



Solid Auger Components - Section 4

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Please call for custom options and other accessories.

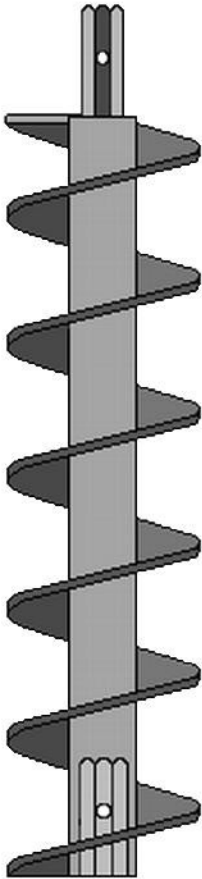
Overview

Solid Augers from Mills Machine are furnished with rugged steel flighting, a heavy-duty steel center shaft, and have a variety of cutterheads available. Used for utility, industrial, mining, and construction applications, they are available in standard diameters from 3 1/2" to 48". Larger sizes are available upon request. Standard solid augers are 5 ft. long and have a hex pin up and a hex box down.

Several cutterhead styles are available, ranging from a fish tail or screw bit design for soft formations, forged steel finger type for soft to medium formations, and a carbide-tipped bullet cutter for medium to hard formations. Each type of cutterhead is specially designed in a spiral shape or with flighting to efficiently convey the cuttings or spoils to the auger flighting.

Mills Machine Company excels in custom designed augers and cutterheads. We have presented several drawings on these pages to show some of the versatility in our product design. Available are standard flow and jet auger designs (drill rod with flighting), cutting heads for standard duty or heavy duty, tough drilling applications. Custom diameters, variations of pitch, flighting, and connections are just some of the custom options available. Let our experienced sales people help you match your desired designs with our broad experience and custom manufacturing abilities.

Solid Augers



Solid augers have a hex shank (pin) up and a hex socket (box) down. The standard length is 5' with other length sections available. All Mills Machine built solid augers have hard surface coating on the outer flighting edge.

*Solid Auger diameters are designated by the hole diameter cut by the solid auger cutter head.

The actual diameter of the auger is smaller so the auger flighting conveys the cuttings and the cutter head does the work.

See "Auger Diameter" column above for actual diameter of the auger.

Description	Part #	Hex	Pitch	Auger Diameter	Weight	
					Lbs.	Kg.
1 1 1/16" Diameter Center Tube with 1 1/8" Hex Shank						
3 1/2" Hole Size	SA312118	1 1/8"	3"	3 7/16" O.D.	35.0	15.9
4 1/2" Hole Size	SA412118	1 1/8"	3"	4" O.D.	39.0	17.7
5" Hole Size	SA500118	1 1/8"	4"	4 1/2" O.D.	40.0	18.1
6" Hole Size	SA600118	1 1/8"	5"	5 1/2" O.D.	43.0	19.5
2 3/8" Diameter Center Tube with 1 5/8" Hex Shank						
4 1/2" Hole Size	SA412158	1 5/8"	3"	4" O.D.	48.0	21.8
5" Hole Size	SA500158	1 5/8"	4"	4 1/2" O.D.	52.0	23.6
6" Hole Size	SA600158	1 5/8"	5"	5 1/2" O.D.	53.0	24
7" Hole Size	SA700158	1 5/8"	5"	6" O.D.	62.0	28.1
8" Hole Size	SA800158	1 5/8"	7"	7" O.D.	63.0	28.6
2 7/8" Diameter Center Tube with 1 5/8" Hex Shank						
9" Hole Size	SA900158	1 5/8"	7"	7 7/8" O.D.	77.0	34.9
10" Hole Size	SA1000158	1 5/8"	8"	8 7/8" O.D.	87.0	39.5
12" Hole Size	SA1200158	1 5/8"	9"	10" O.D.	102.0	46.3

Please call for custom options and other accessories.

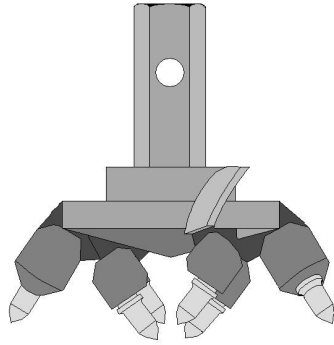
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Toll-Free: 800-654-2703
Local: 405-273-4900
Fax: 405-273-4956

