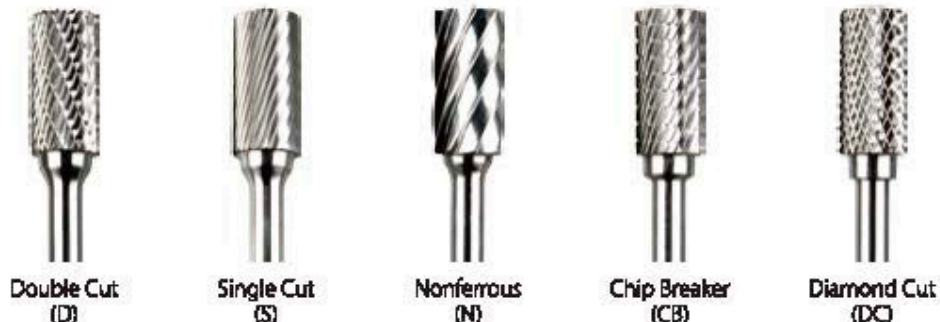




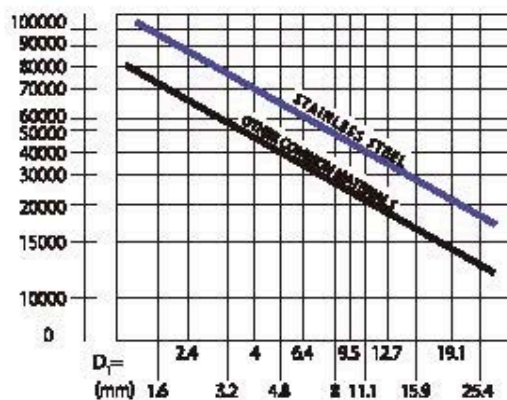
## \* Flute Styles



| Material               | D | S | N | CB | DC |
|------------------------|---|---|---|----|----|
| Aluminium              |   |   | ✓ |    |    |
| Brass, Bronze, Copper  | ✓ |   |   | ✓  |    |
| Carbon Fiber           |   | ✓ |   |    |    |
| Fiberglass             |   |   |   |    | ✓  |
| Cast Iron              | ✓ | ✓ |   | ✓  |    |
| Plastic                |   |   | ✓ | ✓  | ✓  |
| Steel hardness 40-50Rc | ✓ | ✓ |   | ✓  | ✓  |
| Steel hardness 55-60Rc | ✓ | ✓ |   | ✓  | ✓  |
| Carbon Steel           | ✓ | ✓ |   | ✓  | ✓  |
| Nickel Chrome Steel    | ✓ | ✓ |   | ✓  | ✓  |
| Stainless Steel        | ✓ | ✓ |   | ✓  | ✓  |
| Weldments Steel        | ✓ | ✓ |   | ✓  | ✓  |
| Titanium               | ✓ | ✓ |   | ✓  | ✓  |
| Zinc                   |   |   | ✓ |    |    |

## \* Burr Speed Recommendations:

Extra-long burrs with 6mm shanks over 150mm long and 3mm shank burrs over 50mm long should be used at reduced speeds.



