



GOMILL PRO

**VERSATILE
4-FLUTE END
MILLS WITH
MULTILAYER
TIN/TIAlN
COATING**

**TAKE YOUR
MANUFACTURING TO
THE NEXT LEVEL**

[kennametal.com/GOMILLPRO](https://www.kennametal.com/GOMILLPRO)

GOMILL™ PRO

SOLID CARBIDE END MILLS

Applications



Side Milling/
Shoulder
Milling



Helical
Milling



Pocketing



Slotting



Ramping



Dynamic
Milling

Materials

PRIMARY



Steels



Cast Iron



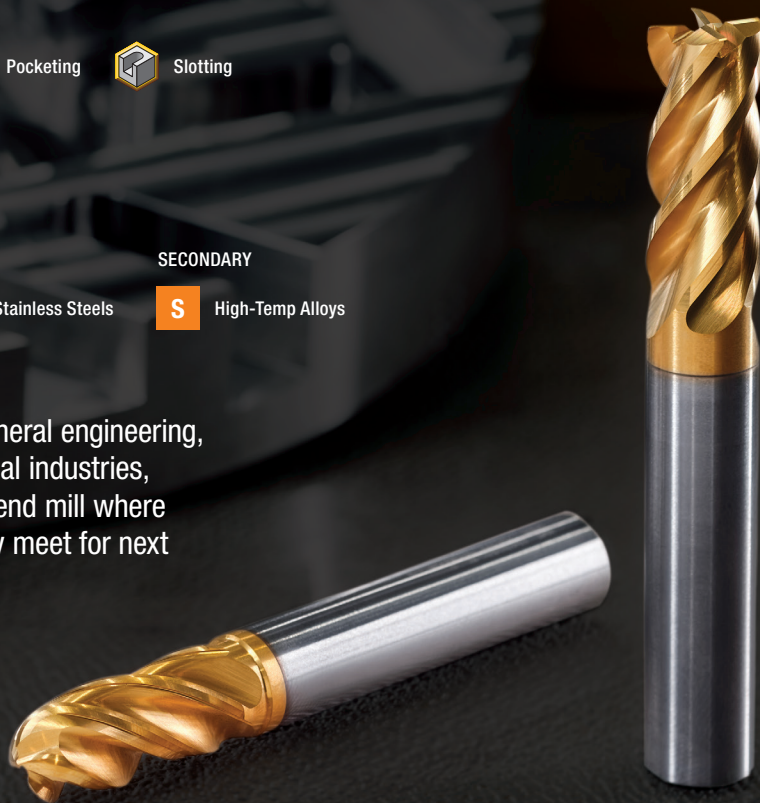
Stainless Steels

SECONDARY



High-Temp Alloys

Ideal for shops working in the general engineering, transportation, energy and medical industries, GOMILL PRO serves as a do-it-all end mill where price, performance and versatility meet for next level operations.



G0mill PRO

SOLID CARBIDE END MILLS

Industries



General
Engineering



Automotive



Wind & Solar



Oil & Gas



Medical

Your Go-To End Mill for Price, Performance & Versatility

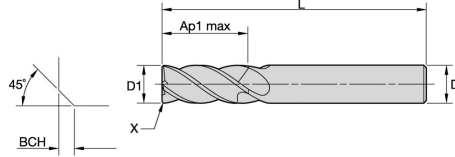
Kennametal's 4-flute G0mill PRO Solid Carbide End Mills are suited to become a go-to solution for small and medium sized shops. Designed for side and shoulder milling, helical milling, pocketing, slotting and shallow ramping, G0mill PRO delivers affordability, versatility and high performance for next level machining. Designed for cutting steels, stainless steels and cast iron, the new solid carbide end mills feature:

- An asymmetric divided flute for better vibration control and tool life and smoother cutting
- A variable helix angle for better vibration control and tool life
- A tapered core for better chip evacuation and tool strength
- Multilayer TiN/TiALN coating for high performance at medium-high cutting on steels, stainless steels and cast iron
- Special relief design for higher edge strength, better vibration control and workpiece material flexibility



