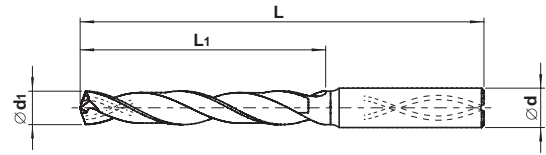


UMT 8222

Twist drills with reinforced shank and internal cooling

DIN 6537L



nano TEC1

| d1 (m7) | L1 | d (h6) | L | Stock | ART No |
|---------|----|--------|----|-------|---------------|
| 3.0 | 28 | 6 | 66 | ● | 82220300066-1 |
| 3.1 | 28 | 6 | 66 | ○ | 82220310066-1 |
| 3.2 | 28 | 6 | 66 | ○ | 82220320066-1 |
| 3.3 | 28 | 6 | 66 | ● | 82220330066-1 |
| 3.4 | 28 | 6 | 66 | ○ | 82220340066-1 |
| 3.5 | 28 | 6 | 66 | ● | 82220350066-1 |
| 3.6 | 28 | 6 | 66 | ○ | 82220360066-1 |
| 3.7 | 28 | 6 | 66 | ● | 82220370066-1 |
| 3.8 | 36 | 6 | 74 | ○ | 82220380074-1 |
| 3.9 | 36 | 6 | 74 | ○ | 82220390074-1 |
| 4.0 | 36 | 6 | 74 | ● | 82220400074-1 |
| 4.1 | 36 | 6 | 74 | ○ | 82220410074-1 |
| 4.2 | 36 | 6 | 74 | ● | 82220420074-1 |
| 4.3 | 36 | 6 | 74 | ○ | 82220430074-1 |
| 4.4 | 36 | 6 | 74 | ○ | 82220440074-1 |
| 4.5 | 36 | 6 | 74 | ● | 82220450074-1 |
| 4.6 | 36 | 6 | 74 | ● | 82220460074-1 |
| 4.7 | 36 | 6 | 74 | ○ | 82220470074-1 |
| 4.8 | 44 | 6 | 82 | ○ | 82220480082-1 |
| 4.9 | 44 | 6 | 82 | ○ | 82220490082-1 |
| 5.0 | 44 | 6 | 82 | ● | 82220500082-1 |
| 5.1 | 44 | 6 | 82 | ○ | 82220510082-1 |
| 5.2 | 44 | 6 | 82 | ● | 82220520082-1 |
| 5.3 | 44 | 6 | 82 | ○ | 82220530082-1 |
| 5.4 | 44 | 6 | 82 | ○ | 82220540082-1 |
| 5.5 | 44 | 6 | 82 | ○ | 82220550082-1 |
| 5.6 | 44 | 6 | 82 | ● | 82220560082-1 |
| 5.7 | 44 | 6 | 82 | ○ | 82220570082-1 |
| 5.8 | 44 | 6 | 82 | ○ | 82220580082-1 |
| 5.9 | 44 | 6 | 82 | ○ | 82220590082-1 |
| 6.0 | 44 | 6 | 82 | ● | 82220600082-1 |
| 6.1 | 53 | 8 | 91 | ○ | 82220610091-1 |
| 6.2 | 53 | 8 | 91 | ○ | 82220620091-1 |
| 6.3 | 53 | 8 | 91 | ○ | 82220630091-1 |
| 6.4 | 53 | 8 | 91 | ○ | 82220640091-1 |
| 6.5 | 53 | 8 | 91 | ○ | 82220650091-1 |
| 6.6 | 53 | 8 | 91 | ○ | 82220660091-1 |
| 6.7 | 53 | 8 | 91 | ○ | 82220670091-1 |
| 6.8 | 53 | 8 | 91 | ● | 82220680091-1 |
| 6.9 | 53 | 8 | 91 | ○ | 82220690091-1 |
| 7.0 | 53 | 8 | 91 | ○ | 82220700091-1 |
| 7.1 | 53 | 8 | 91 | ○ | 82220710091-1 |
| 7.2 | 53 | 8 | 91 | ○ | 82220720091-1 |
| 7.3 | 53 | 8 | 91 | ○ | 82220730091-1 |

