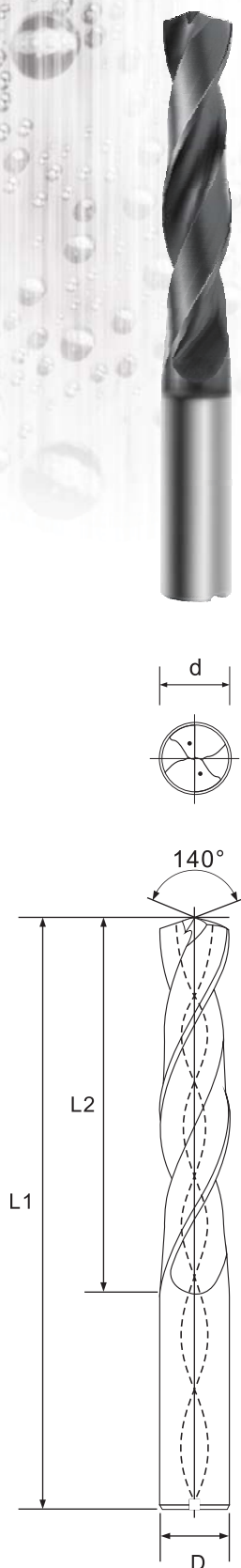
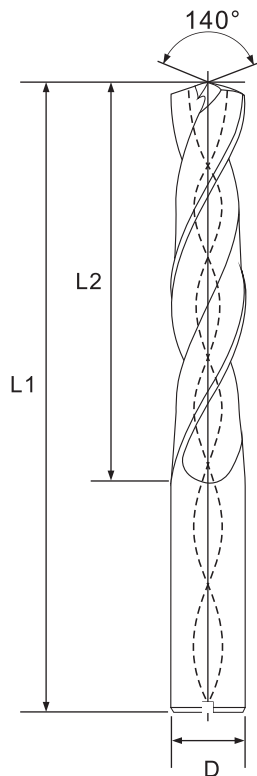
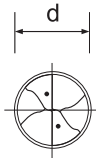




