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HSS Bi-Metal Hole Saws



1. **M3/M42** High Speed Bi-metal Edge Welded to Alloy Steel Back for Heavy Duty Cutting;
2. 4/6 variable Tooth;
3. Cutting Safely and Efficiently, the Best Way to Cut Large Holes, Clearing the Chips in Tough Materials;
4. Cutting Depth to 1-1/2"(38mm) and 1-7/8"(47mm);
5. Diameters from 9/16" -- 8-17/64" (14-210mm);

6. Can be used in Portable Electric or Pneumatic Tools, Vertical Drill Machines, Lathe, Boring/Milling Machines and Other Machine Tools;
7. Cuts Through Stainless Steel and Other Materials Pipe, Nail-Embedded wood, Hard Wood Floors, Plywood and Plastics;
8. All the specifications for arbored hole saws are the same as hole saws. There is an extra charge for the pilots;

Bi-Metal Hole Saws Operating Speed is Important

IMPORTANT!

For safe use of hole saws use the correct rotation speed. The correct speed for each size is given in the table.

For longer saw life and lower operating costs, the following recommendations need to be observed:

1. Use the correct arbor for the size saw to be used.
2. Use pin-type arbors for hole saws larger than Dia.32. When mounting, lift up the disc with the pins and then screw the arbor down into the hole saw as far as it will go. Fit the drive pins into the pin holes in the hole saw by turning the hole saw backwards. Push the pins in. Check that they are securely locked.
3. Check regularly to make sure the drive pins are in the right position.
4. Check that the arbor shank is securely inserted in the chuck on the drive unit. Tighten with chuck key.
5. Cutting oil should be used when sawing steel. Do not use cutting oil when sawing cast iron. The cutting pressure should, however, be high so that each tooth cuts deep. Paraffin can be used when sawing aluminium.
6. Use the correct rotation speed! Too high or too low a speed will decrease the life of the cutting edge.
7. If the hole saw vibrates during sawing, the teeth may become damaged and break. The result is often a rough, imperfect hole.
8. Apply the hole saw perpendicular to the workpiece. If the hole saw is tilted, this will cause uneven loading and abnormal wear on both the saw teeth and the grilling machine. Moreover, the dimensional accuracy of the hole saw can be affected.
9. Clear away chips and slugs frequently in order to prevent overheating.

Operating Speed For Bi-metal hole saws

Item No.	Mild Steel	Tool Stainless	Cast Iron	Brass	Aluminum	Wood
10101014	580	300	400	790	900	3000
10101016	550	275	365	730	825	3000
10101017	500	250	330	665	750	3000
10101019	460	240	300	600	690	3000
10101020	435	230	290	580	660	3000
10101021	425	210	280	560	635	3000
10101022	390	195	260	520	585	3000
10101024	370	185	245	495	555	3000
10101025	350	175	235	470	525	2700
10101027	325	160	215	435	480	2700
10101029	300	150	200	400	450	2700
10101030	285	145	190	380	425	2400
10101032	275	140	180	360	410	2400
10101033	260	135	175	345	390	2400

10101035	250	125	165	330	375	2400
10101037	240	120	160	315	360	2400
10101038	230	115	150	300	345	2400
10101040	220	110	145	290	330	2100
10101041	210	105	140	280	315	2100
10101043	205	100	135	270	305	2100
10101044	195	95	130	260	295	2100
10011046	190	95	125	250	285	2100
10101048	180	90	120	240	270	2100
10101051	170	85	115	230	255	2000
10101052	165	80	110	220	245	2000
10101054	160	80	105	210	240	2000
10101057	150	75	100	200	225	2000
10101059	145	75	100	195	225	2000
10101060	140	70	95	190	220	2000
10101064	135	65	90	180	205	1800
10101065	130	65	85	175	200	1800
10101067	130	65	85	170	195	1800
10101068	130	65	85	170	195	1800
10101070	125	60	80	160	185	1800
10101073	120	60	80	160	180	1800
10101076	115	55	75	150	170	1500
10101079	110	55	70	140	165	1500
10101083	105	50	70	140	155	1500
10101086	100	50	65	130	150	1200
10101089	95	45	65	130	145	1200
10101092	95	45	60	120	140	1200
10101095	90	45	60	120	130	1200
10101098	90	45	60	120	135	1200
10101102	85	40	55	110	130	1000
10101105	80	40	55	110	120	1000
10101108	80	40	55	110	120	900
10101111	80	40	50	100	120	900
10101114	75	35	50	100	105	900
10101121	70	35	45	95	95	900
10101127	65	30	40	90	90	800
10101133	65	30	45	90	90	800
10101140	60	25	40	85	85	800
10101146	60	25	40	85	85	800
10101152	55	25	35	75	75	800