nano TEC1

| d1 (m7) | L1 | d (h6) | L | Stock | ART No |
|---------|----|--------|-----|-------|---------------|
| 7.4 | 53 | 8 | 91 | ● | 82220740091-1 |
| 7.5 | 53 | 8 | 91 | ○ | 82220750091-1 |
| 7.6 | 53 | 8 | 91 | ○ | 82220760091-1 |
| 7.7 | 53 | 8 | 91 | ○ | 82220770091-1 |
| 7.8 | 53 | 8 | 91 | ● | 82220780091-1 |
| 7.9 | 53 | 8 | 91 | ○ | 82220790091-1 |
| 8.0 | 53 | 8 | 91 | ● | 82220800091-1 |
| 8.1 | 61 | 10 | 103 | ○ | 82220810103-1 |
| 8.2 | 61 | 10 | 103 | ○ | 82220820103-1 |
| 8.3 | 61 | 10 | 103 | ○ | 82220830103-1 |
| 8.4 | 61 | 10 | 103 | ○ | 82220840103-1 |
| 8.5 | 61 | 10 | 103 | ● | 82220850103-1 |
| 8.6 | 61 | 10 | 103 | ○ | 82220860103-1 |
| 8.7 | 61 | 10 | 103 | ○ | 82220870103-1 |
| 8.8 | 61 | 10 | 103 | ● | 82220880103-1 |
| 8.9 | 61 | 10 | 103 | ○ | 82220890103-1 |
| 9.0 | 61 | 10 | 103 | ● | 82220900103-1 |
| 9.1 | 61 | 10 | 103 | ○ | 82220910103-1 |
| 9.2 | 61 | 10 | 103 | ○ | 82220920103-1 |
| 9.3 | 61 | 10 | 103 | ● | 82220930103-1 |
| 9.4 | 61 | 10 | 103 | ○ | 82220940103-1 |
| 9.5 | 61 | 10 | 103 | ● | 82220950103-1 |
| 9.6 | 61 | 10 | 103 | ○ | 82220960103-1 |
| 9.7 | 61 | 10 | 103 | ○ | 82220970103-1 |
| 9.8 | 61 | 10 | 103 | ○ | 82220980103-1 |
| 9.9 | 61 | 10 | 103 | ○ | 82220990103-1 |
| 10.0 | 61 | 10 | 103 | ● | 82221000103-1 |
| 10.2 | 71 | 12 | 118 | ● | 82221020118-1 |
| 10.5 | 71 | 12 | 118 | ● | 82221050118-1 |
| 10.8 | 71 | 12 | 118 | ● | 82221080118-1 |
| 11.0 | 71 | 12 | 118 | ● | 82221100118-1 |
| 11.2 | 71 | 12 | 118 | ● | 82221120118-1 |
| 11.7 | 71 | 12 | 118 | ○ | 82221170118-1 |
| 12.0 | 71 | 12 | 118 | ● | 82221200118-1 |
| 12.5 | 77 | 14 | 124 | ● | 82221250124-1 |
| 13.0 | 77 | 14 | 124 | ● | 82221300124-1 |
| 14.0 | 77 | 14 | 124 | ● | 82221400124-1 |
| 14.5 | 83 | 16 | 133 | ● | 82221450133-1 |
| 15.0 | 83 | 16 | 133 | ○ | 82221500133-1 |
| 16.0 | 83 | 16 | 133 | ● | 82221600133-1 |

- In stock
- Produced to order only

Recommended cutting conditions for drills 8222

| Work material | Cutting speed Vc (m/min) | d1 - diameter in mm | | | | f - feed per revolution in mm/rev. | |
|--|--------------------------|---------------------|-----------|-----------|-----------|------------------------------------|-----------|
| | | Ø3 - Ø6 | Ø6 - Ø8 | Ø8 - Ø10 | Ø10 - Ø12 | Ø12 - Ø14 | Ø14 - Ø16 |
| P Carbon steel and Alloy steel < 25 HRC | nanoTEC1 | 0.08-0.15 | 0.14-0.20 | 0.15-0.20 | 0.18-0.25 | 0.20-0.28 | 0.22-0.30 |
| | 90-130 | | | | | | |
| Alloy steel and Tool steel 25-45 HRC | 70-100 | 0.07-0.14 | 0.12-0.18 | 0.14-0.19 | 0.16-0.23 | 0.18-0.26 | 0.20-0.28 |
| K Cast iron GG | 100-140 | 0.10-0.18 | 0.17-0.24 | 0.20-0.30 | 0.22-0.35 | 0.26-0.40 | 0.28-0.42 |
| | 80-110 | 0.08-0.16 | 0.15-0.22 | 0.18-0.26 | 0.20-0.30 | 0.22-0.35 | 0.24-0.38 |
| N Aluminium alloy | 150-180 | 0.10-0.16 | 0.16-0.22 | 0.20-0.26 | 0.22-0.28 | 0.24-0.30 | 0.28-0.36 |