## *nACro* **5SDC Solid Coolant Drill**



| Mode     | Diameter<br>d | Length<br>of Cut<br>L2 | Shank<br>Diameter<br>D | Full<br>Length<br>L1 |
|----------|---------------|------------------------|------------------------|----------------------|
| 5SDC0302 | 3             | 28                     | 6                      | 66L                  |
| 5SDC0312 | 3.1           | 28                     | 6                      | 66L                  |
| 5SDC0322 | 3.2           | 28                     | 6                      | 66L                  |
| 5SDC0332 | 3.3           | 28                     | 6                      | 66L                  |
| 5SDC0342 | 3.4           | 28                     | 6                      | 66L                  |
| 5SDC0352 | 3.5           | 28                     | 6                      | 66L                  |
| 5SDC0362 | 3.6           | 28                     | 6                      | 66L                  |
| 5SDC0372 | 3.7           | 28                     | 6                      | 66L                  |
| 5SDC0382 | 3.8           | 36                     | 6                      | 74L                  |
| 5SDC0392 | 3.9           | 36                     | 6                      | 74L                  |
| 5SDC0402 | 4             | 36                     | 6                      | 74L                  |
| 5SDC0412 | 4.1           | 36                     | 6                      | 74L                  |
| 5SDC0422 | 4.2           | 36                     | 6                      | 74L                  |
| 5SDC0432 | 4.3           | 36                     | 6                      | 74L                  |
| 5SDC0442 | 4.4           | 36                     | 6                      | 74L                  |
| 5SDC0452 | 4.5           | 36                     | 6                      | 74L                  |
| 5SDC0462 | 4.6           | 36                     | 6                      | 74L                  |
| 5SDC0472 | 4.7           | 36                     | 6                      | 74L                  |
| 5SDC0482 | 4.8           | 44                     | 6                      | 82L                  |
| 5SDC0492 | 4.9           | 44                     | 6                      | 82L                  |
| 5SDC0502 | 5             | 44                     | 6                      | 82L                  |
| 5SDC0512 | 5.1           | 44                     | 6                      | 82L                  |
| 5SDC0522 | 5.2           | 44                     | 6                      | 82L                  |
| 5SDC0532 | 5.3           | 44                     | 6                      | 82L                  |
| 5SDC0542 | 5.4           | 44                     | 6                      | 82L                  |
| 5SDC0552 | 5.5           | 44                     | 6                      | 82L                  |
| 5SDC0562 | 5.6           | 44                     | 6                      | 82L                  |
| 5SDC0572 | 5.7           | 44                     | 6                      | 82L                  |
| 5SDC0582 | 5.8           | 44                     | 6                      | 82L                  |
| 5SDC0592 | 5.9           | 44                     | 6                      | 82L                  |
| 5SDC0602 | 6             | 44                     | 6                      | 82L                  |
| 5SDC0612 | 6.1           | 53                     | 8                      | 91L                  |
| 5SDC0622 | 6.2           | 53                     | 8                      | 91L                  |
| 5SDC0632 | 6.3           | 53                     | 8                      | 91L                  |
| 5SDC0642 | 6.4           | 53                     | 8                      | 91L                  |
| 5SDC0652 | 6.5           | 53                     | 8                      | 91L                  |
| 5SDC0662 | 6.6           | 53                     | 8                      | 91L                  |
| 5SDC0672 | 6.7           | 53                     | 8                      | 91L                  |
| 5SDC0682 | 6.8           | 53                     | 8                      | 91L                  |
| 5SDC0692 | 6.9           | 53                     | 8                      | 91L                  |
| 5SDC0702 | 7             | 53                     | 8                      | 91L                  |
| 5SDC0712 | 7.1           | 53                     | 8                      | 91L                  |
| 5SDC0722 | 7.2           | 53                     | 8                      | 91L                  |
| 5SDC0732 | 7.3           | 53                     | 8                      | 91L                  |
| 5SDC0742 | 7.4           | 53                     | 8                      | 91L                  |
| 5SDC0752 | 7.5           | 53                     | 8                      | 91L                  |
| 5SDC0762 | 7.6           | 53                     | 8                      | 91L                  |
| 5SDC0772 | 7.7           | 53                     | 8                      | 91L                  |
| 5SDC0782 | 7.8           | 53                     | 8                      | 91L                  |
| 5SDC0792 | 7.9           | 53                     | 8                      | 91L                  |
| 5SDC0802 | 8             | 53                     | 8                      | 91L                  |
| 5SDC0812 | 8.1           | 61                     | 10                     | 103L                 |
| 5SDC0822 | 8.2           | 61                     | 10                     | 103L                 |
| 5SDC0832 | 8.3           | 61                     | 10                     | 103L                 |
| 5SDC0842 | 8.4           | 61                     | 10                     | 103L                 |
| 5SDC0852 | 8.5           | 61                     | 10                     | 103L                 |
| 5SDC0862 | 8.6           | 61                     | 10                     | 103L                 |

