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| <b>PRODUCT CAT</b>         | <b>CAT</b>                   | <b>APPLICATION</b>           |
| DRILLS                     | STUB                         | GP- upto 45HRc               |
|                            | JOBBER                       | GP- upto 45HRc               |
|                            | GP -L/D-3                    | GP- upto 45HRc for High Feed |
|                            | GP -L/D-5                    | GP- upto 45HRc for High Feed |
| END MILLS                  | GP-END MILL                  | GP- upto 45HRc               |
|                            | GP-BALL NOSE                 | GP- upto 45HRc               |
|                            | DIE & MOULD SOFT - END MILL  | DSSE - 45 to 60HRc           |
|                            | DIE & MOULD SOFT - BALL NOSE | DSSB - 45 to 60HRc           |
|                            | DIE & MOULD SOFT - BULL NOSE | DSSR - 45 to 60HRc           |
|                            | DIE & MOULD HARD- END MILL   | DHSE - above 60HRc           |
|                            | DIE & MOULD HARD - BALL NOSE | DHSB - above 60HRc           |
|                            | DIE & MOULD HARD - BULL NOSE | DHSR - above 60HRc           |
| CENTER DRILL               | CENTER DRILL                 | GP- upto 45HRc               |
| REAMERS                    | REAMERS                      | GP- upto 45HRc               |

## SOLID CARBIDE STUB DRILL- K946 SERIES UPTO 45HRc

| Item code | Drill Dia | Shank Dia | Flute Length | Overall length | List_Price |        | Item code | Drill Dia | Shank Dia | Flute Length | Overall length | List_Price |        |
|-----------|-----------|-----------|--------------|----------------|------------|--------|-----------|-----------|-----------|--------------|----------------|------------|--------|
|           |           |           |              |                | Uncoated   | Coated |           |           |           |              |                | Uncoated   | Coated |
| K94600100 | 1         | 1         | 6            | 26             | 1183       | 1327   | K94600460 | 4.6       | 4.6       | 24           | 58             | 1977       | 2213   |
| K94600110 | 1.1       | 1.1       | 7            | 28             | 1183       | 1327   | K94600470 | 4.7       | 4.7       | 24           | 58             | 1977       | 2213   |
| K94600120 | 1.2       | 1.2       | 8            | 30             | 1183       | 1327   | K94600480 | 4.8       | 4.8       | 26           | 62             | 2160       | 2418   |
| K94600130 | 1.3       | 1.3       | 8            | 30             | 1183       | 1327   | K94600490 | 4.9       | 4.9       | 26           | 62             | 2160       | 2418   |
| K94600140 | 1.4       | 1.4       | 9            | 32             | 1183       | 1327   | K94600500 | 5         | 5         | 26           | 62             | 2252       | 2523   |
| K94600150 | 1.5       | 1.5       | 9            | 32             | 1183       | 1327   | K94600510 | 5.1       | 5.1       | 26           | 62             | 2270       | 2541   |
| K94600160 | 1.6       | 1.6       | 10           | 34             | 1195       | 1337   | K94600520 | 5.2       | 5.2       | 26           | 62             | 2347       | 2629   |
| K94600170 | 1.7       | 1.7       | 10           | 34             | 1195       | 1337   | K94600530 | 5.3       | 5.3       | 26           | 62             | 2428       | 2720   |
| K94600180 | 1.8       | 1.8       | 11           | 36             | 1195       | 1337   | K94600540 | 5.4       | 5.4       | 28           | 66             | 2511       | 2813   |
| K94600190 | 1.9       | 1.9       | 11           | 36             | 1195       | 1337   | K94600550 | 5.5       | 5.5       | 28           | 66             | 2452       | 2744   |
| K94600200 | 2         | 2         | 12           | 38             | 1195       | 1337   | K94600560 | 5.6       | 5.6       | 28           | 66             | 2620       | 2935   |
| K94600210 | 2.1       | 2.1       | 12           | 38             | 1370       | 1533   | K94600570 | 5.7       | 5.7       | 28           | 66             | 2651       | 2970   |
| K94600220 | 2.2       | 2.2       | 13           | 40             | 1370       | 1533   | K94600580 | 5.8       | 5.8       | 28           | 66             | 2685       | 3009   |
| K94600230 | 2.3       | 2.3       | 13           | 40             | 1370       | 1533   | K94600590 | 5.9       | 5.9       | 28           | 66             | 2711       | 3035   |
| K94600240 | 2.4       | 2.4       | 14           | 43             | 1370       | 1533   | K94600600 | 6         | 6         | 28           | 66             | 2629       | 2944   |
| K94600250 | 2.5       | 2.5       | 14           | 43             | 1370       | 1533   | K94600610 | 6.1       | 6.1       | 31           | 70             | 3041       | 3408   |
| K94600260 | 2.6       | 2.6       | 14           | 43             | 1458       | 1634   | K94600620 | 6.2       | 6.2       | 31           | 70             | 3041       | 3408   |
| K94600270 | 2.7       | 2.7       | 16           | 46             | 1458       | 1634   | K94600630 | 6.3       | 6.3       | 31           | 70             | 3041       | 3408   |
| K94600280 | 2.8       | 2.8       | 16           | 46             | 1458       | 1634   | K94600640 | 6.4       | 6.4       | 31           | 70             | 3410       | 3818   |
| K94600290 | 2.9       | 2.9       | 16           | 46             | 1458       | 1634   | K94600650 | 6.5       | 6.5       | 31           | 70             | 3239       | 3630   |
| K94600300 | 3         | 3         | 16           | 46             | 1458       | 1634   | K94600660 | 6.6       | 6.6       | 31           | 70             | 3733       | 4184   |
| K94600310 | 3.1       | 3.1       | 18           | 49             | 1516       | 1697   | K94600670 | 6.7       | 6.7       | 31           | 70             | 3923       | 4393   |
| K94600320 | 3.2       | 3.2       | 18           | 49             | 1516       | 1697   | K94600680 | 6.8       | 6.8       | 34           | 74             | 3733       | 4184   |
| K94600330 | 3.3       | 3.3       | 18           | 49             | 1516       | 1697   | K94600690 | 6.9       | 6.9       | 34           | 74             | 3733       | 4184   |
| K94600340 | 3.4       | 3.4       | 20           | 52             | 1516       | 1697   | K94600700 | 7         | 7         | 34           | 74             | 3547       | 3974   |
| K94600350 | 3.5       | 3.5       | 20           | 52             | 1516       | 1697   | K94600710 | 7.1       | 7.1       | 34           | 74             | 4079       | 4567   |
| K94600360 | 3.6       | 3.6       | 20           | 52             | 1567       | 1759   | K94600720 | 7.2       | 7.2       | 34           | 74             | 4079       | 4567   |
| K94600370 | 3.7       | 3.7       | 20           | 52             | 1639       | 1838   | K94600730 | 7.3       | 7.3       | 34           | 74             | 4079       | 4567   |
| K94600380 | 3.8       | 3.8       | 22           | 55             | 1709       | 1914   | K94600740 | 7.4       | 7.4       | 34           | 74             | 4282       | 4797   |
| K94600390 | 3.9       | 3.9       | 22           | 55             | 1779       | 1992   | K94600750 | 7.5       | 7.5       | 34           | 74             | 3874       | 4341   |
| K94600400 | 4         | 4         | 22           | 55             | 1851       | 2072   | K94600760 | 7.6       | 7.6       | 37           | 79             | 4321       | 4836   |
| K94600410 | 4.1       | 4.1       | 22           | 55             | 1874       | 2099   | K94600770 | 7.7       | 7.7       | 37           | 79             | 4321       | 4836   |
| K94600420 | 4.2       | 4.2       | 22           | 55             | 1899       | 2127   | K94600780 | 7.8       | 7.8       | 37           | 79             | 4321       | 4836   |
| K94600430 | 4.3       | 4.3       | 24           | 58             | 1917       | 2142   | K94600790 | 7.9       | 7.9       | 37           | 79             | 4321       | 4836   |
| K94600440 | 4.4       | 4.4       | 24           | 58             | 1952       | 2182   | K94600800 | 8         | 8         | 37           | 79             | 3895       | 4363   |
| K94600450 | 4.5       | 4.5       | 24           | 58             | 1977       | 2213   | K94600810 | 8.1       | 8.1       | 37           | 79             | 4785       | 5357   |

|      |              |
|------|--------------|
| 2C00 | UNCOATED     |
| 2C01 | TIN COATED   |
| 2C03 | TIALN COATED |

## SOLID CARBIDE STUB DRILL- K946 SERIES UPTO 45HRC

| Item code | Drill Dia | Shank Dia | Flute Length | Overall length | List_Price |        | Item code | Drill Dia | Shank Dia | Flute Length | Overall length | List_Price |        |
|-----------|-----------|-----------|--------------|----------------|------------|--------|-----------|-----------|-----------|--------------|----------------|------------|--------|
|           |           |           |              |                | Uncoated   | Coated |           |           |           |              |                | Uncoated   | Coated |
| K94600820 | 8.2       | 8.2       | 37           | 79             | 4785       | 5357   | K94601180 | 11.8      | 11.8      | 47           | 95             | 9474       | 10606  |
| K94600830 | 8.3       | 8.3       | 37           | 79             | 4785       | 5357   | K94601190 | 11.9      | 11.9      | 51           | 102            | 9474       | 10606  |
| K94600840 | 8.4       | 8.4       | 37           | 79             | 5288       | 5919   | K94601200 | 12        | 12        | 51           | 102            | 9474       | 10606  |
| K94600850 | 8.5       | 8.5       | 37           | 79             | 4785       | 5357   | K94601210 | 12.1      | 12.1      | 51           | 102            | 9718       | 10882  |
| K94600860 | 8.6       | 8.6       | 40           | 84             | 5712       | 6400   | K94601220 | 12.2      | 12.2      | 51           | 102            | 9718       | 10882  |
| K94600870 | 8.7       | 8.7       | 40           | 84             | 5712       | 6400   | K94601230 | 12.3      | 12.3      | 51           | 102            | 9718       | 10882  |
| K94600880 | 8.8       | 8.8       | 40           | 84             | 5712       | 6400   | K94601240 | 12.4      | 12.4      | 51           | 102            | 9718       | 10882  |
| K94600890 | 8.9       | 8.9       | 40           | 84             | 5712       | 6400   | K94601250 | 12.5      | 12.5      | 51           | 102            | 9718       | 10882  |
| K94600900 | 9         | 9         | 40           | 84             | 5489       | 6147   | K94601260 | 12.6      | 12.6      | 51           | 102            | 12595      | 14104  |
| K94600910 | 9.1       | 9.1       | 40           | 84             | 6524       | 7305   | K94601270 | 12.7      | 12.7      | 51           | 102            | 12595      | 14104  |
| K94600920 | 9.2       | 9.2       | 40           | 84             | 6524       | 7305   | K94601280 | 12.8      | 12.8      | 51           | 102            | 12595      | 14104  |
| K94600930 | 9.3       | 9.3       | 40           | 84             | 6524       | 7305   | K94601290 | 12.9      | 12.9      | 51           | 102            | 12595      | 14104  |
| K94600940 | 9.4       | 9.4       | 40           | 84             | 6846       | 7671   | K94601300 | 13        | 13        | 51           | 102            | 12595      | 14104  |
| K94600950 | 9.5       | 9.5       | 40           | 84             | 5419       | 6070   | K94601310 | 13.1      | 13.1      | 51           | 102            | 16450      | 18421  |
| K94600960 | 9.6       | 9.6       | 43           | 89             | 6907       | 7738   | K94601320 | 13.2      | 13.2      | 51           | 102            | 16450      | 18421  |
| K94600970 | 9.7       | 9.7       | 43           | 89             | 6907       | 7738   | K94601330 | 13.3      | 13.3      | 54           | 107            | 16450      | 18421  |
| K94600980 | 9.8       | 9.8       | 43           | 89             | 6907       | 7738   | K94601340 | 13.4      | 13.4      | 54           | 107            | 16450      | 18421  |
| K94600990 | 9.9       | 9.9       | 43           | 89             | 7487       | 8386   | K94601350 | 13.5      | 13.5      | 54           | 107            | 16450      | 18421  |
| K94601000 | 10        | 10        | 43           | 89             | 6711       | 7518   | K94601360 | 13.6      | 13.6      | 54           | 107            | 16450      | 18421  |
| K94601010 | 10.1      | 10.1      | 43           | 89             | 7107       | 7958   | K94601370 | 13.7      | 13.7      | 54           | 107            | 16450      | 18421  |
| K94601020 | 10.2      | 10.2      | 43           | 89             | 7107       | 7958   | K94601380 | 13.8      | 13.8      | 54           | 107            | 16450      | 18421  |
| K94601030 | 10.3      | 10.3      | 43           | 89             | 7107       | 7958   | K94601390 | 13.9      | 13.9      | 54           | 107            | 16450      | 18421  |
| K94601040 | 10.4      | 10.4      | 43           | 89             | 7107       | 7958   | K94601400 | 14        | 14        | 54           | 107            | 16450      | 18421  |
| K94601050 | 10.5      | 10.5      | 43           | 89             | 7630       | 8547   | K94601450 | 14.5      | 14.5      | 56           | 111            | 16208      | 18115  |
| K94601060 | 10.6      | 10.6      | 43           | 89             | 7630       | 8547   | K94601500 | 15        | 15        | 56           | 111            | 16208      | 18115  |
| K94601070 | 10.7      | 10.7      | 47           | 95             | 7630       | 8547   | K94601550 | 15.5      | 15.5      | 58           | 115            | 17336      | 19243  |
| K94601080 | 10.8      | 10.8      | 47           | 95             | 7630       | 8547   | K94601600 | 16        | 16        | 58           | 115            | 16357      | 18268  |
| K94601090 | 10.9      | 10.9      | 47           | 95             | 7630       | 8547   | K94601650 | 16.5      | 16.5      | 60           | 119            | 26106      | 29157  |
| K94601100 | 11        | 11        | 47           | 95             | 7891       | 8840   | K94601700 | 17        | 17        | 60           | 119            | 29412      | 32462  |
| K94601110 | 11.1      | 11.1      | 47           | 95             | 7891       | 8840   | K94601750 | 17.5      | 17.5      | 62           | 123            | 30508      | 33559  |
| K94601120 | 11.2      | 11.2      | 47           | 95             | 7891       | 8840   | K94601800 | 18        | 18        | 62           | 123            | 31083      | 34136  |
| K94601130 | 11.3      | 11.3      | 47           | 95             | 7891       | 8840   | K94601850 | 18.5      | 18.5      | 64           | 127            | 34168      | 37220  |
| K94601140 | 11.4      | 11.4      | 47           | 95             | 7891       | 8840   | K94601900 | 19        | 19        | 64           | 127            | 36061      | 39113  |
| K94601150 | 11.5      | 11.5      | 47           | 95             | 8425       | 9580   | K94601950 | 19.5      | 19.5      | 66           | 131            | 36710      | 42812  |
| K94601160 | 11.6      | 11.6      | 47           | 95             | 9474       | 10606  | K94602000 | 20        | 20        | 66           | 131            | 37702      | 43803  |
| K94601170 | 11.7      | 11.7      | 47           | 95             | 9474       | 10606  |           |           |           |              |                |            |        |

