

Hollow Stem Auger Modifications

Auger Extensions

Auger Extensions are used to compensate for the distance from the ground up to the rig. To order these extensions please specify:

1. Length: standards are 24, 30, 36, 42, or 48 shoulder to shoulder.
2. Tool Joint: Double Key or Triple Key in Standard or Heavy Duty Tapered
3. Auger I.D. (inside diameter)
4. Flighted or flightless. All flightless augers are made with heavy duty tube.

Laser Slotted Augers

These special hollow stem augers are designed to enable sampling of the ground water as it flows through the inside of the auger tube. To maintain the integrity and strength of the auger we use an industrial laser to cut the slots through the auger tube wall. The vertically cut slots are .0015 wide with the number of slots depending on diameter of the auger.

Heavy Duty Flighting

Our standard flighting is 3/8 (9.5 mm) at the outer edge with hardfacing material applied to the working edge. Where severe conditions exist we have cobble chasers available which feature double thick heavy-duty flighting, or any other thickness you desire.

Wide Flighting

Each size auger has a standard flighting size as listed on the catalog sheet. Often there is a need for wider flighting to drill larger size holes. We will custom manufacture augers to meet your width specifications.

Flighting Pitch

The pitch on an auger is the distance between the flights. The standard pitch for our augers is listed on each individual catalog sheet. If you need a different pitch we will be more than happy to make the auger pitch to whatever dimension you need.

I D of Auger

The I.D. (inside diameter) of the Hollow Stem Augers is considered to be the working area of the auger. We manufacture to industry standards or we can make any I.D. that you might require.

Auger Length

Our augers are available in a standard industry length of 5 feet but we have manufactured augers up to 40 feet long and metric lengths are available on request.

Special Connections

Other connections are available: Tapered threads, Acker, Diedrich, etc. We also manufacture extra heavy-duty tool joints for harsh applications.

Special Materials

The standard auger comes with 4142 heat-treated alloy tool joints, mild steel tube and 3/8 (9.5 mm) heavy duty steel flighting with hardfacing on the outer edge. These materials may be modified to meet special needs. We are able to work with unusual requirements such as non-magnetic material and corrosion resistant material.

Other Modifications

There are special needs for augers that have yet to be defined. Mills Machine stands ready to satisfy those needs. We have a full line of augers and have been a leader in the development and design of special augers for the individual requirements of our customers.

"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

Auger Cutter Heads and Their Components

Auger Cutter Heads

All cutter heads are available with Double Key or Triple Key, Standard or Heavy Duty, Acker or Diedrich style tool joints. Auger cutter heads are designed to cut at the gage dimension listed for each auger size as follows:

Auger ID Size		Cutting Diameter	
2 1/4	57 mm	6 1/2	165 mm
3 1/4	83 mm	7 1/2	190 mm
3 3/4	95 mm	8 1/4	210 mm
4 1/4	108 mm	8 3/4	222 mm
6 1/4	159 mm	11	279 mm
6 5/8	168 mm	11 1/2	292 mm
7 1/4	184 mm	12	305 mm
8 1/4	210 mm	13	330 mm
10 1/4	260 mm	15	381 mm
12 1/4	451 mm	17 3/4	451 mm

For details on formation capabilities and see the four color bulletin at the front of this catalog section.

Components for Cutter Heads and Pilot Bits

Component	Part #	Lbs	Kgs
Mini-bullet	CMM4	0.2	0.1
Standard Bullet	C23	0.4	0.2
Standard Blade, Carbide	CO11	1	0.5
Flat Head Screws for Blade 5/8-11 x 1 1/2	CO12	0.2	0.1
Spade Type Blade Cutters, .868 (22.0 mm)	C87L	1	0.5
Cutter Block for Mini-bullet	CMM4	0.4	0.2
Cutter Block for Standard Bullet	C20	0.7	0.3
Cutter Block, Heavy Duty for Standard Bullet	C20HD	1.3	0.6
Cutter Block for Spade Type Blade	C87B	1	0.5
5-T Square Finger Bit	C5T	.2	0.1
Square Finger Bit Cutter Block without Flighting	C5TB	.7	0.3
Square Finger Bit Cutter Block with Flighting	C5TBF	1	0.5
Knock out wrench for C23 Bullet	C123	4.4	2.0

