kennametal.com

KENNAMETAL®

MASTER CATALOG 2018

VOLUME TWO | **ROTATING** TOOLS

HOLEMAKING | TAPPING | SOLID END MILLING | INDEXABLE MILLING

GOmill™ GP General Purpose Solid Carbide End Mills · 2 Flute

Primary Application

GOmill GP series offers plunging, slotting, and profiling with long tool life on a wide range of workpiece materials. They are designed to provide high Metal Removal Rates (MRR) and achieve good surface quality at an excellent cost-benefit ratio. A wide range of diameters and lengths are available with chamfered edge and ball nose as stocked standard.

- Roughing and finishing with one tool.
- Excellent cost-benefit ratio.
- Multilayer KC633M™ grades for high tool life.

Features and Benefits

Advanced Technology

- Roughing and finishing with one tool reduces tool changes and unnecessary tooling inventory.
- Eccentric relief increases edge stability for longer tool life and better surface quality.
- Eccentric relief eases regrinding and reduces reconditioning cost.
- 2-flute design for unstable conditions and high flexibility.

Tailored Grades

- Universal multilayer KC633M coating for cutting steel, cast iron, and stainless (wet).

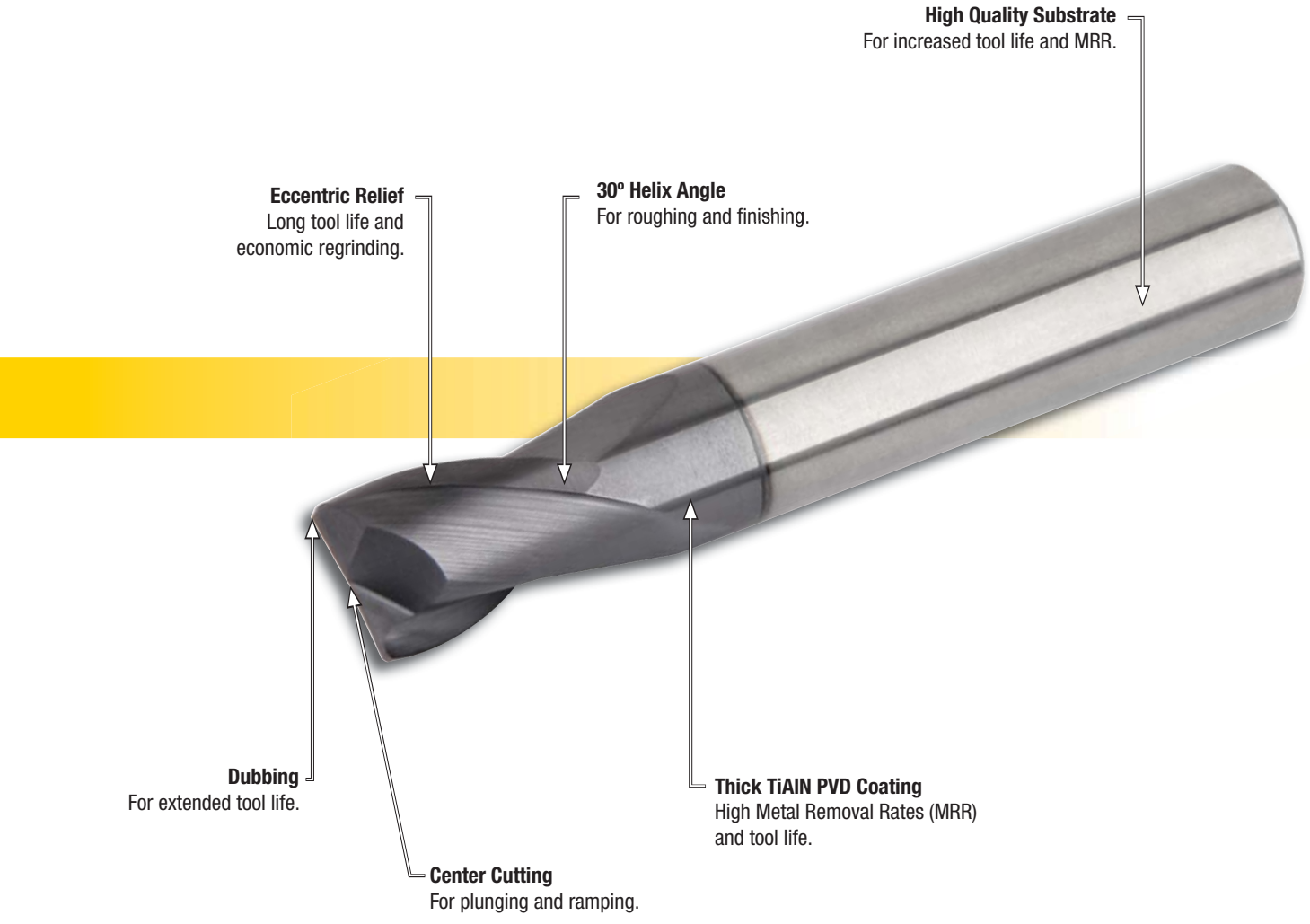
Customization

- Intermediate diameters available.

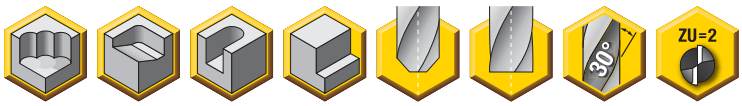
Extensive Standard Offering

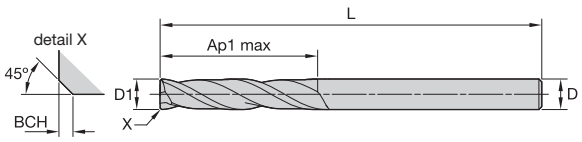
- Diameter range 1/64–1".
- Sharp edge, chamfer edge, and ball nose as standard offering.

Designed for roughing and finishing with one tool at a value price.



- Center cutting.

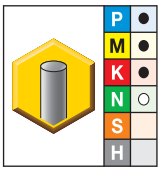