|      |              |
|------|--------------|
| 2C00 | UNCOATED     |
| 2C01 | TIN COATED   |
| 2C03 | TIALN COATED |

## SOLID CARBIDE JOBBER DRILL- K816 SERIES UPTO 45HRC

| Item code | Drill Dia | Shank Dia | Flute Length | Overall length | List Price |        | Itemcode  | Drill Dia | Shank Dia | Flute Length | Overall length | List Price |        |
|-----------|-----------|-----------|--------------|----------------|------------|--------|-----------|-----------|-----------|--------------|----------------|------------|--------|
|           |           |           |              |                | Uncoated   | Coated |           |           |           |              |                | Uncoated   | Coated |
| K81600100 | 1         | 1         | 12           | 34             | 1364       | 1529   | K81600460 | 4.6       | 4.6       | 47           | 80             | 2279       | 2547   |
| K81600110 | 1.1       | 1.1       | 14           | 36             | 1364       | 1529   | K81600470 | 4.7       | 4.7       | 47           | 80             | 2279       | 2547   |
| K81600120 | 1.2       | 1.2       | 16           | 38             | 1364       | 1529   | K81600480 | 4.8       | 4.8       | 52           | 86             | 2488       | 2785   |
| K81600130 | 1.3       | 1.3       | 16           | 38             | 1364       | 1529   | K81600490 | 4.9       | 4.9       | 52           | 86             | 2488       | 2785   |
| K81600140 | 1.4       | 1.4       | 18           | 40             | 1364       | 1529   | K81600500 | 5.0       | 5.0       | 52           | 86             | 2597       | 2907   |
| K81600150 | 1.5       | 1.5       | 18           | 40             | 1364       | 1529   | K81600510 | 5.1       | 5.1       | 52           | 86             | 2612       | 2927   |
| K81600160 | 1.6       | 1.6       | 20           | 43             | 1376       | 1543   | K81600520 | 5.2       | 5.2       | 52           | 86             | 2710       | 3033   |
| K81600170 | 1.7       | 1.7       | 20           | 43             | 1376       | 1543   | K81600530 | 5.3       | 5.3       | 52           | 86             | 2801       | 3135   |
| K81600180 | 1.8       | 1.8       | 22           | 46             | 1376       | 1543   | K81600540 | 5.4       | 5.4       | 57           | 93             | 2895       | 3237   |
| K81600190 | 1.9       | 1.9       | 22           | 46             | 1376       | 1543   | K81600550 | 5.5       | 5.5       | 57           | 93             | 2825       | 3163   |
| K81600200 | 2         | 2         | 24           | 49             | 1376       | 1543   | K81600560 | 5.6       | 5.6       | 57           | 93             | 3019       | 3383   |
| K81600210 | 2.1       | 2.1       | 24           | 49             | 1579       | 1767   | K81600570 | 5.7       | 5.7       | 57           | 93             | 3056       | 3420   |
| K81600220 | 2.2       | 2.2       | 27           | 53             | 1579       | 1767   | K81600580 | 5.8       | 5.8       | 57           | 93             | 3100       | 3467   |
| K81600230 | 2.3       | 2.3       | 27           | 53             | 1579       | 1767   | K81600590 | 5.9       | 5.9       | 57           | 93             | 3123       | 3497   |
| K81600240 | 2.4       | 2.4       | 30           | 57             | 1579       | 1767   | K81600600 | 6.0       | 6.0       | 57           | 93             | 3033       | 3394   |
| K81600250 | 2.5       | 2.5       | 30           | 57             | 1579       | 1767   | K81600610 | 6.1       | 6.1       | 63           | 101            | 3508       | 3926   |
| K81600260 | 2.6       | 2.6       | 30           | 57             | 1681       | 1881   | K81600620 | 6.2       | 6.2       | 63           | 101            | 3508       | 3926   |
| K81600270 | 2.7       | 2.7       | 33           | 61             | 1681       | 1881   | K81600630 | 6.3       | 6.3       | 63           | 101            | 3508       | 3926   |
| K81600280 | 2.8       | 2.8       | 33           | 61             | 1681       | 1881   | K81600640 | 6.4       | 6.4       | 63           | 101            | 3930       | 4400   |
| K81600290 | 2.9       | 2.9       | 33           | 61             | 1681       | 1881   | K81600650 | 6.5       | 6.5       | 63           | 101            | 3733       | 4184   |
| K81600300 | 3         | 3         | 33           | 61             | 1681       | 1881   | K81600660 | 6.6       | 6.6       | 63           | 101            | 4307       | 4820   |
| K81600310 | 3.1       | 3.1       | 36           | 65             | 1748       | 1957   | K81600670 | 6.7       | 6.7       | 63           | 101            | 4522       | 5070   |
| K81600320 | 3.2       | 3.2       | 36           | 65             | 1748       | 1957   | K81600680 | 6.8       | 6.8       | 69           | 109            | 4307       | 4820   |
| K81600330 | 3.3       | 3.3       | 36           | 65             | 1748       | 1957   | K81600690 | 6.9       | 6.9       | 69           | 109            | 4307       | 4820   |
| K81600340 | 3.4       | 3.4       | 39           | 70             | 1748       | 1957   | K81600700 | 7.0       | 7.0       | 69           | 109            | 4091       | 4581   |
| K81600350 | 3.5       | 3.5       | 39           | 70             | 1748       | 1957   | K81600710 | 7.1       | 7.1       | 69           | 109            | 4701       | 5262   |
| K81600360 | 3.6       | 3.6       | 39           | 70             | 1809       | 2024   | K81600720 | 7.2       | 7.2       | 69           | 109            | 4701       | 5262   |
| K81600370 | 3.7       | 3.7       | 39           | 70             | 1889       | 2115   | K81600730 | 7.3       | 7.3       | 69           | 109            | 4701       | 5262   |
| K81600380 | 3.8       | 3.8       | 43           | 75             | 1970       | 2204   | K81600740 | 7.4       | 7.4       | 69           | 109            | 4938       | 5526   |
| K81600390 | 3.9       | 3.9       | 43           | 75             | 2051       | 2298   | K81600750 | 7.5       | 7.5       | 69           | 109            | 4465       | 5003   |
| K81600400 | 4         | 4         | 43           | 75             | 2134       | 2385   | K81600760 | 7.6       | 7.6       | 75           | 117            | 4980       | 5580   |
| K81600410 | 4.1       | 4.1       | 43           | 75             | 2160       | 2420   | K81600770 | 7.7       | 7.7       | 75           | 117            | 4980       | 5580   |
| K81600420 | 4.2       | 4.2       | 43           | 75             | 2190       | 2451   | K81600780 | 7.8       | 7.8       | 75           | 117            | 4980       | 5580   |
| K81600430 | 4.3       | 4.3       | 47           | 80             | 2207       | 2473   | K81600790 | 7.9       | 7.9       | 75           | 117            | 4980       | 5580   |
| K81600440 | 4.4       | 4.4       | 47           | 80             | 2248       | 2516   | K81600800 | 8.0       | 8.0       | 75           | 117            | 4494       | 5027   |
| K81600450 | 4.5       | 4.5       | 47           | 80             | 2279       | 2547   | K81600810 | 8.1       | 8.1       | 75           | 117            | 5516       | 6177   |

|      |              |
|------|--------------|
| 2C00 | UNCOATED     |
| 2C01 | TIN COATED   |
| 2C03 | TIALN COATED |

## SOLID CARBIDE JOBBER DRILL- K816 SERIES UPTO 45HRc

| Item code | Drill Dia | Shank Dia | Flute Length | Overall length | List_Price |        | Itemcode  | Drill Dia | Shank Dia | Flute Length | Overall length | List_Price |        |
|-----------|-----------|-----------|--------------|----------------|------------|--------|-----------|-----------|-----------|--------------|----------------|------------|--------|
|           |           |           |              |                | Uncoated   | Coated |           |           |           |              |                | Uncoated   | Coated |
| K81600820 | 8.2       | 8.2       | 75           | 117.0          | 5516       | 6177   | K81601180 | 11.8      | 11.8      | 94           | 142.0          | 10921      | 12229  |
| K81600830 | 8.3       | 8.3       | 75           | 117.0          | 5516       | 6177   | K81601190 | 11.9      | 11.9      | 101          | 151.0          | 10921      | 12229  |
| K81600840 | 8.4       | 8.4       | 75           | 117.0          | 6096       | 6826   | K81601200 | 12.0      | 12.0      | 101          | 151.0          | 10921      | 12229  |
| K81600850 | 8.5       | 8.5       | 75           | 117.0          | 5516       | 6177   | K81601210 | 12.1      | 12.1      | 101          | 151.0          | 15749      | 19550  |
| K81600860 | 8.6       | 8.6       | 81           | 125.0          | 6585       | 7377   | K81601220 | 12.2      | 12.2      | 101          | 151.0          | 16791      | 20594  |
| K81600870 | 8.7       | 8.7       | 81           | 125.0          | 6585       | 7377   | K81601230 | 12.3      | 12.3      | 101          | 151.0          | 16791      | 20594  |
| K81600880 | 8.8       | 8.8       | 81           | 125.0          | 6585       | 7377   | K81601240 | 12.4      | 12.4      | 101          | 151.0          | 16791      | 20594  |
| K81600890 | 8.9       | 8.9       | 81           | 125.0          | 6585       | 7377   | K81601250 | 12.5      | 12.5      | 101          | 151.0          | 16791      | 20594  |
| K81600900 | 9.0       | 9.0       | 81           | 125.0          | 6326       | 7088   | K81601260 | 12.6      | 12.6      | 101          | 151.0          | 16791      | 20594  |
| K81600910 | 9.1       | 9.1       | 81           | 125.0          | 7520       | 8424   | K81601270 | 12.7      | 12.7      | 101          | 151.0          | 17577      | 21385  |
| K81600920 | 9.2       | 9.2       | 81           | 125.0          | 7520       | 8424   | K81601280 | 12.8      | 12.8      | 101          | 151.0          | 17577      | 21385  |
| K81600930 | 9.3       | 9.3       | 81           | 125.0          | 7520       | 8424   | K81601290 | 12.9      | 12.9      | 101          | 151.0          | 17577      | 21385  |
| K81600940 | 9.4       | 9.4       | 81           | 125.0          | 7895       | 8842   | K81601300 | 13.0      | 13.0      | 101          | 151.0          | 17655      | 21458  |
| K81600950 | 9.5       | 9.5       | 81           | 125.0          | 7895       | 8842   | K81601310 | 13.1      | 13.1      | 101          | 151.0          | 17680      | 21486  |
| K81600960 | 9.6       | 9.6       | 87           | 133.0          | 7962       | 8919   | K81601320 | 13.2      | 13.2      | 101          | 151.0          | 19196      | 22996  |
| K81600970 | 9.7       | 9.7       | 87           | 133.0          | 7962       | 8919   | K81601330 | 13.3      | 13.3      | 108          | 160.0          | 19196      | 22996  |
| K81600980 | 9.8       | 9.8       | 87           | 133.0          | 7962       | 8919   | K81601340 | 13.4      | 13.4      | 108          | 160.0          | 19196      | 22996  |
| K81600990 | 9.9       | 9.9       | 87           | 133.0          | 8637       | 9670   | K81601350 | 13.5      | 13.5      | 108          | 160.0          | 19196      | 22996  |
| K81601000 | 10.0      | 10.0      | 87           | 133.0          | 8197       | 8664   | K81601360 | 13.6      | 13.6      | 108          | 160.0          | 19196      | 22996  |
| K81601010 | 10.1      | 10.1      | 87           | 133.0          | 8197       | 8664   | K81601370 | 13.7      | 13.7      | 108          | 160.0          | 19781      | 23582  |
| K81601020 | 10.2      | 10.2      | 87           | 133.0          | 8192       | 9176   | K81601380 | 13.8      | 13.8      | 108          | 160.0          | 19781      | 23582  |
| K81601030 | 10.3      | 10.3      | 87           | 133.0          | 8192       | 9176   | K81601390 | 13.9      | 13.9      | 108          | 160.0          | 19781      | 23582  |
| K81601040 | 10.4      | 10.4      | 87           | 133.0          | 8192       | 9176   | K81601400 | 14.0      | 14.0      | 108          | 160.0          | 20141      | 23942  |
| K81601050 | 10.5      | 10.5      | 87           | 133.0          | 8797       | 9855   | K81601450 | 14.5      | 14.5      | 114          | 169.0          | 22866      | 26669  |
| K81601060 | 10.6      | 10.6      | 87           | 133.0          | 8797       | 9855   | K81601500 | 15.0      | 15.0      | 114          | 169.0          | 23222      | 27024  |
| K81601070 | 10.7      | 10.7      | 94           | 142.0          | 9101       | 10193  | K81601550 | 15.5      | 15.5      | 120          | 178.0          | 29215      | 33016  |
| K81601080 | 10.8      | 10.8      | 94           | 142.0          | 9101       | 10193  | K81601600 | 16.0      | 16.0      | 120          | 178.0          | 28189      | 31991  |
| K81601090 | 10.9      | 10.9      | 94           | 142.0          | 9101       | 10193  | K81601650 | 16.5      | 16.5      | 125          | 184.0          | 28034      | 34139  |
| K81601100 | 11.0      | 11.0      | 94           | 142.0          | 9101       | 10193  | K81601700 | 17.0      | 17.0      | 125          | 184.0          | 31411      | 37476  |
| K81601110 | 11.1      | 11.1      | 94           | 142.0          | 9863       | 11249  | K81601750 | 17.5      | 17.5      | 130          | 191.0          | 32209      | 38313  |
| K81601120 | 11.2      | 11.2      | 94           | 142.0          | 9863       | 11249  | K81601800 | 18.0      | 18.0      | 130          | 191.0          | 32787      | 38886  |
| K81601130 | 11.3      | 11.3      | 94           | 142.0          | 9863       | 11249  | K81601850 | 18.5      | 18.5      | 135          | 198.0          | 39518      | 45617  |
| K81601140 | 11.4      | 11.4      | 94           | 142.0          | 9863       | 11249  | K81601900 | 19.0      | 19.0      | 135          | 198.0          | 42543      | 48646  |
| K81601150 | 11.5      | 11.5      | 94           | 142.0          | 9863       | 11249  | K81601950 | 19.5      | 19.5      | 140          | 205.0          | 44078      | 50180  |
| K81601160 | 11.6      | 11.6      | 94           | 142.0          | 10921      | 12229  | K81602000 | 20.0      | 20.0      | 140          | 205.0          | 45237      | 51339  |
| K81601170 | 11.7      | 11.7      | 94           | 142.0          | 10921      | 12229  |           |           |           |              |                |            |        |