GOmill PRO

Chamfered • 4 Flutes • Plain Shank

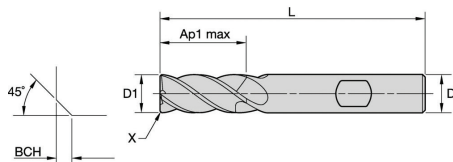


P	●	●
M	●	●
K	●	●
N	●	●
S	●	●
H	●	●

● Primary
○ Secondary

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	BCH	
7231597	GOPR4CH0300R008HAM	3.00	6.00	8.00	57.00	0.15	●
7231599	GOPR4CH0400R011HAM	4.00	6.00	11.00	57.00	0.15	●
7231601	GOPR4CH0500R013HAM	5.00	6.00	13.00	57.00	0.15	●
7231603	GOPR4CH0600R013HAM	6.00	6.00	13.00	57.00	0.15	●
7231605	GOPR4CH0600X032HAM	6.00	6.00	32.00	76.00	0.15	●
7231606	GOPR4CH0700R019HAM	7.00	8.00	19.00	63.00	0.15	●
7231678	GOPR4CH0800L032HAM	8.00	8.00	32.00	87.00	0.20	●
7231676	GOPR4CH0800R019HAM	8.00	8.00	19.00	63.00	0.20	●
7231679	GOPR4CH0900R022HAM	9.00	10.00	22.00	72.00	0.20	●
7231680	GOPR4CH1000R022HAM	10.00	10.00	22.00	72.00	0.20	●
7231712	GOPR4CH1000L038HAM	10.00	10.00	38.00	89.00	0.20	●
7231715	GOPR4CH1200L051HAM	12.00	12.00	51.00	100.00	0.20	●
7231713	GOPR4CH1200R026HAM	12.00	12.00	26.00	83.00	0.20	●
7231716	GOPR4CH1400S026HAM	14.00	14.00	26.00	83.00	0.35	●
7231718	GOPR4CH1600R032HAM	16.00	16.00	32.00	92.00	0.35	●
7231721	GOPR4CH1600L057HAM	16.00	16.00	57.00	125.00	0.35	●
7231724	GOPR4CH2000R057HAM	20.00	20.00	57.00	125.00	0.35	●
7231722	GOPR4CH2000S038HAM	20.00	20.00	38.00	104.00	0.35	●
7231726	GOPR4CH2500S045HAM	25.00	25.00	45.00	121.00	0.35	●



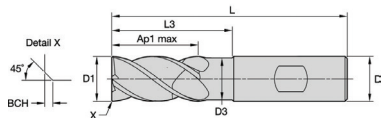
GOmill PRO

Chamfered • 4 Flutes • Weldon Shank

- Primary
 - Secondary
- | | | |
|---|--------|---|
| P | Blue | ● |
| M | Yellow | ● |
| K | Red | ● |
| N | Green | ○ |
| S | Orange | ○ |
| H | Grey | ○ |

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	BCH	
7231598	GOPR4CH0300R008HBM	3.00	6.00	8.00	57.00	0.15	●
7231600	GOPR4CH0400R011HBM	4.00	6.00	11.00	57.00	0.15	●
7231602	GOPR4CH0500R013HBM	5.00	6.00	13.00	57.00	0.15	●
7231604	GOPR4CH0600R013HBM	6.00	6.00	13.00	57.00	0.15	●
7231677	GOPR4CH0800R019HBM	8.00	8.00	19.00	63.00	0.20	●
7231711	GOPR4CH1000R022HBM	10.00	10.00	22.00	72.00	0.20	●
7231714	GOPR4CH1200R026HBM	12.00	12.00	26.00	83.00	0.20	●
7231717	GOPR4CH1400S026HBM	14.00	14.00	26.00	83.00	0.35	●
7231719	GOPR4CH1600R032HBM	16.00	16.00	32.00	92.00	0.35	●
7231723	GOPR4CH2000S038HBM	20.00	20.00	38.00	104.00	0.35	●



GOmill PRO

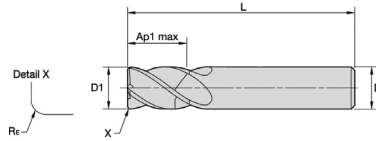
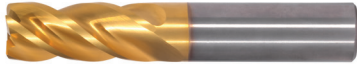
Chamfered • 4 Flutes • Necked • Weldon Shank