"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

Auger Pilot Bits and Tool Joints

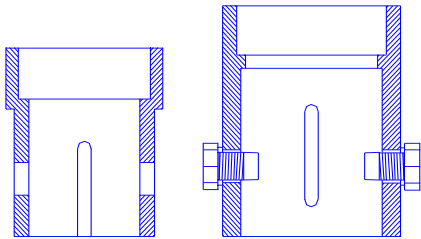
Auger Pilot Bits

Pilot bits are designed to fit snugly in the center of the auger ID for drilling without sampling. The pilot bit OD is 1/8 smaller than the auger ID. Designed to match the auger cutter head style, the pilot bit compliments the cutter head for smooth, rapid drilling.

Pilot bits may be attached to the center drill rod string, with an additional drill rod connected as each auger section is connected. For wireline sampling systems, the pilot bit is attached to the lead auger latching tube and only another auger section is necessary as new depths are reached. The wireline system is used to remove the pilot bit system and a sampling system inserted as required.

For details on formation capability of each style of pilot bit see the color bulletin in the front of this section.

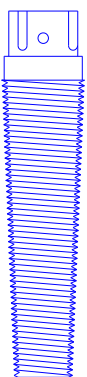
Auger Tool Joints



Mills Machine stocks auger tool joints for repair of Mills augers. We also stock the cutter head connectors for repair or modification of cutter heads. We will sell a small quantity of an auger tool joints on an as needed basis. For prices or discussions on larger volumes please contact your sales representative.

Internal Fishing Tools (Auger Retrievers)

Used for recovery of hollow stem augers lost down-hole. Mills stocks the threaded ends and the tool joints to give fast response to your needs. These tools are for each specific inside diameter of auger and are with left hand thread. Used on both standard and heavy duty-tapered augers. Non-standard tool joints are readily available.



Fishing Tool Description

Fishing Tool Description	Size
A. For 2 1/4 (57 mm) or 3 1/4 (83 mm) augers.	2 1/4
Large OD Wicker - 3 3/4(95 mm)	2 1/4
Small OD Wicker - 1 3/4 (44 mm)	3 1/4
Thread length - 18 (457 mm)	3 1/4
	3 1/4
B. For 3 1/4 (83 mm) or 4 1/4 (108 mm) augers.	3 1/4
Large OD Wicker - 4 3/4 (121 mm)	3 1/4
Small OD Wicker - 2 3/4 (70 mm)	3 1/4
Thread length - 18 (457 mm)	4 1/4
	4 1/4
C. For 6 1/4 (159 mm) or 6 5/8 (168 mm) augers.	4 1/4
Large OD Wicker - 7 1/4 (184 mm)	4 1/4
Small OD Wicker - 5 3/4 (146 mm)	4 1/4
Thread Length - 18 (457 mm)	4 1/4
	6 1/4
Please call for prices.	6 1/4
	6 5/8
	6 5/8
	7 1/4

Some typical Auger Fishing Tools

Tool Joint	Part #
2 1/4 DK	AFT214DK
Diedrich Style	AFT214DD
3 1/4 DK	AFT314DK
3 1/4 TK	AFT314TK
3 1/4 DK, HD	AFT314DKHD
3 1/4 TK, HD	AFT314TKHD
Diedrich Style	AFT314DD
Acker Style	AFT314AC
4 1/4 DK	AFT414DK
4 1/4 TK	AFT414TK
4 1/4 DK, HD	AFT414DKHD
4 1/4 TK, HD	AFT414TKHD
Diedrich Style	AFT414DD
Acker Style	AFT414AC
6 1/4 DK	AFT614DK
6 1/4 DK, HD	AFT614DKHD
6 5/8 TK	AFT658TK
6 5/8 TK, HD	AFT658TKHD
7 1/4 TK	AFT714TK

External spiral auger fishing tools available on request.

