



# Tools – Hole Saws

## Recommended Cutting Speeds

| RUKO Hole Saws Recommended Cutting Speeds |      |  |                                 |                           |                |                                   |                 |                |                |
|---|------|--|---------------------------------|---------------------------|----------------|-----------------------------------|-----------------|----------------|----------------|
| Material                                  |      | High carbon structural steel up to 101,521 psi | Alloyed steel up to 145,037 psi | Cast iron over 36,259 psi | CuZn alloy     | Aluminium alloy up to 11% Silicon | Thermo-plastics | Duro-plastics  | Wood           |
| Vc = m/min                                |      | 30   | 20                              | 10                        | 35             | 30                                | 20              | 15             | 40             |
| Coolant                                   |      | Cutting spray                                  | Cutting spray                   | Compressed air            | Compressed air | Cutting spray                     | Water           | Compressed air | Compressed air |
| Ø inch                                    | Ø mm | r.p.m.   | r.p.m.                          | r.p.m.                    | r.p.m.         | r.p.m.                            | r.p.m.          | r.p.m.         | r.p.m.         |
| 9/16                                      | 14   | 682  | 455                             | 227                       | 796            | 682                               | 455             | 341            | 910            |
| 5/8                                       | 16   | 597  | 398                             | 199                       | 697            | 597                               | 398             | 299            | 796            |
| 11/16                                     | 17   | 562  | 375                             | 187                       | 656            | 562                               | 375             | 281            | 749            |
| 3/4                                       | 19   | 503  | 335                             | 168                       | 587            | 503                               | 335             | 251            | 670            |
| 25/32                                     | 20   | 477  | 318                             | 159                       | 557            | 477                               | 318             | 239            | 637            |
| 13/16                                     | 21   | 455  | 303                             | 152                       | 531            | 455                               | 303             | 227            | 607            |
| 7/8                                       | 22   | 434  | 290                             | 145                       | 507            | 434                               | 290             | 217            | 579            |
| 15/16                                     | 24   | 398  | 265                             | 133                       | 464            | 398                               | 265             | 199            | 531            |
| 1   | 25   | 382  | 255                             | 127                       | 446            | 382                               | 255             | 191            | 510            |
| 1-1/16                                    | 27   | 354  | 236                             | 118                       | 413            | 354                               | 236             | 177            | 472            |
| 1-1/8                                     | 29   | 329  | 220                             | 110                       | 384            | 329                               | 220             | 165            | 439            |
| 1-3/16                                    | 30   | 318  | 212                             | 106                       | 372            | 318                               | 212             | 159            | 425            |
| 1-1/4                                     | 32   | 299  | 199                             | 100                       | 348            | 299                               | 199             | 149            | 398            |
| 1-5/16                                    | 33   | 290  | 193                             | 97                        | 338            | 290                               | 193             | 145            | 386            |
| 1-3/8                                     | 35   | 273  | 182                             | 91                        | 318            | 273                               | 182             | 136            | 364            |
| 1-13/32                                   | 36   | 265  | 177                             | 88                        | 310            | 265                               | 177             | 133            | 354            |
| 1-7/16                                    | 37   | 258  | 172                             | 86                        | 301            | 258                               | 172             | 129            | 344            |
| 1-1/2                                     | 38   | 251  | 168                             | 84                        | 293            | 251                               | 168             | 126            | 335            |
