# **Bi-Metal Hole Saws**





- Constructed from M42 high speed steel with 8% premium cobalt content, resulting in high-strength, greater wear resistance and less prone to chipping
- Rigid solid steel back plate for clean true holes and longer tool life
- Unique fleem ground teeth design results in improved performance and efficient chip removal
- 4/6 variable pitch geometry cuts down on harmonic noise to minimize tooth strippage
- Featuring a 1-7/8 in. depth of cut, reducing cutting time with a single pass design
- Diamond sides provide quick plug removal, available on 7/8 in. to 6 in. hole saws
- Cats eye openings on solid back plate provide line of sight and aid in plug removal, available in 2 in. to 6 in. hole saws

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## **Bi-Metal Hole Saws**

When it comes to purchasing a Bi-Metal Hole Saw, look no more, the IDEAL line of Bi-metal hole saws is the most flexible and easy to use line in the industry. Effectively cuts through a wide range of materials, from stainless, sheet metal, as well as common non-ferrous materials, such as aluminum, copper, brass, wood, engineered wood, nail embedded wood and plastics.

While traditional Bi-Metal Hole Saws are constructed of M3 material, IDEAL hole saws utilize M42 high-speed steel with an additional 8% of premium cobalt. This provides higher-strength, greater wear resistance and is less prone to chipping. Constructed with its rigid solid steel back plate to provide additional strength eliminating the need for an additional drive plate. Minimizing vibration and extending the life of the hole saw and drill battery life providing an economical longer life experience.

The unique fleem ground tooth design enables more uniform pieces of material to be cut per tooth. Its 4/6 variable pitch geometry cuts down on harmonic noise when cutting through tough metals, which can cause premature stripping of the teeth.

To further simplify the cutting process, the IDEAL line of Bi-Metal hole saws come standard in 1-7/8" cutting depth to provide flexibility for uncommon situations and lesson the cutting time.

The 7/8" to 6" individual hole saws come with a wide slot diamond side which aids in plug removal and provides increased visibility while cutting. In addition, 2" to 6" hole saws come with cats eye openings in the solid back plate, which provides line of sight and also aid in plug removal.

The comprehensive list contains: 49 individual hole saws sizes from 9/16" to 6", wide array of arbors- with coordinating accessory pilot bits and arbor extension, and three kits custom to tradesman needs. When it comes to quality, performance and durability, IDEAL is the **professional's** choice for hole saws.





#### Application Use

Creates holes for pipe and tubing installations, door lock installations, electrical conduit and hoses.

Ideal for a wide array of trades: Electrical, Plumbing, General Construction, Maintenance and Automotive.

Compatible with a variety of materials: mild steel, stainless steel, nailed wood, engineered wood, copper, brass and rod iron.



#### **Bi-Metal Hole Saws**

	Hole Saw neter	Pipe Ta	ip Size	Pipe En Siz		Part No.
Inches	ММ	Inches	MM	Inches	MM	
	e with 1/4 in ex Arbor 36-{		bor 36-57	'0, 3/8 in. I	Hex Arbor	36-571,
9/16	14					36-511
5/8	16					36-512
11/16	17					36-513
3/4	19	1⁄2	13	3/8	10	36-514
13/16	21					36-515
7/8	22	3⁄4	19	1/2	13	36-516
15/16	24					36-517
1	25					36-518
1-1/16	27					36-519
1-1/8	29	1	25	3/4	19	36-520
1-3/16	30					36-521



