



# 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: Vc 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.

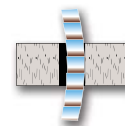
Fits power tools by Bosch®, Atlas Copco®, AEG®, Makita®, Metabo®, Black and Decker® and Hitachi®.

- 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

Wavy Side Set



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

Note - Competitive blade specifications may vary.