|      |              |
|------|--------------|
| 2C00 | UNCOATED     |
| 2C01 | TIN COATED   |
| 2C03 | TIALN COATED |

**SOLID CARBIDE GP DRILL- K2GPR3 SERIES UPTO 45HRC**

| Item code        | Variant | Dril Dia | Shank Dia | Flute Length | Overall Length | List Price | Item code        | Variant | Dril Dia | Shank Dia | Flute Length | Overall Length | List Price |
|------------------|---------|----------|-----------|--------------|----------------|------------|------------------|---------|----------|-----------|--------------|----------------|------------|
| K2GPR30300200662 | 0003    | 3        | 6         | 20           | 62             | 2944       | K2GPR30640340879 | 0003    | 6.4      | 8         | 34           | 79             | 5282       |
| K2GPR30310200662 | 0003    | 3.1      | 6         | 20           | 62             | 2944       | K2GPR30650340879 | 0003    | 6.5      | 8         | 34           | 79             | 5282       |
| K2GPR30320200662 | 0003    | 3.2      | 6         | 20           | 62             | 2944       | K2GPR30660340879 | 0003    | 6.6      | 8         | 34           | 79             | 5282       |
| K2GPR30330200662 | 0003    | 3.3      | 6         | 20           | 62             | 2944       | K2GPR30670340879 | 0003    | 6.7      | 8         | 34           | 79             | 5282       |
| K2GPR30340200662 | 0003    | 3.4      | 6         | 20           | 62             | 2944       | K2GPR30680340879 | 0003    | 6.8      | 8         | 34           | 79             | 5282       |
| K2GPR30350200662 | 0003    | 3.5      | 6         | 20           | 62             | 2944       | K2GPR30690340879 | 0003    | 6.9      | 8         | 34           | 79             | 5282       |
| K2GPR30360200662 | 0003    | 3.6      | 6         | 20           | 62             | 2944       | K2GPR30700340879 | 0003    | 7        | 8         | 34           | 79             | 5282       |
| K2GPR30370200662 | 0003    | 3.7      | 6         | 20           | 62             | 2944       | K2GPR30710410879 | 0003    | 7.1      | 8         | 41           | 79             | 5282       |
| K2GPR30380240666 | 0003    | 3.8      | 6         | 24           | 66             | 2944       | K2GPR30720410879 | 0003    | 7.2      | 8         | 41           | 79             | 5282       |
| K2GPR30390240666 | 0003    | 3.9      | 6         | 24           | 66             | 2944       | K2GPR30730410879 | 0003    | 7.3      | 8         | 41           | 79             | 5282       |
| K2GPR30400240666 | 0003    | 4        | 6         | 24           | 66             | 2944       | K2GPR30740410879 | 0003    | 7.4      | 8         | 41           | 79             | 5282       |
| K2GPR30410240666 | 0003    | 4.1      | 6         | 24           | 66             | 3712       | K2GPR30750410879 | 0003    | 7.5      | 8         | 41           | 79             | 5282       |
| K2GPR30420240666 | 0003    | 4.2      | 6         | 24           | 66             | 3712       | K2GPR30760410879 | 0003    | 7.6      | 8         | 41           | 79             | 5282       |
| K2GPR30430240666 | 0003    | 4.3      | 6         | 24           | 66             | 3712       | K2GPR30780410879 | 0003    | 7.8      | 8         | 41           | 79             | 5282       |
| K2GPR30440240666 | 0003    | 4.4      | 6         | 24           | 66             | 3712       | K2GPR30790410879 | 0003    | 7.9      | 8         | 41           | 79             | 5282       |
| K2GPR30450240666 | 0003    | 4.5      | 6         | 24           | 66             | 3712       | K2GPR30800410879 | 0003    | 8        | 8         | 41           | 79             | 5282       |
| K2GPR30460240666 | 0003    | 4.6      | 6         | 24           | 66             | 3712       | K2GPR30810471089 | 0003    | 8.1      | 10        | 47           | 89             | 7518       |
| K2GPR30470240666 | 0003    | 4.7      | 6         | 24           | 66             | 3712       | K2GPR30820471089 | 0003    | 8.2      | 10        | 47           | 89             | 7518       |
| K2GPR30480280666 | 0003    | 4.8      | 6         | 28           | 66             | 3712       | K2GPR30830471089 | 0003    | 8.3      | 10        | 47           | 89             | 7518       |
| K2GPR30490280666 | 0003    | 4.9      | 6         | 28           | 66             | 3712       | K2GPR30840471089 | 0003    | 8.4      | 10        | 47           | 89             | 7518       |
| K2GPR30500280666 | 0003    | 5        | 6         | 28           | 66             | 3712       | K2GPR30850471089 | 0003    | 8.5      | 10        | 47           | 89             | 7518       |
| K2GPR30510280666 | 0003    | 5.1      | 6         | 28           | 66             | 3712       | K2GPR30860471089 | 0003    | 8.6      | 10        | 47           | 89             | 7518       |
| K2GPR30520280666 | 0003    | 5.3      | 6         | 28           | 66             | 3712       | K2GPR30870471089 | 0003    | 8.7      | 10        | 47           | 89             | 7518       |
| K2GPR30530280666 | 0003    | 5.3      | 6         | 28           | 66             | 3712       | K2GPR30880471089 | 0003    | 8.8      | 10        | 47           | 89             | 7518       |
| K2GPR30540280666 | 0003    | 5.4      | 6         | 28           | 66             | 3712       | K2GPR30890471089 | 0003    | 8.9      | 10        | 47           | 89             | 7518       |
| K2GPR30550280666 | 0003    | 5.5      | 6         | 28           | 66             | 3712       | K2GPR30900471089 | 0003    | 9        | 10        | 47           | 89             | 7518       |
| K2GPR30560280666 | 0003    | 5.6      | 6         | 28           | 66             | 3712       | K2GPR30910471089 | 0003    | 9.1      | 10        | 47           | 89             | 7518       |
| K2GPR30570280666 | 0003    | 5.7      | 6         | 28           | 66             | 3712       | K2GPR30920471089 | 0003    | 9.2      | 10        | 47           | 89             | 7518       |
| K2GPR30580280666 | 0003    | 5.8      | 6         | 28           | 66             | 3712       | K2GPR30930471089 | 0003    | 9.3      | 10        | 47           | 89             | 7518       |
| K2GPR30590280666 | 0003    | 5.9      | 6         | 28           | 66             | 3712       | K2GPR30940471089 | 0003    | 9.4      | 10        | 47           | 89             | 7518       |
| K2GPR30600280666 | 0003    | 6        | 6         | 28           | 66             | 3712       | K2GPR30950471089 | 0003    | 9.5      | 10        | 47           | 89             | 7518       |
| K2GPR30610340879 | 0003    | 6.1      | 8         | 34           | 79             | 5282       | K2GPR30960471089 | 0003    | 9.6      | 10        | 47           | 89             | 7518       |
| K2GPR30620340879 | 0003    | 6.2      | 8         | 34           | 79             | 5282       | K2GPR30970471089 | 0003    | 9.7      | 10        | 47           | 89             | 7518       |
| K2GPR30630340879 | 0003    | 6.3      | 8         | 34           | 79             | 5282       | K2GPR30980471089 | 0003    | 9.8      | 10        | 47           | 89             | 7518       |

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| 0003 | TIALN COATED |
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## SOLID CARBIDE GP DRILL- K2GPR3 SERIES UPTO 45HRC

| Item code        | Variant | Drill Dia | Shank Dia | Flute Length | Overall Length | List Price | Item code        | Variant | Drill Dia | Shank Dia | Flute Length | Overall Length | List Price |
|------------------|---------|-----------|-----------|--------------|----------------|------------|------------------|---------|-----------|-----------|--------------|----------------|------------|
| K2GPR30990471089 | 0003    | 9.9       | 10        | 47           | 89             | 7518       | K2GPR313206014A7 | 0003    | 13.2      | 14        | 60           | 107            | 16354      |
| K2GPR31000471089 | 0003    | 10        | 10        | 47           | 89             | 7518       | K2GPR313306014A7 | 0003    | 13.3      | 14        | 60           | 107            | 16354      |
| K2GPR310105512A2 | 0003    | 10.1      | 12        | 55           | 102            | 13145      | K2GPR313406014A7 | 0003    | 13.4      | 14        | 60           | 107            | 16354      |
| K2GPR310205512A2 | 0003    | 10.2      | 12        | 55           | 102            | 13145      | K2GPR313506014A7 | 0003    | 13.5      | 14        | 60           | 107            | 16354      |
| K2GPR310305512A2 | 0003    | 10.3      | 12        | 55           | 102            | 13145      | K2GPR313606014A7 | 0003    | 13.6      | 14        | 60           | 107            | 16354      |
| K2GPR310405512A2 | 0003    | 10.4      | 12        | 55           | 102            | 13145      | K2GPR313706014A7 | 0003    | 13.7      | 14        | 60           | 107            | 16354      |
| K2GPR310505512A2 | 0003    | 10.5      | 12        | 55           | 102            | 13145      | K2GPR313806014A7 | 0003    | 13.8      | 14        | 60           | 107            | 16354      |
| K2GPR310605512A2 | 0003    | 10.6      | 12        | 55           | 102            | 13145      | K2GPR313906014A7 | 0003    | 13.9      | 14        | 60           | 107            | 16354      |
| K2GPR310705512A2 | 0003    | 10.7      | 12        | 55           | 102            | 13145      | K2GPR314006014A7 | 0003    | 14        | 14        | 60           | 107            | 16354      |
| K2GPR310805512A2 | 0003    | 10.8      | 12        | 55           | 102            | 13145      | K2GPR314206516B5 | 0003    | 14.2      | 16        | 65           | 115            | 18417      |
| K2GPR310905512A2 | 0003    | 10.9      | 12        | 55           | 102            | 13145      | K2GPR314306516B5 | 0003    | 14.3      | 16        | 65           | 115            | 18417      |
| K2GPR311005512A2 | 0003    | 11        | 12        | 55           | 102            | 13145      | K2GPR314506516B5 | 0003    | 14.5      | 16        | 65           | 115            | 18417      |
| K2GPR311105512A2 | 0003    | 11.1      | 12        | 55           | 102            | 13145      | K2GPR314606516B5 | 0003    | 14.6      | 16        | 65           | 115            | 18417      |
| K2GPR311205512A2 | 0003    | 11.2      | 12        | 55           | 102            | 13145      | K2GPR314706516B5 | 0003    | 14.7      | 16        | 65           | 115            | 21026      |
| K2GPR311305512A2 | 0003    | 11.3      | 12        | 55           | 102            | 13145      | K2GPR314806516B5 | 0003    | 14.8      | 16        | 65           | 115            | 21026      |
| K2GPR311405512A2 | 0003    | 11.4      | 12        | 55           | 102            | 13145      | K2GPR315006516B5 | 0003    | 15        | 16        | 65           | 115            | 21772      |
| K2GPR311505512A2 | 0003    | 11.5      | 12        | 55           | 102            | 13145      | K2GPR315206516B5 | 0003    | 15.2      | 16        | 65           | 115            | 21772      |
| K2GPR311605512A2 | 0003    | 11.6      | 12        | 55           | 102            | 13145      | K2GPR315506516B5 | 0003    | 15.5      | 16        | 65           | 115            | 21772      |
| K2GPR311705512A2 | 0003    | 11.7      | 12        | 55           | 102            | 13145      | K2GPR315706516B5 | 0003    | 15.7      | 16        | 65           | 115            | 21772      |
| K2GPR311805512A2 | 0003    | 11.8      | 12        | 55           | 102            | 13145      | K2GPR315806516B5 | 0003    | 15.8      | 16        | 65           | 115            | 21772      |
| K2GPR311905512A2 | 0003    | 11.9      | 12        | 55           | 102            | 13145      | K2GPR316006516B5 | 0003    | 16        | 16        | 65           | 115            | 21772      |
| K2GPR312005512A2 | 0003    | 12        | 12        | 55           | 102            | 13145      | K2GPR316507318C3 | 0003    | 16.5      | 18        | 73           | 123            | 34136      |
| K2GPR312106014A7 | 0003    | 12.1      | 14        | 60           | 107            | 16354      | K2GPR316807318C3 | 0003    | 16.8      | 18        | 73           | 123            | 34136      |
| K2GPR312206014A7 | 0003    | 12.2      | 14        | 60           | 107            | 16354      | K2GPR317007318C3 | 0003    | 17        | 18        | 73           | 123            | 34136      |
| K2GPR312306014A7 | 0003    | 12.3      | 14        | 60           | 107            | 16354      | K2GPR317507318C3 | 0003    | 17.5      | 18        | 73           | 123            | 34136      |
| K2GPR312406014A7 | 0003    | 12.4      | 14        | 60           | 107            | 16354      | K2GPR317807318C3 | 0003    | 17.8      | 18        | 73           | 123            | 34136      |
| K2GPR312506014A7 | 0003    | 12.5      | 14        | 60           | 107            | 16354      | K2GPR318007318C3 | 0003    | 18        | 18        | 73           | 123            | 34136      |
| K2GPR312606014A7 | 0003    | 12.6      | 14        | 60           | 107            | 16354      | K2GPR318507920D1 | 0003    | 18.5      | 20        | 79           | 131            | 43803      |
| K2GPR312706014A7 | 0003    | 12.7      | 14        | 60           | 107            | 16354      | K2GPR319007920D1 | 0003    | 19        | 20        | 79           | 131            | 43803      |
| K2GPR312806014A7 | 0003    | 12.8      | 14        | 60           | 107            | 16354      | K2GPR319507920D1 | 0003    | 19.5      | 20        | 79           | 131            | 43803      |
| K2GPR312906014A7 | 0003    | 12.9      | 14        | 60           | 107            | 16354      | K2GPR319807920D1 | 0003    | 19.8      | 20        | 79           | 131            | 43803      |
| K2GPR313006014A7 | 0003    | 13        | 14        | 60           | 107            | 16354      | K2GPR320007920D1 | 0003    | 20        | 20        | 79           | 131            | 43803      |
| K2GPR313106014A7 | 0003    | 13.1      | 14        | 60           | 107            | 16354      |                  |         |           |           |              |                |            |

|      |              |
|------|--------------|
| 0003 | TIALN COATED |
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**SOLID CARBIDE GP DRILL- K2GPR5 SERIES UPTO 45HRC**