| 1-9/16                                    | 40   | 239  | 159                             | 80                        | 279            | 239                               | 159             | 119            | 318            |
| 1-5/8                                     | 41   | 233  | 155                             | 78                        | 272            | 233                               | 155             | 117            | 311            |
| 1-11/16                                   | 43   | 222  | 148                             | 74                        | 259            | 222                               | 148             | 111            | 296            |
| 1-3/4                                     | 44   | 217  | 145                             | 72                        | 253            | 217                               | 145             | 109            | 290            |
| 1-13/16                                   | 46   | 208  | 138                             | 69                        | 242            | 208                               | 138             | 104            | 277            |
| 1-7/8                                     | 48   | 199  | 133                             | 66                        | 232            | 199                               | 133             | 100            | 265            |
| 2   | 51   | 187  | 125                             | 62                        | 219            | 187                               | 125             | 94             | 250            |
| 2-1/16                                    | 52   | 184  | 122                             | 61                        | 214            | 184                               | 122             | 92             | 245            |
| 2-1/8                                     | 54   | 177  | 118                             | 59                        | 206            | 177                               | 118             | 88             | 236            |
| 2-11/64                                   | 55   | 174  | 116                             | 58                        | 203            | 174                               | 116             | 87             | 231            |
| 2-1/4                                     | 57   | 168  | 112                             | 56                        | 196            | 168                               | 112             | 84             | 223            |
| 2-5/16                                    | 59   | 162  | 108                             | 54                        | 189            | 162                               | 108             | 81             | 216            |
| 2-3/8                                     | 60   | 159  | 106                             | 53                        | 186            | 159                               | 106             | 80             | 212            |
| 2-15/32                                   | 63   | 152  | 101                             | 51                        | 177            | 152                               | 101             | 76             | 202            |
| 2-1/2                                     | 64   | 149  | 100                             | 50                        | 174            | 149                               | 100             | 75             | 199            |
| 2-9/16                                    | 65   | 147  | 98                              | 49                        | 171            | 147                               | 98              | 73             | 196            |
| 2-5/8                                     | 67   | 143  | 95                              | 48                        | 166            | 143                               | 95              | 71             | 190            |
| 2-11/16                                   | 68   | 141  | 94                              | 47                        | 164            | 141                               | 94              | 70             | 187            |
| 2-3/4                                     | 70   | 136  | 91                              | 45                        | 159            | 136                               | 91              | 68             | 182            |
| 2-7/8                                     | 73   | 131  | 87                              | 44                        | 153            | 131                               | 87              | 65             | 175            |
| 3   | 76   | 126  | 84                              | 42                        | 147            | 126                               | 84              | 63             | 168            |
| 3-1/8                                     | 79   | 121  | 81                              | 40                        | 141            | 121                               | 81              | 60             | 161            |
| 3-1/4                                     | 83   | 115  | 77                              | 38                        | 134            | 115                               | 77              | 58             | 153            |
| 3-3/8                                     | 86   | 111  | 74                              | 37                        | 130            | 111                               | 74              | 56             | 148            |
| 3-1/2                                     | 89   | 107  | 72                              | 36                        | 125            | 107                               | 72              | 54             | 143            |



