















































## Stub Length (3xD) Drills

|                                |    |    |    |    |    |    |    |    |    |    |    |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|
| Series                         | <b>660</b>  | <b>303</b>  | <b>553</b>  | <b>610</b>  | <b>329</b>  | <b>659</b>  | <b>5520</b>   | <b>5521</b>   | <b>515</b>  | <b>730</b>  | <b>2463</b>   |
| Length                         | Micro   | Micro LH  | 3xD LH  | 3xD   | 3xD   | 3xD   | 3xD   | 3xD   | 3xD   | 3xD   | 3xD   |
| Shank                          |    |    |    |    |    |   |    |    |    |    |    |
| Style                          | N   | N   | GT80  | Ti  | GV120   | GV120   | GU500DZ   | GT500DZ   | GT500DZ   | N   | N   |
| Point Angle                    | 118°  | 118°  | 130°  | 130°  | 130°  | 130°  | 118°  | 130°  | 130°  | 118°  | 118°  |
| Coolant Fed                    |  |  |  |  |  |  |  |  |  |  |  |
| Substrate                      | Cobalt  | Cobalt  | HSS   | Cobalt  | Cobalt  | Cobalt  | Cobalt  | PM-Cobalt   | PM-Cobalt   | Carbide   | Carbide   |
| Surface Finish                 |  |  |  |  |  |  |  |  |  |  |  |
| Unalloyed case hardened steels | ✓   |   |   |   |   | ✓   |   | ✓   | ✓   |   | ✓   |
| Alloyed case hardened steels   | ✓   |   |   | ✓   |   | ✓   |   | ✓   | ✓   |   | ✓   |
| Alloyed heat-treatable steels  | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| Nitriding steels               | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   | ✓   |
| Size Range (mm)                | 0.128 - 1.800   | 0.130 - 1.850   | 1.000 - 20.00   | 1.000 - 14.29   | 0.400 - 25.40   | 0.500 - 15.50   | 1.000 - 14.29   | 1.000 - 14.00   | 1.000 - 14.29   | 0.500 - 16.00   | 1.000 - 16.00   |
| Sizes page                     | 187   | 113   | 155   | 162   | 123   | 185   | 267   | 269   | 136   | 197   | 222   |