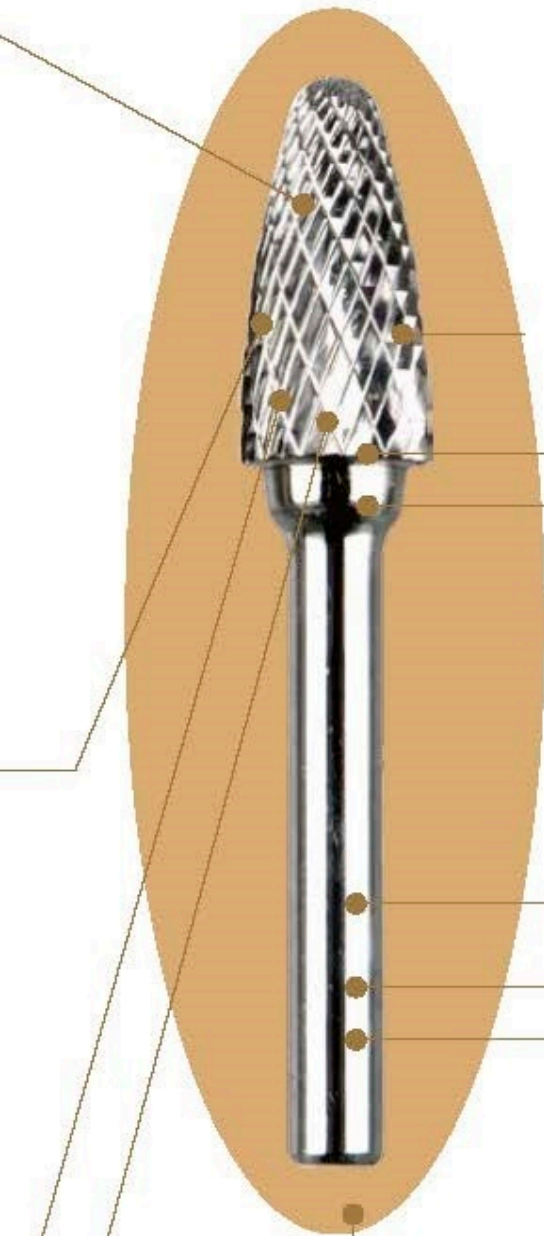
## \* Different Coating Available



## \* Double Head Burr Available

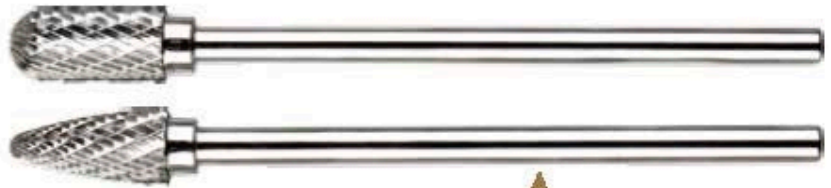


**\* 5-Axle CNC Machine Ground Flute**



- \* 100% Inspection of Brazing
- \* Solid Carbide(without brazing)Available

\* Extra Long Shank Available



- \* Hardened Steel Shank
- \* Shank Diameter Available:  
2.35mm(3/32"), 3.0mm,3.17mm(1/8"), 6.0mm, 6.35mm(1/4") and 8mm

\* Package Option



A



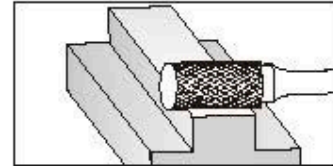
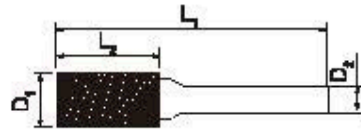
B



C

**\* CYLINDER**

**A**



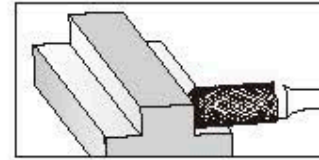
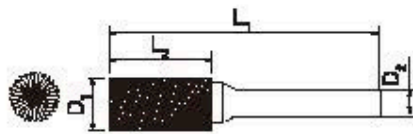
| Code:  | AD10603 | AD1060BL2 | AD1060BL3 | AD21103 | AD2110BL2 | AD2110BL3 | AD31206 | AD31403 | AD3140BL2 | AD3140BL3 | AD41606 |
|--------|---------|-----------|-----------|---------|-----------|-----------|---------|---------|-----------|-----------|---------|
| D1(mm) | 15      | 15        | 15        | 25      | 25        | 25        | 3       | 3       | 3         | 3         | 4       |
| L2(mm) | 6       | 6         | 6         | 11      | 11        | 11        | 12      | 14      | 14        | 14        | 16      |
| D2(mm) | 3       | 3         | 3         | 3       | 3         | 3         | 6       | 3       | 3         | 3         | 6       |
| L1(mm) | 38      | 50        | 75        | 38      | 50        | 75        | 56      | 38      | 50        | 75        | 60      |
| SCTI   | SA-41M  | SA-41ML2  | SA-41ML3  | SA-42M  | SA-42ML2  | SA-42ML3  | SA-11M  | SA-43M  | SA-43ML2  | SA-43ML3  | SA-13M  |



