# FLEXIBLE. EASY-TO-USE. DURABLE B-M $=A$ AD $-B A N G$ 

 DESIGNED WITH TIME SAVINGS AND LONGEVITY IN MIND. THE UNIVERSAL PRODUCT FOR CUTHING

## IbMETAL HOLE SANE

When it comes to purchasing a Bi-Metal Hole Saw, look no further. The IDEAL ${ }^{\otimes}$ Bi-Metal Hole Saw utilizes M42 high-speed steel with $8 \%$ premium cobalt and a rigged solid back plate. Providing $2.3 x$ more holes than leading manufactures with the highest strength and greater wear resistance.
The extreme deep gulleted teeth design clears out uniform chips that minimize binding on the job that provides $1.2 x$ faster drilling time than the leading manufacturers in the market.
With a standard 1-7/8" cutting dept, you can save time cutting 2'x4's with a single pass design. The IDEAL® Bi-Metal Hole Saws effectively cut through a wide range of materials, including stainless steel, sheet metal, as well as common non-ferrous materials, such as aluminum, copper, brass, wood, engineered wood, nail embedded wood and plastics.
When it comes to IDEAL vs. the competition, we have the professional in mind. The wide offering includes sizes from 7/8" to 6 " that include diamond side eyes to provide ease of slug removal. The 2" to 6 " Bi-Metal Hole Saws have large cat eyes on the back, that not only provide line of sight but aid in plug removal. IDEAL is the professional's choice for Bi-Metal Hole Saws.


Based on test $1-1 / 8^{\prime \prime}$ Bi-Metal Hole Saw with 3/8" Arbor in 1/4" 1018 Mild Steel.



## 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

| Bi-Metal Hole Saw <br> Diameter | Pipe Tap Size |  | Pipe Entrance <br> Size | Part <br> No. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inches | MM | Inches | MM | Inches | MM |

36-571, 7/16 in. Hex Arbor 36-572.

| 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 |  | Pipe Tap Size |  | $\begin{aligned} & \text { Pipe Entrance } \\ & \text { Size } \end{aligned}$ |  | Part No. |
| Inches | MM | 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 |  |  | 1 | 25 | $36-524$ |
| $1-7 / 16$ 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 |  |  |  |  | $36-535$ |

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 Diameter |  | Pipe Tap Size |  | Pipe Entrance Size |  | Part <br> No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inches | MM | Inches | MM | Inches | MM |  |
| 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 |



## Bi-Metal Hole Saw Arbors

Durable solid steel construction provides years of long life performance that will not deflect under pressure of drilling. With a hybrid flat hex set screw in the body, it provides a tight fit to withstand vibration but provides ease of replacement of set screw with use of common flat head screwdriver. 36-574 Quick Change Arbor saves valuable time by allowing quick change of hole saw sizes without the need of 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. |
| :--- | :---: |
| $4-1 / 8$ in. $\times 1 / 4$ in. - Fits $36-570$ Hole Saw Arbor | $36-575$ |
| $3-1 / 4 ~ i n . ~ x ~$ <br> $36-4$ <br> 3674 <br> in. - Fits $36-571,36-572,36-573 ~ \& ~ S a w ~ A r b o r ~$ | $36-576$ |



## Arbor Extension

For boring jobs that require a longer reach, arbor extension adds 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 | $36-577$ |

## deweral hole saws

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 highspeed 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.


| Part No. | Hole Saws Included in Kits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hole Saws (in.) |  |  |  |  |  |  |  |  |  |  |  |  |  | Hole Saw Arbors/Extension |  |  |  |
|  | $\begin{gathered} 3 / 4 \\ 36-514 \end{gathered}$ | $\begin{gathered} 7 / 8 \\ 36-516 \end{gathered}$ | $\begin{gathered} 1 \\ 36-518 \end{gathered}$ | $\begin{gathered} 1-1 / 8 \\ 36-520 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1-3 / 8 \\ 36-524 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 1-1 / 2 \\ 36-526 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 1-3 / 4 \\ 36-530 \\ \hline \end{array}$ | $\begin{gathered} 2 \\ 36-533 \end{gathered}$ | $\begin{gathered} 2-1 / 4 \\ 36-536 \end{gathered}$ | $\begin{gathered} 2-1 / 2 \\ 36-539 \end{gathered}$ | $\left\|\begin{array}{c} 3 \\ 36-544 \end{array}\right\|$ | $\begin{gathered} 3-5 / 8 \\ 36-549 \end{gathered}$ | $\begin{gathered} 4-1 / 8 \\ 36-553 \end{gathered}$ | $\begin{gathered} 4-1 / 2 \\ 36-556 \end{gathered}$ | 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).