Using a hole saw is the fastest and easiest way to create a hole up to several inches in diameter. A hole saw has three parts: an arbor that attaches to a standard drill, a pilot bit, and the hole saw itself. The saw will fit into almost any drill but one that will accommodate a 3/8" shaft is best.



A common problem when using a hole saw is that it tends to tear out as the saw exits on the opposite side. To prevent this from happening, begin drilling from the first side as usual, but before the saw goes all the way through, go around and finish the hole from the other side. The result is a clean hole on both sides.

Bi-Metal Hole Saws, High Speed Steel



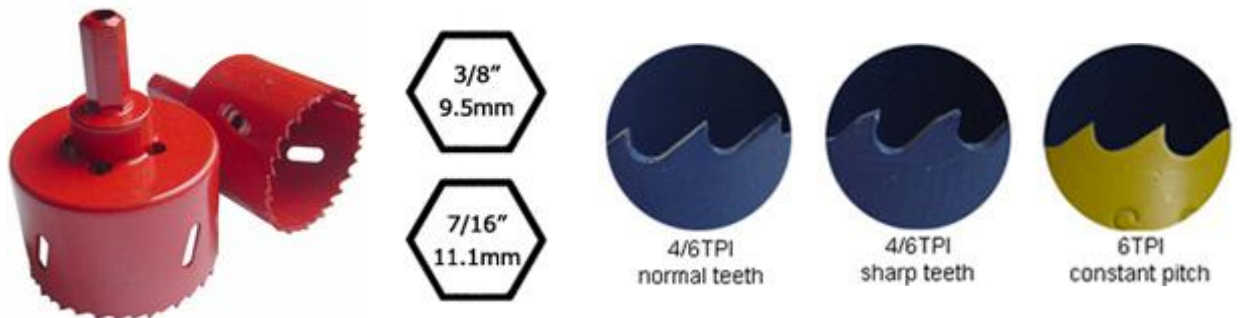
Art No.	Diameter		Art No.	Diameter	
10101014	14	9/16"	10101065	65	2-9/16"
10101016	16	5/8"	10101067	67	2-5/8"
10101017	17	11/16"	10101068	68	2-11/16"
10101019	19	3/4"	10101070	70	2-3/4"
10101020	20	25/32"	10101073	73	2-7/8"
10101021	21	13/16"	10101076	76	3"
10101022	22	7/8"	10101079	79	3-1/8"
10101024	24	15/16"	10101083	83	3-1/4"
10101025	25	1"	10101086	86	3-3/8"
10101027	27	1-1/16"	10101089	89	3-1/2"
10101029	29	1-1/8"	10101092	92	3-5/8"
10101030	30	1-3/16"	10101095	95	3-3/4"
10101032	32	1-1/4"	10101098	98	3-7/8"

10101033	33	1-5/16"	10101102	102	4"
10101035	35	1-3/8"	10101105	105	4-1/8"
10101037	37	1-7/16"	10101108	108	4-1/4"
10101038	38	1-1/2"	10101111	111	4-3/8"
10101040	40	1-9/16"	10101114	114	4-1/2"
10101041	41	1-5/8"	10101121	121	4-3/4"
10101043	43	1-11/16"	10101127	127	5"
10101044	44	1-3/4"	10101133	133	5-1/4"
10101046	46	1-13/16"	10101140	140	5-1/2"
10101048	48	1-7/8"	10101146	146	5-3/4"
10101051	51	2"	10101152	152	6"
10101052	52	2-1/16"	10101160	160	6-19/64"
10101054	54	2-1/8"	10101165	165	6-1/2"
10101057	57	2-1/4"	10101168	168	6-5/8"
10101059	59	2-5/16"	10101177	177	6-31/32"
10101060	60	2-3/8"	10101200	200	7-7/8"
10101064	64	2-1/2"	10101210	210	8-17/64"