| Code:  | A061303 | A061606 | A082006 | A102006 | A122506 | A162506 | A192506 | A252506 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 6       | 6       | 8       | 10      | 12      | 16      | 19      | 25      |
| L2(mm) | 13      | 16      | 20      | 20      | 25      | 25      | 25      | 25      |
| D2(mm) | 3       | 6       | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 48      | 60      | 64      | 64      | 69      | 69      | 69      | 69      |
| SCTI   | SA-51M  | SA-1M   | SA-2M   | SA-3M   | SA-5M   | SA-6M   | SA-7M   | SA-9M   |

**\* CYLINDER WITH END CUT** ✓

**B**



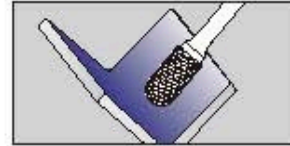
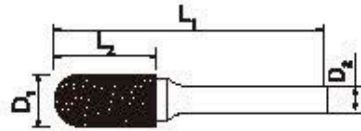
| Code:  | B010603 | B010603L2 | B010603L3 | B021103 | B021103L2 | B021103L3 | B031206 | B031403 | B031403L2 | B031403L3 | B041606 |
|--------|---------|-----------|-----------|---------|-----------|-----------|---------|---------|-----------|-----------|---------|
| D1(mm) | 15      | 15        | 15        | 25      | 25        | 25        | 3       | 3       | 3         | 3         | 4       |
| L2(mm) | 6       | 6         | 6         | 11      | 11        | 11        | 12      | 14      | 14        | 14        | 16      |
| D2(mm) | 3       | 3         | 3         | 3       | 3         | 3         | 6       | 3       | 3         | 3         | 6       |
| L1(mm) | 38      | 50        | 75        | 38      | 50        | 75        | 56      | 38      | 50        | 75        | 60      |
| SCTI   | SB-41M  | SB-41ML2  | SB-41ML3  | SB-42M  | SB-42ML2  | SB-42ML3  | SB-11M  | SB-43M  | SB-43ML2  | SB-43ML3  | SB-13M  |



| Code:  | B061303 | B061606 | B082006 | B102006 | B122506 | B162506 | B192506 | B252506 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 6       | 6       | 8       | 10      | 12      | 16      | 19      | 25      |
| L2(mm) | 13      | 16      | 20      | 20      | 25      | 25      | 25      | 25      |
| D2(mm) | 3       | 6       | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 48      | 60      | 64      | 64      | 69      | 69      | 69      | 69      |
| SCTI   | SB-51M  | SB-1M   | SB-2M   | SB-3M   | SB-5M   | SB-6M   | SB-7M   | SB-9M   |

**\* CYLINDER WITH RADIUS END** ✓

**C**



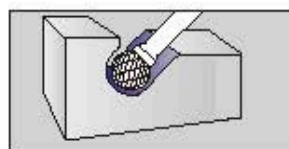
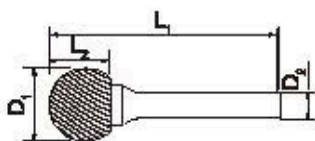
| Code:  | CC2110B | CC3120B | CC3140B | CC3140BL2 | CC3140BL3 | CD4130B | CD4160B | CD5160B | CD6130B |
|--------|---------|---------|---------|-----------|-----------|---------|---------|---------|---------|
| D1(mm) | 25      | 3       | 3       | 3         | 3         | 4       | 4       | 5       | 6       |
| L2(mm) | 11      | 12      | 14      | 14        | 14        | 13      | 16      | 16      | 13      |
| D2(mm) | 3       | 6       | 3       | 3         | 3         | 3       | 6       | 6       | 3       |
| L1(mm) | 38      | 56      | 38      | 50        | 75        | 50      | 60      | 60      | 50      |
| SCTI   | SC-41M  | SC-11M  | SC-42M  | SC-42ML2  | SC-42ML3  | SC-52M  | SC-13M  | SC-14M  | SC-51M  |