	Bi-Metal Hole Saw Diameter		ıp Size	Pipe En Siz		Part No.					
Inches	ММ	Inches	MM	Inches	MM						
	Compatible with 7/16 in. Hex Arbor 36-573, 3/8 in. Quick Change Arbor 36-574.										
1-1/4 in	32					36-522					
1-5/16 in	33					36-523					
1-3/8 in	35					36-524					
1-7/16 in	37					36-525					
1-1/2 in	38	1-1/4	32			36-526					
1-9/16 in	40					36-527					
1-5/8 in	41					36-528					
1-11/16 in	43					36-529					
1-3/4 in	44	1-1/2	38	1-1/4	32	36-530					
1-13/16 in	46					36-531					
1-7/8 in	48					36-532					
2 in	51			1-1/2	38	36-533					
2-1/16 in	52					36-534					
2-1/8 in	54					36-535					
2-1/4 in	57	2	51			36-536					
2-5/16 in	59					36-537					
2-3/8 in	60					36-538					
2-1/2 in	64			2	51	36-539					
2-9/16 in	65					36-540					
2-5/8 in	67	2-1/2	64			36-541					
2-3/4 in	70					36-542					
2-7/8 in	73					36-543					
3 in	76			2-1/2	64	36-544					
3-1/8 in	79					36-545					
3-1/4 in	83	3	76			36-546					
3-3/8 in	86					36-547					
3-1/2 in	89					36-548					
3-5/8 in	92			3	76	36-549					
3-3/4 in	95	3-1/2	89			36-550					
3-7/8 in	98					36-551					
4 in	102					36-552					
4-1/8 in	104			3-1/2	89	36-553					
4-1/4 in	108	4	102			36-554					
4-3/8 in	111					36-555					
4-1/2 in	114					36-556					
4-3/4 in	121	4-1/2	114	4	102	36-557					
5 in	127					36-558					
5-1/2 in	140			5	127	36-559					
5-3/4 in	146					36-560					
6 in	152					36-561					

All pipe sizes listed in the Pipe Tap Size and Pipe Entrance Size columns are standard industry sizes. All pipes are sized by the nominal inside diameter.

\*The sizes listed provide the necessary information whenever a pipe is to be threaded into tanks, boilers, etc. To ensure the best results, the hole should be reamed before tapping with a reamer having a taper of 3/4 in. per foot.

\*\*The sizes listed provide the necessary information for any given pipe size to have sufficient clearance to pass through beams, walls, bulkheads, etc.

#### **Bi-Metal Hole Saw Arbors**

Durable solid steel construction provides years of long life performance. Flat head set screw in body allows easy replacement of the pilot drill bit. Save valuable time through versatile design with the quick change arbor. Instantly change hole saws without tools and without having to remove the arbor from the chuck.

Description	Part No.
1/4 in. Round Arbor for 9/16 in 1-3/16 in.	36-570
3/8 in. Hex Arbor for 9/16 in 1-3/16 in.	36-571
7/16 in. Hex Arbor for 9/16 in 1-3/16 in.	36-572
7/16 in. Hex Arbor for 1-1/4 in 6 in.	36-573
3/8 in. Quick Change Arbor for 1-1/4 in 6 in.	36-574

#### **Bi-Metal Hole Saw Replacement Pilot Bits**

With split point design, replacement pilot drill bits constructed out of high speed steel will start on initial contact for faster penetration and less walking for smooth, fast, cutting experience.

Description	Part No.
3-1/4 in. x 1/4 in.	36-576
4-1/8 in. x 1/4 in.	36-575

#### **Arbor Extension**

For boring jobs that require a longer reach, arbor extension add up to 12 in. of usable length and can easily be connected to the IDEAL line of Bi-metal Hole Saw Arbors.

Description	Part No.
12 in. Extension for 7/16 in. Arbors	36-577







Optimized for cutting a wide range of materials, from stainless, sheet metal, as well as common non-ferrous materials, such as aluminum, copper, brass, wood, engineered wood, nail embedded wood and plastics. Constructed out of M42 high-speed steel with an additional 8% premium cobalt to with-stand abuse and greater wear resistance. Its 1-7/8 in. cutting depth provides flexibility when going through multiple layers of materials. All kits come in a rugged and durable molded plastic carrying case that can survive extra wear and tear of any project.

	Hole Saws Included in Kits										•							
Part No.	Hole Saws (in.)								Hole Saw Arbors									
Fall NU.	3/4 36-514	7/8 36-516	1 36-518	1-1/8 36-520	1-3/8 36-524	1-1/2 36-526	1-3/4 36-530	2 36-533	2-1/4 36-536	2-1/2 36-539	3 36-544	3-5/8 36-549	4-1/8 36-553	4-1/2 36-556	36-573	36-570	36-572	36-577
36-500		•		•	•		•	•		•					•		•	
36-501		•		•	•		•	•		•	•	•	•	•	•	•	•	
36-502*	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	

\*Includes two 3-1/4 in. x 1/4 in. Pilot Bits (36-576).