Mills Machine Co. Inc.
P.O. Box 1514
Shawnee, OK 74802

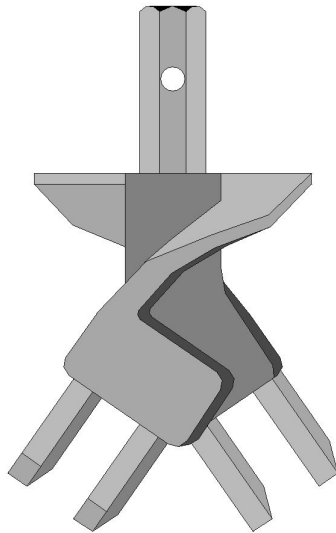
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Bullet Bit Cutterhead



Description	Part #	Hex	# Cutters	Weight	
				Lbs.	Kg.
3 1/2" O.D. Mini-Bullet Cutterhead	SABB312118	1 1/8"	4-CCM4	-	
4" O.D. Mini-Bullet Cutterhead	SABB400118	1 1/8"	4-CCM4	-	
4 1/2" O.D. C-23 Bullet Cutter Head	SABB412118	1 1/8"	4-C23	-	
6" O.D. C-23 Bullet Cutter Head	SABB600158	1 5/8"	6-C23	-	
7" O.D. C-23 Bullet Cutter Head	SABB700158	1 5/8"	8-C23	-	
8" O.D. C-23 Bullet Cutter Head	SABB800158	1 5/8"	8-C23	-	
10" O.D. C-23 Bullet Cutter Head	SABB1000158	1 5/8"	10-C23	-	
12" O.D. C-23 Bullet Cutter Head	SABB1200158	1 5/8"	10-C23	-	

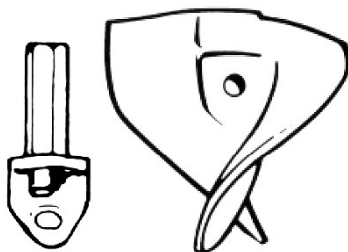
Finger Bit Cutterhead



The finger bit cuts a 1/2" larger diameter hole, on the 5" O.D. and larger sizes, than the corresponding solid auger bullet bit or fish tail bit.

Description	Part #	Hex	Weight	
			Lbs.	Kg.
3 1/2" O.D. Tungsten Carbide Finger Bit	SAFB312118	1 1/8"	1.2	1.2
4 1/2" O.D. Tungsten Carbide Finger Bit	SAFB412118	1 1/8"	10.0	4.5
5 1/2" O.D. Tungsten Carbide Finger Bit	SAFB512118	1 1/8"	11.0	5.0
6 1/2" O.D. Tungsten Carbide Finger Bit	SAFB612118	1 1/8"	15.0	6.8
4 1/2" O.D. Tungsten Carbide Finger Bit	SAFB412158	1 5/8"	48.0	21.8
5 1/2" O.D. Tungsten Carbide Finger Bit	SAFB512158	1 5/8"	52.0	23.6
6 1/2" O.D. Tungsten Carbide Finger Bit	SAFB612158	1 5/8"	53.0	24.0
7 1/2" O.D. Tungsten Carbide Finger Bit	SAFB712158	1 5/8"	62.0	28.1
8 1/2" O.D. Tungsten Carbide Finger Bit	SAFB812158	1 5/8"	63.0	28.6
9 1/2" O.D. Tungsten Carbide Finger Bit	SAFB912158	1 5/8"	77.0	34.9
10 1/2" O.D. Tungsten Carbide Finger Bit	SAFB1012158	1 5/8"	87.0	39.5
12 1/2" O.D. Tungsten Carbide Finger Bit	SAFB1212158	1 5/8"	102.0	46.3

Fish Tail Screw Bit Cutterhead






Description	Part #	Weight	
		Lbs.	Kg.
Fish Tail Screw Bit Head			
3 1/2" O.D. Fish Tail Screw Bit Head, Medium	SASBH312HFM	-	
4 1/2" O.D. Fish Tail Screw Bit Head, Medium	SASBH412HFM	-	
5" O.D. Fish Tail Screw Bit Head, Large	SASBH500HFL	-	
6" O.D. Fish Tail Screw Bit Head, Large	SASBH600HFL	-	
7" O.D. Fish Tail Screw Bit Head, Large	SASBH700HFL	-	
8" O.D. Fish Tail Screw Bit Head, Large	SASBH800HFL	-	
9" O.D. Fish Tail Screw Bit Head, Large	SASBH900HFL	-	
10" O.D. Fish Tail Screw Bit Head, Large	SASBH1000HFL	-	

Fish Tail Screw Bit Shank

1 1/8" Hex Fish Tail Screw Bit Shank, Medium	SASBSHK118M	-	
1 1/8" Hex Fish Tail Screw Bit Shank, Large	SASBSHK118L	-	
1 5/8" Hex Fish Tail Screw Bit Shank, Medium	SASBSHK158M	-	
1 5/8" Hex Fish Tail Screw Bit Shank, Large	SASBSHK158L	-	

Please call for custom options and other accessories.