| Code:  | CD6160B | CD8200B | C10200B | C12250B | C16250B | C19250B | C25250B |
|--------|---------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 6       | 8       | 10      | 12      | 16      | 19      | 25      |
| L2(mm) | 16      | 20      | 20      | 25      | 25      | 25      | 25      |
| D2(mm) | 6       | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 60      | 64      | 64      | 69      | 69      | 69      | 69      |
| SCTI   | SC-1M   | SC-2M   | SC-3M   | SC-5M   | SC-6M   | SC-7M   | SC-9M   |

**\* BALL** 

**D**



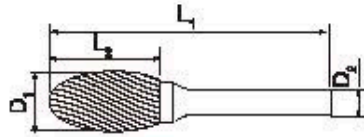
| Code:  | D020203 | D030203 | D030203L2 | D030203L3 | D030206 | D040303 | D050406 | D060503 | D060506 |
|--------|---------|---------|-----------|-----------|---------|---------|---------|---------|---------|
| D1(mm) | 2.5     | 3       | 3         | 3         | 3       | 4       | 5       | 6       | 6       |
| L2(mm) | 23      | 25      | 25        | 25        | 25      | 34      | 47      | 5       | 5       |
| D2(mm) | 3       | 3       | 3         | 3         | 6       | 3       | 6       | 3       | 6       |
| L1(mm) | 38      | 38      | 50        | 75        | 50      | 45      | 50      | 45      | 50      |
| SCTI   | SD-41M  | SD-42M  | SD-42ML2  | SD-42ML3  | SD-11M  | SD-52M  | SD-14M  | SD-51M  | SD-1M   |



| Code:  | D080606 | D100906 | D121006 | D161406 | D191606 | D252106 |
|--------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 8       | 10      | 12      | 16      | 19      | 25      |
| L2(mm) | 6.4     | 9       | 10.8    | 14      | 16      | 21      |
| D2(mm) | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 50      | 53      | 55      | 58      | 60      | 65      |
| SCTI   | SD-2M   | SD-3M   | SD-5M   | SD-6M   | SD-7M   | SD-9M   |

\* OVAL ▾

E



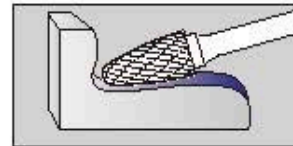
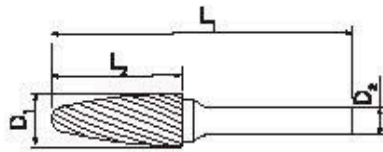
| Code:  | E030503 | E030503L2 | E030503L3 | E050703 | E060903 | E060906 |
|--------|---------|-----------|-----------|---------|---------|---------|
| D1(mm) | 3       | 3         | 3         | 5       | 6       | 6       |
| L2(mm) | 5.5     | 5.5       | 5.5       | 7.1     | 9.5     | 9.5     |
| D2(mm) | 3       | 3         | 3         | 3       | 3       | 6       |
| L1(mm) | 38      | 50        | 75        | 45      | 45      | 54      |
| SCTI   | SE-41M  | SE-41ML2  | SE-41ML3  | SE-53M  | SE-51M  | SE-1M   |



| Code:  | E081306 | E101606 | E122206 | E162506 | E192506 |
|--------|---------|---------|---------|---------|---------|
| D1(mm) | 8       | 10      | 12      | 16      | 19      |
| L2(mm) | 13      | 16      | 22      | 25      | 25      |
| D2(mm) | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 58      | 60      | 66      | 69      | 69      |
| SCTI   | SE-2M   | SE-3M   | SE-5M   | SE-6M   | SE-7M   |

