

Fast drill for micro drilling of steel.



- Especially for steels and aluminiums
- Especially for micro-drilling
- Precise drilling
- Compact drill bit
- Made in France
  
- Conventional point
- 30° type N flute
- High-speed steel
- 118° tip

### Machine



### Application

|                          |                        |                             |                                   |
|--------------------------|------------------------|-----------------------------|-----------------------------------|
| <b>N</b><br>1            | <b>N</b><br>3          | <b>P</b><br>1               | <b>P</b><br>2                     |
| N1-<br>Aluminum<br>alloy | N3-<br>Copper<br>alloy | P1-<br>Unrealized<br>steels | P2-<br>Weakly<br>allied<br>steels |

### Features

|                         |                           |                       |            |  |             |  |            |            |           |
|-------------------------|---------------------------|-----------------------|------------|--|-------------|--|------------|------------|-----------|
| <b>HSS</b><br><b>E5</b> | <b>BRIGHT</b><br>UNCOATED | simDIN<br><b>1899</b> | <b>CYL</b> |  | <b>118°</b> |  | <b>30°</b> | <b>2xd</b> | <b>h6</b> |
|-------------------------|---------------------------|-----------------------|------------|--|-------------|--|------------|------------|-----------|

### Properties and benefits

- + Conventional grinding: with a standard point sharpening ➡ Simple and robust, for versatile use. Enables good hole precision and wear resistance.
- + 30° type N flute: normal flute profile with a 30° helix angle. ➡ Suitable for general use. Provides good rigidity to the tool, as well as excellent drilling precision.
- + High-speed steel: HSS substrate ➡ For general use in steels and cast irons up to 950 N/mm<sup>2</sup>
- + 118° tip: 118° tip angle for the sharpening of the drill bit. ➡ Suitable for general use in materials with long shavings. Enables the rapid attach of the material and simple centring.



| Code        | EAN           | Ø    | d2/CM | L  | l   | lu | QTY | PCB |
|-------------|---------------|------|-------|----|-----|----|-----|-----|
| 81403210015 | 3221910737238 | 0.15 | 1     | 25 | 1   |    | 1   | 10  |
| 81403210016 | 3221910737245 | 0.16 | 1     | 25 | 1.4 |    | 1   | 10  |
| 81403210017 | 3221910737252 | 0.17 | 1     | 25 | 1.4 |    | 1   | 10  |
| 81403210018 | 3221910737269 | 0.18 | 1     | 25 | 1.4 |    | 1   | 10  |
| 81403210019 | 3221910737276 | 0.19 | 1     | 25 | 1.4 |    | 1   | 10  |
| 81403210020 | 3221910737283 | 0.2  | 1     | 25 | 1.8 |    | 1   | 10  |
| 81403210021 | 3221910737290 | 0.21 | 1     | 25 | 1.8 |    | 1   | 10  |
| 81403210022 | 3221910737306 | 0.22 | 1     | 25 | 1.8 |    | 1   | 10  |
| 81403210023 | 3221910737313 | 0.23 | 1     | 25 | 1.8 |    | 1   | 10  |
| 81403210024 | 3221910737320 | 0.24 | 1     | 25 | 1.8 |    | 1   | 10  |
| 81403210025 | 3221910737337 | 0.25 | 1     | 25 | 2.2 |    | 1   | 10  |
| 81403210027 | 3221910737351 | 0.27 | 1     | 25 | 2.2 |    | 1   | 10  |
| 81403210028 | 3221910737368 | 0.28 | 1     | 25 | 2.2 |    | 1   | 10  |
| 81403210029 | 3221910737375 | 0.29 | 1     | 25 | 2.2 |    | 1   | 10  |
| 81403210030 | 3221910737382 | 0.3  | 1     | 25 | 2.2 |    | 1   | 10  |
| 81403210031 | 3221910737399 | 0.31 | 1     | 25 | 2.8 |    | 1   | 10  |

Fast drill for micro drilling of steel.

