

GEM
CUTTING TOOL SYSTEM

CARBIDE CUTTING TOOLS

- ◆ **Stainless steel series**
- ◆ **Copper processing series**
- ◆ **Aluminum alloy processing series**

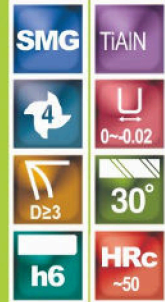
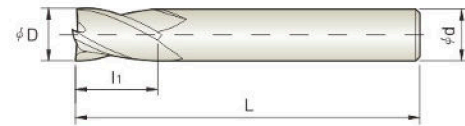


GEM CARBIDE-TOOLS
END MILL DESIGNER

GEM-UVE4

4 FLUTES SQUARE END MILLS

- ◆ Designed for cutting of hardened steels below HRc55.
- ◆ Geometry design to protect the breakage of cutting edge and improve the cutting performance.
- ◆ Covers all-round cutting from roughing to finishing.



UV-SERIES

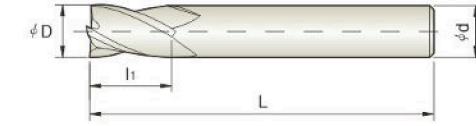
MODEL	unit (mm)			
	DIA D	F.L l _f	O.L L	S.D d
GEM-UVE4010	1.0	3	50	4
GEM-UVE4015	1.5	4	50	4
GEM-UVE4020	2.0	6	50	4
GEM-UVE4030	3.0	8	50	4
GEM-UVE4040	4.0	11	50	4
GEM-UVE4050	5.0	13	50	4
GEM-UVE4060	6.0	16	50	6
GEM-UVE4080	8.0	20	60	8
GEM-UVE4100	10.0	25	75	10
GEM-UVE4120	12.0	30	75	12
GEM-UVE4160	16.0	40	100	16

Size	D Tolerance(mm)
All	0~-0.020

GEM-UVEL4

4 FLUTES LONG SQUARE END MILLS

- ◆ Designed for cutting of hardened steels below HRc55.
- ◆ Geometry design to protect the breakage of cutting edge and improve the cutting performance.
- ◆ Covers all-round cutting from roughing to finishing.



UV-SERIES

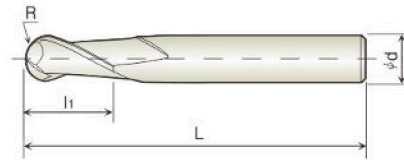
MODEL	unit (mm)			
	DIA D	F.L l _f	O.L L	S.D d
GEM-UVEL4040	4.0	11	75	4
GEM-UVEL4050	6.0	16	75	6
GEM-UVEL4060	6.0	16	100	6
GEM-UVEL4060-100	8.0	20	75	8
GEM-UVEL4080	8.0	20	100	8
GEM-UVEL4100	10.0	30	100	10
GEM-UVEL4120	12.0	30	100	12
GEM-UVEL4160	16.0	50	150	16

Size	D Tolerance(mm)
All	0~-0.020

GEM-UVB2

2 FLUTES SQUARE BALL END MILLS

- ◆ Designed for cutting of hardened steels below HRC55.
- ◆ Geometry design to protect the breakage of cutting edge and improve the cutting performance.
- ◆ Covers all-round cutting from roughing to finishing.



UV-SERIES

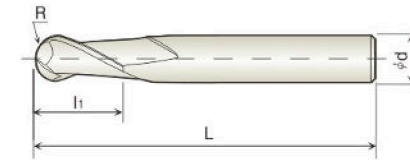
MODEL	unit (mm)			
	DIA R	F.L l ₁	O.L L	S.D d
GEM-UVB2010	R0.5	2	50	4
GEM-UVB2015	R0.75	3	50	4
GEM-UVB2020	R1.0	4	50	4
GEM-UVB2030	R1.5	6	50	4
GEM-UVB2040	R2.0	8	50	4
GEM-UVB2050	R2.5	10	50	6
GEM-UVB2060	R3.0	12	50	6
GEM-UVB2080	R4.0	16	60	8
GEM-UVB2100	R5.0	20	75	10
GEM-UVB2120	R6.0	24	75	12

Size	D Tolerance(mm)
All	0~-0.020

GEM-UVBL2

2 FLUTES LONG SQUARE BALL END MILLS

- ◆ Designed for cutting of hardened steels below HRC55.
- ◆ Geometry design to protect the breakage of cutting edge and improve the cutting performance.
- ◆ Covers all-round cutting from roughing to finishing.