| Item code        | Variant | Drill Dia | Shank Dia | Flute Length | Overall Length | List Price | Item code        | Variant | Drill Dia | Shank Dia | Flute Length | Overall Length | List Price |
|------------------|---------|-----------|-----------|--------------|----------------|------------|------------------|---------|-----------|-----------|--------------|----------------|------------|
| K2GPR50300280666 | 0003    | 3         | 6         | 28           | 66             | 3449       | K2GPR50640530891 | 0003    | 6.4       | 8         | 53           | 91             | 6672       |
| K2GPR50310280666 | 0003    | 3.1       | 6         | 28           | 66             | 3449       | K2GPR50650530891 | 0003    | 6.5       | 8         | 53           | 91             | 6672       |
| K2GPR50320280666 | 0003    | 3.2       | 6         | 28           | 66             | 3449       | K2GPR50660530891 | 0003    | 6.6       | 8         | 53           | 91             | 6672       |
| K2GPR50330280666 | 0003    | 3.3       | 6         | 28           | 66             | 3449       | K2GPR50670530891 | 0003    | 6.7       | 8         | 53           | 91             | 6672       |
| K2GPR50340280666 | 0003    | 3.4       | 6         | 28           | 66             | 3449       | K2GPR50680530891 | 0003    | 6.8       | 8         | 53           | 91             | 6672       |
| K2GPR50350280666 | 0003    | 3.5       | 6         | 28           | 66             | 3449       | K2GPR50690530891 | 0003    | 6.9       | 8         | 53           | 91             | 6672       |
| K2GPR50360280666 | 0003    | 3.6       | 6         | 28           | 66             | 3449       | K2GPR50700530891 | 0003    | 7         | 8         | 53           | 91             | 6672       |
| K2GPR50370280666 | 0003    | 3.7       | 6         | 28           | 66             | 3449       | K2GPR50710530891 | 0003    | 7.1       | 8         | 53           | 91             | 6672       |
| K2GPR50380360674 | 0003    | 3.8       | 6         | 36           | 74             | 4193       | K2GPR50720530891 | 0003    | 7.2       | 8         | 53           | 91             | 6672       |
| K2GPR50390360674 | 0003    | 3.9       | 6         | 36           | 74             | 4193       | K2GPR50730530891 | 0003    | 7.2       | 8         | 53           | 91             | 6672       |
| K2GPR50400360674 | 0003    | 4         | 6         | 36           | 74             | 4193       | K2GPR50740530891 | 0003    | 7.4       | 8         | 53           | 91             | 6672       |
| K2GPR50410360674 | 0003    | 4.1       | 6         | 36           | 74             | 4193       | K2GPR50750530891 | 0003    | 7.5       | 8         | 53           | 91             | 6672       |
| K2GPR50420360674 | 0003    | 4.2       | 6         | 36           | 74             | 4193       | K2GPR50760530891 | 0003    | 7.6       | 8         | 53           | 91             | 6672       |
| K2GPR50430360674 | 0003    | 4.3       | 6         | 36           | 74             | 4193       | K2GPR50770530891 | 0003    | 7.7       | 8         | 53           | 91             | 6672       |
| K2GPR50440360674 | 0003    | 4.4       | 6         | 36           | 74             | 4193       | K2GPR50780530891 | 0003    | 7.8       | 8         | 53           | 91             | 6672       |
| K2GPR50450360674 | 0003    | 4.5       | 6         | 36           | 74             | 4193       | K2GPR50790530891 | 0003    | 7.9       | 8         | 53           | 91             | 6672       |
| K2GPR50460360674 | 0003    | 4.6       | 6         | 36           | 74             | 4193       | K2GPR50800530891 | 0003    | 8         | 8         | 53           | 91             | 6672       |
| K2GPR50470360674 | 0003    | 4.7       | 6         | 36           | 74             | 4193       | K2GPR508106110A3 | 0003    | 8.1       | 10        | 61           | 103            | 9280       |
| K2GPR50480440682 | 0003    | 4.8       | 6         | 44           | 82             | 4193       | K2GPR508206110A3 | 0003    | 8.2       | 10        | 61           | 103            | 9280       |
| K2GPR50490440682 | 0003    | 4.9       | 6         | 44           | 82             | 4193       | K2GPR508306110A3 | 0003    | 8.3       | 10        | 61           | 103            | 9280       |
| K2GPR50500440682 | 0003    | 5         | 6         | 44           | 82             | 4193       | K2GPR508406110A3 | 0003    | 8.4       | 10        | 61           | 103            | 9280       |
| K2GPR50510440682 | 0003    | 5.1       | 6         | 44           | 82             | 4193       | K2GPR508506110A3 | 0003    | 8.5       | 10        | 61           | 103            | 9280       |
| K2GPR50520440682 | 0003    | 5.2       | 6         | 44           | 82             | 4193       | K2GPR508606110A3 | 0003    | 8.6       | 10        | 61           | 103            | 9280       |
| K2GPR50530440682 | 0003    | 5.3       | 6         | 44           | 82             | 4193       | K2GPR508706110A3 | 0003    | 8.7       | 10        | 61           | 103            | 9280       |
| K2GPR50540440682 | 0003    | 5.4       | 6         | 44           | 82             | 4193       | K2GPR508806110A3 | 0003    | 8.8       | 10        | 61           | 103            | 9280       |
| K2GPR50550440682 | 0003    | 5.5       | 6         | 44           | 82             | 4193       | K2GPR508906110A3 | 0003    | 8.9       | 10        | 61           | 103            | 9280       |
| K2GPR50560440682 | 0003    | 5.6       | 6         | 44           | 82             | 4193       | K2GPR509006110A3 | 0003    | 9         | 10        | 61           | 103            | 9431       |
| K2GPR50570440682 | 0003    | 5.7       | 6         | 44           | 82             | 4193       | K2GPR509106110A3 | 0003    | 9.1       | 10        | 61           | 103            | 9431       |
| K2GPR50580440682 | 0003    | 5.8       | 6         | 44           | 82             | 4193       | K2GPR509206110A3 | 0003    | 9.2       | 10        | 61           | 103            | 9431       |
| K2GPR50590440682 | 0003    | 5.9       | 6         | 44           | 82             | 4193       | K2GPR509306110A3 | 0003    | 9.3       | 10        | 61           | 103            | 9431       |
| K2GPR50600440682 | 0003    | 6         | 6         | 44           | 82             | 4193       | K2GPR509406110A3 | 0003    | 9.4       | 10        | 61           | 103            | 9431       |
| K2GPR50610530891 | 0003    | 6.1       | 8         | 53           | 91             | 6672       | K2GPR509506110A3 | 0003    | 9.5       | 10        | 61           | 103            | 9431       |
| K2GPR50620530891 | 0003    | 6.2       | 8         | 53           | 91             | 6672       | K2GPR509606110A3 | 0003    | 9.6       | 10        | 61           | 103            | 9431       |
| K2GPR50630530891 | 0003    | 6.3       | 8         | 53           | 91             | 6672       | K2GPR509706110A3 | 0003    | 9.7       | 10        | 61           | 103            | 9431       |

0003 TIALN COATED

## SOLID CARBIDE GP DRILL- K2GPR5 SERIES UPTO 45HRc

| Item code        | Variant | Drill Dia | Shank Dia | Flute Length | Overall Length | List Price | Item code        | Variant | Drill Dia | Shank Dia | Flute Length | Overall Length | List Price |
|------------------|---------|-----------|-----------|--------------|----------------|------------|------------------|---------|-----------|-----------|--------------|----------------|------------|
| K2GPR509806110A3 | 0003    | 9.8       | 10        | 61           | 103            | 9431       | K2GPR513107714C4 | 0003    | 13.1      | 14        | 77           | 124            | 18548      |
| K2GPR509906110A3 | 0003    | 9.9       | 10        | 61           | 103            | 9431       | K2GPR513207714C4 | 0003    | 13.2      | 14        | 77           | 124            | 18548      |
| K2GPR510006110A3 | 0003    | 10        | 10        | 61           | 103            | 9431       | K2GPR513307714C4 | 0003    | 13.3      | 14        | 77           | 124            | 18548      |
| K2GPR510107112B8 | 0003    | 10.1      | 12        | 71           | 118            | 15346      | K2GPR513407714C4 | 0003    | 13.4      | 14        | 77           | 124            | 18548      |
| K2GPR510207112B8 | 0003    | 10.2      | 12        | 71           | 118            | 15346      | K2GPR513507714C4 | 0003    | 13.5      | 14        | 77           | 124            | 18548      |
| K2GPR510307112B8 | 0003    | 10.3      | 12        | 71           | 118            | 15346      | K2GPR513607714C4 | 0003    | 13.6      | 14        | 77           | 124            | 18548      |
| K2GPR510407112B8 | 0003    | 10.4      | 12        | 71           | 118            | 15346      | K2GPR513707714C4 | 0003    | 13.7      | 14        | 77           | 124            | 18548      |
| K2GPR510507112B8 | 0003    | 10.5      | 12        | 71           | 118            | 15346      | K2GPR513807714C4 | 0003    | 13.8      | 14        | 77           | 124            | 18548      |
| K2GPR510607112B8 | 0003    | 10.6      | 12        | 71           | 118            | 15346      | K2GPR514007714C4 | 0003    | 14        | 14        | 77           | 124            | 18548      |
| K2GPR510707112B8 | 0003    | 10.7      | 12        | 71           | 118            | 15346      | K2GPR514208316D3 | 0003    | 14.2      | 16        | 83           | 133            | 22861      |
| K2GPR510807112B8 | 0003    | 10.8      | 12        | 71           | 118            | 15346      | K2GPR514308316D3 | 0003    | 14.3      | 16        | 83           | 133            | 22861      |
| K2GPR510907112B8 | 0003    | 10.9      | 12        | 71           | 118            | 15346      | K2GPR514508316D3 | 0003    | 14.3      | 16        | 83           | 133            | 22861      |
| K2GPR511007112B8 | 0003    | 11        | 12        | 71           | 118            | 15346      | K2GPR514608316D3 | 0003    | 14.6      | 16        | 83           | 133            | 22861      |
| K2GPR511107112B8 | 0003    | 11.1      | 12        | 71           | 118            | 15346      | K2GPR514708316D3 | 0003    | 14.7      | 16        | 83           | 133            | 22861      |
| K2GPR511207112B8 | 0003    | 11.2      | 12        | 71           | 118            | 15346      | K2GPR514808316D3 | 0003    | 14.8      | 16        | 83           | 133            | 22861      |
| K2GPR511307112B8 | 0003    | 11.3      | 12        | 71           | 118            | 15346      | K2GPR515008316D3 | 0003    | 15        | 16        | 83           | 133            | 23578      |
| K2GPR511407112B8 | 0003    | 11.4      | 12        | 71           | 118            | 15346      | K2GPR515208316D3 | 0003    | 15.3      | 16        | 83           | 133            | 23578      |
| K2GPR511507112B8 | 0003    | 11.5      | 12        | 71           | 118            | 15346      | K2GPR515508316D3 | 0003    | 15.5      | 16        | 83           | 133            | 23578      |
| K2GPR511607112B8 | 0003    | 11.6      | 12        | 71           | 118            | 15346      | K2GPR515708316D3 | 0003    | 15.7      | 16        | 83           | 133            | 23578      |
| K2GPR511707112B8 | 0003    | 11.7      | 12        | 71           | 118            | 15346      | K2GPR515808316D3 | 0003    | 15.8      | 16        | 83           | 133            | 23578      |
| K2GPR511807112B8 | 0003    | 11.8      | 12        | 71           | 118            | 15346      | K2GPR516008316D3 | 0003    | 16        | 16        | 83           | 133            | 23578      |
| K2GPR511907112B8 | 0003    | 11.9      | 12        | 71           | 118            | 15346      | K2GPR516509318E3 | 0003    | 16.5      | 18        | 93           | 143            | 34874      |
| K2GPR512007112B8 | 0003    | 12        | 12        | 71           | 118            | 15346      | K2GPR516809318E3 | 0003    | 16.8      | 18        | 93           | 143            | 34874      |
| K2GPR512107714C4 | 0003    | 12.1      | 14        | 77           | 124            | 18548      | K2GPR517009318E3 | 0003    | 17        | 18        | 93           | 143            | 34874      |
| K2GPR512207714C4 | 0003    | 12.2      | 14        | 77           | 124            | 18548      | K2GPR517509318E3 | 0003    | 17.5      | 18        | 93           | 143            | 34874      |
| K2GPR512307714C4 | 0003    | 12        | 14        | 77           | 124            | 18548      | K2GPR517809318E3 | 0003    | 17.8      | 18        | 93           | 143            | 34874      |
| K2GPR512407714C4 | 0003    | 12.5      | 14        | 77           | 124            | 18548      | K2GPR518009318E3 | 0003    | 18        | 18        | 93           | 143            | 34874      |
| K2GPR512507714C4 | 0003    | 12.5      | 14        | 77           | 124            | 18548      | K2GPR518510120F3 | 0003    | 18.5      | 20        | 101          | 153            | 41282      |
| K2GPR512607714C4 | 0003    | 12.6      | 14        | 77           | 124            | 18548      | K2GPR519010120F3 | 0003    | 19        | 20        | 101          | 153            | 41282      |
| K2GPR512707714C4 | 0003    | 12.7      | 14        | 77           | 124            | 18548      | K2GPR519510120F3 | 0003    | 19.5      | 20        | 101          | 153            | 41282      |
| K2GPR512807714C4 | 0003    | 12.8      | 14        | 77           | 124            | 18548      | K2GPR519810120F3 | 0003    | 19.8      | 20        | 101          | 153            | 41282      |
| K2GPR512907714C4 | 0003    | 12.9      | 14        | 77           | 124            | 18548      | K2GPR520010120F3 | 0003    | 20        | 20        | 101          | 153            | 41282      |
| K2GPR513007714C4 | 0003    | 13        | 14        | 77           | 124            | 18548      |                  |         |           |           |              |                |            |