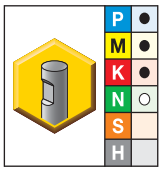


End Mill Tolerances

D1	tolerance	D	tolerance h6 + / -
All	+.000/- .002"	≤1/8"	+0/-.00024"
		>1/8–1/4"	+0/-.00031"
		>1/4–3/8"	+0/-.00035"
		>3/8–23/32"	+0/-.00043"
		>23/32–1 3/16"	+0/-.00051"

2SE-2CH..IS-IR-IL-IX • 2 Flute • Inch



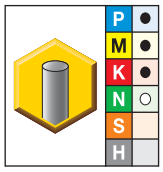


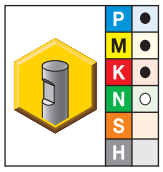
● first choice
○ alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
2SE0016IR003A	–	1/64	1/8	1/32	1 1/2	–
2SE0031IR007A	–	1/32	1/8	5/64	1 1/2	–
2SE0062IR012A	–	1/16	1/8	1/8	1 1/2	–
2SE0062IL018A	–	1/16	1/8	3/16	1 1/2	–
2SE0062IX050A	–	1/16	1/8	1/2	2	–
2SE0078IR018A	–	5/64	1/8	3/16	1 1/2	–
2SE0093IR018A	–	3/32	1/8	3/16	1 1/2	–
2SE0093IL037A	–	3/32	1/8	3/8	1 1/2	–
2SE0093IX062A	–	3/32	1/8	5/8	2	–
2SE0109IR037A	–	7/64	1/8	3/8	1 1/2	–
2CH0125IR025A	–	1/8	1/8	1/4	1 1/2	.010
2SE0125IR025A	–	1/8	1/8	1/4	1 1/2	–
2CH0125IL050A	–	1/8	1/8	1/2	1 1/2	.010
2SE0125IL050A	–	1/8	1/8	1/2	1 1/2	–
2CH0125IX075A	–	1/8	1/8	3/4	2 1/4	.010
2SE0125IX075A	–	1/8	1/8	3/4	2 1/4	–
2CH0140IR056A	–	9/64	3/16	9/16	2	.010
2SE0140IR056A	–	9/64	3/16	9/16	2	–
2CH0156IR031A	–	5/32	3/16	5/16	2	.010
2SE0156IR031A	–	5/32	3/16	5/16	2	–
2CH0156IL056A	–	5/32	3/16	9/16	2	.010
2SE0156IL056A	–	5/32	3/16	9/16	2	–
2CH0171IR062A	–	11/64	3/16	5/8	2	.010
2SE0171IR062A	–	11/64	3/16	5/8	2	–
2CH0187IR062A	–	3/16	3/16	5/8	2	.010
2SE0187IR062A	–	3/16	3/16	5/8	2	–
2CH0187IL075A	–	3/16	3/16	3/4	2 1/2	.010
2SE0187IL075A	–	3/16	3/16	3/4	2 1/2	–
2CH0187IX112A	–	3/16	3/16	1 1/8	3	.010
2SE0187IX112A	–	3/16	3/16	1 1/8	3	–
2CH0218IR043A	–	7/32	1/4	7/16	2	.016
2SE0218IR043A	–	7/32	1/4	7/16	2	–