"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

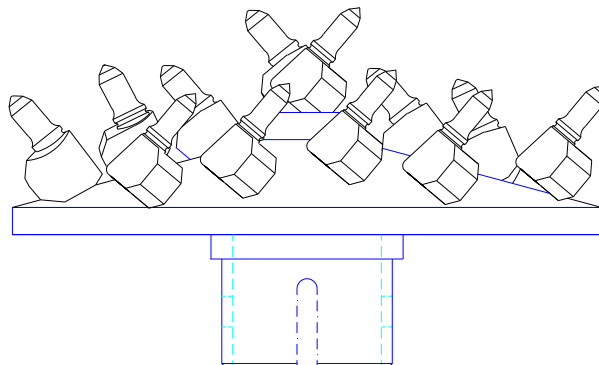
Concrete Cutter Bits

Concrete Cutter Bits

The concrete cutter bit has been specially **designed to drill through concrete to set manhole covers** and give access to the earth below the concrete. The bits feature our inexpensive field replaceable bullet carbide cutters. They make a clean round hole with rapid penetration. **They are not manufactured to drill below the concrete.** We also, manufacture a complete line of solid face cutter heads to drill through and below the concrete. Our Concrete Cutter Bits are available in a variety of sizes and tool joint connections with some of our more **common configurations listed below.**

Part #	Description	Number of Cutters	Weight	
			Lbs.	Kgs.
ACBB600158HXP	6 Concrete Bullet Bit with 1 5/8 Hex Pin	6		
ACBB700314DKP	7 Concrete Bullet Bit with 3 1/4 Auger DK Pin	7		
ACBB800414TKP	8 Concrete Bullet Bit with 4 1/4 Auger TK Pin	9		
ACBB900414TKPHD	9 Concrete Bullet Bit with 4 1/4 Auger TK HD Pin	10		
ACBB1000414DKP	10 Concrete Bullet Bit with 4 1/4 Auger DK Pin	12		
ACBB1200614DKP	12 Concrete Bullet Bit with 6 1/4 Auger DK Pin	15		
ACBB1400614DKPHD	14 Concrete Bullet Bit with 6 1/4 Auger DK HD Pin	18		
ACBB1500658TKP	15 Concrete Bullet Bit with 6 5/8 Auger TK Pin	20		
ACBB1600658TKPHD	16 Concrete Bullet Bit with 6 5/8 Auger TK HD Pin	21		
ACBB1800814DKP	18 Concrete Bullet Bit with 8 1/4 Auger DK Pin	24		
ACBB2000814TKP	20 Concrete Bullet Bit with 8 1/4 Auger TK Pin	30		
ACBB22001014TKP	22 Concrete Bullet Bit with 10 1/4 Auger TK Pin	33		
ACBB24001214TKP	24 Concrete Bullet Bit with 12 1/4 Auger TK Pin	36		

The bits are available with any auger or threaded tool joint. Call your Mills Sales Representative for specific pricing information.



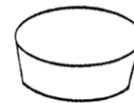
"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

Hollow Stem Auger Accessories

Auger plugs are used to block the ID of the auger when drilling without the pilot bit. Plugs may be left in the hole when sampling or the sampling tube will pass through the flex plug.

Auger Plugs

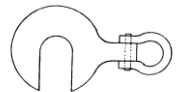
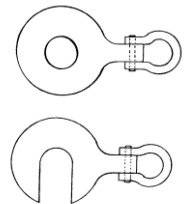
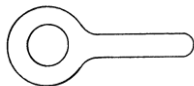
High Density Polyethylene			
Auger Size	Part #	Weight	
		Lbs	Kgs
3 1/4	APEP314HD		
4 1/4	APEP414HD	.5	.2
6 5/8	APEP614	.7	.3
8 1/4	APEP814		
Plastic Flex Plug			
2 1/4	APFP214	.1	.05
3 1/4	APFP314	.2	.1
4 1/4	APFP414	.3	.1
6 1/4	APFP614	.4	.2
Wooden Plug			
2 1/4'	APW214	2	.9
3 1/4	APW314	3	1.4
4 1/4	APW414	4	1.8
6 1/4	APW614	5	2.3
6 5/8	APW658	5	2.3
8 1/4	APW614		
10 1/4	APW1014		
12 1/4	APW1214		
Wooden Plug - Heavy Duty			
3 1/4	APW314HD	4	1.8
4 1/4	APW414HD	5	2.3



