

|           |                                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cooling   |     |
| Tolerance | f8                                                                                                                                                                                                                                                                                                                                      |
| Coating   | TiSiN- $\alpha$                                                                                                                                                                                                                                                                                                                         |

HA

HSC

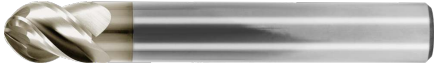
HPC



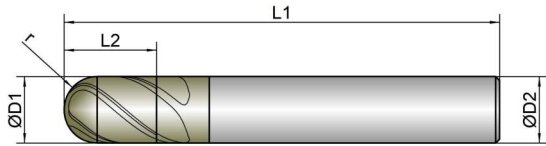
NEW



Expert



HA K203413



| Steel      |             |             | Hardened steel |          |          |          | Stainless steel (VA) | Castings | Non-ferrous materials |        |    |          | Inconel | Abrasive material |          | Titanium |
|------------|-------------|-------------|----------------|----------|----------|----------|----------------------|----------|-----------------------|--------|----|----------|---------|-------------------|----------|----------|
| < 850 N/mm | < 1100 N/mm | < 1400 N/mm | < 55 HRC       | < 60 HRC | < 67 HRC | < 70 HRC |                      |          | Al                    | Copper | Mg | Plastics |         | CFRP / GFRP       | Graphite |          |
| 200        | 160         | 150         |                |          |          |          | 100                  | 350      |                       |        |    |          |         |                   |          |          |

|         | D1<br><br>mm<br>Ø | L2<br><br>mm | L1<br><br>mm | D2<br><br>mm<br>Ø | z<br><br># | r<br><br>mm | <br>° |
|---------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| K203413 |                                                                                                      |                                                                                                 |                                                                                                 |                                                                                                      |                                                                                                 |                                                                                                  |                                                                                            |
| 3       | 3.0                                                                                                  | 5.0                                                                                             | 54.0                                                                                            | 6.0                                                                                                  | 4                                                                                               | 1.50                                                                                             | 40                                                                                         |
| 4       | 4.0                                                                                                  | 8.0                                                                                             | 54.0                                                                                            | 6.0                                                                                                  | 4                                                                                               | 2.00                                                                                             | 40                                                                                         |
| 5       | 5.0                                                                                                  | 9.0                                                                                             | 54.0                                                                                            | 6.0                                                                                                  | 4                                                                                               | 2.50                                                                                             | 40                                                                                         |
| 6       | 6.0                                                                                                  | 10.0                                                                                            | 54.0                                                                                            | 6.0                                                                                                  | 4                                                                                               | 3.00                                                                                             | 40                                                                                         |
| 8       | 8.0                                                                                                  | 12.0                                                                                            | 58.0                                                                                            | 8.0                                                                                                  | 4                                                                                               | 4.00                                                                                             | 40                                                                                         |
| 10      | 10.0                                                                                                 | 14.0                                                                                            | 66.0                                                                                            | 10.0                                                                                                 | 4                                                                                               | 5.00                                                                                             | 40                                                                                         |
| 12      | 12.0                                                                                                 | 16.0                                                                                            | 73.0                                                                                            | 12.0                                                                                                 | 4                                                                                               | 6.00                                                                                             | 40                                                                                         |
| 16      | 16.0                                                                                                 | 22.0                                                                                            | 82.0                                                                                            | 16.0                                                                                                 | 4                                                                                               | 8.00                                                                                             | 40                                                                                         |