(continued)

(2SE-2CH..IS-IR-IL-IX • 2 Flute • Inch — continued)



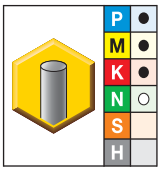


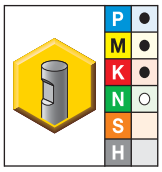
● first choice
○ alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
2CH0218IL062A	—	7/32	1/4	5/8	2 1/2	.016
2SE0218IL062A	—	7/32	1/4	5/8	2 1/2	—
2CH0250IS050A	—	1/4	1/4	1/2	2	.016
2SE0250IS050A	—	1/4	1/4	1/2	2	—
2CH0250IR075A	—	1/4	1/4	3/4	2 1/2	.016
2SE0250IR075A	—	1/4	1/4	3/4	2 1/2	—
2CH0250IL112A	—	1/4	1/4	1 1/8	3	.016
2SE0250IL112A	—	1/4	1/4	1 1/2	3	—
2CH0250IX150A	—	1/4	1/4	1 1/2	4	.016
2SE0250IX150A	—	1/4	1/4	1 1/2	4	—
2CH0281IR075A	—	9/32	5/16	3/4	2 1/2	.016
2SE0281IR075A	—	9/32	5/16	3/4	2 1/2	—
2CH0312IS050A	—	5/16	5/16	1/2	2	.016
2SE0312IS050A	—	5/16	5/16	1/2	2	—
2CH0312IR081A	—	5/16	5/16	13/16	2 1/2	.016
2SE0312IR081A	—	5/16	5/16	13/16	2 1/2	—
2CH0312IL112A	—	5/16	5/16	1 1/8	3	.016
2SE0312IL112A	—	5/16	5/16	1 1/8	3	—
2CH0312IX162A	—	5/16	5/16	1 5/8	4	.016
2SE0312IX162A	—	5/16	5/16	1 5/8	4	—
2CH0343IR100A	—	11/32	3/8	1	2 1/2	.020
2SE0343IR100A	—	11/32	3/8	1	2 1/2	—
2CH0375IS062A	—	3/8	3/8	5/8	2	.020
2SE0375IS062A	—	3/8	3/8	5/8	2	—
2CH0375IR100A	—	3/8	3/8	1	2 1/2	.020
2SE0375IR100A	—	3/8	3/8	1	2 1/2	—
2CH0375IL112A	—	3/8	3/8	1 1/8	3	.020
2SE0375IL112A	—	3/8	3/8	1 1/2	3	—
2CH0375IX175A	—	3/8	3/8	1 3/4	4	.020
2SE0375IX175A	—	3/8	3/8	1 3/4	4	—
2CH0406IR100A	—	13/32	7/16	1	2 3/4	.020
2SE0406IR100A	—	13/32	7/16	1	2 3/4	—
2CH0437IR062A	—	7/16	7/16	5/8	2 1/2	.020
2SE0437IR062A	—	7/16	7/16	5/8	2 1/2	—
2CH0437IL100A	—	7/16	7/16	1	2 1/2	.020
2SE0437IL100A	—	7/16	7/16	1	2 1/2	—
2CH0437IX200A	—	7/16	7/16	2	4	.020
2SE0437IX200A	—	7/16	7/16	2	4	—
2CH0468IR100A	—	15/32	1/2	1	3	.020
2SE0468IR100A	—	15/32	1/2	1	3	—
2CH0500IS062A	—	1/2	1/2	5/8	2 1/2	.020
2SE0500IS062A	—	1/2	1/2	5/8	2 1/2	—
2CH0500IR100A	2CH0500IR100B	1/2	1/2	1	3	.020
2SE0500IR100A	2SE0500IR100B	1/2	1/2	1	3	—
2CH0500IL200A	2CH0500IL200B	1/2	1/2	2	4	.020
2SE0500IL200A	2SE0500IL200B	1/2	1/2	2	4	—
2CH0500IX300A	2CH0500IX300B	1/2	1/2	3	6	.020
2SE0500IX300A	2SE0500IX300B	1/2	1/2	3	6	—