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Electrical and eye injury hazard. Contact with live voltage may cause

injury or death. Do not use on near or on live voltage. Wear eye protection.



### **Recommended Hole Saw RPM Chart**

Bi-Metal Hole	Saw Diameter	Part No.			aterial			
Inches	ММ		Mild Steel	Tool & Stainless	Cast Iron	Brass	Aluminum	Wood
Compatible with 1/4	in. Round Arbor 36	5570, 3/8 in. Hex Arbo	or 36-571, 7/16 in. H	ex Arbor 36-572.				
9/16	14	36-511	580	300	400	790	900	3000
5/8	16	36-512	550	275	365	730	825	3000
11/16	17	36-513	500	250	330	665	750	3000
3/4	19	36-514	460	230	300	600	690	3000
13/16	21	36-515	399	210	280	560	630	3000
7/8	22	36-516	390	195	260	520	585	3000
15/16	24	36-517	350	185	245	495	555	2700
1	25	36-518	350	175	235	470	525	2700
1-1/16	27	36-519	325	160	215	435	480	2700
1-1/8	29	36-520	300	150	200	400	450	
1-3/16	30	36-521	285	145	190	380	425	
Compatible with 7/10	6 in. Hex Arbor 36-	573, 3/8 in. Quick Cha	inge Arbor 36-574.	-				
1-1/4 in	32	36-522	275	140	180	360	410	2400
1-5/16 in	33	36-523	260	135	175	345	390	2400
1-3/8 in	35	36-524	255	130	170	330	375	2400
1-7/16 in	37	36-525	240	120	160	315	360	2400
1-1/2 in	38	36-526	230	115	150	300	345	2400
1-9/16 in	40	36-527	220	110	145	290	330	2100
1-5/8 in	41	36-528	210	105	140	280	315	2100
1-11/16 in	43	36-529	205	100	135	270	305	2100
1-3/4 in	43	36-530	195	95	130	250	295	2100
				95		250		
1-13/16 in	46	36-531	190		125		285	2100
1-7/8 in	48	36-532	180	90	120	240	270	2100
2 in	51 52	36-533	170	85	115	230	255	2000
2-1/16 in		36-534	165	80	110	220	245	2000
2-1/8 in	54	36-535	160	80	105	210	240	2000
2-1/4 in	57	36-536	150	75	100	200	225	2000
2-5/16 in	59	36-537	140	70	95	190	220	2000
2-1/2 in	64	36-539	135	65	90	180	205	2000
2-9/16 in	65	36-540	130	65	85	175	200	1850
2-5/8 in	67	36-541	130	65	85	170	195	1850
2-3/4 in	70	36-542	125	60	80	160	185	1800
2-7/8 in	73	36-543	120	60	80	160	180	1800
3 in	76	36-544	115	55	75	150	170	1800
3-1/8 in	79	36-545	110	55	70	140	165	1500
3-1/4 in	83	36-546	105	50	70	140	155	1500
3-3/8 in	86	36-547	100	50	65	130	150	
3-1/2 in	89	36-548	95	45	65	130	145	
3-5/8 in	92	36-549	95	45	60	120	140	1200
3-3/4 in	95	36-550	90	45	60	120	135	1200
3-7/8 in	98	36-551	85	40	55	110	130	1200
4 in	102	36-552	85	40	55	110	130	1000
4-1/8 in	104	36-553	80	40	55	110	120	1000
4-1/4 in	108	36-554	80	40	55	110	120	900
4-3/8 in	111	36-555	75	35	50	100	105	900
4-1/2 in	114	36-556	75	35	50	100	105	900
4-3/4 in	121	36-557	70	35	45	90	95	900
5 in	127	36-558	65	30	40	85	95	800
5-1/2 in	140	36-559	60	30	40	80	90	800
5-3/4 in	146	36-560	60	30	40	80	90	800
6 in	152	36-561	55	25	35	75	85	800

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