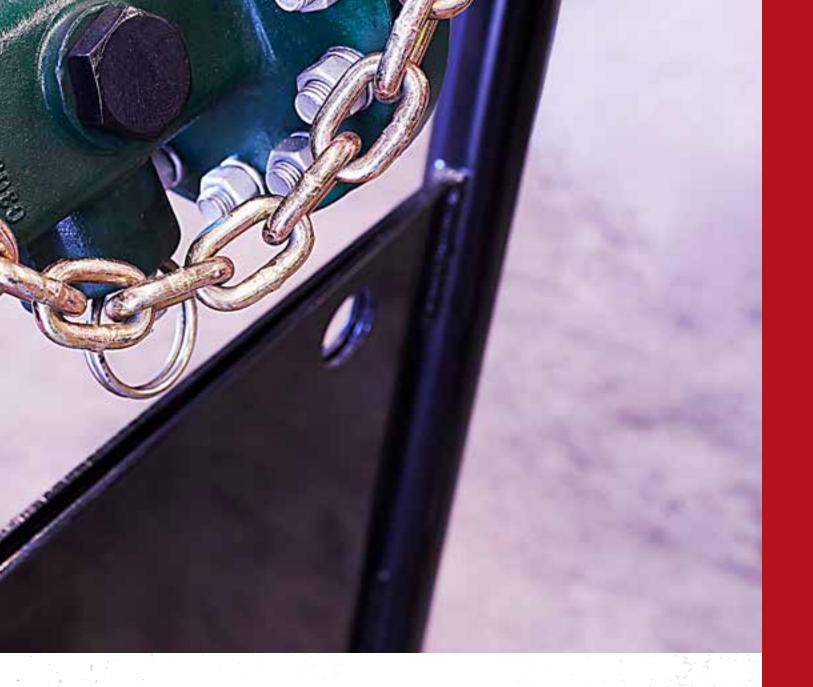


PERFORMANCE TEAM SET-UP (PTS)

It's quick and easy - that's why our customers love it.

No more hunting down the anchor installation parts, or swapping the kelly bar because you no longer need one! Everything stays pinned up to the digger drive and runs off the locking dog.









EXPLODED VIEW

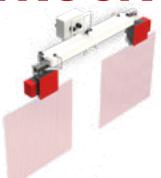
PERFORMANCE TEAM SET-UP AUGER:

- Available in 16", 18", and 24" sizes (Other sizes available upon request)
- Dirt or carbide teeth
- Special PTS square drive box

PERFORMANCE TEAM SET-UP:

- 2 1/2" or 2 5/8" Kelly Bar adapter
- 12 Bolt Locking Dog
- Reduced end or red end anchor bar
- Bolt with click pin for Kelly Bar connection
- Chain with bolt and click pin
- Pin 5/8" x 6" with click pin, lanyard, swivel handle, for auger connection

