

# Tools – Step Drill Bits



**101701**



**101701T**



**101701E**



**101702T**

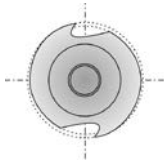
## Split Point Step Drills

The spiral flutes of RUKO high-performance step drills are CBN-ground from the solid hardened form. Because CBN (cubical boron nitride) is a much harder abrasive than even silicon carbide or corundum, a better and sharper cutting edge is achieved without burrs. Because of this higher dimensional precision, the drills will last considerably longer while maintaining precise process tolerances. Drill bits are available in High Speed Steel, Cobalt 5 alloy High Speed Steel and Titanium Nitride-coated High Speed Steel. HSS-Co5 bits are the best choice for cutting stainless steels. The added titanium nitride coating increases the surface hardness to approximately 2300 HV and the heat resistance to 1100°F (600°C).

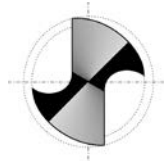
## Features

What makes these step drills special?

- CBN-ground flutes without burrs mean a superior cutting edge and longer tool life.
- Each step has a radially adjusted relief produced by CBN grinding, relating directly to the diameter of the step, so the cutting edge is always the highest point of the diameter.
- Each step is axially CBN relief-ground, meaning the cutting edge is also the highest point of the axial cutting axis.
- The cutting edge of each step has relief angle, meaning the cutting edge is also the highest point in advance direction.
- The CBN-ground point ensures centering and spot-drilling, even in thin-walled material.
- Point Cut: split point DIN 1412 C
- Point angle: 118°
- Step angle: 90°
- Right-hand cutting



**Radially adjusted relief produced by CBN grinding**



**CBN-ground bit with split point DIN 1412C**



**CBN-ground flute**

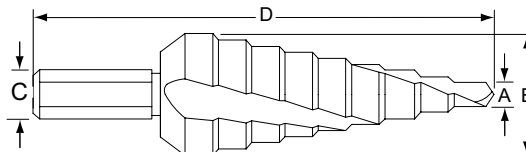


**Axial relief produced by CBN grinding**



**CBN-ground relief angle**

| Self-Starting Step Drill Bits |                         |         |         |                        |         |         |                 |         |         |              |   |                        |                        |                        |                        |
|-------------------------------|-------------------------|---------|---------|------------------------|---------|---------|-----------------|---------|---------|--------------|---|------------------------|------------------------|------------------------|------------------------|
| Fractional                    | Part # High Speed Steel | Pcs /Pk | Price   | Part # Titanium Coated | Pcs /Pk | Price   | Part # Cobalt 5 | Pcs /Pk | Price   | Drill Size   | Steps                                   | Min Drill Size A (in.) | Max Drill Size B (in.) | Shank Diameter C (in.) | Overall Length D (in.) |
|                               | 101701                  | 1       | \$19.75 | 101701T                | 1       | \$33.00 | 101701E         | 1       | \$28.00 | 1            | 3/16" to 1/2" in 1/16" increments       | 3/16                   | 1/2                    | 1/4                    | 3-1/8                  |
|                               | 101702                  | 1       | \$23.00 | 101702T                | 1       | \$36.00 | 101702E         | 1       | \$32.00 | 2            | 1/8" to 1/2" in 1/32" increments        | 1/8                    | 1/2                    | 1/4                    | 2-7/8                  |
|                               | 101703                  | 1       | \$28.50 | 101703T                | 1       | \$45.00 | 101703E         | 1       | \$39.50 | 3            | 1/4" to 3/4" in 1/16" increments        | 1/4                    | 3/4                    | 3/8                    | 2-7/8                  |
|                               | 101704                  | 1       | \$38.50 | 101704T                | 1       | \$51.00 | 101704E         | 1       | \$44.00 | 4            | 3/16" to 7/8" in 1/16" increments       | 3/16                   | 7/8                    | 3/8                    | 3-1/4                  |
|                               | 101705                  | 1       | \$39.00 | 101705T                | 1       | \$54.00 | 101705E         | 1       | \$46.50 | 5            | 13/32", 9/16" to 1" in 1/16" increments | 1/4                    | 1                      | 3/8                    | 3-1/16                 |
|                               | 101706                  | 1       | \$55.00 | 101706T                | 1       | \$85.00 | 101706E         | 1       | \$75.00 | 6            | 7/8", 1-1/8", 1-7/32", 1-1/4", 1-3/8"   | 1/4                    | 1-3/8                  | 3/8                    | 3                      |
|                               | 101707                  | 1       | \$22.50 | 101707T                | 1       | \$35.50 | 101707E         | 1       | \$28.00 | 7            | 3/8", 1/2"                              | 3/16                   | 1/2                    | 1/4                    | 1-7/8                  |
|                               | 101708                  | 1       | \$34.00 | 101708T                | 1       | \$47.50 | not available   | -       | -       | 8            | 7/8"                                    | 11/64                  | 7/8                    | 3/8                    | 2                      |
| 101709                        | 1                       | \$44.00 | 101709T | 1                      | \$70.00 | 101709E | 1               | \$61.00 | 9       | 7/8", 1-1/8" | 1/4                                     | 1-1/8                  | 3/8                    | 2-7/16                 |                        |