|      |              |
|------|--------------|
| 0003 | TIALN COATED |
|------|--------------|

## SOLID CARBIDE GP END MILLS- K2GPSE/K4GPSE SERIES UPTO 45HRC

| STUB SERIES      |         |      |    |    |      |            |
|------------------|---------|------|----|----|------|------------|
| Item code        | Variant | CD   | SD | FL | OAL  | List Price |
| K4GPSE0300603038 | 00S3    | 3.0  | 3  | 6  | 38.0 | 1188       |
| K4GPSE0300604038 | 00S3    | 3.0  | 4  | 6  | 38.0 | 1745       |
| K4GPSE0300606038 | 00S3    | 3.0  | 6  | 6  | 38.0 | 1551       |
| K4GPSE0350704050 | 00S3    | 3.5  | 4  | 7  | 50.0 | 1745       |
| K4GPSE0400804050 | 00S3    | 4.0  | 4  | 8  | 50.0 | 1602       |
| K4GPSE0400806050 | 00S3    | 4.0  | 6  | 8  | 50.0 | 2203       |
| K4GPSE0501006050 | 00S3    | 5.0  | 6  | 10 | 50.0 | 2203       |
| K4GPSE0551006054 | 00S3    | 5.5  | 6  | 10 | 54.0 | 2203       |
| K4GPSE0601206054 | 00S3    | 6.0  | 6  | 12 | 54.0 | 2060       |
| K4GPSE0701207054 | 00S3    | 7.0  | 7  | 12 | 54.0 | 2418       |
| K4GPSE0701208054 | 00S3    | 7.0  | 8  | 12 | 54.0 | 2989       |
| K4GPSE0801208054 | 00S3    | 8.0  | 8  | 12 | 54.0 | 2847       |
| K4GPSE0901409066 | 00S3    | 9.0  | 9  | 14 | 66.0 | 3576       |
| K4GPSE0901410066 | 00S3    | 9.0  | 10 | 14 | 66.0 | 5006       |
| K4GPSE1001410066 | 00S3    | 10.0 | 10 | 14 | 66.0 | 4863       |
| K4GPSE1101911073 | 00S3    | 11.0 | 11 | 19 | 73.0 | 5321       |
| K4GPSE1101912073 | 00S3    | 11.0 | 12 | 19 | 73.0 | 5629       |
| K4GPSE1201912073 | 00S3    | 12.0 | 12 | 19 | 73.0 | 5486       |
| K4GPSE1302214075 | 00S3    | 13.0 | 14 | 22 | 75.0 | 8237       |
| K4GPSE1402214075 | 00S3    | 14.0 | 14 | 22 | 75.0 | 8094       |
| K4GPSE1502516082 | 00S3    | 15.0 | 16 | 25 | 82.0 | 9549       |
| K4GPSE1602516082 | 00S3    | 16.0 | 16 | 25 | 82.0 | 9406       |
| K4GPSE1702518084 | 00S3    | 17.0 | 18 | 25 | 84.0 | 13425      |
| K4GPSE1802518084 | 00S3    | 18.0 | 18 | 25 | 84.0 | 13282      |
| K4GPSE1902520084 | 00S3    | 19.0 | 20 | 25 | 84.0 | 20785      |
| K4GPSE2002520084 | 00S3    | 20.0 | 20 | 25 | 84.0 | 20642      |

| REGULAR SERIES   |         |      |    |    |       |            |
|------------------|---------|------|----|----|-------|------------|
| Item code        | Variant | CD   | SD | FL | OAL   | List Price |
| K4GPSE0201203038 | 0003    | 2.0  | 3  | 12 | 38.0  | 1417       |
| K4GPSE0301203038 | 0003    | 3.0  | 3  | 12 | 38.0  | 1316       |
| K4GPSE0301204038 | 0003    | 3.0  | 4  | 12 | 38.0  | 1430       |
| K4GPSE0301206038 | 0003    | 3.0  | 6  | 12 | 38.0  | 1560       |
| K4GPSE0351204050 | 0003    | 3.5  | 4  | 12 | 50.0  | 1874       |
| K4GPSE0401404050 | 0003    | 4.0  | 4  | 14 | 50.0  | 1731       |
| K4GPSE0401406050 | 0003    | 4.0  | 6  | 14 | 50.0  | 2148       |
| K4GPSE0451605050 | 0003    | 4.5  | 5  | 16 | 50.0  | 2317       |
| K4GPSE0501605050 | 0003    | 5.0  | 5  | 16 | 50.0  | 2174       |
| K4GPSE0501606050 | 0003    | 5.0  | 6  | 16 | 50.0  | 2148       |
| K4GPSE0551606056 | 0003    | 5.5  | 6  | 16 | 56.0  | 2404       |
| K4GPSE0601906056 | 0003    | 6.0  | 6  | 19 | 56.0  | 2261       |
| K4GPSE0701907063 | 0003    | 7.0  | 7  | 19 | 63.0  | 2718       |
| K4GPSE0802008063 | 0003    | 8.0  | 8  | 20 | 63.0  | 2746       |
| K4GPSE0852209075 | 0003    | 8.5  | 9  | 22 | 75.0  | 4349       |
| K4GPSE0902209075 | 0003    | 9.0  | 9  | 22 | 75.0  | 3992       |
| K4GPSE1002210075 | 0003    | 10.0 | 10 | 22 | 75.0  | 4649       |
| K4GPSE1102511075 | 0003    | 11.0 | 11 | 25 | 75.0  | 5314       |
| K4GPSE1202512075 | 0003    | 12.0 | 12 | 25 | 75.0  | 5543       |
| K4GPSE1302514075 | 0003    | 13.0 | 14 | 25 | 75.0  | 10084      |
| K4GPSE1403214089 | 0003    | 14.0 | 14 | 32 | 89.0  | 9941       |
| K4GPSE1503216089 | 0003    | 15.0 | 16 | 32 | 89.0  | 11534      |
| K4GPSE1603216089 | 0003    | 16.0 | 16 | 32 | 89.0  | 10513      |
| K4GPSE1803818100 | 0003    | 18.0 | 18 | 38 | 100.0 | 16305      |
| K4GPSE1903820100 | 0003    | 19.0 | 20 | 38 | 100.0 | 22885      |
| K4GPSE2003820100 | 0003    | 20.0 | 20 | 38 | 100.0 | 22885      |
| K4GPSE2203822100 | 0003    | 22.0 | 22 | 38 | 100.0 | 25173      |
| K4GPSE2503825100 | 0003    | 25.0 | 25 | 38 | 100.0 | 31574      |

| LONG SERIES      |         |      |    |    |       |            |
|------------------|---------|------|----|----|-------|------------|
| Item code        | Variant | CD   | SD | FL | OAL   | List Price |
| K4GPSE0302503075 | 00L3    | 3.0  | 3  | 25 | 75.0  | 2446       |
| K4GPSE0302504075 | 00L3    | 3.0  | 4  | 25 | 75.0  | 2861       |
| K4GPSE0402504075 | 00L3    | 4.0  | 4  | 25 | 75.0  | 2718       |
| K4GPSE0502505075 | 00L3    | 5.0  | 5  | 25 | 75.0  | 3076       |
| K4GPSE0502506075 | 00L3    | 5.0  | 6  | 25 | 75.0  | 3333       |
| K4GPSE0602506075 | 00L3    | 6.0  | 6  | 25 | 75.0  | 3190       |
| K4GPSE0803008075 | 00L3    | 8.0  | 8  | 30 | 75.0  | 3648       |
| K4GPSE1004010100 | 00L3    | 10.0 | 10 | 40 | 100.0 | 5797       |
| K4GPSE1005010100 | 00L3    | 10.0 | 10 | 50 | 100.0 | 6058       |
| K4GPSE1205012100 | 00L3    | 12.0 | 12 | 50 | 100.0 | 7951       |
| K4GPSE1405014100 | 00L3    | 14.0 | 14 | 50 | 100.0 | 13608      |
| K4GPSE1605016100 | 00L3    | 16.0 | 16 | 50 | 100.0 | 16017      |
| K4GPSE1805018100 | 00L3    | 18.0 | 18 | 50 | 100.0 | 21401      |
| K4GPSE2005020100 | 00L3    | 20.0 | 20 | 50 | 100.0 | 27899      |
| K4GPSE2507525150 | 00L3    | 25.0 | 25 | 75 | 150.0 | 53609      |

| EXTRA LONG SERIES |         |      |    |    |       |            |
|-------------------|---------|------|----|----|-------|------------|
| Item code         | Variant | CD   | SD | FL | OAL   | List Price |
| K4GPSE0302504100  | 00X3    | 3.0  | 4  | 25 | 100.0 | 3061       |
| K4GPSE0402504100  | 00X3    | 4.0  | 4  | 25 | 100.0 | 3420       |
| K4GPSE0502506100  | 00X3    | 5.0  | 6  | 25 | 100.0 | 3994       |
| K4GPSE0603006100  | 00X3    | 6.0  | 6  | 30 | 100.0 | 3994       |
| K4GPSE0803508100  | 00X3    | 8.0  | 8  | 35 | 100.0 | 5301       |
| K4GPSE0804008120  | 00X3    | 8.0  | 8  | 40 | 120.0 | 6625       |
| K4GPSE0805008150  | 00X3    | 8.0  | 8  | 50 | 150.0 | 6625       |
| K4GPSE1007510150  | 00X3    | 10.0 | 10 | 75 | 150.0 | 7211       |
| K4GPSE1207512150  | 00X3    | 12.0 | 12 | 75 | 150.0 | 16128      |
| K4GPSE1407514150  | 00X3    | 14.0 | 14 | 75 | 150.0 | 25512      |
| K4GPSE1607516150  | 00X3    | 16.0 | 16 | 75 | 150.0 | 30031      |
| K4GPSE1807518150  | 00X3    | 18.0 | 18 | 75 | 150.0 | 40127      |
| K4GPSE2007520150  | 00X3    | 20.0 | 20 | 75 | 150.0 | 52235      |

|      |              |
|------|--------------|
| 00S3 | TIALN COATED |
| 0003 | TIALN COATED |
| 00L3 | TIALN COATED |
| 00X3 | TIALN COATED |

## SOLID CARBIDE GP BALL NOSE END MILLS - K2GPSB / K4GPSB SERIES UPTO 45HRc

| STUB SERIES      |         |             |           |              |                |            |
|------------------|---------|-------------|-----------|--------------|----------------|------------|
| Item code        | Variant | Cutting Dia | Shank Dia | Flute Length | Overall Length | List Price |
| K4GPSB0300603038 | 00S3    | 3.0         | 3         | 6            | 38             | 1400       |
| K4GPSB0400804050 | 00S3    | 4.0         | 4         | 8            | 50             | 1888       |
| K4GPSB0501005050 | 00S3    | 5.0         | 5         | 10           | 50             | 2361       |
| K4GPSB0501006050 | 00S3    | 5.0         | 6         | 10           | 50             | 2547       |
| K4GPSB0601206050 | 00S3    | 6.0         | 6         | 12           | 50             | 2404       |
| K4GPSB0801208050 | 00S3    | 8.0         | 8         | 12           | 50             | 2854       |
| K4GPSB1001610056 | 00S3    | 10.0        | 10        | 16           | 56             | 4900       |
| K4GPSB1201912063 | 00S3    | 12.0        | 12        | 19           | 63             | 5607       |
| K4GPSB1401914070 | 00S3    | 14.0        | 14        | 19           | 70             | 10012      |
| K4GPSB1602516076 | 00S3    | 16.0        | 16        | 25           | 76             | 10584      |
| K4GPSB2002520076 | 00S3    | 20.0        | 20        | 25           | 76             | 20596      |
| REGULAR SERIES   |         |             |           |              |                |            |
| Item code        | Variant | Cutting Dia | Shank Dia | Flute Length | Overall Length | List Price |
| K4GPSB0251203038 | 0003    | 2.5         | 3         | 12           | 38             | 1747       |
| K4GPSB0301203038 | 0003    | 3.0         | 3         | 12           | 38             | 1552       |
| K4GPSB0301204038 | 0003    | 3.0         | 4         | 12           | 38             | 1698       |
| K4GPSB0301206038 | 0003    | 3.0         | 6         | 12           | 38             | 1888       |
| K4GPSB0401404050 | 0003    | 4.0         | 4         | 14           | 50             | 2046       |
| K4GPSB0401406050 | 0003    | 4.0         | 6         | 14           | 50             | 2542       |
| K4GPSB0501605050 | 0003    | 5.0         | 5         | 16           | 50             | 2575       |
| K4GPSB0501606050 | 0003    | 5.0         | 6         | 16           | 50             | 2542       |
| K4GPSB0601906056 | 0003    | 6.0         | 6         | 19           | 56             | 2687       |
| K4GPSB0802008063 | 0003    | 8.0         | 8         | 20           | 63             | 3140       |
| K4GPSB1002210075 | 0003    | 10.0        | 10        | 22           | 75             | 5478       |
| K4GPSB1202512075 | 0003    | 12.0        | 12        | 25           | 75             | 6558       |
| K4GPSB1403214089 | 0003    | 14.0        | 14        | 32           | 89             | 12938      |
| K4GPSB1603216089 | 0003    | 16.0        | 16        | 32           | 89             | 12430      |
| K4GPSB1803818100 | 0003    | 18.0        | 18        | 38           | 100            | 19296      |
| K4GPSB2003820100 | 0003    | 20.0        | 20        | 38           | 100            | 27190      |
| K4GPSB2504025100 | 0003    | 25.0        | 25        | 40           | 100            | 37219      |
| LONG SERIES      |         |             |           |              |                |            |
| Item code        | Variant | Cutting Dia | Shank Dia | Flute Length | Overall Length | List Price |
| K4GPSB0302003075 | 00L3    | 3.0         | 3         | 20           | 75             | 2876       |
| K4GPSB0302004075 | 00L3    | 3.0         | 4         | 20           | 75             | 3351       |
| K4GPSB0402004075 | 00L3    | 4.0         | 4         | 20           | 75             | 3208       |
| K4GPSB0502506075 | 00L3    | 5.0         | 6         | 25           | 75             | 3913       |
| K4GPSB0602506075 | 00L3    | 6.0         | 6         | 25           | 75             | 3770       |
| K4GPSB0802508089 | 00L3    | 8.0         | 8         | 25           | 89             | 5094       |
| K4GPSB1003010089 | 00L3    | 10.0        | 10        | 30           | 89             | 6001       |
| K4GPSB1004010100 | 00L3    | 10.0        | 10        | 40           | 100            | 6784       |
| K4GPSB1203012100 | 00L3    | 12.0        | 12        | 30           | 100            | 8905       |
| K4GPSB1604516100 | 00L3    | 16.0        | 16        | 45           | 100            | 14420      |
| K4GPSB2004520100 | 00L3    | 20.0        | 20        | 45           | 100            | 27354      |

|      |              |
|------|--------------|
| 00S3 | TIALN COATED |
| 0003 | TIALN COATED |
| 00L3 | TIALN COATED |

## SOLID CARBIDE DIE & MOULD SOFT END MILLS - K4DSSE SERIES 45-60HRc

### REGULAR SERIES

| Item code        | Variant | Description                           | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---------------------------------------|-----|--------|----|-----|------------|
| K4DSSE0100303050 | 0006    | SC DSSE 4F 1x3x3x50 ALTIN Coating     | 1   | 3      | 3  | 50  | 1863       |
| K4DSSE0200503050 | 0006    | SC DSSE 4F 2x3x5x50 ALTIN Coating     | 2   | 3      | 5  | 50  | 1648       |
| K4DSSE0301003050 | 0006    | SC DSSE 4F 3x3x10x50 ALTIN Coating    | 3   | 3      | 10 | 50  | 1652       |
| K4DSSE0301204050 | 0006    | SC DSSE 4F 3x4x12x50 ALTIN Coating    | 3   | 4      | 12 | 50  | 1872       |
| K4DSSE0401204050 | 0006    | SC DSSE 4F 4x4x12x50 ALTIN Coating    | 4   | 4      | 12 | 50  | 2212       |
| K4DSSE0501305050 | 0006    | SC DSSE 4F 5x5x13x50 ALTIN Coating    | 5   | 5      | 13 | 50  | 2635       |
| K4DSSE0601506060 | 0006    | SC DSSE 4F 6x6x15x60 ALTIN Coating    | 6   | 6      | 15 | 60  | 2954       |
| K4DSSE0802008060 | 0006    | SC DSSE 4F 8x8x20x60 ALTIN Coating    | 8   | 8      | 20 | 60  | 4045       |
| K4DSSE1002510075 | 0006    | SC DSSE 4F 10x10x25x75 ALTIN Coating  | 10  | 10     | 25 | 75  | 6894       |
| K4DSSE1203012075 | 0006    | SC DSSE 4F 12x12x30x75 ALTIN Coating  | 12  | 12     | 30 | 75  | 9104       |
| K4DSSE1403214075 | 0006    | SC DSSE 4F 14x14x32x75 ALTIN Coating  | 14  | 14     | 32 | 75  | 12384      |
| K4DSSE1603216100 | 0006    | SC DSSE 4F 16x16x32x100 ALTIN Coating | 16  | 16     | 32 | 100 | 18745      |
| K4DSSE1803818100 | 0006    | SC DSSE 4F 18x18x38x100 ALTIN Coating | 18  | 18     | 38 | 100 | 23209      |
| K4DSSE2003820100 | 0006    | SC DSSE 4F 20x20x38x100 ALTIN Coating | 20  | 20     | 38 | 100 | 29308      |

