

Standard Inserts

When you order standard inserts, kindly specify the following information:

-----Shape, Clearance angle, Tolerance, Type, I.C., Thickness, Corner Radius, etc

1 Shape

2 Clearance Angle

4 Type

6 Thickness

| Symbol | ANSI | ISO | Dimension Inch | Dimension mm |
|--------|------|-----|----------------|--------------|
| 1 | 01 | | 0.062 | 1.59 |
| 1.2 | T1 | | 0.078 | 1.98 |
| 1.5 | 02 | | 0.094 | 2.38 |
| 2 | 03 | | 0.125 | 3.18 |
| 2.5 | T3 | | 0.156 | 3.97 |
| 3 | 04 | | 0.188 | 4.76 |
| 3.5 | 05 | | 0.219 | 5.56 |
| 4 | 06 | | 0.250 | 6.35 |
| 5 | 07 | | 0.313 | 7.94 |
| 6 | 09 | | 0.375 | 9.52 |
| 8 | 12 | | 0.500 | 12.7 |

7 Corner Radius

| ANSI | ISO | Inch | mm |
|------|-----|--------------|--------------|
| 0 | 00 | Sharp Edge | Sharp Edge |
| 0.5 | 02 | 0.008 | 0.2 |
| 1 | 04 | 0.016 | 0.4 |
| 2 | 08 | 0.031 | 0.8 |
| 3 | 12 | 0.047 | 1.2 |
| 4 | 16 | 0.062 | 1.6 |
| 5 | 20 | 0.078 | 2 |
| 6 | 24 | 0.094 | 2.4 |
| 7 | 28 | 0.109 | 2.78 |
| 8 | 32 | 0.125 | 3.18 |
| 0 | 0 | Round Insert | Round Insert |

T

1

N

2

M

3

G

4

4

5

3

6

4

7

R

8

E

9

3 Tolerance

ANSI Inch

| Symbol | I.C. (Inscribed Circle) | T | B |
|--------|-------------------------|-------|------------|
| A | ±.001 | ±.001 | ±.005 |
| C | ±.001 | ±.001 | ±.0005 |
| E | ±.001 | ±.001 | ±.001 |
| F | ±.0005 | ±.001 | ±.0002 |
| G | ±.001 | ±.005 | ±.001 |
| H | ±.001 | ±.001 | ±.005 |
| M* | ±.002 - ±.004 | ±.005 | ±.002-.010 |
| U* | ±.005 - ±.010 | ±.005 | ±.005-.012 |
| N* | ±.002 - ±.004 | ±.001 | ±.002-.010 |

Iso Metric (For insert shapes C, E, S, T, W)

| Symbol | d (Inscribed Circle) | s (Thickness) | m |
|--------|----------------------|---------------|---------------|
| A | ±0.075 | ±0.025 | ±0.605 |
| C | ±0.025 | ±0.025 | ±0.013 |
| E | ±0.025 | ±0.025 | ±0.025 |
| F | ±0.013 | ±0.025 | ±0.005 |
| G | ±0.025 | ±0.13 | ±0.025 |
| H | ±0.013 | ±0.025 | ±0.013 |
| M* | ±0.05 - ±0.15 | ±0.13 | ±0.08 - ±0.20 |
| N | ±0.05 - ±0.13 | ±0.025 | ±0.08 - ±0.18 |
| U* | ±0.08 - ±0.25 | ±0.13 | ±0.13 - ±0.38 |

For Insert Shapes D, V

| Symbol | d | s | m |
|--------|---------------|-------------|---------------|
| M,U | ±0.05 - ±0.10 | ±0.025-.013 | ±0.11 - ±0.18 |

*Exact tolerance is determined by size of insert

8 Direction

R = Right Hand
L = Left Hand (if required)