**\* TREE WITH RADIUS END ✓**

**F**



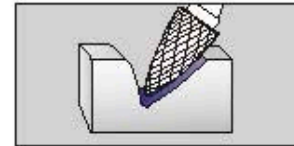
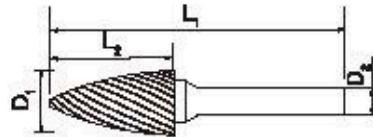
| Code:  | F030603 | F031203 | F031203L2 | F031203L3 | F031206 | F051203 | F061303 | F061606 |
|--------|---------|---------|-----------|-----------|---------|---------|---------|---------|
| D1(mm) | 3       | 3       | 3         | 3         | 3       | 5       | 6       | 6       |
| L2(mm) | 6       | 12.7    | 12.7      | 12.7      | 12.7    | 12.7    | 13      | 16      |
| D2(mm) | 3       | 3       | 3         | 3         | 6       | 3       | 3       | 6       |
| L1(mm) | 38      | 38      | 50        | 75        | 56      | 48      | 50      | 60      |
| SCTI   | SF-41M  | SF-42M  | SF-42ML2  | SF-42ML3  | SF-11M  | SF-53M  | SF-51M  | SF-1M   |



| Code:  | F061906 | F082006 | F102006 | F122506 | F162506 | F192506 |
|--------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 6       | 8       | 10      | 12      | 16      | 19      |
| L2(mm) | 19      | 20      | 20      | 25      | 25      | 25      |
| D2(mm) | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 63      | 64      | 64      | 69      | 69      | 69      |
| SCTI   | SF-1M   | SF-2M   | SF-3M   | SF-5M   | SF-6M   | SF-7M   |

**\* TREE WITH POINTED END** ✓

**G**

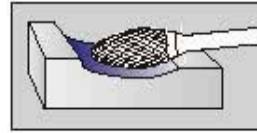
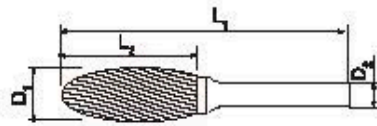


| Code:  | G030603 | G030903 | G031203 | G031203L2 | G031203L3 | G061303 |
|--------|---------|---------|---------|-----------|-----------|---------|
| D1(mm) | 3       | 3       | 3       | 3         | 3         | 6       |
| L2(mm) | 6       | 9.5     | 12.7    | 12.7      | 12.7      | 13      |
| D2(mm) | 3       | 3       | 3       | 3         | 3         | 3       |
| L1(mm) | 38      | 38      | 38      | 50        | 75        | 50      |
| SCTI   | SG-41M  | SG-43M  | SG-44M  | SG-44ML2  | SG-44ML3  | SG-51M  |



| Code:  | G061606 | G082006 | G102006 | G122506 | G162506 | G192506 |
|--------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 6       | 8       | 10      | 12      | 16      | 19      |
| L2(mm) | 16      | 20      | 20      | 25      | 25      | 25      |
| D2(mm) | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 60      | 64      | 64      | 69      | 69      | 69      |
| SCTI   | SG-1M   | SG-2M   | SG-3M   | SG-5M   | SG-6M   | SG-7M   |

**\* FLAME** ✓

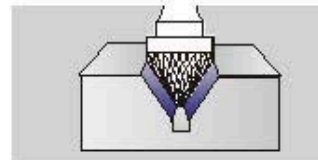
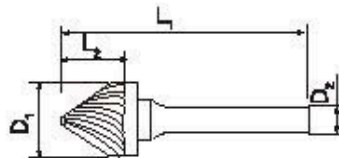


**H**



| Code:  | H030603 | H030603L2 | H030603L3 | H061606 | H082006 | H102006 | H123206 | H163606 | H194106 |
|--------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 3       | 3         | 3         | 6       | 8       | 10      | 12      | 16      | 19      |
| L2(mm) | 63      | 63        | 63        | 16      | 20      | 20      | 32      | 36      | 41      |
| D2(mm) | 3       | 3         | 3         | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 38      | 50        | 75        | 60      | 64      | 64      | 76      | 80      | 85      |
| SCTI   | SH-1M   | SH-1ML2   | SH-1ML3   | SH-1M   | SH-2M   | SH-3M   | SH-5M   | SH-6M   | SH-7M   |

