



A Brand AE-VMSS

Advanced Performance Anti-Vibration Carbide End Mills

ABOUT OSG

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List 8206 - A Brand AE-VMSS: 4 Flute, Stub Length

List 8226 - A Brand AE-VMSS-RA: 4 Flute, Stub Length, Right Angle Type

Slotting

Hardness	-	Up to 30 HRC		-	-	-	-	-	-	-	-	-	30-45 HRC																
Work Material	Carbon Steel Mild Steel Cast Iron	Tool Steel Alloy Steel		Stainless Steel 300SUS, 400SUS		Stainless Steel Precipitation Hardened 13-8PH, 15-5, 17-4PH		Titanium Alloy Ti-6AL-4V		Ni-Based Alloy Inconel 718		Prehardened Steels Hardened Steels																	
Cutting Speed (SFM)	330 (260-395)	295 (230-360)		230 (160-260)		230 (195-265)		195 (165 - 230)		80 (65-100)		260 (195-330)																	
Depth of Cut	<table border="1"> <tr><th>aa</th><th>ar</th></tr> <tr><td>1.0D</td><td>1.0D</td></tr> </table>		aa	ar	1.0D	1.0D	<table border="1"> <tr><th>Dia</th><th>aa</th><th>ar</th></tr> <tr><td>D≤6</td><td>0.5D</td><td>1.0D</td></tr> <tr><td>D>6</td><td>1.0D</td><td>1.0D</td></tr> </table>		Dia	aa	ar	D≤6	0.5D	1.0D	D>6	1.0D	1.0D	<table border="1"> <tr><th>aa</th><th>ar</th></tr> <tr><td>0.25D</td><td>1.0D</td></tr> </table>		aa	ar	0.25D	1.0D	<table border="1"> <tr><th>aa</th><th>ar</th></tr> <tr><td>1.0D</td><td>1.0D</td></tr> </table>		aa	ar	1.0D	1.0D
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Mill Dia. (mm)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)															
1	25,000	19.5	25,000	18.1	19,100	13.4	25,000	12.6	22,280	11.8	9,550	4.7	22,300	14.2															
1.5	19,100	24.0	17,000	18.9	12,700	14.2	16,980	14.2	14,850	13.4	6,370	5.1	14,900	16.5															
2	14,300	24.8	1,270	20.1	9,600	15.0	12,810	14.2	11,140	13.8	4,770	5.5	11,100	17.3															
2.5	11,500	30.7	10,200	22.4	7,600	16.9	10,190	16.1	8,910	15.4	3,820	5.9	8,900	18.1															
3	10,600	36.6	9,600	27.2	7,400	18.5	8,540	16.9	7,430	16.1	3,180	6.3	8,500	20.1															
4	8,000	37.8	7,200	28.3	5,600	19.3	6,410	18.1	5,570	17.3	2,390	6.7	6,400	20.1															
5	6,400	40.2	5,700	31.5	4,000	22.0	5,120	19.3	4,460	18.5	1,910	7.1	5,100	24.0															
6	5,300	40.6	4,800	35.4	3,700	14.6	4,270	18.9	3,710	18.1	1,590	7.1	4,200	26.4															
8	4,000	35.8	3,600	28.3	2,800	14.6	2,750	17.7	2,390	16.9	1,190	7.9	3,200	25.2															
10	3,200	33.1	2,900	27.6	2,200	13.8	2,200	16.5	1,910	15.7	950	7.1	2,500	21.7															
12	2,700	31.9	2,400	26.4	1,900	13.0	1,830	16.5	1,590	15.7	800	7.1	2,100	21.7															

Note: For List 8226 please reduce the speed and feed as shown above by 70%

Side Milling

Hardness	-	Up to 30 HRC		-	-	-	-	-	-	-	-	-	30-45 HRC					
Work Material	Carbon Steel Mild Steel Cast Iron	Tool Steel Alloy Steel		Stainless Steel 300SUS, 400SUS		Stainless Steel Precipitation Hardened 13-8PH, 15-5, 17-4PH		Titanium Alloy Ti-6AL-4V		Ni-Based Alloy Inconel 718		Prehardened Steels Hardened Steels						
Cutting Speed (SFM)	430 (330-495)	395 (330-495)		260 (195-330)		265 (230-295)		230 (195-265)		100 (85-130)		330 (260-395)						
Depth of Cut	<table border="1"> <tr><th>aa</th><th>ar</th></tr> <tr><td>1.5D</td><td>0.2D</td></tr> </table>		aa	ar	1.5D	0.2D												
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1.5D	0.2D																	
Mill Dia. (mm)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)				
1	25,000	21.7	25,000	23.7	22,300	17.7	25,000	17.7	25,000	350.0	12,730	160.0	25,000	20.1				
1.5	25,000	35.5	21,200	29.9	14,900	18.1	19,520	18.1	16,980	400.0	8,490	180.0	17,000	21.3				
2	19,900	56.3	17,500	33.1	11,100	18.5	14,640	18.5	12,730	420.0	6,370	190.0	14,300	24.8				
2.5	15,900	62.6	14,000	35.4	8,900	18.9	11,710	18.9	10,190	460.0	5,090	210.0	11,500	27.2				
3	13,800	65.4	12,700	42.1	8,000	18.9	9,760	18.9	8,490	480.0	4,240	220.0	10,600	29.9				
4	10,400	72.0	9,600	45.3	6,000	20.9	7,320	20.9	6,370	530.0	3,180	240.0	8,000	31.5				
5	8,300	78.3	7,600	48.0	4,800	22.0	5,860	22.0	5,090	540.0	2,550	250.0	6,400	35.4				
6	6,900	81.5	6,400	60.6	4,200	25.2	4,880	25.2	4,240	550.0	2,120	250.0	5,300	41.7				
8	5,200	69.7	4,800	60.6	3,200	24.0	3,200	24.0	2,790	430.0	1,590	230.0	4,000	40.9				
10	4,100	64.6	3,800	53.9	2,500	22.9	2,560	22.8	2,230	410.0	1,270	220.0	3,200	35.4				
12	3,500	55.1	3,200	50.4	2,100	20.9	2,140	20.9	1,860	400.0	1,060	210.0	2,700	29.9				

Note: For List 8226 please reduce the speed and feed as shown above by 70%