Pulling Plates and Holding Irons

For holding or pulling 1 3/4 OD, 2 3/8 and 2 5/8 OD Drill Rod

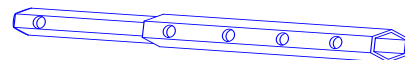
Pulling Plate Closed		Lbs	Kgs
AW and AWJ Rod	AHIPPCAW-AWJ	11	5.0
NW and NWJ Rod	AHIPPCNW-NWJ	23	23
Pulling Plate Open			
AW and AWJ Rod	AHIPPOAW-AWJ	9	4.1
NW and NWJ Rod	AHIPPONW-NWJ	20	9.1
2 3/8 ID	AHIPPO238ID	21	9.5
Holding Iron Closed			
AW	AHICAW-AWJ	16	7.3
NW	AHICNW-NWJ	16	7.3
Holding Iron Open			
AW	AHIONW-NWJ	13	5.9
NW	AHIOAW-AWJ	15	6.8



Hex Extension Rod

These extension rods are used to compensate for the drill base height above the ground or to extend the drive cap.

Solid Rods 1 5/8 (41.3 mm) Hex Pin to 1 5/8 (41.3 mm) Hex Box - 5' (1524 mm) length. AEXT158-5
Adjustable Rod 1 5/8 (41.3 mm) Hex Pin to 1 5/8 (41.3 mm) Hex Box, AEXT158-2-3
 Adjustable from 2' to 3' (610 mm to 914 mm).



"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

Check our Web site:
www.MillsMachine.com

MILLS MACHINE CO. INC., P O BOX 1514, SHAWNEE, OK, 74802
 Phone: 800-654-2703 or 405-273-4900 Fax: 405-273-4956

0303

2-5

Hollow Stem Auger Accessories

Auger Hoisting Assembly

The hoisting assembly is used to lift the auger string with the main hoist and features a heavy-duty wire cable bridal assembly with two snap on safety hooks.



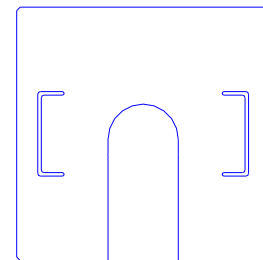
Description	Hook		Weight		
	Part #	Capacity	Lbs	Kgs	
2 1/4 (57 mm) Double key, standard duty	AHA2142	3 Ton	20	9.1	
3 1/4 (83 mm) Double key, standard duty	AHA3142	3 Ton	21	9.5	
3 1/4 (83 mm) Double key, heavy duty	AHA3142HD	3 Ton	21	9.5	
3 1/4 (83 mm) Triple key, standard duty	AHA3143	3 Ton	21	9.5	
3 1/4 (83 mm) Triple key, heavy-duty	AHA3143HD	3 Ton	21	9.5	
4 1/4 (108 mm) Double key, standard duty	AHA4142	3 Ton	22	10	
4 1/4 (108 mm) Double key, heavy-duty	AHA4142HD	3 Ton	22	10	
4 1/4 (108 mm) Triple key, standard duty	AHA4143	3 Ton	22	10	
4 1/4 (108 mm) Triple key, heavy-duty	AHA4143TP	3 Ton	22	10	
6 1/4 (159 mm) Double key, standard duty	AHA6142	3 Ton	27	12.2	
6 1/4 (159 mm) Double key, heavy-duty	AHA6142TP	3 Ton	27	12.2	
6 5/8 (168 mm) Triple key, standard duty	AHA6583	3 Ton	28	12.7	
6 5/8 (168 mm) Triple key, heavy-duty	AHA6583HD	3 Ton	28	12.7	
8 1/4 (210 mm) Double key, heavy-duty	AHA8142	5 Ton	36	16.3	
8 1/4 (210 mm) Triple key, standard-duty	AHA8143	5 Ton	36	16.3	
10 1/4 (260 mm) Triple key, heavy-duty	AHA10143	5 Ton	48	21.8	
12 1/4 (311 mm) Triple key, heavy-duty	AHA12143	5 Ton	59	26.8	

Hoisting Assemblies are available in Acker, Diedrich or other special tool joints. The removable wire cable assembly may be used for other lifting jobs within the capacity of the lifting hook.

Auger Forks

These forks are used as temporary support for hollow stem augers.