Description:

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Individual Bi-metal hole saws Built-in arbor



Art No.	Diameter	Art No.	Diameter
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10102014	14	9/16"	10102065	65	2-9/16"
10102016	16	5/8"	10102067	67	2-5/8"
10102017	17	11/16"	10102068	68	2-11/16"
10102019	19	3/4"	10102070	70	2-3/4"
10102020	20	25/32"	10102073	73	2-7/8"
10102021	21	13/16"	10102076	76	3"
10102022	22	7/8"	10102079	79	3-1/8"
10102024	24	15/16"	10102083	83	3-1/4"
10102025	25	1"	10102086	86	3-3/8"
10102027	27	1-1/16"	10102089	89	3-1/2"
10102029	29	1-1/8"	10102092	92	3-5/8"
10102030	30	1-3/16"	10102095	95	3-3/4"
10102032	32	1-1/4"	10102098	98	3-7/8"
10102033	33	1-5/16"	10102102	102	4"
10102035	35	1-3/8"	10102105	105	4-1/8"
10102037	37	1-7/16"	10102108	108	4-1/4"
10102038	38	1-1/2"	10102111	111	4-3/8"
10102040	40	1-9/16"	10102114	114	4-1/2"
10102041	41	1-5/8"	10102121	121	4-3/4"
10102043	43	1-11/16"	10102127	127	5"
10102044	44	1-3/4"	10102133	133	5-1/4"
10102046	46	1-13/16"	10102140	140	5-1/2"
10102048	48	1-7/8"	10102146	146	5-3/4"
10102051	51	2"	10102152	152	6"
10102052	52	2-1/16"	10102160	160	6-19/64"
10102054	54	2-1/8"	10102165	165	6-1/2"
10102057	57	2-1/4"	10102168	168	6-5/8"
10102059	59	2-5/16"	10102177	177	6-31/32"
10102060	60	2-3/8"	10102200	200	7-7/8"
10102064	64	2-1/2"	10102210	210	8-17/64"

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Arbors & Accessories for Hole Saws



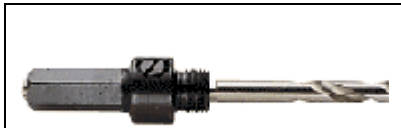
Art No.: 10103001
Shank: 1/4" Round (6.35mm)
Thread: 1/2-20UNF
Chuck: 1/4" (6.5mm)
Fit to Saws: 9/16" to 1-3/16" (14 - 30mm)



Art No.: 10103002
Shank: 3/8" Hex (9.5mm)
Thread: 1/2-20UNF
Chuck: 3/8" (9.5mm)
Fit to Saws: 9/16" to 1-3/16" (14 - 30mm)



Art No.: 10103003
Shank: 7/16" Hex (11.1mm)
Thread: 1/2-20UNF
Chuck: 1/2" (13mm)
Fit to Saws: 9/16" to 1-3/16" (14 - 30mm)



Art No.: 10103004
Shank: 7/16" Hex (11.1mm)
Thread: 1/2-20UNF
Chuck: 1/2" (13mm)
Fit to Saws: 9/16" to 1-3/16" (14 - 30mm)



Art No.: 10103005
Shank: 7/16" Hex (11.1mm)
Thread: 5/8-18UNF
Chuck: 1/2" (13mm)
Fit to Saws: 1-1/4" to 2-3/8" (32 - 60mm)



Art No.: 10103006
Shank: 7/16" Hex (11.1mm)
Thread: 5/8-18UNF
Chuck: 1/2" (13mm)
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103007
Shank: 3/8" Hex (9.5mm)
Thread: 5/8-18UNF
Chuck: 1/2" (13mm)
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103007a
Shank: 3/8" Quick Change
Thread: 5/8-18UNF
Chuck: Quick Change Adapter
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103008
Shank: 7/16" Hex (11.1mm)
Thread: 5/8-18UNF
Chuck: 1/2" (13mm)
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103009
Shank: 5/8" Hex (15.8mm)
Thread: 5/8-18UNF
Chuck: 3/4" (19mm)
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103010
Shank: SDS Plus
Thread: 1/2-20UNF
Chuck: SDS
Fit to Saws: 9/16" to 1-3/16" (14 - 30mm)