UV-SERIES

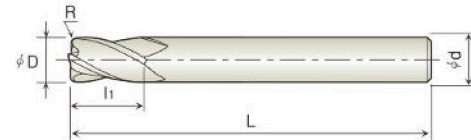
MODEL	unit (mm)			
	DIA R	F.L l ₁	O.L L	S.D d
GEM-UVBL2040	R2.0	8	75	4
GEM-UVBL2060	R3.0	12	75	6
GEM-UVBL2060-100	R3.0	12	100	6
GEM-UVBL2080	R4.0	16	75	8
GEM-UVBL2080-100	R4.0	16	100	8
GEM-UVBL2100	R5.0	20	100	10
GEM-UVBL2120	R6.0	24	100	12

Size	D Tolerance(mm)
All	0~-0.020

GEM-UVE4R

4 FLUTES CORNER RADIUS END MILLS

- ◆ Designed for cutting of hardened steels below HRC55.
- ◆ Geometry design to protect the breakage of cutting edge and improve the cutting performance.
- ◆ Covers all-round cutting from roughing to finishing.



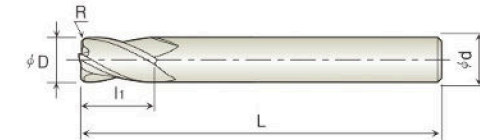
MODEL	DIA	F.L	O.L	S.D
	DxR	l ₁	L	d
GEM-UVE4010R02	1R0.2	3	50	4
GEM-UVE4015R02	1.5R0.2	4	50	4
GEM-UVE4020R02	2R0.2	6	50	4
GEM-UVE4020R05	2R0.5	6	50	4
GEM-UVE4030R02	3R0.2	8	50	4
GEM-UVE4030R05	3R0.5	8	50	4
GEM-UVE4040R02	4R0.2	10	50	4
GEM-UVE4040R05	4R0.5	10	50	4
GEM-UVE4040R10	4R1.0	10	50	4
GEM-UVE4060R05	6R0.5	16	50	6
GEM-UVE4060R10	6R1.0	16	50	6
GEM-UVE4080R05	8R0.5	20	60	8
GEM-UVE4080R10	8R1.0	20	60	8
GEM-UVE4100R05	10R0.5	25	75	10
GEM-UVE4100R10	10R1.0	25	75	10
GEM-UVE4120R05	12R0.5	30	75	12
GEM-UVE4120R10	12R1.0	30	75	12

Size	D Tolerance(mm)
All	0~-0.020

GEM-UVEL4R

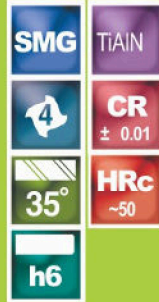
4 FLUTES LONG CORNER RADIUS END MILLS

- ◆ Designed for cutting of hardened steels below HRC55.
- ◆ Geometry design to protect the breakage of cutting edge and improve the cutting performance.
- ◆ Covers all-round cutting from roughing to finishing.



MODEL	DIA	F.L	O.L	S.D
	DxR	l ₁	L	d
GEM-UVEL4040R05	4R0.5	10	75	4
GEM-UVEL4060R05	6R0.5	16	75	6
GEM-UVEL4060R10	6R1.0	16	75	6
GEM-UVEL4060R05-100	6R0.5	16	100	6
GEM-UVEL4060R10-100	6R1.0	16	100	6
GEM-UVEL4080R05	8R0.5	20	75	8
GEM-UVEL4080R10	8R1.0	20	75	8
GEM-UVEL4080R05-100	8R0.5	20	100	8
GEM-UVEL4080R10-100	8R1.0	20	100	8
GEM-UVEL4100R05	10R0.5	25	100	10
GEM-UVEL4100R10	10R1.0	25	100	10
GEM-UVEL4120R05	12R0.5	30	100	12
GEM-UVEL4120R10	12R1.0	30	100	12

Size	D Tolerance(mm)
All	0~-0.020



UV-SERIES

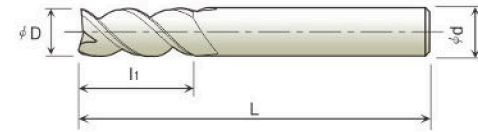


UV-SERIES

GEM-UAE3

3 FLUTES AL FLAT SQUARE END MILLS

- ◆ Cut better rigidity and performance with the good balanced 3 flutes.
- ◆ Suitable for cutting aluminium, copper and nonferrous metals.