**nACro****5SDC Solid Coolant Drill**

| Model    | Diameter<br>d | Length<br>of Cut<br>L2 | Shank<br>Diameter<br>D | Full<br>Length<br>L1 |
|----------|---------------|------------------------|------------------------|----------------------|
| 5SDC0872 | 8.7           | 61                     | 10                     | 103L                 |
| 5SDC0882 | 8.8           | 61                     | 10                     | 103L                 |
| 5SDC0892 | 8.9           | 61                     | 10                     | 103L                 |
| 5SDC0902 | 9             | 61                     | 10                     | 103L                 |
| 5SDC0912 | 9.1           | 61                     | 10                     | 103L                 |
| 5SDC0922 | 9.2           | 61                     | 10                     | 103L                 |
| 5SDC0932 | 9.3           | 61                     | 10                     | 103L                 |
| 5SDC0942 | 9.4           | 61                     | 10                     | 103L                 |
| 5SDC0952 | 9.5           | 61                     | 10                     | 103L                 |
| 5SDC0962 | 9.6           | 61                     | 10                     | 103L                 |
| 5SDC0972 | 9.7           | 61                     | 10                     | 103L                 |
| 5SDC0982 | 9.8           | 61                     | 10                     | 103L                 |
| 5SDC0992 | 9.9           | 61                     | 10                     | 103L                 |
| 5SDC1002 | 10            | 61                     | 10                     | 103L                 |
| 5SDC1012 | 10.1          | 71                     | 12                     | 118L                 |
| 5SDC1022 | 10.2          | 71                     | 12                     | 118L                 |
| 5SDC1032 | 10.3          | 71                     | 12                     | 118L                 |
| 5SDC1042 | 10.4          | 71                     | 12                     | 118L                 |
| 5SDC1052 | 10.5          | 71                     | 12                     | 118L                 |
| 5SDC1062 | 10.6          | 71                     | 12                     | 118L                 |
| 5SDC1072 | 10.7          | 71                     | 12                     | 118L                 |
| 5SDC1082 | 10.8          | 71                     | 12                     | 118L                 |
| 5SDC1092 | 10.9          | 71                     | 12                     | 118L                 |
| 5SDC1102 | 11            | 71                     | 12                     | 118L                 |
| 5SDC1112 | 11.1          | 71                     | 12                     | 118L                 |
| 5SDC1122 | 11.2          | 71                     | 12                     | 118L                 |
| 5SDC1132 | 11.3          | 71                     | 12                     | 118L                 |
| 5SDC1142 | 11.4          | 71                     | 12                     | 118L                 |
| 5SDC1152 | 11.5          | 71                     | 12                     | 118L                 |
| 5SDC1162 | 11.6          | 71                     | 12                     | 118L                 |
| 5SDC1172 | 11.7          | 71                     | 12                     | 118L                 |
| 5SDC1182 | 11.8          | 71                     | 12                     | 118L                 |
| 5SDC1192 | 11.9          | 71                     | 12                     | 118L                 |
| 5SDC1202 | 12            | 71                     | 12                     | 118L                 |
| 5SDC1252 | 12.5          | 77                     | 14                     | 124L                 |
| 5SDC1302 | 13            | 77                     | 14                     | 124L                 |
| 5SDC1352 | 13.5          | 77                     | 14                     | 124L                 |
| 5SDC1402 | 14            | 77                     | 14                     | 124L                 |
| 5SDC1452 | 14.5          | 83                     | 16                     | 133L                 |
| 5SDC1502 | 15            | 83                     | 16                     | 133L                 |
| 5SDC1552 | 15.5          | 83                     | 16                     | 133L                 |
| 5SDC1602 | 16            | 83                     | 16                     | 133L                 |
| 5SDC1652 | 16.5          | 93                     | 18                     | 143L                 |
| 5SDC1702 | 17            | 93                     | 18                     | 143L                 |
| 5SDC1752 | 17.5          | 93                     | 18                     | 143L                 |
| 5SDC1802 | 18            | 93                     | 18                     | 143L                 |
| 5SDC1852 | 18.5          | 101                    | 20                     | 153L                 |
| 5SDC1902 | 19            | 101                    | 20                     | 153L                 |
| 5SDC1952 | 19.5          | 101                    | 20                     | 153L                 |
| 5SDC2002 | 20            | 101                    | 20                     | 153L                 |
| 5SDC2202 | 22            | 155                    | 25                     | 213L                 |
| 5SDC2402 | 24            | 155                    | 25                     | 213L                 |
| 5SDC2502 | 25            | 155                    | 25                     | 213L                 |
| 5SDC2602 | 26            | 186                    | 32                     | 248L                 |
| 5SDC2802 | 28            | 186                    | 32                     | 248L                 |
| 5SDC3002 | 30            | 186                    | 32                     | 248L                 |

## nACro nACro Drills with Coolant-hole

### Drilling in wet condition

#### nACro nACro Drills with Coolant-hole

| Work Material   | Structural Steels, Carbon Steels, Cast Irons<br>SS,SC,FC |                | Alloy Steels, Pre-hardened Steels<br>SCM,NAK |                | Mold Steels, Hardened Steels<br>(30~40HRC) |                | Hardened Steels<br>(40~50HRC) |                | Ductile Cast Irons<br>(FCD450) |                |
|-----------------|----------------------------------------------------------|----------------|----------------------------------------------|----------------|--------------------------------------------|----------------|-------------------------------|----------------|--------------------------------|----------------|
|                 | Rotation<br>min <sup>-1</sup>                            | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>                | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>              | Feed<br>mm/min | Rotation<br>min <sup>-1</sup> | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>  | Feed<br>mm/min |
| Drill Dia. (mm) |                                                          |                |                                              |                |                                            |                |                               |                |                                |                |
| 5               | 9600                                                     | 1700           | 6400                                         | 1100           | 4500                                       | 780            | 3200                          | 480            | 6400                           | 640            |
| 8               | 6000                                                     | 1600           | 4000                                         | 1100           | 2800                                       | 750            | 2000                          | 460            | 4000                           | 640            |
| 10              | 4800                                                     | 1500           | 3200                                         | 1000           | 2200                                       | 710            | 1600                          | 440            | 3200                           | 640            |
| 12              | 4000                                                     | 1500           | 2700                                         | 1000           | 1900                                       | 700            | 1300                          | 410            | 2700                           | 640            |
| 16              | 3000                                                     | 1300           | 2000                                         | 900            | 1400                                       | 630            | 1000                          | 380            | 2000                           | 620            |