Art No.: 10103011
Shank: SDS Plus
Thread: 5/8-18UNF
Chuck: SDS
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103012
Shank: 1/4 Universal
Thread: 1/2-20UNF
Chuck: 1/4"
Fit to Saws: 9/16" to 1-3/16" (14 - 30mm)



Art No.: 10103013
Shank: 1/4 Universal
Thread: 5/8-18UNF
Chuck: 1/4"
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)



Art No.: 10103014
Shank: 7/16" Hex (11.1mm)
Thread: 5/8-18UNF
Chuck: 1/2" (13mm)
Fit to Saws: 1-1/4" to 8-17/64" (32 - 210mm)

Art No.	Description	
10104001	Adapters arbors with 1/2-20 threads to fit 5/8-18	
Art No.	Description	
10104002	5-1/2" (140mm) Extension for shank of 7/16" arbors	
10104003	10" (250mm) Extension for shank of 7/16" arbors	
10104004	12" (300mm) Extension for shank of 7/16" arbors	
10104005	18" (450mm) Extension for shank of 7/16" arbors	
Art No.	Description	
10104006	Ejector Spring, fits all 1/4" pilot drills	
Art No.	Description	
10104007	2-7/8" x 1/4" (73mm x 6.35mm) Pilot Drills	
Art No.	Description	
10104008	4" x 1/4" (102mm x 6.35mm) Pilot Drills	
Art No.	Description	

10104009	Hex Key Wrench	
Art No.	Description	
10104010	Hole Saws Drive Plate for 2-5/8" - 6" (67mm - 152mm)	
Art No.	Description	
10104011	Hole Saws Drive Plate for 4-1/8" - 6" (105mm - 152mm)	

Bi-metal Hole Saw Set ----- packing with Plastic Box

7pcs Hole Saw Set (Art No: 10105001)

64-76-89-102mm
2 1/2"-3"-3 1/2"- 4"
1 Arbor + 1 Pilot Drills

7pcs Hole Saw Set (Art No: 10105002)

22-25-29-32-38mm
7/8"-1"-1 1/8"-1 1/4"-1 1/2"
1 Arbor + 1 Adapter

7pcs Hole Saw Set (Art No: 10105003)

19-22-25-29-32mm
3/4"-7/8"-1"-1 1/8"-1 1/4"
1 Arbor + 1 Adapter

7pcs Hole Saw Set (Art No: 10105004)

19-22-29-35mm
3/4"-7/8"-1 1/8"-1 3/8"
1 Arbor + 1 Pilot Drills + 1 Adapter

9pcs Hole Saw Set (Art No: 10105005)

16-20-25-32-40-51mm
5/8"-25/32"-1"- 1 1/4"-1 9/16"-2"
2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10105006)

19-22-29-38-44-57mm
3/4"-7/8"-1 1/8"-1 1/2"-1 3/4"-2 1/4"
2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10105007)

9pcs Hole Saw Set (Art No: 10105008)

9pcs Hole Saw Set (Art No: 10105009)



22-29-35-44-51-64mm
 $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{3}{8}$ "- $1\frac{3}{4}$ "-2"- $2\frac{1}{2}$ "
2 Arbors + 1 Adapter



19-22-29-38-44-68mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "- $2\frac{11}{16}$ "
2 Arbors + 1 Adapter



32-38-44-57-60-68mm
 $1\frac{1}{4}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "- $2\frac{1}{4}$ "- $2\frac{3}{8}$ "
 $-2\frac{11}{16}$ ", **2 Arbor + Adapter**

13pcs Hole Saw Set (Art No: 10105010)



19-22-29-35-38-44-51-57-64mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{3}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "-2"-
 $2\frac{1}{4}$ "
 $-2\frac{1}{2}$ ", **2 Arbor + Pilot Drills + Adapter**

14pcs Hole Saw Set (Art No: 10105011)