(continued)

(2SE-2CH..IS-IR-IL-IX • 2 Flute • Inch — continued)



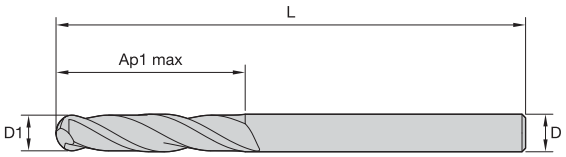


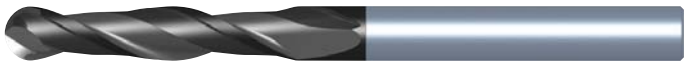
● first choice
○ alternate choice

KC633M	KC633M	D1	D	length of cut Ap1 max	length L	BCH
2CH0562IR075A	**—**	9/16	9/16	3/4	3	.020
2SE0562IR075A	**—**	9/16	9/16	3/4	3	—
2CH0562IL125A	**2CH0562IL125B**	9/16	9/16	1 1/4	3 1/2	.020
2SE0562IL125A	**2SE0562IL125B**	9/16	9/16	1 1/4	3 1/2	—
2CH0562IX225A	**2CH0562IX225B**	9/16	9/16	2 1/4	5	.020
2SE0562IX225A	**2SE0562IX225B**	9/16	9/16	2 1/4	5	—
2CH0625IR075A	**—**	5/8	5/8	3/4	3	.020
2SE0625IR075A	**—**	5/8	5/8	3/4	3	—
2CH0625IL125A	**2CH0625IL125B**	5/8	5/8	1 1/4	3 1/2	.020
2SE0625IL125A	**2SE0625IL125B**	5/8	5/8	1 1/4	3 1/2	—
2CH0625IX225A	**2CH0625IX225B**	5/8	5/8	2 1/4	5	.020
2SE0625IX225A	**2SE0625IX225B**	5/8	5/8	2 1/4	5	—
2CH0687IR137A	**2CH0687IR137B**	11/16	3/4	1 3/8	4	.020
2SE0687IR137A	**2SE0687IR137B**	11/16	3/4	1 3/8	4	—
2CH0750IS100A	**—**	3/4	3/4	1	3	.020
2SE0750IS100A	**—**	3/4	3/4	1	3	—
2CH0750IR150A	**—**	3/4	3/4	1 1/2	4	.020
2SE0750IR150A	**—**	3/4	3/4	1 1/2	4	—
2CH0750IR225A	**2CH0750IR225B**	3/4	3/4	2 1/4	5	.020
2SE0750IR225A	**2SE0750IR225B**	3/4	3/4	2 1/4	5	—
2CH0750IL300A	**2CH0750IL300B**	3/4	3/4	3	6	.020
2SE0750IL300A	**2SE0750IL300B**	3/4	3/4	3	6	—
2CH0750IX400A	**2CH0750IX400B**	3/4	3/4	4	7	.020
2SE0750IX400A	**2SE0750IX400B**	3/4	3/4	4	7	—
2CH0875IR150A	**2CH0875IR150B**	7/8	7/8	1 1/2	4	.020
2SE0875IR150A	**2SE0875IR150B**	7/8	7/8	1 1/2	4	—
2CH0875IL225A	**2CH0875IL225B**	7/8	7/8	2 1/4	5	.020
2SE0875IL225A	**2SE0875IL225B**	7/8	7/8	2 1/4	5	—
2CH1000IS150A	**—**	1	1	1 1/2	4	.020
2SE1000IS150A	**—**	1	1	1 1/2	4	—
2CH1000IR225A	**2CH1000IR225B**	1	1	2 1/4	5	.020
2SE1000IR225A	**2SE1000IR225B**	1	1	2 1/4	5	—
2CH1000IL300A	**2CH1000IL300B**	1	1	3	6	.020
2SE1000IL300A	**2SE1000IL300B**	1	1	3	6	—
2CH1000IX400A	**2CH1000IX400B**	1	1	4	7	.020
2SE1000IX400A	**2SE1000IX400B**	1	1	4	7	—

