

- Mid-low hardened steels (~HRC42), Mild steels, Cast irons, SUS
- HR coating reduces stress of flute and enhances wear resistance.
- Deep hole helix design enable chip evacuation and increase surface roughness.



Contact Trucut Tools to order  
sales@trucuttools.co.uk  
Tel. 01202 717 110



Ø 3~20 Shield Edge

Condition	D Size	D Tolerance
ØD ≠ Ød	Ø 3 ~ 6	+0 ~ -0.01mm
	Ø 8 ~ 20	+0 ~ -0.015mm

Condition	D Size	D Tolerance
ØD = Ød	Ø 6	-0.005 ~ -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	Overall Length L	Shank Dia d
6VSE 030 080 S06	3	8	50	6
6VSE 030 120 S06	3	12	60	6
6VSE 040 100 S06	4	10	50	6
6VSE 040 160 S06	4	16	60	6
6VSE 050 150 S06	5	15	60	6
6VSE 050 200 S06	5	20	70	6
6VSE 050 250 S06	5	25	75	6
6VSE 060 150 S06	6	15	60	6
6VSE 060 200 S06	6	20	70	6
6VSE 060 250 S06	6	25	75	6
6VSE 080 210 S08	8	21	70	8
6VSE 080 260 S08	8	26	70	8
6VSE 080 320 S08	8	32	75	8
6VSE 100 260 S10	10	26	75	10
6VSE 100 350 S10	10	35	90	10
6VSE 100 420 S10	10	42	100	10
6VSE 120 310 S12	12	31	80	12
6VSE 120 410 S12	12	41	100	12
6VSE 120 510 S12	12	51	120	12
New 6VSE 140 360 S14	14	36	90	14
New 6VSE 140 550 S14	14	55	120	14
6VSE 160 400 S16	16	40	100	16
6VSE 160 650 S16	16	65	130	16
6VSE 200 450 S20	20	45	100	20
6VSE 200 800 S20	20	80	160	20

# 4VSE/4VCC/4VSC

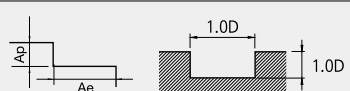
## Cutting Condition

• 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

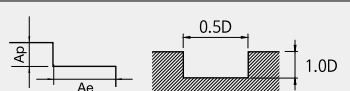
Depth of Cut

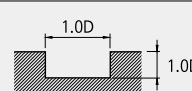
- Ap : Axial Depth
- Ae : Radial Depth



Side Milling

- Ap : Axial Depth
- Ae : Radial Depth





- 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

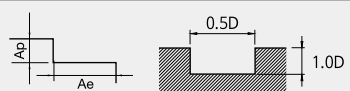
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mm Outside Diameter	RPM	FEED	Ap Axial Depth	AE Radial Depth	RPM	FEED	Ap Axial Depth	AE Radial Depth	RPM	FEED	Ap Axial Depth	AE Radial Depth	RPM	FEED	Ap Axial Depth	AE Radial Depth	RPM	FEED	Ap Axial Depth	AE Radial Depth
Ø3	21,000	5,200	6.0	0.20	18,500	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

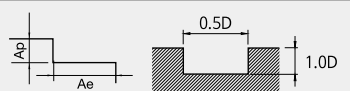
Depth of Cut

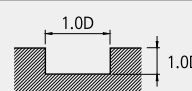
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