19-22-25-29-32-35-38-44-51-57-64mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "-1"- $1\frac{1}{8}$ "- $1\frac{1}{4}$ "- $1\frac{3}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "
 -2 "- $2\frac{1}{4}$ "- $2\frac{1}{2}$ ", **2 Arbor + Adapter**

14pcs Hole Saw Set (Art No: 10105012)



19-22-25-32-35-38-44-51-57-64-76mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "-1"- $1\frac{1}{4}$ "- $1\frac{3}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "-2"-
 $2\frac{1}{4}$ "
 $-2\frac{1}{2}$ "-3", **2 Arbor + Adapter**

7pcs Hole Saw Set (Art No: 10105014)



19-29-33-51-68mm
 $\frac{3}{4}$ "- $1\frac{1}{8}$ "- $1\frac{5}{16}$ "-2"- $2\frac{11}{16}$ "
2 Arbors

Bi-metal Hole Saw Set ----- packing with Aluminum Case, Metal Box

9pcs Hole Saw Set (Art No: 10106001)



16-20-25-32-40-51mm
 $\frac{5}{8}$ "- $\frac{25}{32}$ "-1"- $1\frac{1}{4}$ "- $1\frac{9}{16}$ "-2"
 2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10106002)



19-22-29-38-44-57mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "- $2\frac{1}{4}$ "
 2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10106003)



22-29-35-44-51-64mm
 $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{3}{8}$ "- $1\frac{3}{4}$ "-2"- $2\frac{1}{2}$ "
 2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10106004)



19-22-29-38-44-68mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "- $2\frac{11}{16}$ "
 2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10106005)



32-38-44-57-60-68mm
 $1\frac{1}{4}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "- $2\frac{1}{4}$ "- $2\frac{3}{8}$ "- $2\frac{11}{16}$ "
 2 Arbor + Adapter

13pcs Hole Saw Set (Art No: 10106006)



19-22-29-35-38-44-51-57-64mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{3}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "-2"-
 $2\frac{1}{4}$ "
 - $2\frac{1}{2}$ ", 2 Arbor + Pilot Drills + Adapter

16pcs Hole Saw Set (Art No: 10106006)

9pcs Hole Saw Set (Art No: 10106011)

9pcs Hole Saw Set (Art No: 10106012)



19-20-22-25-29-32-35-38-44-51-57-67-76
 $\frac{3}{4}$ "- $\frac{25}{32}$ "- $\frac{7}{8}$ "-1"- $1\frac{1}{8}$ "- $1\frac{1}{4}$ "- $1\frac{3}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "-2"- $2\frac{1}{4}$ "- $2\frac{5}{8}$ "-3"
2 Arbors + Extension + spring



16-20-25-32-40-51mm
 $\frac{5}{8}$ "- $\frac{25}{32}$ "-1"- $1\frac{1}{4}$ "- $1\frac{9}{16}$ "-2"
2 Arbors + 1 Adapter



19-22-29-38-44-57mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "- $2\frac{1}{4}$ "
2 Arbors + 1 Adapter

9pcs Hole Saw Set (Art No: 10106013)



22-29-35-44-51-64mm
 $\frac{7}{8}$ "- $1\frac{1}{8}$ "- $1\frac{3}{8}$ "- $1\frac{3}{4}$ "-2"- $2\frac{1}{2}$ "
2 Arbors + 1 Adapter

7pcs Hole Saw Set (Art No: 10106014)



22-25-29-32-38mm
 $\frac{7}{8}$ "-1"- $1\frac{1}{8}$ "- $1\frac{1}{4}$ "- $1\frac{1}{2}$ "
1 Arbor + 1 Adapter

16pcs Hole Saw Set (Art No: 10106016)



19-22-25-29-32-35-38-44-51-54-64mm
 $\frac{3}{4}$ "- $\frac{7}{8}$ "-1"- $1\frac{1}{8}$ "- $1\frac{1}{4}$ "- $1\frac{3}{8}$ "- $1\frac{1}{2}$ "- $1\frac{3}{4}$ "-2"- $2\frac{1}{8}$ "- $2\frac{1}{2}$ "
2 Arbor + 2 Polid Drills + Safety Goggle