### LONG SERIES

| Item code        | Variant | Description                           | Dia | Sh.Dia | FL | OAL | #REF! |
|------------------|---------|---------------------------------------|-----|--------|----|-----|-------|
| K4DSSE0301203075 | 00L6    | SC DSSE 4F 3x3x12x75 ALTIN Coating    | 3   | 3      | 12 | 75  | 2301  |
| K4DSSE0401604075 | 00L6    | SC DSSE 4F 4x4x16x75 ALTIN Coating    | 4   | 4      | 16 | 75  | 3500  |
| K4DSSE0502005075 | 00L6    | SC DSSE 4F 5x5x20x75 ALTIN Coating    | 5   | 5      | 20 | 75  | 3357  |
| K4DSSE0602006075 | 00L6    | SC DSSE 4F 6x6x20x75 ALTIN Coating    | 6   | 6      | 20 | 75  | 3979  |
| K4DSSE0802008075 | 00L6    | SC DSSE 4F 8x8x20x75 ALTIN Coating    | 8   | 8      | 20 | 75  | 4802  |
| K4DSSE1002510100 | 00L6    | SC DSSE 4F 10x10x25x100 ALTIN Coating | 10  | 10     | 25 | 100 | 9782  |
| K4DSSE1203012100 | 00L6    | SC DSSE 4F 12x12x30x100 ALTIN Coating | 12  | 12     | 30 | 100 | 13280 |
| K4DSSE1604516120 | 00L6    | SC DSSE 4F 16x16x45x120 ALTIN Coating | 16  | 16     | 45 | 120 | 25842 |
| K4DSSE2004520120 | 00L6    | SC DSSE 4F 20x20x45x120 ALTIN Coating | 20  | 20     | 45 | 120 | 47564 |

### EXTRA LONG SERIES

| Item code        | Variant | Description                           | Dia | Sh.Dia | FL | OAL | #REF! |
|------------------|---------|---------------------------------------|-----|--------|----|-----|-------|
| K4DSSE0301203100 | 00X6    | SC DSSE 4F 3x3x12x100 ALTIN Coating   | 3   | 3      | 12 | 100 | 2519  |
| K4DSSE0401604100 | 00X6    | SC DSSE 4F 4x4x16x100 ALTIN Coating   | 4   | 4      | 16 | 100 | 3425  |
| K4DSSE0502005100 | 00X6    | SC DSSE 4F 5x5x20x100 ALTIN Coating   | 5   | 5      | 20 | 100 | 3633  |
| K4DSSE0602006100 | 00X6    | SC DSSE 4F 6x6x20x100 ALTIN Coating   | 6   | 6      | 20 | 100 | 4301  |
| K4DSSE0602006150 | 00X6    | SC DSSE 4F 6x6x20x150 ALTIN Coating   | 6   | 6      | 20 | 150 | 5325  |
| K4DSSE0802008100 | 00X6    | SC DSSE 4F 8x8x20x100 ALTIN Coating   | 8   | 8      | 20 | 100 | 6698  |
| K4DSSE0802008150 | 00X6    | SC DSSE 4F 8x8x20x150 ALTIN Coating   | 8   | 8      | 20 | 150 | 8442  |
| K4DSSE1002510150 | 00X6    | SC DSSE 4F 10x10x25x150 ALTIN Coating | 10  | 10     | 25 | 150 | 11823 |
| K4DSSE1203012150 | 00X6    | SC DSSE 4F 12x12x30x150 ALTIN Coating | 12  | 12     | 30 | 150 | 16167 |
| K4DSSE1604516150 | 00X6    | SC DSSE 4F 16x16x45x150 ALTIN Coating | 16  | 16     | 45 | 150 | 26470 |
| K4DSSE2004520150 | 00X6    | SC DSSE 4F 20x20x45x150 ALTIN Coating | 20  | 20     | 45 | 150 | 44990 |

|      |              |
|------|--------------|
| 0006 | ALTIN COATED |
| 00L6 | ALTIN COATED |
| 00X6 | ALTIN COATED |

## SOLID CARBIDE DIE & MOULD SOFT BALL NOSE - K2DSSB SERIES 45-60HRC

### REGULAR SERIES

| Item code        | Variant | Description                           | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---------------------------------------|-----|--------|----|-----|------------|
| K2DSSB0100304050 | 0006    | SC DSSB 2F 1x4x3x50 ALTIN Coating     | 1   | 4      | 3  | 50  | 2286       |
| K2DSSB0200404050 | 0006    | SC DSSB 2F 2x4x4x50 ALTIN Coating     | 2   | 4      | 4  | 50  | 2286       |
| K2DSSB0300603050 | 0006    | SC DSSB 2F 3x3x6x50 ALTIN Coating     | 3   | 3      | 6  | 50  | 2231       |
| K2DSSB0400804050 | 0006    | SC DSSB 2F 4x4x8x50 ALTIN Coating     | 4   | 4      | 8  | 50  | 2449       |
| K2DSSB0501305050 | 0006    | SC DSSB 2F 5x5x13x50 ALTIN Coating    | 5   | 5      | 13 | 50  | 2903       |
| K2DSSB0601206050 | 0006    | SC DSSB 2F 6x6x12x60 ALTIN Coating    | 6   | 6      | 12 | 60  | 3507       |
| K2DSSB0801408060 | 0006    | SC DSSB 2F 8x8x14x60 ALTIN Coating    | 8   | 8      | 14 | 60  | 4746       |
| K2DSSB1002210075 | 0006    | SC DSSB 2F 10x10x22x75 ALTIN Coating  | 10  | 10     | 22 | 75  | 8336       |
| K2DSSB1202512075 | 0006    | SC DSSB 2F 12x12x25x75 ALTIN Coating  | 12  | 12     | 25 | 75  | 9788       |
| K2DSSB1603216100 | 0006    | SC DSSB 2F 16x16x32x100 ALTIN Coating | 16  | 16     | 32 | 100 | 19835      |
| K2DSSB2003220100 | 0006    | SC DSSB 2F 20x20x32x100 ALTIN Coating | 20  | 20     | 32 | 100 | 43451      |

### LONG SERIES

| Item code        | Variant | Description                           | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---------------------------------------|-----|--------|----|-----|------------|
| K2DSSB0300603075 | 00L6    | SC DSSB 2F 3x3x6x75 ALTIN Coating     | 3   | 3      | 6  | 75  | 2938       |
| K2DSSB0400804075 | 00L6    | SC DSSB 2F 4x4x8x75 ALTIN Coating     | 4   | 4      | 8  | 75  | 3445       |
| K2DSSB0501005075 | 00L6    | SC DSSB 2F 5x5x10x75 ALTIN Coating    | 5   | 5      | 10 | 75  | 3646       |
| K2DSSB0601206075 | 00L6    | SC DSSB 2F 6x6x12x75 ALTIN Coating    | 6   | 6      | 12 | 75  | 4036       |
| K2DSSB0801608075 | 00L6    | SC DSSB 2F 8x8x16x75 ALTIN Coating    | 8   | 8      | 16 | 75  | 5182       |
| K2DSSB1002210100 | 00L6    | SC DSSB 2F 10x10x22x100 ALTIN Coating | 10  | 10     | 22 | 100 | 9230       |
| K2DSSB1202512100 | 00L6    | SC DSSB 2F 12x12x25x100 ALTIN Coating | 12  | 12     | 25 | 100 | 12091      |

### EXTRA LONG SERIES

| Item code        | Variant | Description                           | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---------------------------------------|-----|--------|----|-----|------------|
| K2DSSB0400804100 | 00X6    | SC DSSB 2F 4x4x8x100 ALTIN Coating    | 4   | 4      | 8  | 100 | 3901       |
| K2DSSB0501005100 | 00X6    | SC DSSB 2F 5x5x10x100 ALTIN Coating   | 5   | 5      | 10 | 100 | 4040       |
| K2DSSB0601206100 | 00X6    | SC DSSB 2F 6x6x12x100 ALTIN Coating   | 6   | 6      | 12 | 100 | 4471       |
| K2DSSB0601206150 | 00X6    | SC DSSB 2F 6x6x12x150 ALTIN Coating   | 6   | 6      | 12 | 150 | 6145       |
| K2DSSB0801608100 | 00X6    | SC DSSB 2F 8x8x16x100 ALTIN Coating   | 8   | 8      | 16 | 100 | 6650       |
| K2DSSB0801608150 | 00X6    | SC DSSB 2F 8x8x16x150 ALTIN Coating   | 8   | 8      | 16 | 150 | 8542       |
| K2DSSB1002210150 | 00X6    | SC DSSB 2F 10x10x22x150 ALTIN Coating | 10  | 10     | 22 | 150 | 12445      |
| K2DSSB1202512150 | 00X6    | SC DSSB 2F 12x12x25x150 ALTIN Coating | 12  | 12     | 25 | 150 | 16571      |