- Primary
- Secondary

P	●
M	●
K	●
N	○
S	○
H	○

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	BCH	
7230995	GOPR4CH0200N006HBM	2.00	6.00	1.88	4.00	57.00	8.00	0.15	●
7231184	GOPR4CH0300N008HBM	3.00	6.00	2.82	8.00	57.00	15.00	0.15	●
7231185	GOPR4CH0400N011HBM	4.00	6.00	3.76	11.00	57.00	16.00	0.15	●
7231186	GOPR4CH0500N013HBM	5.00	6.00	4.70	13.00	57.00	18.00	0.15	●
7231187	GOPR4CH0600N013HBM	6.00	6.00	5.64	13.00	57.00	21.00	0.15	●
7231188	GOPR4CH0800N019HBM	8.00	8.00	7.52	19.00	63.00	27.00	0.20	●
7231189	GOPR4CH1000N022HBM	10.00	10.00	9.40	22.00	72.00	32.00	0.20	●
7231190	GOPR4CH1200N026HBM	12.00	12.00	11.28	26.00	83.00	38.00	0.20	●
7231191	GOPR4CH1600N032HBM	16.00	16.00	15.04	32.00	92.00	44.00	0.35	●
7231192	GOPR4CH2000N038HBM	20.00	20.00	18.80	38.00	104.00	53.00	0.35	●
7231725	GOPR4CH2500N045HBM	25.00	25.00	23.50	45.00	121.00	65.00	0.35	●



GOMILL PRO

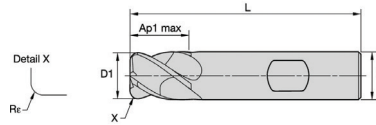
Radiused • 4 Flutes • Plain Shank

P	●
M	●
K	●
N	○
S	○
H	○

● Primary
○ Secondary

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	Rε	
7231579	GOPR4RA0600S007HAR040M	6.00	6.00	7.00	50.00	0.40	●
7231641	GOPR4RA0800S010HAR040M	8.00	8.00	10.00	50.00	0.40	●
7231643	GOPR4RA1000S012HAR040M	10.00	10.00	12.00	66.00	0.40	●
7231646	GOPR4RA1200S015HAR050M	12.00	12.00	15.00	73.00	0.50	●
7231662	GOPR4RA1600R035HAR050M	16.00	16.00	35.00	92.00	0.50	●
7231664	GOPR4RA1600S020HAR050M	16.00	16.00	20.00	82.00	0.50	●
7231668	GOPR4RA2000R042HAR050M	20.00	20.00	42.00	104.00	0.50	●
7231670	GOPR4RA2000S025HAR050M	20.00	20.00	25.00	92.00	0.50	●
7231674	GOPR4RA2500R052HAR050M	25.00	25.00	52.00	121.00	0.50	●



P	●
M	●
K	●
N	○
S	○
H	○

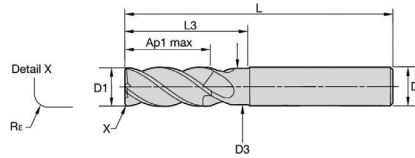
- Primary
- Secondary

GOmill PRO

Radiused • 4 Flutes • Weldon Shank

Order Number	Catalog Number	D1	D	AP1 Max	L	Re	
7231580	GOPR4RA0600S007HBR040M	6.00	6.00	7.00	50.00	0.40	●
7231642	GOPR4RA0800S010HBR040M	8.00	8.00	10.00	50.00	0.40	●
7231644	GOPR4RA1000S012HBR040M	10.00	10.00	12.00	66.00	0.40	●
7231647	GOPR4RA1200S015HBR050M	12.00	12.00	15.00	73.00	0.50	●
7231665	GOPR4RA1600S020HBR050M	16.00	16.00	20.00	82.00	0.50	●
7231663	GOPR4RA1600R035HBR050M	16.00	16.00	35.00	92.00	0.50	●
7231671	GOPR4RA2000S025HBR050M	20.00	20.00	25.00	92.00	0.50	●
7231669	GOPR4RA2000R042HBR050M	20.00	20.00	42.00	104.00	0.50	●
7231675	GOPR4RA2500R052HBR050M	25.00	25.00	52.00	121.00	0.50	●