TRUCK ACCESSORIES



Telescopic Light Bar Assembly P/N 10000



Threaded Pole Extractor P/N 10020



Swivel Sheave 16,000lbs P/N 10045



Swivel Sheave 30,000lbs P/N 10050



3/4" Diameter Cable Step Small Cable Step (4-3/4" X 12") P/N 10055



1 1/4" Diameter Cable Step Large Cable Step (12" X 12") P/N 10060



Pull Out Step (14" X 24") P/N 10070









Utility Pole Safety Light P/N 10130



Top Load Chock Block Holder P/N 10165



Chock Block Holder Left Side P/N 10170



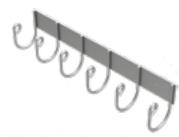
Chock Block Holder Right Side P/N 10175



Hook Rack Fixed (3 Hooks) P/N 10180



Hook Rack Swivel (3 Hooks) P/N 10185



Hook Rack Fixed (6 Hooks) P/N 10210



Hook Rack Swivel (6 Hooks) P/N 10215



Cage Spider Reel (4-3/4" X 12") P/N 10255



Guy Wire Spider Reel (11" Wide) P/N 10260



Guy Wire Basket (6" Wide) P/N 10266



"A" Frame Spider Reel P/N 10280



Stand Up Spider Reel P/N 10285



Stand Up Spider Reel Base P/N 10290



Double Spider Reel P/N 10295



Duplex-Triplex Wire Basket P/N 10300



CB Draw Bar P/N 10310



Wire Storage Rack (Bicycle) P/N 10330



Outrigger Pad Rack Double P/N 10395



Trailer Jack Pivot Set P/N 10510



Bucket Rest Kit P/N 10440



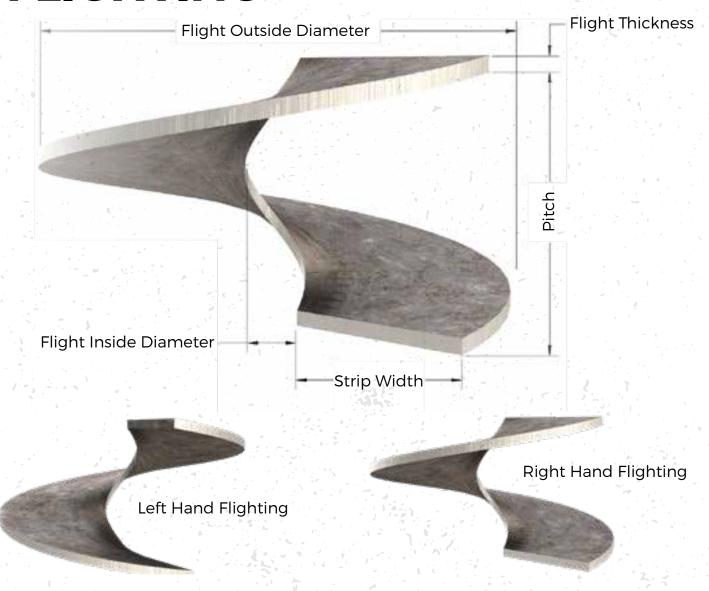
4 Tube Scud Launcher P/N 10475



CR Reel P/N 10305



FLIGHTING

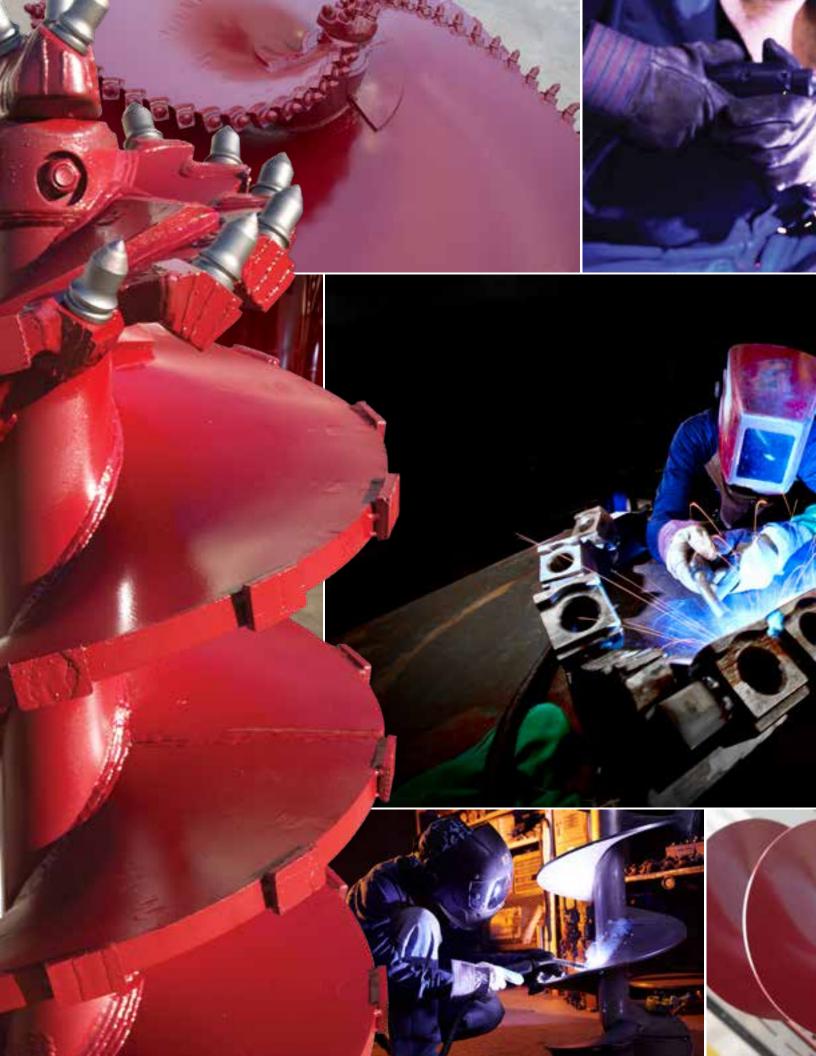


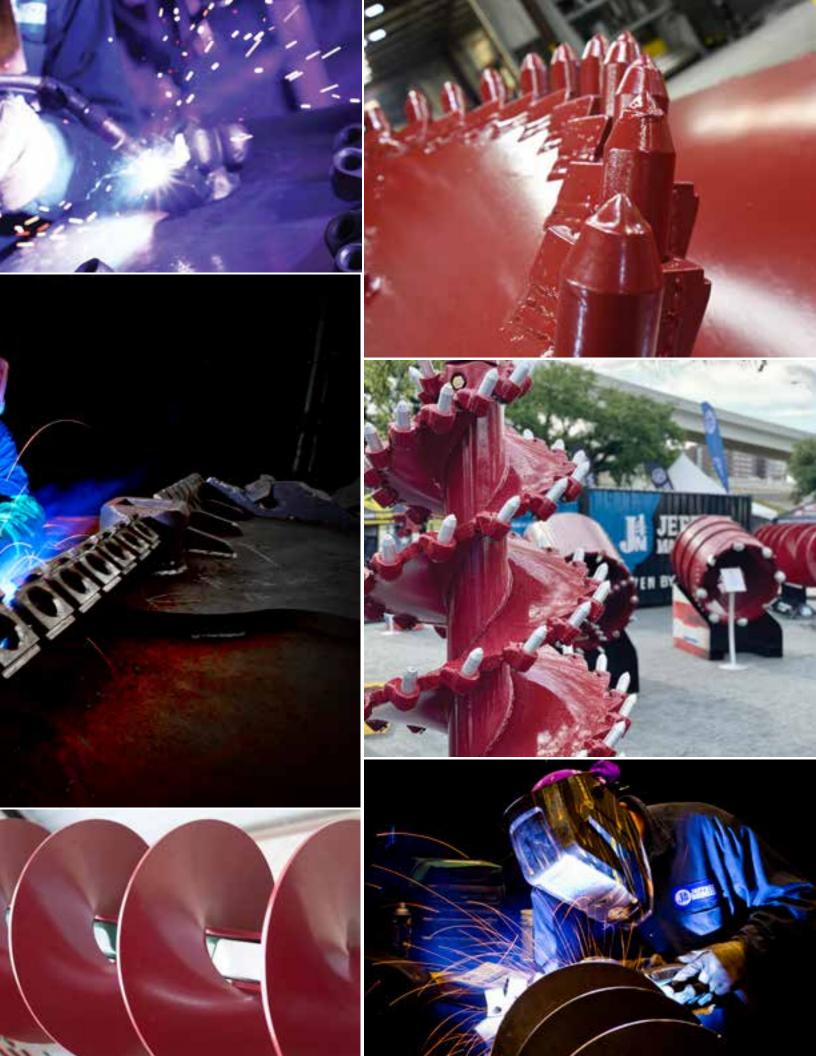
SPECIFICATIONS NEEDED TO QUOTE:

- Outside diameter
- · Pitch
- · Inside diameter

- · Thickness
- · Specify right or left hand flighting









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Specifications are subject to change without notice.