|      |              |
|------|--------------|
| 0006 | ALTIN COATED |
| 00L6 | ALTIN COATED |
| 00X6 | ALTIN COATED |

## SOLID CARBIDE DIE & MOULD SOFT BULL NOSE - K4DSSR SERIES 45-60HRC

| REGULAR SERIES    |         |   |     |               |    |    |     |            |
|-------------------|---------|---|-----|---------------|----|----|-----|------------|
| Item code         | Variant | Description                                 | Dia | Corner Radius | SD | FL | OAL | List price |
| K4DSSR0300803050  | 0506    | SC DSSR 4F 3x3x8x50xCR0.5 ALTIN Coating     | 3   | 0.5           | 3  | 8  | 50  | 2459       |
| K4DSSR0300803050  | 1006    | SC DSSR 4F 3x3x8x50xCR1 ALTIN Coating       | 3   | 1.0           | 3  | 8  | 50  | 2459       |
| K4DSSR0401104050  | 0506    | SC DSSR 4F 4x4x11x50xCR0.5 ALTIN Coating    | 4   | 0.5           | 4  | 11 | 50  | 2557       |
| K4DSSR0401104050  | 1006    | SC DSSR 4F 4x4x11x50xCR1 ALTIN Coating      | 4   | 1.0           | 4  | 11 | 50  | 2557       |
| K4DSSR0501305050  | 0506    | SC DSSR 4F 5x5x13x50xCR0.5 ALTIN Coating    | 5   | 0.5           | 5  | 13 | 50  | 3010       |
| K4DSSR0501305050  | 1006    | SC DSSR 4F 5x5x13x50xCR1 ALTIN Coating      | 5   | 1.0           | 5  | 13 | 50  | 3010       |
| K4DSSR0601606050  | 0506    | SC DSSR 4F 6x6x16x50xCR0.5 ALTIN Coating    | 6   | 0.5           | 6  | 16 | 50  | 3330       |
| K4DSSR0601606050  | 1006    | SC DSSR 4F 6x6x16x50xCR1 ALTIN Coating      | 6   | 1.0           | 6  | 16 | 50  | 3330       |
| K4DSSR0802008060  | 0506    | SC DSSR 4F 8x8x20x60xCR0.5 ALTIN Coating    | 8   | 0.5           | 8  | 20 | 60  | 4869       |
| K4DSSR0802008060  | 1006    | SC DSSR 4F 8x8x20x60xCR1 ALTIN Coating      | 8   | 1.0           | 8  | 20 | 60  | 4869       |
| K4DSSR1002510075  | 0506    | SC DSSR 4F 10x10x25x75xCR0.5 ALTIN Coating  | 10  | 0.5           | 10 | 25 | 75  | 7361       |
| K4DSSR1002510075  | 1006    | SC DSSR 4F 10x10x25x75xCR1 ALTIN Coating    | 10  | 1.0           | 10 | 25 | 75  | 7361       |
| K4DSSR1203012075  | 1006    | SC DSSR 4F 12x12x30x75xCR1 ALTIN Coating    | 12  | 1.0           | 12 | 30 | 75  | 9726       |
| K4DSSR1203012075  | 2006    | SC DSSR 4F 12x12x30x75xCR2 ALTIN Coating    | 12  | 2.0           | 12 | 30 | 75  | 9726       |
| LONG SERIES       |         |   |     |               |    |    |     |            |
| Item code         | Variant | Description                                 | Dia | Corner Radius | SD | FL | OAL | List price |
| K4DSSR0300803075  | 05L6    | SC DSSR 4F 3x3x8x75xCR0.5 ALTIN Coating     | 3   | 0.5           | 3  | 8  | 75  | 3250       |
| K4DSSR0300803075  | 10L6    | SC DSSR 4F 3x3x8x75xCR1 ALTIN Coating       | 3   | 1.0           | 3  | 8  | 75  | 3250       |
| K4DSSR0401104075  | 05L6    | SC DSSR 4F 4x4x11x75xCR0.5 ALTIN Coating    | 4   | 0.5           | 4  | 11 | 75  | 3457       |
| K4DSSR0401104075  | 10L6    | SC DSSR 4F 4x4x11x75xCR1 ALTIN Coating      | 4   | 1.0           | 4  | 11 | 75  | 3457       |
| K4DSSR0501305075  | 05L6    | SC DSSR 4F 5x5x13x75xCR0.5 ALTIN Coating    | 5   | 0.5           | 5  | 13 | 75  | 3767       |
| K4DSSR0501305075  | 10L6    | SC DSSR 4F 5x5x13x75xCR1 ALTIN Coating      | 5   | 1.0           | 5  | 13 | 75  | 3767       |
| K4DSSR0601606075  | 05L6    | SC DSSR 4F 6x6x16x75xCR0.5 ALTIN Coating    | 6   | 0.5           | 6  | 16 | 75  | 4206       |
| K4DSSR0601606075  | 10L6    | SC DSSR 4F 6x6x16x75xCR1 ALTIN Coating      | 6   | 1.0           | 6  | 16 | 75  | 4206       |
| K4DSSR0601606100  | 05L6    | SC DSSR 4F 6x6x16x100xCR0.5 ALTIN Coating   | 6   | 0.5           | 6  | 16 | 100 | 4837       |
| K4DSSR0601606100  | 10L6    | SC DSSR 4F 6x6x16x100xCR1 ALTIN Coating     | 6   | 1.0           | 6  | 16 | 100 | 4837       |
| K4DSSR0802008075  | 05L6    | SC DSSR 4F 8x8x20x75xCR0.5 ALTIN Coating    | 8   | 0.5           | 8  | 20 | 75  | 5580       |
| K4DSSR0802008075  | 10L6    | SC DSSR 4F 8x8x20x75xCR1 ALTIN Coating      | 8   | 1.0           | 8  | 20 | 75  | 5580       |
| K4DSSR0802008100  | 05L6    | SC DSSR 4F 8x8x20x100xCR0.5 ALTIN Coating   | 8   | 0.5           | 8  | 20 | 100 | 7109       |
| K4DSSR0802008100  | 10L6    | SC DSSR 4F 8x8x20x100xCR1 ALTIN Coating     | 8   | 1.0           | 8  | 20 | 100 | 7109       |
| K4DSSR1002510100  | 05L6    | SC DSSR 4F 10x10x25x100xCR0.5 ALTIN Coating | 10  | 0.5           | 10 | 25 | 100 | 9900       |
| K4DSSR1002510100  | 10L6    | SC DSSR 4F 10x10x25x100xCR1 ALTIN Coating   | 10  | 1.0           | 10 | 25 | 100 | 9900       |
| K4DSSR1203012100  | 10L6    | SC DSSR 4F 12x12x30x100xCR1 ALTIN Coating   | 12  | 1.0           | 12 | 30 | 100 | 13190      |
| K4DSSR1203012100  | 20L6    | SC DSSR 4F 12x12x30x100xCR2 ALTIN Coating   | 12  | 2.0           | 12 | 30 | 100 | 13190      |
| EXTRA LONG SERIES |         |   |     |               |    |    |     |            |
| Item code         | Variant | Description                                 | Dia | Corner Radius | SD | FL | OAL | List price |
| K4DSSR0601606150  | 05X6    | SC DSSR 4F 6x6x16x150xCR0.5 ALTIN Coating   | 6   | 0.5           | 6  | 16 | 150 | 6856       |
| K4DSSR0601606150  | 10X6    | SC DSSR 4F 6x6x16x150xCR1 ALTIN Coating     | 6   | 1.0           | 6  | 16 | 150 | 6856       |
| K4DSSR0802008150  | 05X6    | SC DSSR 4F 8x8x20x150xCR0.5 ALTIN Coating   | 8   | 0.5           | 8  | 20 | 150 | 9726       |
| K4DSSR0802008150  | 10X6    | SC DSSR 4F 8x8x20x150xCR1 ALTIN Coating     | 8   | 1.0           | 8  | 20 | 150 | 9726       |
| K4DSSR1002510150  | 05X6    | SC DSSR 4F 10x10x25x150xCR0.5 ALTIN Coating | 10  | 0.5           | 10 | 25 | 150 | 12289      |
| K4DSSR1002510150  | 10X6    | SC DSSR 4F 10x10x25x150xCR1 ALTIN Coating   | 10  | 1.0           | 10 | 25 | 150 | 12289      |
| K4DSSR1203012150  | 10X6    | SC DSSR 4F 12x12x30x150xCR1 ALTIN Coating   | 12  | 1.0           | 12 | 30 | 150 | 18831      |
| K4DSSR1203012150  | 20X6    | SC DSSR 4F 12x12x30x150xCR2 ALTIN Coating   | 12  | 2.0           | 12 | 30 | 150 | 18831      |

|                  |              |
|------------------|--------------|
| 0506, 1006, 2006 | ALTIN COATED |
| 05L6, 10L6, 20L6 | ALTIN COATED |
| 05X6, 10X6, 20X6 | ALTIN COATED |

## SOLID CARBIDE DIE & MOULD HARD END MILLS - K4DHSE SERIES ABOVE 60HRc

### REGULAR SERIES

| Item code        | Variant | Description                             | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---|-----|--------|----|-----|------------|
| K4DHSE0100303050 | 0009    | SC DHSE 4F 1x3x3x50 TISINOS Coating     | 1   | 3      | 3  | 50  | 1995       |
| K4DHSE0200503050 | 0009    | SC DHSE 4F 2x3x5x50 TISINOS Coating     | 2   | 3      | 5  | 50  | 1915       |
| K4DHSE0301003050 | 0009    | SC DHSE 4F 3x3x10x50 TISINOS Coating    | 3   | 3      | 10 | 50  | 1853       |
| K4DHSE0301204050 | 0009    | SC DHSE 4F 3x4x12x50 TISINOS Coating    | 3   | 4      | 12 | 50  | 2214       |
| K4DHSE0401204050 | 0009    | SC DHSE 4F 4x4x12x50 TISINOS Coating    | 4   | 4      | 12 | 50  | 2306       |
| K4DHSE0501305050 | 0009    | SC DHSE 4F 5x5x13x50 TISINOS Coating    | 5   | 5      | 13 | 50  | 2719       |
| K4DHSE0601506060 | 0009    | SC DHSE 4F 6x6x15x60 TISINOS Coating    | 6   | 6      | 15 | 60  | 3632       |
| K4DHSE0802008060 | 0009    | SC DHSE 4F 8x8x20x60 TISINOS Coating    | 8   | 8      | 20 | 60  | 4866       |
| K4DHSE1002510075 | 0009    | SC DHSE 4F 10x10x25x75 TISINOS Coating  | 10  | 10     | 25 | 75  | 7585       |
| K4DHSE1203012075 | 0009    | SC DHSE 4F 12x12x30x75 TISINOS Coating  | 12  | 12     | 30 | 75  | 9878       |
| K4DHSE1403214075 | 0009    | SC DHSE 4F 14x14x32x75 TISINOS Coating  | 14  | 14     | 32 | 75  | 13332      |
| K4DHSE1603216100 | 0009    | SC DHSE 4F 16x16x32x100 TISINOS Coating | 16  | 16     | 32 | 100 | 20275      |
| K4DHSE1803818100 | 0009    | SC DHSE 4F 18x18x38x100 TISINOS Coating | 18  | 18     | 38 | 100 | 25296      |
| K4DHSE2003820100 | 0009    | SC DHSE 4F 20x20x38x100 TISINOS Coating | 20  | 20     | 38 | 100 | 31269      |

### LONG SERIES

| Item code        | Variant | Description                             | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---|-----|--------|----|-----|------------|
| K4DHSE0301203075 | 00L9    | SC DHSE 4F 3x3x12x75 TISINOS Coating    | 3   | 3      | 12 | 75  | 2500       |
| K4DHSE0401604075 | 00L9    | SC DHSE 4F 4x4x16x75 TISINOS Coating    | 4   | 4      | 16 | 75  | 3704       |
| K4DHSE0502005075 | 00L9    | SC DHSE 4F 5x5x20x75 TISINOS Coating    | 5   | 5      | 20 | 75  | 3566       |
| K4DHSE0602006075 | 00L9    | SC DHSE 4F 6x6x20x75 TISINOS Coating    | 6   | 6      | 20 | 75  | 4197       |
| K4DHSE0802008075 | 00L9    | SC DHSE 4F 8x8x20x75 TISINOS Coating    | 8   | 8      | 20 | 75  | 5623       |
| K4DHSE1002510100 | 00L9    | SC DHSE 4F 10x10x25x100 TISINOS Coating | 10  | 10     | 25 | 100 | 10701      |
| K4DHSE1203012100 | 00L9    | SC DHSE 4F 12x12x30x100 TISINOS Coating | 12  | 12     | 30 | 100 | 14192      |
| K4DHSE1604516120 | 00L9    | SC DHSE 4F 16x16x45x120 TISINOS Coating | 16  | 16     | 45 | 120 | 27144      |
| K4DHSE2004520120 | 00L9    | SC DHSE 4F 20x20x45x120 TISINOS Coating | 20  | 20     | 45 | 120 | 49116      |

### EXTRA LONG SERIES

| Item code        | Variant | Description                             | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---|-----|--------|----|-----|------------|
| K4DHSE0301203100 | 00X9    | SC DHSE 4F 3x3x12x100 TISINOS Coating   | 3   | 3      | 12 | 100 | 2821       |
| K4DHSE0401604100 | 00X9    | SC DHSE 4F 4x4x16x100 TISINOS Coating   | 4   | 4      | 16 | 100 | 3655       |
| K4DHSE0502005100 | 00X9    | SC DHSE 4F 5x5x20x100 TISINOS Coating   | 5   | 5      | 20 | 100 | 4310       |
| K4DHSE0602006100 | 00X9    | SC DHSE 4F 6x6x20x100 TISINOS Coating   | 6   | 6      | 20 | 100 | 4928       |
| K4DHSE0602006150 | 00X9    | SC DHSE 4F 6x6x20x150 TISINOS Coating   | 6   | 6      | 20 | 150 | 6541       |
| K4DHSE0802008100 | 00X9    | SC DHSE 4F 8x8x20x100 TISINOS Coating   | 8   | 8      | 20 | 100 | 7412       |
| K4DHSE0802008150 | 00X9    | SC DHSE 4F 8x8x20x150 TISINOS Coating   | 8   | 8      | 20 | 150 | 9564       |
| K4DHSE1002510150 | 00X9    | SC DHSE 4F 10x10x25x150 TISINOS Coating | 10  | 10     | 25 | 150 | 13189      |
| K4DHSE1203012150 | 00X9    | SC DHSE 4F 12x12x30x150 TISINOS Coating | 12  | 12     | 30 | 150 | 18516      |
| K4DHSE1604516150 | 00X9    | SC DHSE 4F 16x16x45x150 TISINOS Coating | 16  | 16     | 45 | 150 | 29408      |
| K4DHSE2004520150 | 00X9    | SC DHSE 4F 20x20x45x150 TISINOS Coating | 20  | 20     | 45 | 150 | 48992      |

|      |                |
|------|----------------|
| 0009 | TISINOS COATED |
| 00L9 | TISINOS COATED |
| 00X9 | TISINOS COATED |

## SOLID CARBIDE DIE & MOULD HARD BALL NOSE - K2DHSB SERIES ABOVE 60HRC

### REGULAR SERIES

| Item code        | Variant | Description                             | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---|-----|--------|----|-----|------------|
| K2DHSB0100304050 | 0009    | SC DHSB 2F 1x4x3x50 TISINOS Coating     | 1   | 4      | 3  | 50  | 2467       |
| K2DHSB0200404050 | 0009    | SC DHSB 2F 2x4x4x50 TISINOS Coating     | 2   | 4      | 4  | 50  | 2467       |
| K2DHSB0300603050 | 0009    | SC DHSB 2F 3x3x6x50 TISINOS Coating     | 3   | 3      | 6  | 50  | 2416       |
| K2DHSB0400804050 | 0009    | SC DHSB 2F 4x4x8x50 TISINOS Coating     | 4   | 4      | 8  | 50  | 2699       |
| K2DHSB0501305050 | 0009    | SC DHSB 2F 5x5x13x50 TISINOS Coating    | 5   | 5      | 13 | 50  | 3321       |
| K2DHSB0601206060 | 0009    | SC DHSB 2F 6x6x12x60 TISINOS Coating    | 6   | 6      | 12 | 60  | 4215       |
| K2DHSB0801408060 | 0009    | SC DHSB 2F 8x8x14x60 TISINOS Coating    | 8   | 8      | 14 | 60  | 5448       |
| K2DHSB1002210075 | 0009    | SC DHSB 2F 10x10x22x75 TISINOS Coating  | 10  | 10     | 22 | 75  | 9646       |
| K2DHSB1202512075 | 0009    | SC DHSB 2F 12x12x25x75 TISINOS Coating  | 12  | 12     | 25 | 75  | 12424      |
| K2DHSB1603216100 | 0009    | SC DHSB 2F 16x16x32x100 TISINOS Coating | 16  | 16     | 32 | 100 | 22257      |
| K2DHSB2003220100 | 0009    | SC DHSB 2F 20x20x32x100 TISINOS Coating | 20  | 20     | 32 | 100 | 45634      |

### LONG SERIES

| Item code        | Variant | Description                             | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---|-----|--------|----|-----|------------|
| K2DHSB0300603075 | 00L9    | SC DHSB 2F 3x3x6x75 TISINOS Coating     | 3   | 3      | 6  | 75  | 3117       |
| K2DHSB0400804075 | 00L9    | SC DHSB 2F 4x4x8x75 TISINOS Coating     | 4   | 4      | 8  | 75  | 3619       |
| K2DHSB0501005075 | 00L9    | SC DHSB 2F 5x5x10x75 TISINOS Coating    | 5   | 5      | 10 | 75  | 4271       |
| K2DHSB0601206075 | 00L9    | SC DHSB 2F 6x6x12x75 TISINOS Coating    | 6   | 6      | 12 | 75  | 4944       |
| K2DHSB0801608075 | 00L9    | SC DHSB 2F 8x8x16x75 TISINOS Coating    | 8   | 8      | 16 | 75  | 6773       |
| K2DHSB1002210100 | 00L9    | SC DHSB 2F 10x10x22x100 TISINOS Coating | 10  | 10     | 22 | 100 | 11742      |
| K2DHSB1202512100 | 00L9    | SC DHSB 2F 12x12x25x100 TISINOS Coating | 12  | 12     | 25 | 100 | 15203      |