**\* CONE 60°** ✓



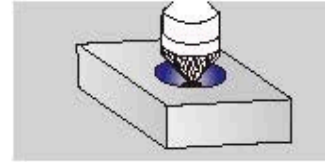
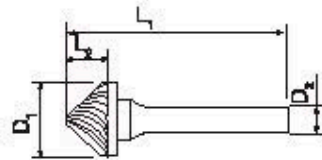
**J**



| Code:  | J030203 | J060406 | J100806 | J121106 | J161406 | J191706 | J252406 |
|--------|---------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 3       | 6       | 10      | 12      | 16      | 19      | 25      |
| L2(mm) | 25      | 4       | 8       | 11      | 14.5    | 17.5    | 24.5    |
| D2(mm) | 3       | 6       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 38      | 50      | 56      | 59      | 63      | 66      | 72      |
| SCTI   | SJ-2M   | SJ-1M   | SJ-3M   | SJ-5M   | SJ-6M   | SJ-7M   | SJ-9M   |

\* CONE 90° ✓

K

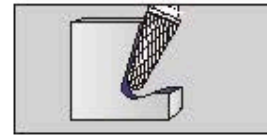
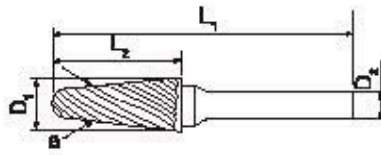


| Code:  | K030103 | K060306 | K080406 | K100506 |
|--------|---------|---------|---------|---------|
| D1(mm) | 3       | 6       | 8       | 10      |
| L2(mm) | 1.5     | 3       | 4       | 5       |
| D2(mm) | 3       | 6       | 6       | 6       |
| L1(mm) | 38      | 52      | 52      | 55      |
| SCTI   | SK-42M  | SK-1M   | SK-2M   | SK-3M   |



| Code:  | K120606 | K160806 | K190906 | K251206 |
|--------|---------|---------|---------|---------|
| D1(mm) | 12      | 16      | 19      | 25      |
| L2(mm) | 6       | 8       | 9.5     | 12.7    |
| D2(mm) | 6       | 6       | 6       | 6       |
| L1(mm) | 55      | 58      | 58      | 63      |
| SCTI   | SK-5M   | SK-6M   | SK-7M   | SK-9M   |

**\* TAPER RADIUS** ✓



**L**

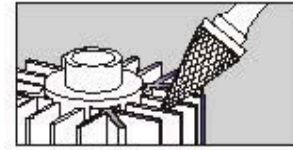
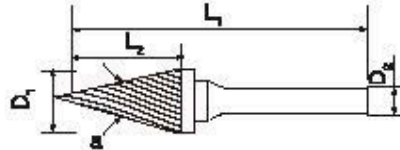


| Code:  | L030903 | L031203 | L031203L2 | L031203L3 | L061303 | L061606 |
|--------|---------|---------|-----------|-----------|---------|---------|
| D1(mm) | 3       | 3       | 3         | 3         | 6       | 6       |
| L2(mm) | 9.5     | 12.7    | 12.7      | 12.7      | 13      | 16      |
| D2(mm) | 3       | 3       | 3         | 3         | 3       | 6       |
| L1(mm) | 38      | 38      | 50        | 75        | 50      | 60      |
| a      | 8°      | 8°      | 8°        | 8°        | 14°     | 14°     |
| SCTI   | SL-41M  | SL-42M  | SL-42ML2  | SL-42ML3  | SL-51M  | SL-1M   |



| Code:  | L082206 | L102506 | L122806 | L163006 | L193806 |
|--------|---------|---------|---------|---------|---------|
| D1(mm) | 8       | 10      | 12      | 16      | 19      |
| L2(mm) | 22      | 25      | 28      | 30      | 38      |
| D2(mm) | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 66      | 69      | 72      | 74      | 82      |
| a      | 14°     | 14°     | 14°     | 14°     | 14°     |
| SCTI   | SL-2M   | SL-3M   | SL-4M   | SL-5M   | SL-7M   |