|             |               |      |     |    |     |   |    |
|-------------|---------------|------|-----|----|-----|---|----|
| 81403210032 | 3221910737405 | 0.32 | 1   | 25 | 2.8 | 1 | 10 |
| 81403210033 | 3221910737412 | 0.33 | 1   | 25 | 2.8 | 1 | 10 |
| 81403210034 | 3221910737429 | 0.34 | 1   | 25 | 2.8 | 1 | 10 |
| 81403210035 | 3221910737436 | 0.35 | 1   | 25 | 2.8 | 1 | 10 |
| 81403210037 | 3221910737443 | 0.37 | 1   | 25 | 2.8 | 1 | 10 |
| 81403210038 | 3221910737450 | 0.38 | 1   | 25 | 2.8 | 1 | 10 |
| 81403210040 | 3221910737467 | 0.4  | 1   | 25 | 3.2 | 1 | 10 |
| 81403210041 | 3221910737474 | 0.41 | 1   | 25 | 3.2 | 1 | 10 |
| 81403210042 | 3221910737481 | 0.42 | 1   | 25 | 3.2 | 1 | 10 |
| 81403210043 | 3221910737498 | 0.43 | 1   | 25 | 3.2 | 1 | 10 |
| 81403210044 | 3221910737504 | 0.44 | 1   | 25 | 3.2 | 1 | 10 |
| 81403210045 | 3221910737511 | 0.45 | 1   | 25 | 3.2 | 1 | 10 |
| 81403210046 | 3221910737528 | 0.46 | 1   | 25 | 3.6 | 1 | 10 |
| 81403210047 | 3221910737535 | 0.47 | 1   | 25 | 3.6 | 1 | 10 |
| 81403210049 | 3221910737542 | 0.49 | 1   | 25 | 3.6 | 1 | 10 |
| 81403210050 | 3221910737559 | 0.5  | 1   | 25 | 3.6 | 1 | 10 |
| 81403210051 | 3221910737566 | 0.51 | 1.5 | 25 | 4   | 1 | 10 |
| 81403210052 | 3221910737573 | 0.52 | 1.5 | 25 | 4   | 1 | 10 |
| 81403210053 | 3221910737580 | 0.53 | 1.5 | 25 | 4   | 1 | 10 |
| 81403210054 | 3221910737597 | 0.54 | 1.5 | 25 | 4   | 1 | 10 |
| 81403210055 | 3221910737603 | 0.55 | 1.5 | 25 | 4   | 1 | 10 |
| 81403210056 | 3221910737610 | 0.56 | 1.5 | 25 | 4.5 | 1 | 10 |
| 81403210058 | 3221910737627 | 0.58 | 1.5 | 25 | 4.5 | 1 | 10 |
| 81403210059 | 3221910737634 | 0.59 | 1.5 | 25 | 4.5 | 1 | 10 |
| 81403210060 | 3221910737641 | 0.6  | 1.5 | 25 | 4.5 | 1 | 10 |
| 81403210061 | 3221910737658 | 0.61 | 1.5 | 25 | 4.7 | 1 | 10 |
| 81403210062 | 3221910737665 | 0.62 | 1.5 | 25 | 4.7 | 1 | 10 |
| 81403210063 | 3221910737672 | 0.63 | 1.5 | 25 | 4.7 | 1 | 10 |
| 81403210065 | 3221910737689 | 0.65 | 1.5 | 25 | 4.7 | 1 | 10 |
| 81403210068 | 3221910737702 | 0.68 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210069 | 3221910737719 | 0.69 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210070 | 3221910737726 | 0.7  | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210071 | 3221910737733 | 0.71 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210072 | 3221910737740 | 0.72 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210073 | 3221910737757 | 0.73 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210074 | 3221910737764 | 0.74 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210075 | 3221910737771 | 0.75 | 1.5 | 25 | 5.2 | 1 | 10 |
| 81403210076 | 3221910737788 | 0.76 | 1.5 | 25 | 5.5 | 1 | 10 |
| 81403210077 | 3221910737795 | 0.77 | 1.5 | 25 | 5.5 | 1 | 10 |
| 81403210078 | 3221910737801 | 0.78 | 1.5 | 25 | 5.5 | 1 | 10 |
| 81403210079 | 3221910737818 | 0.79 | 1.5 | 25 | 5.5 | 1 | 10 |
| 81403210080 | 3221910737825 | 0.8  | 1.5 | 25 | 5.5 | 1 | 10 |
| 81403210085 | 3221910737832 | 0.85 | 1.5 | 25 | 5.5 | 1 | 10 |
| 81403210090 | 3221910737849 | 0.9  | 1.5 | 25 | 6   | 1 | 10 |
| 81403210095 | 3221910737856 | 0.95 | 1.5 | 25 | 6   | 1 | 10 |
| 81403210100 | 3221910737863 | 1    | 1.5 | 25 | 6.5 | 1 | 10 |
| 81403210105 | 3221910737870 | 1.05 | 1.5 | 25 | 6.5 | 1 | 10 |
| 81403210110 | 3221910737887 | 1.1  | 1.5 | 25 | 7   | 1 | 10 |
| 81403210120 | 3221910737894 | 1.2  | 1.5 | 25 | 7.5 | 1 | 10 |
| 81403210125 | 3221910737900 | 1.25 | 1.5 | 25 | 7.5 | 1 | 10 |
| 81403210130 | 3221910737917 | 1.3  | 1.5 | 25 | 7.5 | 1 | 10 |
| 81403210135 | 3221910737924 | 1.35 | 1.5 | 25 | 8.5 | 1 | 10 |
| 81403210140 | 3221910737931 | 1.4  | 1.5 | 25 | 8.5 | 1 | 10 |
| 81403210145 | 3221910737948 | 1.45 | 1.5 | 25 | 8.5 | 1 | 10 |