#### nACro nACro Drills with Coolant-hole

| Work Material   | Structural Steels, Carbon Steels, Cast Irons<br>SS,SC,FC |                | Alloy Steels, Pre-hardened Steels<br>SCM,NAK |                | Mold Steels, Hardened Steels<br>(30~40HRC) |                | Hardened Steels<br>(40~50HRC) |                | Ductile Cast Irons<br>(FCD450) |                |
|-----------------|----------------------------------------------------------|----------------|----------------------------------------------|----------------|--------------------------------------------|----------------|-------------------------------|----------------|--------------------------------|----------------|
|                 | Rotation<br>min <sup>-1</sup>                            | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>                | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>              | Feed<br>mm/min | Rotation<br>min <sup>-1</sup> | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>  | Feed<br>mm/min |
| Drill Dia. (mm) |                                                          |                |                                              |                |                                            |                |                               |                |                                |                |
| 5               | 9600                                                     | 1550           | 6400                                         | 1000           | 4500                                       | 700            | 3200                          | 430            | 6400                           | 580            |
| 8               | 6000                                                     | 1450           | 4000                                         | 1000           | 2800                                       | 680            | 2000                          | 400            | 4000                           | 580            |
| 10              | 4800                                                     | 1350           | 3200                                         | 900            | 2200                                       | 640            | 1600                          | 400            | 3200                           | 580            |
| 12              | 4000                                                     | 1350           | 2700                                         | 900            | 1900                                       | 630            | 1300                          | 370            | 2700                           | 580            |
| 16              | 3000                                                     | 1200           | 2000                                         | 800            | 1400                                       | 570            | 1000                          | 340            | 2000                           | 560            |

#### nACro nACro Drills with Coolant-hole

| Work Material   | Structural Steels, Carbon Steels, Cast Irons<br>SS,SC,FC |                | Alloy Steels, Pre-hardened Steels<br>SCM,NAK |                | Mold Steels, Hardened Steels<br>(30~40HRC) |                | Hardened Steels<br>(40~50HRC) |                | Ductile Cast Irons<br>(FCD450) |                |
|-----------------|----------------------------------------------------------|----------------|----------------------------------------------|----------------|--------------------------------------------|----------------|-------------------------------|----------------|--------------------------------|----------------|
|                 | Rotation<br>min <sup>-1</sup>                            | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>                | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>              | Feed<br>mm/min | Rotation<br>min <sup>-1</sup> | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>  | Feed<br>mm/min |
| Drill Dia. (mm) |                                                          |                |                                              |                |                                            |                |                               |                |                                |                |
| 5               | 9600                                                     | 1310           | 6400                                         | 840            | 4500                                       | 590            | 3200                          | 350            | 6400                           | 420            |
| 8               | 6000                                                     | 1210           | 4000                                         | 840            | 2800                                       | 570            | 2000                          | 320            | 4000                           | 420            |
| 10              | 4800                                                     | 1110           | 3200                                         | 740            | 2200                                       | 530            | 1600                          | 320            | 3200                           | 420            |
| 12              | 4000                                                     | 1110           | 2700                                         | 740            | 1900                                       | 520            | 1300                          | 290            | 2700                           | 420            |
| 16              | 3000                                                     | 960            | 2000                                         | 640            | 1400                                       | 460            | 1000                          | 260            | 2000                           | 400            |