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 |  | Material RPM |  |  |  |  | Wood |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inches | MM | Mild Steel | Tool \& Stainless | Cast Iron | Brass | Aluminum |  |
| 9/16 | 14 | 580 | 300 | 400 | 790 | 900 | 3000 |
| 5/8 | 16 | 550 | 275 | 365 | 730 | 825 | 3000 |
| 11/16 | 17 | 500 | 250 | 330 | 665 | 750 | 3000 |
| 3/4 | 19 | 460 | 230 | 300 | 600 | 690 | 3000 |
| 13/16 | 21 | 399 | 210 | 280 | 560 | 630 | 3000 |
| 7/8 | 22 | 390 | 195 | 260 | 520 | 585 | 3000 |
| 15/16 | 24 | 350 | 185 | 245 | 495 | 555 | 2700 |
| 1 | 25 | 350 | 175 | 235 | 470 | 525 | 2700 |
| 1-1/16 | 27 | 325 | 160 | 215 | 435 | 480 | 2700 |
| 1-1/8 | 29 | 300 | 150 | 200 | 400 | 450 | 2700 |
| 1-3/16 | 30 | 285 | 145 | 190 | 380 | 425 | 2400 |
| 1-1/4 in | 32 | 275 | 140 | 180 | 360 | 410 | 2400 |
| 1-5/16 in | 33 | 260 | 135 | 175 | 345 | 390 | 2400 |
| 1-3/8 in | 35 | 255 | 130 | 170 | 330 | 375 | 2400 |
| 1-7/16 in | 37 | 240 | 120 | 160 | 315 | 360 | 2400 |
| $1-1 / 2$ in | 38 | 230 | 115 | 150 | 300 | 345 | 2400 |
| 1-9/16 in | 40 | 220 | 110 | 145 | 290 | 330 | 2100 |
| 1-5/8 in | 41 | 210 | 105 | 140 | 280 | 315 | 2100 |
| 1-11/16 in | 43 | 205 | 100 | 135 | 270 | 305 | 2100 |
| 1-3/4 in | 44 | 195 | 95 | 130 | 250 | 295 | 2100 |
| 1-13/16 in | 46 | 190 | 95 | 125 | 250 | 285 | 2100 |
| 1-7/8 in | 48 | 180 | 90 | 120 | 240 | 270 | 2100 |
| 2 in | 51 | 170 | 85 | 115 | 230 | 255 | 2000 |
| 2-1/16 in | 52 | 165 | 80 | 110 | 220 | 245 | 2000 |
| 2-1/8 in | 54 | 160 | 80 | 105 | 210 | 240 | 2000 |
| 2-1/4 in | 57 | 150 | 75 | 100 | 200 | 225 | 2000 |
| 2-5/16 in | 59 | 140 | 70 | 95 | 190 | 220 | 2000 |
| 2-1/2 in | 64 | 135 | 65 | 90 | 180 | 205 | 2000 |
| 2-9/16 in | 65 | 130 | 65 | 85 | 175 | 200 | 1850 |
| 2-5/8 in | 67 | 130 | 65 | 85 | 170 | 195 | 1850 |
| 2-3/4 in | 70 | 125 | 60 | 80 | 160 | 185 | 1800 |
| 2-7/8 in | 73 | 120 | 60 | 80 | 160 | 180 | 1800 |
| 3 in | 76 | 115 | 55 | 75 | 150 | 170 | 1800 |
| $3-1 / 8$ in | 79 | 110 | 55 | 70 | 140 | 165 | 1500 |
| 3-1/4 in | 83 | 105 | 50 | 70 | 140 | 155 | 1500 |
| $3-3 / 8$ in | 86 | 100 | 50 | 65 | 130 | 150 | 1500 |
| $3-1 / 2$ in | 89 | 95 | 45 | 65 | 130 | 145 | 1200 |
| $3-5 / 8$ in | 92 | 95 | 45 | 60 | 120 | 140 | 1200 |
| 3-3/4 in | 95 | 90 | 45 | 60 | 120 | 135 | 1200 |
| 3-7/8 in | 98 | 85 | 40 | 55 | 110 | 130 | 1200 |
| 4 in | 102 | 85 | 40 | 55 | 110 | 130 | 1000 |
| 4-1/8 in | 104 | 80 | 40 | 55 | 110 | 120 | 1000 |
| $4-1 / 4$ in | 108 | 80 | 40 | 55 | 110 | 120 | 900 |
| 4-3/8 in | 111 | 75 | 35 | 50 | 100 | 105 | 900 |
| 4-1/2 in | 114 | 75 | 35 | 50 | 100 | 105 | 900 |
| 4-3/4 in | 121 | 70 | 35 | 45 | 90 | 95 | 900 |
| 5 in | 127 | 65 | 30 | 40 | 85 | 95 | 800 |
| $5-1 / 2$ in | 140 | 60 | 30 | 40 | 80 | 90 | 800 |
| 5-3/4 in | 146 | 60 | 30 | 40 | 80 | 90 | 800 |
| 6 in | 152 | 55 | 25 | 35 | 75 | 85 | 800 |