Description	Part #	Lbs	Kgs
2 1/4 (57 mm) with side handles	AFRK2143	6	2.7
3 1/4 (83 mm) with side handles	AFRK3143	7	3.2
3 3/4 (95 mm) with side handles	AFRK3343	10	4.5
4 1/4 (108 mm) with side handles	AFRK4143	10	4.5
4 7/8 (124 mm) with side handles	AFRK4873	10	4.5
6 1/4 (159 mm) with side handles	AFRK6143	14	6.4
6 5/8 (168 mm) with side handles	AFRK6583	14	6.4
8 1/4 (210 mm) with side handles	AFRK8143	21	9.5
10 1/4 (260 mm) with side handles	AFRK10143	25	11.3
12 1/4 (311 mm) with side handles	AFRK12143	38	17.2



Comes

Auger Hook

This hand hook is made to handle all augers - made from 3/4 (19 mm) round bar.

Description
Auger Hook

Part #
AHO75



"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

Hollow Stem Auger Accessories

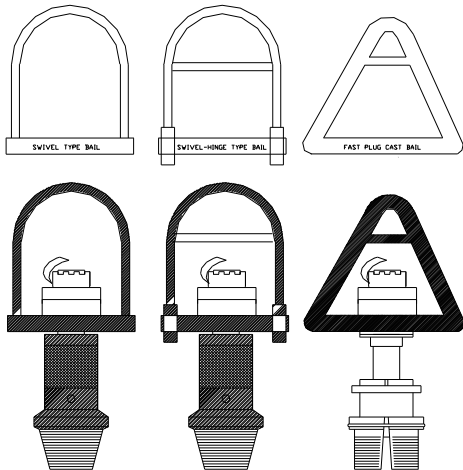
Auger Drill Pipe

Auger Drill Pipe is carried in inventory in the following sizes:



Part #	Description	Weight	
		Lbs	Kgs
AWRD5	AW Rod X 5'	21	9.5
AWRD10	AW Rod X 10'	45	20.4
NWRD5	NW Rod X 5'	31	14.1
NWRD10	NW Rod X 10'	60	27.2
AWJRD5	AWJ Rod X 5'	23	10.4
AWJRD10	AWJ Rod X 10'	49	22.2
NWJRD5	NWJ Rod X 5'	35	15.9
NWJRD10	NWJ Rod X 10'	68	30.8

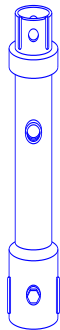
Hoist Plugs



In addition to the hoisting assembly and auger forks on the previous page, page 2-5, Mills Machine carries Swivel Hoist Plugs, Swivel-Hinged Hoist Plugs, Lifting Plugs and Murphy Fast Plugs. The full line is described in the Pipe handling Tools section of this catalog. Following are specific plugs we inventory:

Size	Swivel	Swivel Hinged	Murphy Fast Plug
NW Pin	X	X	
NWJ Pin	X	X	X
AW Pin	X	X	
AWJ Pin	X	X	
NW Box	X	X	
NWJ Box	X	X	
AW Box	X	X	
AWJ Box	X	X	

Hollow Stem Wash



Used for mud rotary drilling, the hollow stem wash tee has a pipe thread coupling located on the side of the tube, a 2 NPT on the smaller sizes and a 3 NPT on the larger sizes. Our wash tees have tool joints the same as the auger string. We can supply special tool joints to meet your specific needs or lengths as required. The standard length is 18 (457 mm) shoulder to shoulder with the wash tee 6 (152 mm) below the bottom edge of the top tool joint.

