

- Mid-low hardened steels (~HRC42), Mild steels, Cast irons, SUS
- HR coating reduces stress of flute and enhances wear resistance.
- Unequal pitch design and helix enable decrease of chattering.
- 4flutes and deep pocket enable chip evacuation and increase surface roughness.

**TR** Contact Trucut Tools to order  
[sales@trucuttools.co.uk](mailto:sales@trucuttools.co.uk)  
 Tel. 01202 717 110

4

WC  
미립자

HR  
Coating

38°  
Helix Angle

35°/38°  
Helix Angle

C Cutting

CUTTING  
DATA

ø 1~2.5
ø 3~20
C Cutting
466P

Condition	D Size	D Tolerance	Condition	D Size	D Tolerance
øD ≠ ød	ø 1 ~ 6	+0 ~ -0.01mm	øD = ød	ø 4 ~ 6	-0.005 ~ -0.015mm
	ø 8 ~ 20	+0 ~ -0.015mm		ø 8 ~ 12	-0.01 ~ -0.025mm
		ø 14 ~ 20		-0.015 ~ -0.03mm	

: mm

Order Number	Diameter D	Length of cut L1	Chamfer C	Overall Length L	Shank Dia d	Order Number	Diameter D	Length of cut L1	Chamfer C	Overall Length L	Shank Dia d
4VCC 010 020 S04	1	2	0.03	45	4						
4VCC 010 025 S06	1	2.5	0.03	50	6						
4VCC 010 035 S06	1	3.5	0.03	50	6						
4VCC 012 020 S04	1.2	2	0.04	45	4						
4VCC 012 030 S06	1.2	3	0.04	50	6						
4VCC 012 050 S06	1.2	5	0.04	50	6						
4VCC 015 030 S04	1.5	3	0.05	45	4						
4VCC 015 040 S06	1.5	4	0.05	50	6						
4VCC 015 060 S06	1.5	6	0.05	50	6						
4VCC 020 040 S04	2	4	0.075	45	4						
4VCC 020 060 S06	2	6	0.075	50	6						
4VCC 020 090 S06	2	9	0.075	50	6						
4VCC 025 050 S04	2.5	5	0.08	50	4						
4VCC 025 070 S06	2.5	7	0.08	50	6						
4VCC 025 100 S06	2.5	10	0.08	50	6						
4VCC 030 060 S04	3	6	0.1	50	4						
4VCC 030 060 S06	3	6	0.1	50	6						
4VCC 030 080 S06	3	8	0.1	50	6						
4VCC 030 120 S06	3	12	0.1	50	6						
4VCC 040 080 S04	4	8	0.15	50	4						
4VCC 040 080 S06	4	8	0.15	50	6						
4VCC 040 100 S06	4	10	0.15	50	6						
4VCC 040 150 S06	4	15	0.15	60	6						
4VCC 050 100 S06	5	10	0.15	50	6						
4VCC 050 150 S06	5	15	0.15	60	6						
4VCC 050 200 S06	5	20	0.15	70	6						
4VCC 060 120 S06	6	12	0.2	50	6						
4VCC 060 150 S06	6	15	0.2	60	6						
4VCC 060 200 S06	6	20	0.2	70	6						
4VCC 080 160 S08	8	16	0.2	60	8						
4VCC 080 200 S08	8	20	0.2	70	8						
4VCC 080 300 S08	8	30	0.2	80	8						
4VCC 100 200 S10	10	20	0.3	75	10						
4VCC 100 250 S10	10	25	0.3	75	10						
4VCC 100 350 S10	10	35	0.3	90	10						
4VCC 120 240 S12	12	24	0.35	75	12						
4VCC 120 300 S12	12	30	0.35	80	12						
4VCC 120 450 S12	12	45	0.35	100	12						
New 4VCC 140 360 S14	14	36	0.38	90	14						
New 4VCC 140 500 S14	14	50	0.38	110	14						
4VCC 160 400 S16	16	40	0.4	100	16						
4VCC 160 600 S16	16	60	0.4	120	16						
4VCC 200 450 S20	20	45	0.5	100	20						
4VCC 200 650 S20	20	65	0.5	120	20						