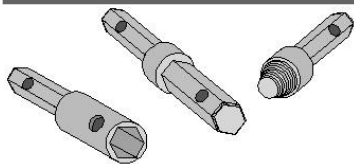
Hex Components

Description	Part #	Weight		Diagram
		Lbs.	Kg.	
Hex Repair Shanks				
13/16" Hex Repair Shank	RS1316	0.66	0.3	
1 1/8" Hex Repair Shank (For 1 11/16" O.D. Tube)	RS118	1.9	0.9	
1 5/8" Hex Repair Shank (For 2 3/8" O.D. Tube)	RS158	5.0	2.3	
1 5/8" Hex Repair Shank (For 2 7/8" O.D. Tube)	RS158MSA	5.5	2.5	
2" Hex Repair Shank	RS200	9.8	4.5	
2 1/4" Hex Repair Shank	RS214	11.7	5.3	
3" Hex Repair Shank	RS300	24.3	11	
4" Hex Repair Shank	RS400	45.0	20.5	
Hex Repair Sockets				
13/16" Hex Repair Socket	RK1316	0.6	0.3	
1 1/8" Hex Repair Socket (For 1 11/16" O.D. Tube)	RK118	1.4	0.7	
1 5/8" Hex Repair Socket (For 2 3/8" O.D. Tube)	RK158	3.5	1.6	
1 5/8" Hex Repair Socket (For 2 7/8" O.D. Tube)	RK158MSA	3.7	1.7	
2" Hex Repair Socket	RK200	6.2	2.9	
2 1/4" Hex Repair Socket	RK214	9.3	4.3	
3" Hex Repair Socket	RK300	20.5	9.3	
4" Hex Repair Socket	RK400	35.0	15.9	
Hex Drive Pins				
Drive Pin for 1 11/16" O.D. Tube (1 1/8" Hex)	SADP103	0.16	0.08	
Drive Pin for 2 3/8" Tube (1 5/8" Hex)	SADP104	0.34	0.16	
Drive Pin for 2 7/8" Tube (1 5/8" or 2" Hex)	SADP105	0.46	0.20	

Finger Bit Components

Description	Part #	Weight	
		Lbs.	Kg.
Mini Finger Bit, Hard Surfaced	SAF312	0.14	0.06
Standard Finger Bit, Hard Surfaced	SAF1C	0.16	0.07
Standard Finger Bit, Carbide Coated	SAF1H	0.18	0.08
Finger Bit Wedge	SAW33	0.72	0.32
Finger Bit Wedge	SAW34	0.24	0.11
Finger Bit Wedge	SAW37	0.36	0.16

Hex Adapters



Mills Machine has a complete line of Hex adapters.

Standard sizes are:

13/16" - 1 1/8" - 1 5/8" - 2" - 2 1/4" - 3" or 4"

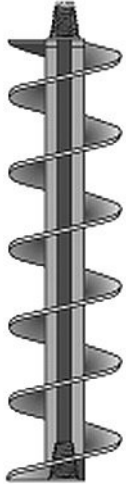
Hex to Hex or Hex to Thread adapters

(over 600 thread gages in stock).

Square connections and other shapes are available upon request.

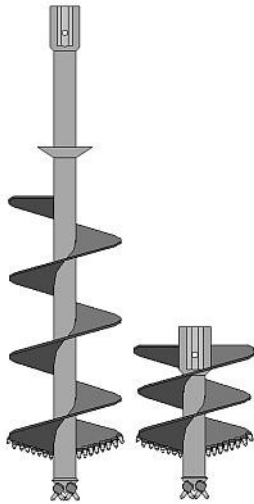
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Jet Auger



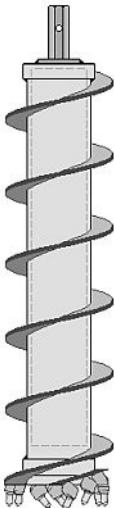
Jet Augers allow for the passage of fluid or air through the auger for cooling and for the removal of cuttings. Additionally, they can be used with or without circulation.

"Post", "Rock", "Dirt", or "Tree" Auger



Depending on cutters and length this can be a "Post", "Rock", "Dirt", or "Tree" Auger. We can furnish to any length, single or double helix, choice of cutters, choice of pilot bits, and choice of connection.

Post Remover



Post Removers are a fast and easy way to remove highway posts and other posts. It fits over the top of the post and removes dirt and cement from around the post for fast and easy extraction.

Please call for custom options and other accessories.

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Mills Machine Co. Inc.
P.O. Box 1514
Shawnee, OK 74802

Toll-Free: 800-654-2703
Local: 405-273-4900
Fax: 405-273-4956

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