KCU20



GOmill PRO

Radiused • 4 Flutes • Necked • Plain Shank

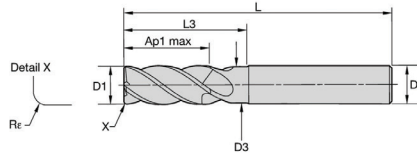
P	●	○
M	●	○
K	●	○
N	●	○
S	●	○
H	●	○

● Primary
○ Secondary

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	Re	
7231153	GOPR4RA0300N008HAR020M	3.00	6.00	2.82	8.00	57.00	15.00	0.20	●
7231155	GOPR4RA0400N011HAR050M	4.00	6.00	3.76	11.00	57.00	16.00	0.50	●
7231154	GOPR4RA0400N011HAR020M	4.00	6.00	3.76	11.00	57.00	16.00	0.20	●
7231157	GOPR4RA0500N013HAR050M	5.00	6.00	4.70	13.00	57.00	18.00	0.50	●
7231158	GOPR4RA0500N013HAR100M	5.00	6.00	4.70	13.00	57.00	18.00	1.00	●
7231156	GOPR4RA0500N013HAR020M	5.00	6.00	4.70	13.00	57.00	18.00	0.20	●
7231161	GOPR4RA0600N013HAR150M	6.00	6.00	5.64	13.00	57.00	21.00	1.50	●
7231159	GOPR4RA0600N013HAR050M	6.00	6.00	5.64	13.00	57.00	21.00	0.50	●
7231160	GOPR4RA0600N013HAR100M	6.00	6.00	5.64	13.00	57.00	21.00	1.00	●
7231165	GOPR4RA0800N019HAR150M	8.00	8.00	7.52	19.00	63.00	27.00	1.50	●
7231166	GOPR4RA0800N019HAR200M	8.00	8.00	7.52	19.00	63.00	27.00	2.00	●
7231163	GOPR4RA0800N019HAR050M	8.00	8.00	7.52	19.00	63.00	27.00	0.50	●
7231164	GOPR4RA0800N019HAR100M	8.00	8.00	7.52	19.00	63.00	27.00	1.00	●
7231170	GOPR4RA1000N022HAR200M	10.00	10.00	9.40	22.00	72.00	32.00	2.00	●
7231168	GOPR4RA1000N022HAR100M	10.00	10.00	9.40	22.00	72.00	32.00	1.00	●
7231169	GOPR4RA1000N022HAR150M	10.00	10.00	9.40	22.00	72.00	32.00	1.50	●
7231167	GOPR4RA1000N022HAR050M	10.00	10.00	9.40	22.00	72.00	32.00	0.50	●
7231645	GOPR4RA1000N022HAR250M	10.00	10.00	9.40	22.00	72.00	32.00	2.50	●
7231171	GOPR4RA1200N026HAR050M	12.00	12.00	11.28	26.00	83.00	38.00	0.50	●
7231172	GOPR4RA1200N026HAR100M	12.00	12.00	11.28	26.00	83.00	38.00	1.00	●
7231173	GOPR4RA1200N026HAR150M	12.00	12.00	11.28	26.00	83.00	38.00	1.50	●
7231174	GOPR4RA1200N026HAR200M	12.00	12.00	11.28	26.00	83.00	38.00	2.00	●
7231175	GOPR4RA1200N026HAR400M	12.00	12.00	11.28	26.00	83.00	38.00	4.00	●
7231649	GOPR4RA1200N026HAR300M	12.00	12.00	11.28	26.00	83.00	38.00	3.00	●
7231648	GOPR4RA1200N026HAR250M	12.00	12.00	11.28	26.00	83.00	38.00	2.50	●

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P	Blue	●
M	Yellow	●
K	Red	●
N	Green	○
S	Orange	○
H	Grey	○