### Drilling in Oil Mist

#### nACro nACro Drills with Coolant-hole

| Work Material   | Structural Steels, Carbon Steels, Cast Irons<br>SS,SC,FC |                | Alloy Steels, Pre-hardened Steels<br>SCM,NAK |                | Mold Steels, Hardened Steels<br>(30~40HRC) |                | Hardened Steels<br>(40~50HRC) |                | Ductile Cast Irons<br>(FCD450) |                |
|-----------------|----------------------------------------------------------|----------------|----------------------------------------------|----------------|--------------------------------------------|----------------|-------------------------------|----------------|--------------------------------|----------------|
|                 | Rotation<br>min <sup>-1</sup>                            | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>                | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>              | Feed<br>mm/min | Rotation<br>min <sup>-1</sup> | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>  | Feed<br>mm/min |
| Drill Dia. (mm) |                                                          |                |                                              |                |                                            |                |                               |                |                                |                |
| 5               | 5800                                                     | 790            | 3800                                         | 520            | 2700                                       | 360            | 1900                          | 210            | 3800                           | 380            |
| 8               | 3600                                                     | 740            | 2400                                         | 500            | 1700                                       | 350            | 1200                          | 200            | 2400                           | 380            |
| 10              | 2900                                                     | 730            | 1900                                         | 470            | 1300                                       | 330            | 1000                          | 200            | 1900                           | 370            |
| 12              | 2400                                                     | 690            | 1600                                         | 460            | 1100                                       | 330            | 800                           | 180            | 1600                           | 370            |
| 16              | 1800                                                     | 620            | 1200                                         | 420            | 800                                        | 270            | 600                           | 170            | 1200                           | 370            |

#### nACro nACro Drills with Coolant-hole

| Work Material   | Structural Steels, Carbon Steels, Cast Irons<br>SS,SC,FC |                | Alloy Steels, Pre-hardened Steels<br>SCM,NAK |                | Mold Steels, Hardened Steels<br>(30~40HRC) |                | Hardened Steels<br>(40~50HRC) |                | Ductile Cast Irons<br>(FCD450) |                |
|-----------------|----------------------------------------------------------|----------------|----------------------------------------------|----------------|--------------------------------------------|----------------|-------------------------------|----------------|--------------------------------|----------------|
|                 | Rotation<br>min <sup>-1</sup>                            | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>                | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>              | Feed<br>mm/min | Rotation<br>min <sup>-1</sup> | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>  | Feed<br>mm/min |
| Drill Dia. (mm) |                                                          |                |                                              |                |                                            |                |                               |                |                                |                |
| 5               | 5800                                                     | 720            | 3800                                         | 470            | 2700                                       | 330            | 1900                          | 200            | 3800                           | 340            |
| 8               | 3600                                                     | 670            | 2400                                         | 460            | 1700                                       | 320            | 1200                          | 190            | 2400                           | 340            |
| 10              | 2900                                                     | 660            | 1900                                         | 420            | 1300                                       | 310            | 1000                          | 190            | 1900                           | 330            |
| 12              | 2400                                                     | 620            | 1600                                         | 420            | 1100                                       | 300            | 800                           | 170            | 1600                           | 330            |
| 16              | 1800                                                     | 560            | 1200                                         | 380            | 800                                        | 250            | 600                           | 160            | 1200                           | 330            |

#### nACro nACro Drills with Coolant-hole

| Work Material   | Structural Steels, Carbon Steels, Cast Irons<br>SS,SC,FC |                | Alloy Steels, Pre-hardened Steels<br>SCM,NAK |                | Mold Steels, Hardened Steels<br>(30~40HRC) |                | Hardened Steels<br>(40~50HRC) |                | Ductile Cast Irons<br>(FCD450) |                |
|-----------------|----------------------------------------------------------|----------------|----------------------------------------------|----------------|--------------------------------------------|----------------|-------------------------------|----------------|--------------------------------|----------------|
|                 | Rotation<br>min <sup>-1</sup>                            | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>                | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>              | Feed<br>mm/min | Rotation<br>min <sup>-1</sup> | Feed<br>mm/min | Rotation<br>min <sup>-1</sup>  | Feed<br>mm/min |
| Drill Dia. (mm) |                                                          |                |                                              |                |                                            |                |                               |                |                                |                |
| 5               | 5800                                                     | 580            | 3800                                         | 380            | 2700                                       | 260            | 1900                          | 150            | 3800                           | 250            |
| 8               | 3600                                                     | 530            | 2400                                         | 360            | 1700                                       | 250            | 1200                          | 140            | 2400                           | 240            |
| 10              | 2900                                                     | 520            | 1900                                         | 330            | 1300                                       | 250            | 1000                          | 140            | 1900                           | 240            |
| 12              | 2400                                                     | 480            | 1600                                         | 320            | 1100                                       | 230            | 800                           | 120            | 1600                           | 230            |
| 16              | 1800                                                     | 420            | 1200                                         | 280            | 800                                        | 190            | 600                           | 110            | 1200                           | 230            |