NOTE: For application data, please see page Q11.

- Center cutting.

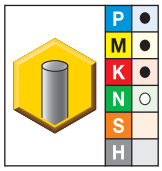




End Mill Tolerances

D1	tolerance	D	tolerance h6 + / -
All	+.000/- .002"	≤1/8"	+0/-.00024"
		>1/8–1/4"	+0/-.00031"
		>1/4–3/8"	+0/-.00035"
		>3/8–23/32"	+0/-.00043"
		>23/32–1 3/16"	+0/-.00051"

2BN..IS-IR-IL-IX • 2 Flute • Ball Nose • Inch

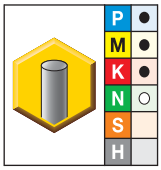


● first choice
○ alternate choice

KC633M	D1	D	length of cut Ap1 max	length L
2BN0031IR007A	1/32	1/8	5/64	1 1/2
2BN0047IR018A	3/64	1/8	3/16	1 1/2
2BN0063IR018A	1/16	1/8	3/16	1 1/2
2BN0094IR018A	3/32	1/8	3/16	1 1/2
2BN0094IL037A	3/32	1/8	3/8	1 1/2
2BN0109IR037A	7/64	1/8	3/8	1 1/2
2BN0125IS025A	1/8	1/8	1/4	1 1/2
2BN0125IR050A	1/8	1/8	1/2	1 1/2
2BN0125IL075A	1/8	1/8	3/4	2 1/4
2BN0125IX075A	1/8	1/8	3/4	3
2BN0156IR031A	5/32	3/16	5/16	2
2BN0156IL056A	5/32	3/16	9/16	2
2BN0187IS031A	3/16	3/16	5/16	1 1/2
2BN0187IR062A	3/16	3/16	5/8	2
2BN0187IL075A	3/16	3/16	3/4	2 1/2
2BN0187IX100A	3/16	3/16	1	4
2BN0219IR062A	7/32	1/4	5/8	2 1/2
2BN0250IS050A	1/4	1/4	1/2	2
2BN0250IR075A	1/4	1/4	3/4	2 1/2
2BN0250IR112A	1/4	1/4	1 1/8	3
2BN0250IL150A	1/4	1/4	1 1/2	4
2BN0250IX150A	1/4	1/4	1 1/2	6
2BN0312IR081A	5/16	5/16	13/16	2 1/2
2BN0312IL112A	5/16	5/16	1 1/8	3
2BN0312IX150A	5/16	5/16	1 1/2	6
2BN0375IS062A	3/8	3/8	5/8	2
2BN0375IR087A	3/8	3/8	7/8	2 1/2
2BN0375IL112A	3/8	3/8	1 1/8	3
2BN0375IX300A	3/8	3/8	3	6
2BN0406IR100A	13/32	7/16	1	2 1/2
2BN0437IR100A	7/16	7/16	1	2 1/2
2BN0500IS062A	1/2	1/2	5/8	2 1/2

(continued)

(2BN..IS-IR-IL-IX • 2 Flute • Ball Nose • Inch — continued)