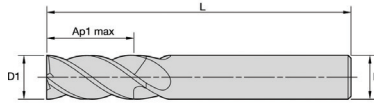
- Primary
- Secondary

GOmill PRO Continued

Radiused • 4 Flutes • Necked • Plain Shank

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	Re	
7231650	GOPR4RA1400N026HAR050M	14.00	14.00	13.16	26.00	89.00	40.00	0.50	●
7231661	GOPR4RA1400N026HAR100M	14.00	14.00	13.16	26.00	89.00	40.00	1.00	●
7231178	GOPR4RA1600N032HAR300M	16.00	16.00	15.04	32.00	92.00	44.00	3.00	●
7231177	GOPR4RA1600N032HAR200M	16.00	16.00	15.04	32.00	92.00	44.00	2.00	●
7231176	GOPR4RA1600N032HAR100M	16.00	16.00	15.04	32.00	92.00	44.00	1.00	●
7231179	GOPR4RA1600N032HAR400M	16.00	16.00	15.04	32.00	92.00	44.00	4.00	●
7231667	GOPR4RA1600N032HAR250M	16.00	16.00	15.04	32.00	92.00	44.00	2.50	●
7231666	GOPR4RA1600N032HAR050M	16.00	16.00	15.04	32.00	92.00	44.00	0.50	●
7231180	GOPR4RA2000N038HAR100M	20.00	20.00	18.80	38.00	104.00	53.00	1.00	●
7231181	GOPR4RA2000N038HAR200M	20.00	20.00	18.80	38.00	104.00	53.00	2.00	●
7231182	GOPR4RA2000N038HAR300M	20.00	20.00	18.80	38.00	104.00	53.00	3.00	●
7231183	GOPR4RA2000N038HAR400M	20.00	20.00	18.80	38.00	104.00	53.00	4.00	●
7231673	GOPR4RA2000N038HAR250M	20.00	20.00	18.8	38.00	104.00	53.00	2.50	●
7231672	GOPR4RA2000N038HAR050M	20.00	20.00	18.80	38.00	104.00	53.00	0.50	●

KCU20



P	Blue	●
M	Yellow	●
K	Red	●
N	Green	●
S	Orange	○
H	Grey	○

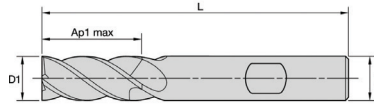
- Primary
- Secondary

GOmill PRO

Square End • 4 Flutes • Plain Shank

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	
7230994	GOPR4SE0200R006HAM	2.00	6.00	6.00	57.00	●
7231062	GOPR4SE0300R008HAM	3.00	6.00	8.00	57.00	●
7231064	GOPR4SE0400R011HAM	4.00	6.00	11.00	57.00	●
7231066	GOPR4SE0500R013HAM	5.00	6.00	13.00	57.00	●
7231068	GOPR4SE0600R013HAM	6.00	6.00	13.00	57.00	●
7231070	GOPR4SE0800R019HAM	8.00	8.00	19.00	63.00	●
7231132	GOPR4SE1000R022HAM	10.00	10.00	22.00	72.00	●
7231133	GOPR4SE1000R025HAM	10.00	10.00	25.00	72.00	●
7231135	GOPR4SE1200R026HAM	12.00	12.00	26.00	83.00	●
7231137	GOPR4SE1200R030HAM	12.00	12.00	30.00	83.00	●
7231578	GOPR4SE1400S026HAM	14.00	14.00	26.00	83.00	●
7231139	GOPR4SE1600R032HAM	16.00	16.00	32.00	92.00	●
7231151	GOPR4SE2000S038HAM	20.00	20.00	38.00	104.00	●



GOmill PRO

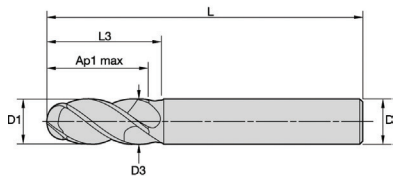
Square End • 4 Flutes • Weldon Shank

- Primary
- Secondary

P	●
M	●
K	●
N	○
S	○
H	○

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	
7231063	GOPR4SE0300R008HBM	3.00	6.00	8.00	57.00	●
7231065	GOPR4SE0400R011HBM	4.00	6.00	11.00	57.00	●
7231067	GOPR4SE0500R013HBM	5.00	6.00	13.00	57.00	●
7231069	GOPR4SE0600R013HBM	6.00	6.00	13.00	57.00	●
7231131	GOPR4SE0800R019HBM	8.00	8.00	19.00	63.00	●
7231134	GOPR4SE1000R022HBM	10.00	10.00	22.00	72.00	●
7231136	GOPR4SE1200R026HBM	12.00	12.00	26.00	83.00	●
7231140	GOPR4SE1600R032HBM	16.00	16.00	32.00	92.00	●
7231152	GOPR4SE2000S038HBM	20.00	20.00	38.00	104.00	●