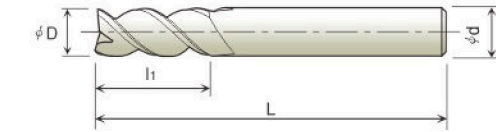


MODEL	unit (mm)			
	DIA D	F.L l _f	O.L L	S.D d
GEM-UAE3010	1.0	3	50	4
GEM-UAE3015	1.5	4.5	50	4
GEM-UAE3020	2.0	6	50	4
GEM-UAE3025	2.5	7	50	4
GEM-UAE3030	3.0	9	50	4
GEM-UAE3040	4.0	11	50	4
GEM-UAE3050	5.0	13	60	6
GEM-UAE3060	6.0	15	60	6
GEM-UAEL3060	6.0	24	100	6
GEM-UAE3080	8.0	20	60	8
GEM-UAEL3080	8.0	32	100	8
GEM-UAE3100	10.0	25	75	10
GEM-UAEL3100	10.0	40	100	10
GEM-UAE3120	12.0	30	75	12
GEM-UAEL3120	12.0	48	100	100

Size	D Tolerance(mm)
All	0~-0.020

GEM-UAE3

- ◆ Cut better rigidity and performance with the good balanced 3 flutes.
- ◆ Suitable for cutting aluminium, copper and nonferrous metals.



MODEL	unit (mm)			
	DIA D	F.L l _f	O.L L	S.D d
GEM-UAE3010-H	1.0	3	50	4
GEM-UAE3015-H	1.5	4.5	50	4
GEM-UAE3020-H	2.0	6	50	4
GEM-UAE3025-H	2.5	7	50	4
GEM-UAE3030-H	3.0	9	50	4
GEM-UAE3040-H	4.0	11	50	4
GEM-UAE3050-H	5.0	13	60	6
GEM-UAE3060-H	6.0	15	60	6
GEM-UAEL3060-H	6.0	24	100	6
GEM-UAE3080-H	8.0	20	60	8
GEM-UAEL3080-H	8.0	32	100	8
GEM-UAE3100-H	10.0	25	75	10
GEM-UAEL3100-H	10.0	40	100	10
GEM-UAE3120-H	12.0	30	75	12
GEM-UAEL3120-H	12.0	48	100	100

Size	D Tolerance(mm)
All	0~-0.020



UA-SERIES

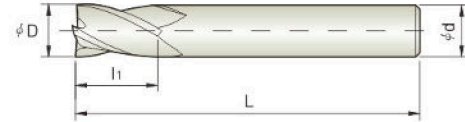


UA-SERIES

GEM-UCU4

4 FLUTES SQUARE END MILLS

- ◆ 4 flutes design with excellent sharpness and balance
- ◆ Suitable for cutting aluminium, copper and nonferrous metals.



MODEL	unit (mm)			
	DIA D	F.L l ₁	O.L L	S.D d
GEM-UCU4010	1.0	3	50	4
GEM-UCU4015	1.5	4	50	4
GEM-UCU4020	2.0	6	50	4
GEM-UCU4030	3.0	8	50	4
GEM-UCU4040	4.0	11	50	4
GEM-UCU4050	5.0	13	50	4
GEM-UCU4060	6.0	16	50	6
GEM-UCU4080	8.0	20	60	8
GEM-UCU4100	10.0	25	75	10
GEM-UCU4120	12.0	30	75	12
GEM-UCU4160	16.0	40	100	16

Size	D Tolerance(mm)
All	0~-0.020

GEM-UCUL4

4 FLUTES LONG SQUARE END MILLS

- ◆ 4 flutes design with excellent sharpness and balance
- ◆ Suitable for cutting aluminium, copper and nonferrous metals.



MODEL	unit (mm)			
	DIA D	F.L l ₁	O.L L	S.D d
GEM-UCUL4040	4.0	11	75	4
GEM-UCUL4050	6.0	16	75	6
GEM-UCUL4060	6.0	16	100	6
GEM-UCUL4060-100	8.0	20	75	8
GEM-UCUL4080	8.0	20	100	8
GEM-UCUL4100	10.0	30	100	10
GEM-UCUL4120	12.0	30	100	12
GEM-UCUL4160	16.0	50	150	16

Size	D Tolerance(mm)
All	0~-0.020



UC-SERIES

UC-SERIES