### EXTRA LONG SERIES

| Item code        | Variant | Description                             | Dia | Sh.Dia | FL | OAL | List price |
|------------------|---------|---|-----|--------|----|-----|------------|
| K2DHSB0400804100 | 00X9    | SC DHSB 2F 4x4x8x100 TISINOS Coating    | 4   | 4      | 8  | 100 | 4210       |
| K2DHSB0501005100 | 00X9    | SC DHSB 2F 5x5x10x100 TISINOS Coating   | 5   | 5      | 10 | 100 | 5078       |
| K2DHSB0601206100 | 00X9    | SC DHSB 2F 6x6x12x100 TISINOS Coating   | 6   | 6      | 12 | 100 | 5918       |
| K2DHSB0601206150 | 00X9    | SC DHSB 2F 6x6x12x150 TISINOS Coating   | 6   | 6      | 12 | 150 | 7665       |
| K2DHSB0801608100 | 00X9    | SC DHSB 2F 8x8x16x100 TISINOS Coating   | 8   | 8      | 16 | 100 | 8219       |
| K2DHSB0801608150 | 00X9    | SC DHSB 2F 8x8x16x150 TISINOS Coating   | 8   | 8      | 16 | 150 | 10872      |
| K2DHSB1002210150 | 00X9    | SC DHSB 2F 10x10x22x150 TISINOS Coating | 10  | 10     | 22 | 150 | 15590      |
| K2DHSB1202512150 | 00X9    | SC DHSB 2F 12x12x25x150 TISINOS Coating | 12  | 12     | 25 | 150 | 20501      |

|      |                |
|------|----------------|
| 0009 | TISINOS COATED |
| 00L9 | TISINOS COATED |
| 00X9 | TISINOS COATED |

## SOLID CARBIDE DIE & MOULD HARD BULL NOSE - K4DSSR SERIES 45-60HRc

| REGULAR SERIES    |         |   |     |               |    |    |     |            |
|-------------------|---------|---|-----|---------------|----|----|-----|------------|
| Item code         | Variant | Description                                   | Dia | Corner Radius | SD | FL | OAL | List price |
| K4DHSR0300803050  | 0506    | SC DHSR 4F 3x3x8x50xCR0.5 TISINOS Coating     | 3   | 0.5           | 3  | 8  | 50  | 2650       |
| K4DHSR0300803050  | 1006    | SC DHSR 4F 3x3x8x50xCR1 TISINOS Coating       | 3   | 1.0           | 3  | 8  | 50  | 2650       |
| K4DHSR0401104050  | 0506    | SC DHSR 4F 4x4x11x50xCR0.5 TISINOS Coating    | 4   | 0.5           | 4  | 11 | 50  | 3027       |
| K4DHSR0401104050  | 1006    | SC DHSR 4F 4x4x11x50xCR1 TISINOS Coating      | 4   | 1.0           | 4  | 11 | 50  | 3027       |
| K4DHSR0501305050  | 0506    | SC DHSR 4F 5x5x13x50xCR0.5 TISINOS Coating    | 5   | 0.5           | 5  | 13 | 50  | 3422       |
| K4DHSR0501305050  | 1006    | SC DHSR 4F 5x5x13x50xCR1 TISINOS Coating      | 5   | 1.0           | 5  | 13 | 50  | 3422       |
| K4DHSR0601606050  | 0506    | SC DHSR 4F 6x6x16x50xCR0.5 TISINOS Coating    | 6   | 0.5           | 6  | 16 | 50  | 3744       |
| K4DHSR0601606050  | 1006    | SC DHSR 4F 6x6x16x50xCR1 TISINOS Coating      | 6   | 1.0           | 6  | 16 | 50  | 3744       |
| K4DHSR0802008060  | 0506    | SC DHSR 4F 8x8x20x60xCR0.5 TISINOS Coating    | 8   | 0.5           | 8  | 20 | 60  | 6085       |
| K4DHSR0802008060  | 1006    | SC DHSR 4F 8x8x20x60xCR1 TISINOS Coating      | 8   | 1.0           | 8  | 20 | 60  | 6085       |
| K4DHSR1002510075  | 0506    | SC DHSR 4F 10x10x25x75xCR0.5 TISINOS Coating  | 10  | 0.5           | 10 | 25 | 75  | 9113       |
| K4DHSR1002510075  | 1006    | SC DHSR 4F 10x10x25x75xCR1 TISINOS Coating    | 10  | 1.0           | 10 | 25 | 75  | 9113       |
| K4DHSR1203012075  | 1006    | SC DHSR 4F 12x12x30x75xCR1 TISINOS Coating    | 12  | 1.0           | 12 | 30 | 75  | 11881      |
| K4DHSR1203012075  | 2006    | SC DHSR 4F 12x12x30x75xCR2 TISINOS Coating    | 12  | 2.0           | 12 | 30 | 75  | 11881      |
| LONG SERIES       |         |   |     |               |    |    |     |            |
| Item code         | Variant | Description                                   | Dia | Corner Radius | SD | FL | OAL | List price |
| K4DHSR0300803075  | 05L6    | SC DHSR 4F 3x3x8x75xCR0.5 TISINOS Coating     | 3   | 0.5           | 3  | 8  | 75  | 3457       |
| K4DHSR0300803075  | 10L6    | SC DHSR 4F 3x3x8x75xCR1 TISINOS Coating       | 3   | 1.0           | 3  | 8  | 75  | 3457       |
| K4DHSR0401104075  | 05L6    | SC DHSR 4F 4x4x11x75xCR0.5 TISINOS Coating    | 4   | 0.5           | 4  | 11 | 75  | 3960       |
| K4DHSR0401104075  | 10L6    | SC DHSR 4F 4x4x11x75xCR1 TISINOS Coating      | 4   | 1.0           | 4  | 11 | 75  | 3960       |
| K4DHSR0501305075  | 05L6    | SC DHSR 4F 5x5x13x75xCR0.5 TISINOS Coating    | 5   | 0.5           | 5  | 13 | 75  | 4612       |
| K4DHSR0501305075  | 10L6    | SC DHSR 4F 5x5x13x75xCR1 TISINOS Coating      | 5   | 1.0           | 5  | 13 | 75  | 4612       |
| K4DHSR0601606075  | 05L6    | SC DHSR 4F 6x6x16x75xCR0.5 TISINOS Coating    | 6   | 0.5           | 6  | 16 | 75  | 5114       |
| K4DHSR0601606075  | 10L6    | SC DHSR 4F 6x6x16x75xCR1 TISINOS Coating      | 6   | 1.0           | 6  | 16 | 75  | 5114       |
| K4DHSR0601606100  | 05L6    | SC DHSR 4F 6x6x16x100xCR0.5 TISINOS Coating   | 6   | 0.5           | 6  | 16 | 100 | 5620       |
| K4DHSR0601606100  | 10L6    | SC DHSR 4F 6x6x16x100xCR1 TISINOS Coating     | 6   | 1.0           | 6  | 16 | 100 | 5620       |
| K4DHSR0802008075  | 05L6    | SC DHSR 4F 8x8x20x75xCR0.5 TISINOS Coating    | 8   | 0.5           | 8  | 20 | 75  | 6676       |
| K4DHSR0802008075  | 10L6    | SC DHSR 4F 8x8x20x75xCR1 TISINOS Coating      | 8   | 1.0           | 8  | 20 | 75  | 6676       |
| K4DHSR0802008100  | 05L6    | SC DHSR 4F 8x8x20x100xCR0.5 TISINOS Coating   | 8   | 0.5           | 8  | 20 | 100 | 7744       |
| K4DHSR0802008100  | 10L6    | SC DHSR 4F 8x8x20x100xCR1 TISINOS Coating     | 8   | 1.0           | 8  | 20 | 100 | 7744       |
| K4DHSR1002510100  | 05L6    | SC DHSR 4F 10x10x25x100xCR0.5 TISINOS Coating | 10  | 0.5           | 10 | 25 | 100 | 10681      |
| K4DHSR1002510100  | 10L6    | SC DHSR 4F 10x10x25x100xCR1 TISINOS Coating   | 10  | 1.0           | 10 | 25 | 100 | 10681      |
| K4DHSR1203012100  | 10L6    | SC DHSR 4F 12x12x30x100xCR1 TISINOS Coating   | 12  | 1.0           | 12 | 30 | 100 | 15203      |
| K4DHSR1203012100  | 20L6    | SC DHSR 4F 12x12x30x100xCR2 TISINOS Coating   | 12  | 2.0           | 12 | 30 | 100 | 15203      |
| EXTRA LONG SERIES |         |   |     |               |    |    |     |            |
| Item code         | Variant | Description                                   | Dia | Corner Radius | SD | FL | OAL | List price |
| K4DHSR0601606150  | 05X6    | SC DHSR 4F 6x6x16x150xCR0.5 TISINOS Coating   | 6   | 0.5           | 6  | 16 | 150 | 7534       |
| K4DHSR0601606150  | 10X6    | SC DHSR 4F 6x6x16x150xCR1 TISINOS Coating     | 6   | 1.0           | 6  | 16 | 150 | 7534       |
| K4DHSR0802008150  | 05X6    | SC DHSR 4F 8x8x20x150xCR0.5 TISINOS Coating   | 8   | 0.5           | 8  | 20 | 150 | 10448      |
| K4DHSR0802008150  | 10X6    | SC DHSR 4F 8x8x20x150xCR1 TISINOS Coating     | 8   | 1.0           | 8  | 20 | 150 | 10448      |
| K4DHSR1002510150  | 05X6    | SC DHSR 4F 10x10x25x150xCR0.5 TISINOS Coating | 10  | 0.5           | 10 | 25 | 150 | 13048      |
| K4DHSR1002510150  | 10X6    | SC DHSR 4F 10x10x25x150xCR1 TISINOS Coating   | 10  | 1.0           | 10 | 25 | 150 | 13048      |
| K4DHSR1203012150  | 10X6    | SC DHSR 4F 12x12x30x150xCR1 TISINOS Coating   | 12  | 1.0           | 12 | 30 | 150 | 19713      |
| K4DHSR1203012150  | 20X6    | SC DHSR 4F 12x12x30x150xCR2 TISINOS Coating   | 12  | 2.0           | 12 | 30 | 150 | 19713      |

|      |                |
|------|----------------|
| 0009 | TISINOS COATED |
| 00L9 | TISINOS COATED |
| 00X9 | TISINOS COATED |

**MICRO GRAIN SOLID CARBIDE CENTRE DRILLS**  
**DIMENSIONS ACCORDING TO : IS : 6708 – 1977**  
**CENTRE DRILL TYPE : Type A**  
**Point Angle : 120°**

| Pilot Dia | Body Dia | OAL | List price |        |
|-----------|----------|-----|------------|--------|
| mm - k12  | mm - h9  | mm  | Uncoated   | Coated |
| 1         | 3.15     | 32  | 3104       | 3632   |
| 1.25      | 3.15     | 32  | 3104       | 3632   |
| 2         | 4.00     | 36  | 3140       | 3674   |
| 2.00      | 5.00     | 40  | 3159       | 3701   |
| 3         | 6.30     | 45  | 4286       | 5156   |
| 3.15      | 8.00     | 50  | 5078       | 5946   |
| 4         | 10.00    | 56  | 6716       | 7585   |
| 5.00      | 12.50    | 63  | 10477      | 11552  |
| 6         | 16.00    | 71  | 14306      | 15377  |
| 8.00      | 20.00    | 80  | 22715      | 25297  |

**MICRO GRAIN SOLID CARBIDE CENTRE DRILLS**  
**DIMENSIONS ACCORDING TO: BS 328 / Part 2 / 1950**  
**CENTRE DRILL TYPE : Type A**  
**Point Angle : 120°**

| C  | Pilot Dia | Body Dia | OAL   | List price |        |
|----|-----------|----------|-------|------------|--------|
| NO | Inch      | Inch     | Inch  | Uncoated   | Coated |
| 2  | 1/16      | 3/16     | 1-3/4 | 3111       | 3654   |
| 3  | 3/32      | 1/4      | 2     | 4286       | 5159   |
| 4  | 1/8       | 5/16     | 2-1/4 | 5078       | 5948   |
| 5  | 3/16      | 7/16     | 2-1/2 | 9635       | 10504  |
| 6  | 1/4       | 5/8      | 3     | 14306      | 15379  |
| 7  | 5/16      | 3/4      | 3-1/2 | 22237      | 24819  |

|      |              |
|------|--------------|
| 0000 | UNCOATED     |
| 0001 | TIN COATED   |
| 0003 | TIALN COATED |

**MICRO GRAIN SOLID CARBIDE CHUCKING REAMER**  
**DIMENSIONS ACCORDING TO : IS 5446 – 1978 / BS 328**  
**TYPE : Straight Helix**

| Dia  | Shank Dia | CEL | OAL | No. of Flutes | LIST PRICE |        |
|------|-----------|-----|-----|---------------|------------|--------|
|      |           |     |     |               | Uncoated   | Coated |
| 3.0  | 3.0       | 15  | 61  | 4             | 2255       | 2915   |
| 4.0  | 4.0       | 19  | 75  | 4             | 2388       | 3086   |
| 5.0  | 5.0       | 23  | 86  | 4             | 2653       | 3427   |
| 5.5  | 5.6       | 26  | 93  | 4             | 3129       | 3907   |
| 6.0  | 5.6       | 26  | 93  | 6             | 3382       | 4156   |
| 6.5  | 6.3       | 28  | 101 | 6             | 3776       | 5025   |
| 7.0  | 7.1       | 31  | 109 | 6             | 5035       | 6284   |
| 7.5  | 7.1       | 31  | 109 | 6             | 5379       | 6626   |
| 8.0  | 8.0       | 33  | 117 | 6             | 5991       | 7239   |
| 8.5  | 8.0       | 33  | 117 | 6             | 6050       | 7296   |
| 9.0  | 9.0       | 36  | 125 | 6             | 8017       | 9266   |
| 9.5  | 9.0       | 36  | 125 | 6             | 8593       | 9843   |
| 10.0 | 10.0      | 38  | 133 | 6             | 8772       | 11234  |
| 10.5 | 10.0      | 38  | 133 | 6             | 9200       | 11663  |
| 11.0 | 10.0      | 41  | 142 | 6             | 10742      | 13211  |
| 11.5 | 10.0      | 41  | 142 | 6             | 11301      | 13764  |
| 12.0 | 10.0      | 44  | 151 | 6             | 12829      | 15292  |
| 12.5 | 10.0      | 44  | 151 | 6             | 13628      | 16699  |
| 13.0 | 10.0      | 44  | 151 | 6             | 14233      | 17306  |
| 13.5 | 12.5      | 47  | 160 | 6             | 15593      | 18668  |
| 14.0 | 12.5      | 47  | 160 | 8             | 16797      | 19866  |
| 14.5 | 12.5      | 50  | 162 | 8             | 19564      | 22635  |
| 15.0 | 12.5      | 50  | 162 | 8             | 20056      | 23128  |
| 15.5 | 12.5      | 52  | 170 | 8             | 21766      | 24838  |
| 16.0 | 12.5      | 52  | 170 | 8             | 21843      | 24914  |

|      |              |
|------|--------------|
| 0000 | UNCOATED     |
| 0001 | TIN COATED   |
| 0003 | TIALN COATED |