GOMILL PRO

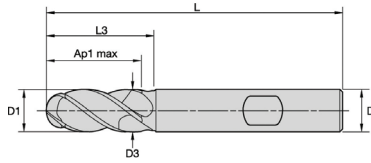
Ball Nose • 4 Flutes • Necked • Plain Shank

P	Blue	●
M	Yellow	●
K	Red	●
N	Green	○
S	Orange	○
H	Grey	○

● Primary
○ Secondary

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	
7231264	GOPR4BN0500R013HAM	5.00	6.00	4.70	13.00	57.00	18.00	●
7231266	GOPR4BN0600R013HAM	6.00	6.00	5.64	13.00	57.00	21.00	●
7231268	GOPR4BN0800R019HAM	8.00	8.00	7.52	19.00	63.00	27.00	●
7231270	GOPR4BN1000R022HAM	10.00	10.00	9.40	22.00	72.00	32.00	●
7231272	GOPR4BN1200R026HAM	12.00	12.00	11.28	26.00	83.00	30.00	●
7231274	GOPR4BN1600R032HAM	16.00	16.00	15.04	32.00	92.00	38.00	●
7231276	GOPR4BN2000S038HAM	20.00	20.00	18.80	38.00	104.00	50.00	●



GOmill PRO

Ball Nose • 4 Flutes • Necked • Weldon Shank

- Primary
- Secondary

P	●
M	●
K	●
N	○
S	○
H	○

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	
7231265	GOPR4BN0500R013HBM	5.00	6.00	4.70	13.00	57.00	18.00	●
7231267	GOPR4BN0600R013HBM	6.00	6.00	5.64	13.00	57.00	21.00	●
7231269	GOPR4BN0800R019HBM	8.00	8.00	7.52	19.00	63.00	27.00	●
7231271	GOPR4BN1000R022HBM	10.00	10.00	9.40	22.00	72.00	32.00	●
7231273	GOPR4BN1200R026HBM	12.00	12.00	11.28	26.00	83.00	30.00	●
7231275	GOPR4BN1600R032HBM	16.00	16.00	15.04	32.00	92.00	38.00	●
7231277	GOPR4BN2000S038HBM	20.00	20.00	18.80	38.00	104.00	50.00	●

G0mill PRO APPLICATION DATA



Material Group					Cutting Speed Vc		Recommended Feed per Tooth (Fz=mm/th) is for Side Milling (A). For Slotting (B) Reduce Fz by 20%																			
	Side Milling		Slotting		m/min		D1 - Diameter																			
	ap	ae	ap		Min	Max		mm	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0					
P	P0	Ap1Max	0.4xD	1xD	150	200		Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124					
	P1	Ap1Max	0.4xD	1xD	150	200		Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124					
	P2	Ap1Max	0.4xD	1xD	140	190		Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124					
	P3	Ap1Max	0.4xD	1xD	120	160		Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114					
	P4	Ap1Max	0.4xD	0.75xD	90	150		Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.077	0.083	0.088	0.098					
	P5	Ap1Max	0.4xD	1xD	60	100		Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.070	0.076	0.081	0.091					
	P6	Ap1Max	0.4xD	0.75xD	50	75		Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.057	0.061	0.065	0.071					
M	M1	Ap1Max	0.4xD	1xD	90	115		Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114					
	M2	Ap1Max	0.4xD	1xD	60	80		Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.070	0.076	0.081	0.091					
	M3	Ap1Max	0.4xD	1xD	60	70		Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.057	0.061	0.065	0.071					
K	K1	Ap1Max	0.4xD	1xD	120	150		Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124					
	K2	Ap1Max	0.4xD	1xD	110	140		Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114					
	K3	Ap1Max	0.4xD	1xD	110	130		Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.070	0.076	0.081	0.091					
S	S1	Ap1Max	0.4xD	0.3xD	50	90		Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114					
	S2	Ap1Max	0.4xD	0.3xD	25	50		Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.046	0.050	0.054	0.061					
	S3	Ap1Max	0.4xD	1xD	25	40		Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.046	0.050	0.054	0.061					
	S4	Ap1Max	0.4xD	1xD	50	60		Fz	0.007	0.011	0.016	0.021	0.026	0.037	0.045	0.052	0.058	0.064	0.069	0.074	0.084					
H	H1	Ap1Max	0.4xD	0.75xD	80	140		Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.077	0.083	0.088	0.098					
	H2	Ap1Max	0.4xD	0.5xD	70	120		Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.057	0.061	0.065	0.071					

NOTE:

Those guidelines may require variations to achieve optimum results.