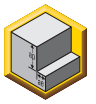


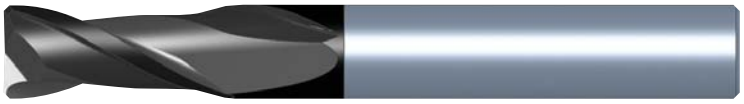
● first choice
○ alternate choice

KC633M	D1	D	length of cut Ap1 max	length L
2BN0500IR100A	1/2	1/2	1	3
2BN0500IX150A	1/2	1/2	1 1/2	6
2BN0500IL200A	1/2	1/2	2	4
2BN0500IX300A	1/2	1/2	3	6
2BN0625IR125A	5/8	5/8	1 1/4	3 1/2
2BN0625IL225A	5/8	5/8	2 1/4	5
2BN0625IX300A	5/8	5/8	3	6
2BN0750IS100A	3/4	3/4	1	3
2BN0750IR150A	3/4	3/4	1 1/2	4
2BN0750IL200A	3/4	3/4	2	6
2BN0750IX300A	3/4	3/4	3	6
2BN0875IR150A	7/8	7/8	1 1/2	4
2BN1000IR150A	1	1	1 1/2	4
2BN1000IL300A	1	1	3	6

NOTE: For application data, please see page Q12.

GOmill GP • 2SE/CH..IS-IR • 2 Flute • Short • Regular





Material Group		Side Milling (A) and Slotting (B) A ap	ae	B ap	KC633M Cutting Speed — vc SFM min		max	Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%. D1 — Diameter inch	1/64 .0156	1/32 .0313	1/16 .0625	5/64 .0781	3/32 .0938	1/8 .1250	3/16 .1875	1/4 .2500	5/16 .3125	3/8 .3750	1/2 .5000	5/8 .6250	3/4 .7500	1 1.0000
P	0	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	1	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	0.5 x D	460	–	620	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	3	Ap1 max	0.1 x D	0.5 x D	390	–	520	IPT	.0001	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	4	Ap1 max	0.1 x D	0.5 x D	300	–	490	IPT	.0001	.0002	.0003	.0004	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039
M	1	Ap1 max	0.1 x D	0.5 x D	300	–	380	IPT	.0001	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.1 x D	0.5 x D	200	–	260	IPT	.0001	.0002	.0003	.0004	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
K	1	Ap1 max	0.1 x D	0.5 x D	390	–	490	IPT	.0001	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	0.5 x D	360	–	460	IPT	.0001	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
N	1	Ap1 max	0.1 x D	0.5 x D	820	–	3250	IPT	.0002	.0003	.0006	.0008	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100
	2	Ap1 max	0.1 x D	0.5 x D	820	–	2450	IPT	.0001	.0003	.0005	.0006	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080
	4	Ap1 max	0.1 x D	0.5 x D	820	–	2450	IPT	.0001	.0003	.0006	.0007	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090

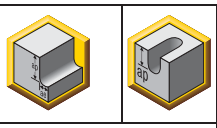
NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >1/2" diameter.

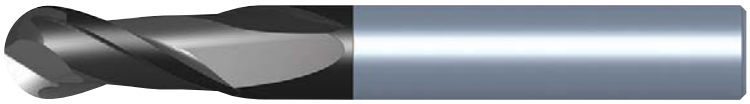
GOmill GP • 2SE/CH..IL-IX • 2 Flute • Long • Extra Long


Material Group		Side Milling (A) A ap	ae	KC633M Cutting Speed — vc SFM min		max	Recommended feed per tooth (IPT = inch/th) for side milling (A). D1 — Diameter inch	1/16 .0156	5/64 .0781	3/32 .0938	1/8 .1250	3/16 .1875	1/4 .2500	5/16 .3125	3/8 .3750	1/2 .5000	5/8 .6250	3/4 .7500	1 1.0000
P	0	Ap1 max	0.1 x D	490	–	660	IPT	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	1	Ap1 max	0.1 x D	490	–	660	IPT	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	460	–	620	IPT	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	3	Ap1 max	0.1 x D	390	–	520	IPT	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	4	Ap1 max	0.1 x D	300	–	490	IPT	.0003	.0004	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039
M	1	Ap1 max	0.1 x D	300	–	380	IPT	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.1 x D	200	–	260	IPT	.0003	.0004	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
K	1	Ap1 max	0.1 x D	390	–	490	IPT	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	360	–	460	IPT	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
N	1	Ap1 max	0.1 x D	820	–	3250	IPT	.0006	.0008	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100
	2	Ap1 max	0.1 x D	820	–	2450	IPT	.0005	.0006	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080
	4	Ap1 max	0.1 x D	820	–	2450	IPT	.0006	.0007	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
Higher value of cutting speed is used for finishing applications or for lower hardness (machinability) within group.
Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >1/2" diameter.