# 4VSE/4VCC/4VSC

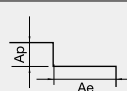
## Cutting Condition

• RPM : rev./min • Feed : mm/min

Material	Structural steels / Carbon Steels / Gray cast irons SS/SC/FC				Tool steels / Mold steels SCM/HPM				Titanium alloy steels Ti6A				Heat Resistance Alloys				Stainless Steels SUS304 / SUS316			
	~30HRc				30 ~ 40HRc				-				-				-			
mm Outside Diameter	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial	RPM	FEED	Ap Axial	Ae Radial
Ø1	41,400	800	1.50	0.50	38,000	690	1.50	0.50	22,920	150	1.00	0.30	10,800	100	1.00	0.20	31,900	380	1.50	0.35
Ø1.2	34,500	700	3.00	0.60	32,000	600	1.80	0.60	19,104	120	1.20	0.36	8,951	80	1.20	0.24	26,500	300	1.80	0.42
Ø1.5	27,600	550	2.25	0.75	25,600	450	2.25	0.75	15,360	100	1.50	0.45	7,155	65	1.50	0.30	21,200	250	2.25	0.53
Ø2	20,700	400	3.00	1.00	19,100	330	3.00	1.00	11,460	80	2.00	0.60	5,400	65	2.00	0.40	15,600	200	3.00	0.70
Ø2.5	16,500	330	3.75	1.25	15,300	270	3.75	1.25	9,120	70	2.50	0.75	4,293	50	2.50	0.50	12,800	150	3.75	0.88
Ø3	13,800	330	4.50	1.50	12,740	240	4.50	1.50	7,644	100	3.00	0.90	3,578	50	3.00	0.60	10,600	210	4.50	1.05
Ø4	10,350	410	6.00	2.00	9,560	405	6.00	2.00	5,736	160	4.00	1.20	2,700	40	4.00	0.80	8,000	150	6.00	1.40
Ø5	8,280	430	7.50	2.50	7,600	450	7.50	2.50	4,584	230	5.00	1.50	2,160	60	5.00	1.00	6,380	250	7.50	1.75
Ø6	6,900	550	9.00	3.00	6,400	450	9.00	3.00	3,840	250	6.00	1.80	1,782	116	6.00	1.20	5,300	420	9.00	2.10
Ø8	5,180	600	12.00	4.00	4,780	420	12.00	4.00	2,868	320	8.00	2.40	1,350	116	8.00	1.60	4,000	180	12.00	2.80
Ø10	4,140	780	15.00	5.00	4,140	600	15.00	5.00	2,400	380	10.00	3.00	1,080	131	10.00	2.00	3,180	510	15.00	3.50
Ø12	3,450	800	18.00	6.00	3,440	600	18.00	6.00	1,920	400	12.00	3.60	891	145	12.00	2.40	2,650	530	18.00	4.20
Ø16	2,600	700	24.00	8.00	2,600	600	24.00	8.00	1,440	350	16.00	4.80	675	131	16.00	3.20	2,000	400	24.00	5.60
Ø20	2,000	700	30.00	10.00	2,000	540	30.00	10.00	1,200	320	20.00	6.00	540	116	20.00	4.00	1,600	320	30.00	7.00

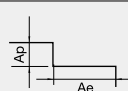
Depth of Cut

- Ap : Axial Depth
- Ae : Radial Depth



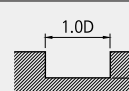
Side Milling

- Ap : Axial Depth
- Ae : Radial Depth



Side Milling

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- When entering the tool to the workpiece, enter the tool from outside to the workpiece.
- If the diameter or effective length of your tool are not on the table, adjust it compared similarity value on the table.
- The edge the flute precisely grinded. If you want to measure the tool, and to avoid damaging on the flutes, use non-contact measuring method.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- If the table over the maximum RPM and feed of your machine, or found red heat on the material, adjust RPM and feed in the same proportion.
- Use a machine with low vibration and good rigidity (1 or less, the vibration tolerance management should be within 5µm)
- Air blow or mist coolants are recommended and note for chip emission, heat, or ignition.

# 6VSE/6VSC

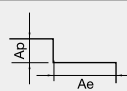
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Ø3	21,000	5,200	6.0	0.20	18,500	2,000	6.0	0.20	7,400	900	4.5	0.2	2,860	280	4.5	0.2	5,600	1,350	6.0	0.20
Ø4	18,000	5,750	8.0	0.20	16,000	2,410	8.0	0.20	6,850	930	6.0	0.2	2,100	300	6.0	0.2	5,950	1,650	8.0	0.20
Ø5	15,200	6,100	10.0	0.30	13,500	2,850	10.0	0.30	6,100	1,050	7.5	0.3	1,850	360	7.5	0.3	6,300	1,800	10.0	0.30
Ø6	14,500	6,300	12.0	0.30	12,000	3,100	12.0	0.30	5,800	1,150	9.0	0.3	1,700	385	9.0	0.3	6,800	2,000	12.0	0.30
Ø8	12,000	8,150	14.0	0.40	8,500	3,900	14.0	0.40	4,350	1,350	10.5	0.4	1,450	420	10.5	0.4	5,400	2,300	14.0	0.40
Ø10	9,500	7,950	20.0	0.50	7,250	4,100	20.0	0.50	3,400	1,500	15.0	0.5	1,000	460	15.0	0.5	4,850	2,400	20.0	0.50
Ø12	8,200	7,800	24.0	0.60	5,900	4,250	24.0	0.60	2,850	1,650	18.0	0.6	900	490	18.0	0.6	3,900	2,600	24.0	0.60
Ø16	6,200	6,800	32.0	0.80	4,250	3,950	32.0	0.80	2,450	1,350	24.0	0.8	750	400	24.0	0.8	2,800	2,000	32.0	0.80
Ø20	4,850	6,650	40.0	1.00	3,650	3,650	40.0	1.00	1,950	1,200	30.0	1.0	580	360	30.0	1.0	2,650	1,700	40.0	1.00

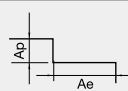
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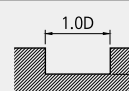
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