**Spiral flute step drill bit**



# Tools – Jobber Length Drill Bits

| Jobber Length Drill Bits - Metric Sizes Continued |                               |         |         |                    |         |         |                         |                           |                             |
|---|-------------------------------|---------|---------|--------------------|---------|---------|-------------------------|---------------------------|-----------------------------|
| Metric  | Part #<br>High Speed<br>Steel | Pcs/Pkg | Price   | Part #<br>Cobalt 5 | Pcs/Pkg | Price   | Drill Size<br>A<br>(mm) | Flute Length<br>B<br>(mm) | Overall Length<br>C<br>(mm) |
|   | 214075                        | 10      | \$21.00 | 215075             | 10      | \$45.00 | 7.5                     | 69.0                      | 109.0                       |
|   | 214080                        | 10      | \$25.50 | 215080             | 10      | \$52.00 | 8.0                     | 75.0                      | 117.0                       |
|   | 214085                        | 10      | \$28.00 | 215085             | 10      | \$63.00 | 8.5                     | 75.0                      | 117.0                       |
|   | 214090                        | 10      | \$31.00 | 215090             | 10      | \$73.00 | 9.0                     | 81.0                      | 125.0                       |
|   | 214095                        | 10      | \$32.50 | 215095             | 10      | \$75.00 | 9.5                     | 81.0                      | 125.0                       |
|   | 214100                        | 10      | \$38.50 | 215100             | 10      | \$85.00 | 10.0                    | 87.0                      | 133.0                       |
|   | 214102                        | 10      | \$40.00 | 215102             | 10      | \$91.00 | 10.2                    | 87.0                      | 133.0                       |
|   | 214105                        | 5       | \$21.00 | 215105             | 5       | \$49.00 | 10.5                    | 87.0                      | 133.0                       |
|   | 214110                        | 5       | \$23.50 | 215110             | 5       | \$50.00 | 11.0                    | 94.0                      | 142.0                       |
|   | 214115                        | 5       | \$25.50 | 215115             | 5       | \$60.00 | 11.5                    | 94.0                      | 142.0                       |
|   | 214120                        | 5       | \$28.00 | 215120             | 5       | \$62.00 | 12.0                    | 101.0                     | 151.0                       |
|   | 214125                        | 5       | \$29.50 | 215125             | 5       | \$68.00 | 12.5                    | 101.0                     | 151.0                       |
|   | 214130                        | 5       | \$35.50 | 215130             | 5       | \$70.00 | 13.0                    | 101.0                     | 151.0                       |