GOmill GP • 2BN..IS-IR • 2 Flute • Ball Nose • Short • Regular





Material Group		Side Milling (A) and Slotting (B)			KC633M			Recommended feed per tooth (IPT = inch/th) for side milling (A). For slotting (B), reduce IPT by 20%.														
		A		B	Cutting Speed — vc SFM			D1 — Diameter														
		ap	ae	ap	min		max	inch	1/32 .0313	1/16 .0625	5/64 .0781	3/32 .0938	1/8 .1250	3/16 .1875	1/4 .2500	5/16 .3125	3/8 .3750	1/2 .5000	5/8 .6250	3/4 .7500	1 1.0000
P	0	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	1	Ap1 max	0.1 x D	0.5 x D	490	–	660	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	0.5 x D	460	–	620	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	3	Ap1 max	0.1 x D	0.5 x D	390	–	520	IPT	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	4	Ap1 max	0.1 x D	0.5 x D	300	–	490	IPT	.0002	.0003	.0004	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039
M	1	Ap1 max	0.1 x D	0.5 x D	300	–	380	IPT	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.1 x D	0.5 x D	200	–	260	IPT	.0002	.0003	.0004	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
K	1	Ap1 max	0.1 x D	0.5 x D	390	–	490	IPT	.0002	.0004	.0005	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	0.5 x D	360	–	460	IPT	.0002	.0004	.0004	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
N	1	Ap1 max	0.1 x D	0.5 x D	820	–	3250	IPT	.0003	.0006	.0008	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100
	2	Ap1 max	0.1 x D	0.5 x D	820	–	2450	IPT	.0003	.0005	.0006	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080
	4	Ap1 max	0.1 x D	0.5 x D	820	–	2450	IPT	.0003	.0006	.0007	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090

NOTE: Lower value of cutting speed is used for high stock removal applications or for higher hardness (machinability) within group.
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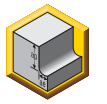
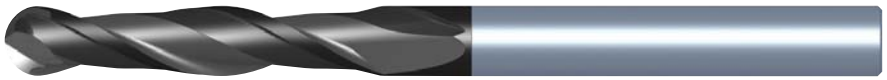
GOmill GP • 2BN..IL-IX • 2 Flute • Ball Nose • Long • Extra Long

Material Group		Side Milling (A)		KC633M			Recommended feed per tooth (IPT = inch/th) for side milling (A).									
		A		Cutting Speed — vc SFM			D1 — Diameter									
		ap	ae	min		max	inch	3/32 .0938	1/8 .1250	3/16 .1875	1/4 .2500	5/16 .3125	3/8 .3750	1/2 .5000	5/8 .6250	3/4 .7500	1 1.0000
P	0	Ap1 max	0.1 x D	490	–	660	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	1	Ap1 max	0.1 x D	490	–	660	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	460	–	620	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	3	Ap1 max	0.1 x D	390	–	520	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	4	Ap1 max	0.1 x D	300	–	490	IPT	.0005	.0007	.0010	.0014	.0018	.0020	.0026	.0030	.0034	.0039
M	1	Ap1 max	0.1 x D	300	–	380	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
	2	Ap1 max	0.1 x D	200	–	260	IPT	.0004	.0006	.0009	.0012	.0016	.0018	.0023	.0027	.0031	.0036
K	1	Ap1 max	0.1 x D	390	–	490	IPT	.0007	.0009	.0014	.0018	.0023	.0027	.0034	.0040	.0044	.0049
	2	Ap1 max	0.1 x D	360	–	460	IPT	.0005	.0007	.0011	.0015	.0020	.0023	.0029	.0034	.0039	.0045
N	1	Ap1 max	0.1 x D	820	–	3250	IPT	.0009	.0013	.0019	.0025	.0031	.0038	.0050	.0063	.0075	.0100
	2	Ap1 max	0.1 x D	820	–	2450	IPT	.0008	.0010	.0015	.0020	.0025	.0030	.0040	.0050	.0060	.0080
	4	Ap1 max	0.1 x D	820	–	2450	IPT	.0008	.0011	.0017	.0023	.0028	.0034	.0045	.0056	.0068	.0090

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