# Tools – Hole Saws – Recommended Cutting Speeds, continued

| RUKO Hole Saws Recommended Cutting Speeds, continued |      |  |                                 |                           |                |                                   |                 |                |                |
|--|------|--|---------------------------------|---------------------------|----------------|-----------------------------------|-----------------|----------------|----------------|
| Material   |      | High carbon structural steel up to 101,521 psi | Alloyed steel up to 145,037 psi | Cast iron over 36,259 psi | CuZn alloy     | Aluminium alloy up to 11% Silicon | Thermo-plastics | Duro-plastics  | Wood           |
| Vc = m/min   |      | 30   | 20                              | 10                        | 35             | 30                                | 20              | 15             | 40             |
| Coolant  |      | Cutting spray                                  | Cutting spray                   | Compressed air            | Compressed air | Cutting spray                     | Water           | Compressed air | Compressed air |
| Ø inch   | Ø mm | r.p.m.   | r.p.m.                          | r.p.m.                    | r.p.m.         | r.p.m.                            | r.p.m.          | r.p.m.         | r.p.m.         |
| 3-5/8  | 92   | 104  | 69                              | 35                        | 121            | 104                               | 69              | 52             | 138            |
| 3-3/4  | 95   | 101  | 67                              | 34                        | 117            | 101                               | 67              | 50             | 134            |
| 3-7/8  | 98   | 97   | 65                              | 32                        | 114            | 97                                | 65              | 49             | 130            |
| 4  | 102  | 94   | 62                              | 31                        | 109            | 94                                | 62              | 47             | 125            |
| 4-1/8  | 105  | 91   | 61                              | 30                        | 106            | 91                                | 61              | 45             | 121            |
| 4-1/4  | 108  | 88   | 59                              | 29                        | 103            | 88                                | 59              | 44             | 118            |
| 4-3/8  | 111  | 86   | 57                              | 29                        | 100            | 86                                | 57              | 43             | 115            |
| 4-1/2  | 114  | 84   | 56                              | 28                        | 98             | 84                                | 56              | 42             | 112            |
| 4-3/4  | 121  | 79   | 53                              | 26                        | 92             | 79                                | 53              | 39             | 105            |
| 5  | 127  | 75   | 50                              | 25                        | 88             | 75                                | 50              | 38             | 100            |
| 5-1/4  | 133  | 72   | 48                              | 24                        | 84             | 72                                | 48              | 36             | 96             |
| 5-1/2  | 140  | 68   | 45                              | 23                        | 80             | 68                                | 45              | 34             | 91             |
| 6  | 152  | 63   | 42                              | 21                        | 73             | 63                                | 42              | 31             | 84             |
| 6-5/16   | 160  | 60   | 40                              | 20                        | 70             | 60                                | 40              | 30             | 80             |
| 6-5/8  | 168  | 57   | 38                              | 19                        | 66             | 57                                | 38              | 28             | 76             |
| 6-31/32  | 177  | 54   | 36                              | 18                        | 63             | 54                                | 36              | 27             | 72             |
| 8-1/4  | 210  | 45   | 30                              | 15                        | 53             | 45                                | 30              | 23             | 61             |

Note: V<sub>c</sub> equals the recommended maximum linear speed of hole saw for each material.



# Tools – Jig Saw Blades

RUKO T-shank jig saw blades in 5 or 20 piece sets for a variety of applications.

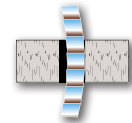
Fits power tools by Bosch®, Atlas Copco®, AEG®, Makita®, Metabo®, Black and Decker® and Hitachi®.

- All models have a wavy side set to prevent clamping of the saw blade in the work piece.
- Narrow blades (7.1 mm height) are suitable for profiled cuts.
- Bi-metal blades have a high-speed steel (HSS) cutting edge and high carbon steel (HCS) spine. This makes them highly flexible with high cutting performance and long service life for conditions where the saw blade is subjected to extreme stresses.



3218009 shown

Wavy Side Set



| Jig Saw Blades |         |         |              |               |  |  |
|----------------|---------|---------|--------------|---------------|--|--|
| Part #         | Pcs/Pkg | Price   | Construction | Tooth Spacing | Recommended Applications   | Dimensions<br>Length x Height x Thickness      |
| 3218009        | 5       | \$6.25  | HSS          | 24 teeth/in   | Metals up to 5/64in [2mm]<br>Fiberglass up to 5/32in [4mm]                                 | 77.0 x 7.1 x 1.0 mm<br>[3.03 x 9/32 x 0.04 in] |
| 3238009        | 20      | \$23.50 |              |               | Hard plastics, hard fabrics, pressed materials and insulation materials up to 5/16in [8mm] |  |
| 3218011        | 5       | \$6.25  | HSS          | 14 teeth/in   | Mild steel up to 5/16in [4mm]<br>Stainless steel up to 7/64in [3mm]                        | 77.0 x 7.9 x 1.0 mm<br>[3.03 x 5/16 x 0.04 in] |
| 3238011        | 20      | \$23.50 |              |               | Non-ferrous metals up to 3/8in [9.5 mm]  |  |
| 3218033        | 5       | \$9.25  | Bi-metal     | 21 teeth/in   | Mild steel, stainless steel and non-ferrous metals 1/16 to 5/32in [1.5 to 4 mm]            | 77.0 x 7.9 x 1.0 mm<br>[3.03 x 5/16 x 0.04 in] |
| 3238033        | 20      | \$35.50 |              |               |  |  |

Note - Competitive blade specifications may vary.