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 diameters greater than 12mm.

For better surface finish reduce feed per tooth.

Side milling applications - for longest reach (L3) tools, reduce Ae by 30%.

Slot milling applications - for longest reach (L3) tools, reduce Ae by 30%.

Sharp corner tools do not recommended for slotting application.

GOmill PRO APPLICATION DATA - Adjustment Factor Table

Adjustment Factor Table for Feed and Speed Calculation.

	Ae/D	2%	4%	5%	8%	10%	12%	20%	30%	40%	50%	100%
Speed Factor	Kv	2.1 - 3.6	1.6 - 3	1.6 - 2.5	1.6	1.4	1.38	1.3	1.2	1.1	1	1
Feed Factor	KFz	3.58	2.56	2.3	1.84	1.67	1.54	1.25	1.09	1.02	1	0.9
phi [°]		16.26	23.07	25.84	32.86	36.87	40.54	53.13	66.42	78.46	90.00	180.00

NOTE:

These calculations are for roughing / semi-finishing cuts when used with the recommended base fz.

For light finishing cuts requiring improved surface quality it is recommended to reduce the base fz approximately 50% and then apply these factors.

For an Ae/D ratio of 5% or less there is range given for speed factor Kv, which allows the user to either be more conservative at the lower value or more aggressive with the higher value.

This can also be considered based on machinability of the material, from difficult to free cutting.

To calculate application specific cutting data, please use above Kv coefficient for adaptation of cutting speed and KFz for feed respectively.

$$Vc_{new} = Vc * Kv$$

$$Fz_{new} = Fz * KFz$$

Calculation Example:


Application:	D1=	14.0mm
	Material Group	P5
	Ae=	20% of D
Cutting data recommendation:	Vc=	80 m/min
	Fz=	0.063 mm/th
Adjustment coefficient:	Kv=	1.30
	KFz=	1.25

Final cutting data recommendation:

Vc new=	80 *	1.30 =	104
Fz new=	0.06328 *	1.25 =	0.0791

G0mill PRO APPLICATION DATA - Long



Material Group		Recommended Feed per Tooth (Fz=mm/th) is for Side Milling (A). No Slotting operations recommended.																			
		Side Milling		KCU20		D1 - Diameter															
				Cutting Speed Vc		mm	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	18.0	20.0	25.0			
		Min	Max	m/min																	
ap	ae	Min	Max	mm	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	18.0	20.0	25.0					
P	P0	Ap1Max	0.2xD	150	200	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124			
	P1	Ap1Max	0.2xD	150	200	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124			
	P2	Ap1Max	0.2xD	140	190	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124			
	P3	Ap1Max	0.2xD	120	160	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114			
	P4	Ap1Max	0.2xD	90	150	Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.083	0.088	0.098			
	P5	Ap1Max	0.2xD	60	100	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.076	0.081	0.091			
M	P6	Ap1Max	0.15xD	50	75	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.061	0.065	0.071			
	M1	Ap1Max	0.2xD	90	115	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114			
	M2	Ap1Max	0.2xD	60	80	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.076	0.081	0.091			
K	M3	Ap1Max	0.2xD	60	70	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.061	0.065	0.071			
	K1	Ap1Max	0.2xD	120	150	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124			
	K2	Ap1Max	0.2xD	110	140	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114			
S	K3	Ap1Max	0.2xD	110	130	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.076	0.081	0.091			
	S1	Ap1Max	0.1xD	50	90	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114			
	S2	Ap1Max	0.1xD	25	50	Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.050	0.054	0.061			
	S3	Ap1Max	0.1xD	25	40	Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.050	0.054	0.061			
	S4	Ap1Max	0.15xD	50	60	Fz	0.007	0.011	0.016	0.021	0.026	0.037	0.045	0.052	0.058	0.069	0.074	0.084			
H	H1	Ap1Max	0.15xD	80	140	Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.083	0.088	0.098			
	H2	Ap1Max	0.15xD	70	120	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.061	0.065	0.071			

NOTE:

Those guidelines may require variations to achieve optimum results.

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.

For better surface finish reduce feed per tooth.