9 Chipbreaker Designation

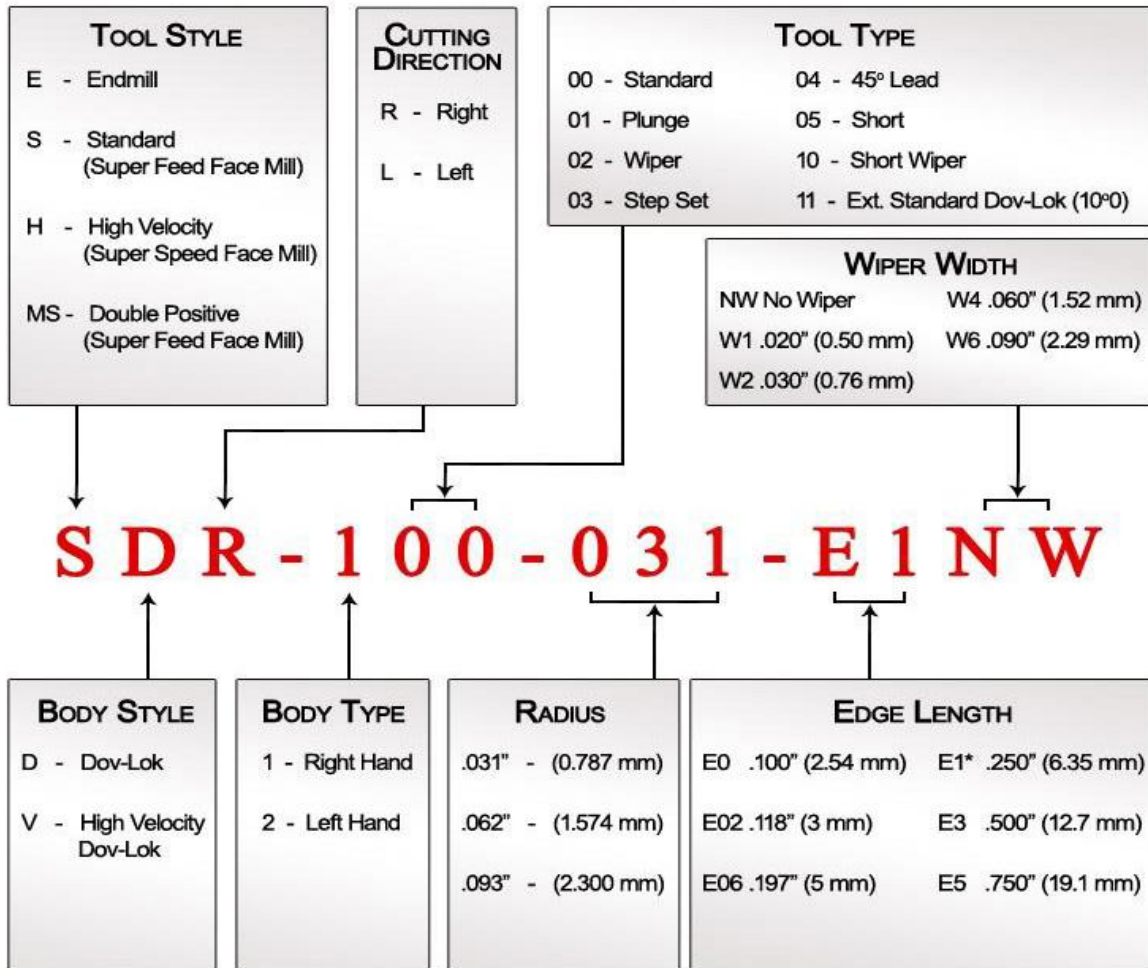
5 I.C. and Code For Metric Cutting Edge Length

| I.C. | Symbol | | C | D | M | R | S | T | V | W |
|------|--------|--------|----|----|----|-----|----|----|----|----|
| | Inch | mm | | | | | | | | |
| 1.25 | 0.156 | 3.97 | S4 | 04 | 03 | 03 | 03 | 06 | | |
| 1.5 | 0.188 | 4.76 | | 05 | 04 | 04 | 04 | 08 | | S3 |
| 1.8 | 0.219 | 5.56 | | 06 | 05 | 05 | 05 | 09 | 08 | 03 |
| 2 | 0.250 | 6.35 | | 07 | 06 | 06* | 06 | 11 | 11 | 04 |
| 2.5 | 0.313 | 7.94 | | 08 | 07 | 07 | 07 | 13 | 13 | 05 |
| 3 | 0.375 | 9.525 | | 09 | 08 | 08 | 08 | 16 | 16 | 06 |
| 4 | 0.500 | 12.70 | | 12 | 10 | 10 | 10 | 22 | 22 | 08 |
| 5 | 0.625 | 15.875 | | 15 | 12 | 12 | 12 | 27 | 27 | 10 |
| 6 | 0.750 | 19.05 | | 19 | 15 | 15 | 15 | 33 | 33 | 13 |
| 8 | 1.000 | 25.40 | | 25 | 19 | 19 | 19 | 44 | 44 | 17 |
| 10 | 1.250 | 31.75 | | 32 | 25 | 25 | 25 | 53 | | |

SDR/EDR Dov-Lok Inserts

When you order SDR/EDR inserts, kindly specify the following information:

----- Tool Style, Body Style, Cutting Direction, Corner Radius, Edge Length, Wiper, etc



Other Custom Radii, Features & Options available upon request.

* End Mill E1 = .150" (3.81 mm)

UCDR Cartridge

When you order UCDR inserts, kindly specify the following information:

----- Corner Radius, Wiper, Cartridge Style, Edge Length, etc

UC: Ultra-Mill

MS: 90 Deg Mount

D: PCD

R: Right Hand

B: Borazon

L: Left Hand

UE: Endmill

WS: Wedge Style

C: Carbide

Example: UCDR 32-01

| | | |
|--------------------|---------------|----------------|
| 3: Nose Radius | 0 = 0.000 | 1 = 0.010 |
| | 2 = 0.030 | 3 = 0.060 |
| | 4 = 0.090 | 5 = 0.016 |
| | 6 = 0.100 | |
| | | |
| 2: Wiper Flat | 0 = No Wiper | 1 = 0.060 |
| | 2 = 0.080 | 3 = 0.100 |
| | 4 = 0.120 | |
| 0: Cartridge Style | 0 = Standard | 1 = Two Phase |
| | 2 = Long Edge | 3 = Boring |
| | 4 = Short | 5 = Chip Guard |
| | 6 = No Drag | |
| 1: Max DOC | 0 = 0.200 | 1 = 0.250 |
| | 2 = 0.375 | 3 = 0.500 |
| | 4 = 0.625 | |

*Recommended cartridge for all standard purposes is UCDR33-00

*If cutter body has Set Height of under 2" use UCDR33-40 short cartridge

*Any special Radius or Wiper use the cutter No. w/-5 (Ex. UTXXXX-5)

*Long Edge insert is 0.12 wide