**\* CONE** ✓

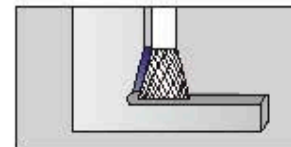
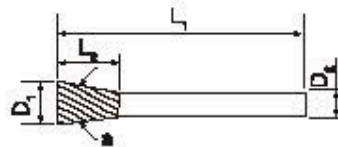


**M**



| Code:  | M030803 | M081103 | M031103L2 | M081103L3 | M031603 | M061308 | M061306 | M061906 | M102006 | M122506 | M162506 |
|--------|---------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 3       | 3       | 3         | 3         | 3       | 6       | 6       | 6       | 10      | 12      | 16      |
| L2(mm) | 8.9     | 11      | 11        | 11        | 16      | 13      | 13      | 19      | 20      | 25      | 25      |
| D2(mm) | 3       | 3       | 3         | 3         | 3       | 3       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 38      | 38      | 50        | 75        | 38      | 50      | 57      | 63      | 64      | 69      | 69      |
| a      | 12°     | 14°     | 14°       | 14°       | 7°      | 22°     | 22°     | 14°     | 28°     | 28°     | 31°     |
| SCTI   | SM-41M  | SM-42M  | SM-42ML2  | SM-42ML3  | SM-43M  | SM-51M  | SM-1M   | SM-2M   | SM-4M   | SM-5M   | SM-6M   |

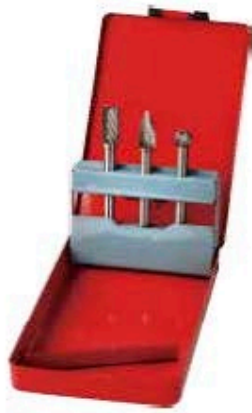
**\* INVERTED CONE** ✓



**N**



| Code:  | N020303 | N030403 | N060603 | N060806 | N101006 | N121206 | N161906 | N191606 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| D1(mm) | 2.5     | 3       | 6       | 6       | 10      | 12      | 16      | 19      |
| L2(mm) | 3       | 4       | 6       | 8       | 10      | 12      | 19      | 16      |
| D2(mm) | 3       | 3       | 3       | 6       | 6       | 6       | 6       | 6       |
| L1(mm) | 38      | 38      | 50      | 52      | 54      | 56      | 63      | 60      |
| a      | 10°     | 10°     | 10°     | 10°     | 13°     | 28°     | 18°     | 30°     |
| SCTI   | SN-41M  | SN-42M  | SN-51M  | SN-1M   | SN-2M   | SN-4M   | SN-6M   | SN-7M   |



\* **K-1** ▲

**Shank Diameter: 6mm**  
**Including: A1020, G1020,**  
**D1009**



\* **K-2** ▲

**Shank Diameter: 3mm**  
**Including: C0314, M0311, F0312,**  
**D0302, A0314, G0312, B0314**



\* **K-3** ▲

**Shank Diameter: 6mm**  
**Including: A1225, A1020, C1025,**  
**F1225, G1225, D0806, F1025,**  
**C0820, M1020, A0820**



\* **K-6** ▲

**Shank Diameter: 3mm**  
**Including: A0613, B0613,**  
**C0613, D0605, D0403,**  
**F0512, G0613, L0613**



\* **K-8 (Single Cut)** ▲

**Shank Diameter: 6mm**  
**Including: C0820, L0822,**  
**G1020, F1020, C0616, N0608,**  
**A0820, F0820, E1016**



\* **K-9** ▲

**Shank Diameter: 6mm**  
**Including: F1225, F1020,**  
**D1210, D1009, C0616,**  
**C1020, A1020, A1225**