"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

Check our Web site:
www.MillsMachine.com

MILLS MACHINE CO. INC., P O BOX 1514, SHAWNEE, OK, 74802

0303

Phone: 800-654-2703 or 405-273-4900 Fax: 405-273-4956

2-7

Hollow Stem Auger Construction Components - Reference Sheet

Hollow Stem Auger Hardware

	Auger Size	Qty.	Bolt #	Qty.	Bushing #	Qty.	Key #	Pitch	Rod to Cap Bolt
Standard Double Key	2 1/4 (57 mm)	1	ALB2	1	ABN2	2	ADK1	5 Pitch	ANAB2
	3 1/4 (83 mm)	1	ALB2	1	ABN2	2	ADK1	5 Pitch	ANAB3
	3 3/4 (95 mm)	1	ALB2	1	ABN2	2	ADK1	5 Pitch	ANAB4
	4 1/4 (108 mm)	2	ALB2	2	ABN2	2	ADK1	5 Pitch	ANAB4
	6 1/4 (159 mm)	2	ALB2	2	ABN2	2	ADK1	6 Pitch	ANAB6
Heavy Duty - Double Key	3 3/4 (95 mm)	2	ALB3	2	ABN3	2	ADK2	5 Pitch	ANAB4
	4 1/4 (108 mm)	2	ALB3	2	ABN3	2	ADK2	6 Pitch	ANAB4
	6 1/4 (159 mm)	2	ALB3	2	ABN3	2	ADK2	6 Pitch	ANAB6
	8 1/4 (210 mm)	2	ALB3	2	ABN3	2	ADK2	6 Pitch	ANAB4
Standard Triple Key	3 1/4 (83 mm)	1	ALB1	1	ABN1	3	ADK1	5 Pitch	ANAB3
	4 1/4 (108 mm)	2	ALB1	2	ABN1	3	ADK1	5 Pitch	ANAB4
	6 5/8 (168 mm)	2	ALB1	2	ABN1	3	ADK1	6 Pitch	ANAB6
	8 1/4 (210 mm)	2	ALB1	2	ABN1M	3	ADK1-S	6 Pitch	ANAB4
Heavy Duty - Triple Key	4 1/4 (108 mm)	2	ALB3	2	ABN3	3	ADK2	6 Pitch	ANAB4
	6 5/8 (168 mm)	2	ALB3	2	ABN3	3	ADK2	6 Pitch	ANAB6
	10 1/4 (260 mm)	2	ALB4	2	ABN3-M	3	ADK3	7 1/2 Pitch	ANAB4
	12 1/4 (311 mm)	2	ALB4	2	ABN3-M	3	ADK3	7 1/2 Pitch	ANAB4

Auger Cutter Head Hardware

Auger Size	Carbide Blade	Spade Type Blade	Blade-Bullet Combo	Spade-Bullet Combo	Bullet Cutter	5-T Cutter Head
2 1/4 (57 mm)		2 - C87L Spade Type Blades 2 - C87B Blocks		2 - C87L Spade Blades 2 - C87B Blocks 2 - C23 Bullets 2 - C20 Blocks	4 - C23 Bullets 4 - C20 Blocks 2 - ACHF214BU Bullet Flights	4 - C5T Finger Bits 2 - C5TBF Cutter Blocks/Flighting 2 - CFTB Cutter Blocks No Flighting
3 1/4 (83 mm)	2 - C011 Carbide Blades 2 - C012 Cap Screws 2 - ACHF314BL Blade Flights	3 - C87L Spade 3 - C87B Blocks	2 - C011 Carbide Blades 2 - C012 Cap Screw 2 - ACHF314BL Blade Flights 2 - C23 Bullets 2 - C20 Blocks	2 - C87L Spade Blades 2 - C87B Blocks 2 - C23 Bullets 2 - C20 Blocks	4 - C23 Bullets 4 - C20 Blocks 2 - ACHF314BU Bullet Flights	4 - C5T Finger Bits 4 - C20 Blocks 2 - ACHF314BU Bullet Blocks/Flighting 2 - C5TB Cutter Blocks No Flighting
3 3/4 (95 mm) or 4 1/4 (108 mm)	3 - C011 Carbide Blades 3 - C012 Cap Screws 3 - ACHF414BL Blade Flights	4 - C87L Spade Type Blades 4 - C87B Blocks	3 - C011 Carbide Blades 3 - C012 Cap Screw 3 - ACHF414BL Blade Flights 3 - C23 Bullets 3 - C-20 Blocks	3 - C87L Spade Blades 3 - C87B Blocks 3 - C23 Bullets 3 - C20 Blocks	6 - C23 Bullets 6 - C20 Blocks 3 - ACHF414BU Bullet Flights	4 - C5T Finger Bits 2 - C5TBF Cutter Blocks/flighting 2 - C5TB Cutter Blocks No Flighting
6 1/4 (159 mm)	4 - C011 Carbide Blades 4 - C012 Cap Screws 4 - ACHF614BL Blade Flights	5 - C87L Spade Type Blades 5 - C87B Blocks	4 - C011 Carbide Blades 4 - C012 Cap Screw 4 - ACHF614BL Blade Flights 4 - C23 Bullets 4 - C20 Blocks	4 - C87L Spade Blades 4 - C87B Blocks 4 - C23 Bullets 4 - C20 Blocks	8 - C23 Bullets 8 - C20 Blocks 4 - ACHF614BU Bullet Flights	4 - C5T Finger Bits 2 - C5TBF Cutter Blocks/Flighting 2 - C5TB Cutter Blocks/no Flighting
6 5/8 (168 mm)	4 - C011 Carbide Blades 4 - C012 Cap Screws 4 - ACHF658BL Blade Flights	5 - C87L Spade Type Blades 5 - C87B Blocks	4 - C011 Carbide Blades 4 - C012 Cap Screw 4 - ACHF658BL Blade Flights 4 - C23 Bullets 4 - C20 Blocks	4 - C87L Spade Blades 4 - C87B Blocks 4 - C23 Bullets 4 - C20 Blocks	8 - C23 Bullets 8 - C20 Blocks 4 - ACHF658BU Bullet Flights	6 - C5T Finger Bits 3 - C5TBF Cutter Blocks/Flt. 3 - C5TB Cutter Blocks No Flighting 8 - Bit Available
8 1/4 (210 mm)	5 - C011 Carbide Blades 5 - C012 Cap Screws 5 - ACHF814BL Blade Flights	5 - C87L Spade Type Blades 5 - C87B Blocks	5 - C011 Carbide Blades 5 - C012 Cap Screw 5 - ACHF814BL Blade Flights 5 - C23 Bullets 5 - C20 Blocks	4 - C87L Spade Blades 4 - C87B Blocks 4 - C23 Bullets 4 - C20 Blocks	10 - C23 Bullets 10 - M20 Blocks 5 - ACHF814BU Bullet Flights	6 - C5T Finger Bits 3 - C5TBF Cutter Blocks/Flighting 3 - C5TB Cutter Blocks No Flighting 8 - Bit Available
10 1/4 (260 mm)	6 - C011 Carbide Blades 6 - C012 Cap Screws 6 - ACHF1014BL Blade Flights	8 - C87L Spade Type Blades 8 - C87B Blocks	6 - C011 Carbide Blades 6 - C012 Cap Screw 6 - ACHF1014BL Blade Flights 6 - C23 Bullets 6 - C20 Blocks	5 - C87L Spade Blades 5 - C87B Blocks 5 - C23 Bullets 5 - C20 Blocks	10 - C23 Bullets 10 - C20 Blocks 5 - ACHF1014BU Bullet Flights	
12 1/4 (311 mm)	7 - C011 Carbide Blades 7 - C012 Cap Screws 7 - ACHF1214BL Blade Flights	10 - MMC87L Spade Type Blades 10 - MMC87B Blocks	7 - CC011 Carbide Blades 7 - C012 Cap Screw 7 - ACHF1214BL Blade Flights 7 - C23 Bullets 7 - C20 Blocks	6 - 87L Spade Blades 6 - 87B Blocks 6 - CC23 Bullets 6 - C20 Blocks	12 - CC23 Bullets 12 - CC20 Blocks 6 - ACHF1214BU Bullet Flights	

Pilot Bit Hardware

	Auger Size						
	3 1/4 (83 mm)	3 3/4 (95 mm) or 4 1/4 (108 mm)	6 1/4 (159 mm)	6 5/8 (168 mm)	8 1/4 (210 mm)	10 1/4 (260 mm)	12 1/4 (311 mm)
Bullet	3-CMM4 Bullets 3-CMM4B Blocks	3-C23 Bullets 3-C20 Blocks	6-C23 Bullets 6-C20 Blocks	6-C23 Bullets 6-C20 Blocks	8-C23 Bullets 8-C20 Blocks	10-C23 Bullets 10-C20 Blocks	12-C23 Bullets 12-C20 Blocks
Spade		2-C87L Spaded 2-C87B Blocks	4-87L Spade 4-C87B Blocks	4-C87L Spaded 4-C87B Blocks	6-C87L Spade 6-C87B Blocks	8-C87L Spade 8-C87B Blocks	10-C87L Spade 10-C 87B Blocks

"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

"PLEASE CALL FOR CUSTOM OPTIONS AND OTHER ACCESSORIES"

0303

2-8

**Check our Web site:
www.MillsMachine.com**

MILLS MACHINE CO. INC., P O BOX 1514, SHAWNEE, OK, 74802
Phone: 800-654-2703 or 405-273-4900 Fax: 405-273-4956