

# GOMILL™ PRO

## SOLID CARBIDE END MILLS

### Applications



Side Milling/  
Shoulder  
Milling



Helical  
Milling



Pocketing



Slotting



Ramping



Dynamic  
Milling

### Materials

#### PRIMARY



Steels



Cast Iron



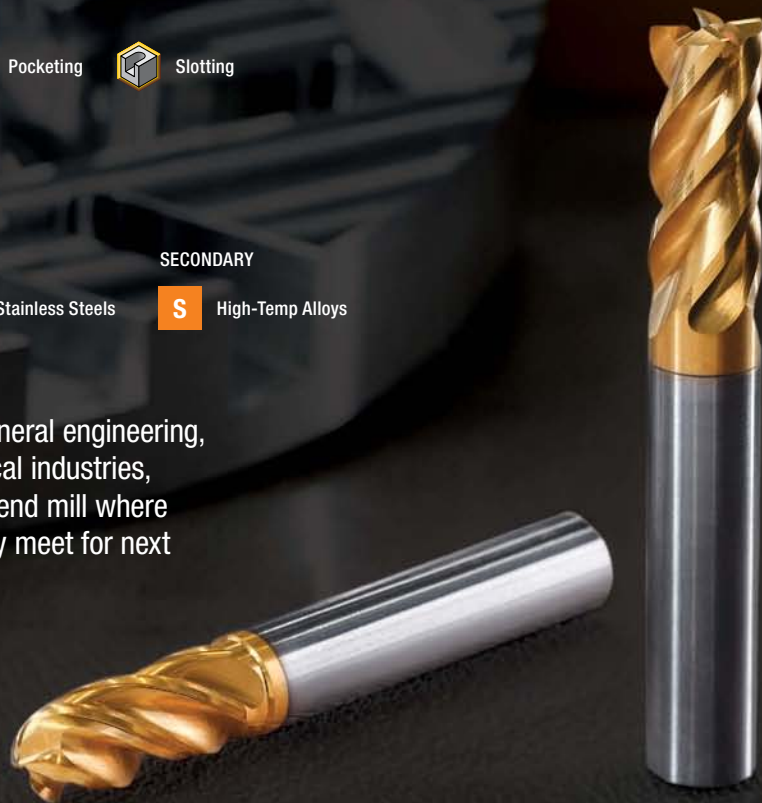
Stainless Steels

#### 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

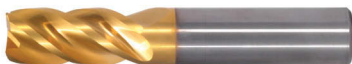


Medical

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

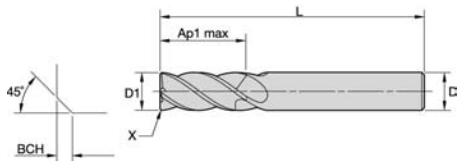
Kennametal's 4-flute G0mill PRO Solid Carbide End Mills are suited to become a go-to solution for small and medium sized shops. Designed for side and shoulder milling, helical milling, pocketing, slotting and shallow ramping, G0mill PRO delivers affordability, versatility and high performance for next 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



● Primary  
○ Secondary

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

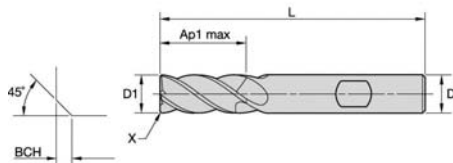
KCU20

| Order Number | Catalog Number     | D1    | D     | AP1 Max | L      | BCH  |   |
|--------------|--------------------|-------|-------|---------|--------|------|---|
| 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 | ● |
| 7231676      | GOPR4CH0800R019HAM | 8.00  | 8.00  | 19.00   | 63.00  | 0.20 | ● |
| 7231678      | GOPR4CH0800L032HAM | 8.00  | 8.00  | 32.00   | 87.00  | 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 | ● |
| 7231713      | GOPR4CH1200R026HAM | 12.00 | 12.00 | 26.00   | 83.00  | 0.20 | ● |
| 7231715      | GOPR4CH1200L051HAM | 12.00 | 12.00 | 51.00   | 100.00 | 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 | ● |
| 7231722      | GOPR4CH2000S038HAM | 20.00 | 20.00 | 38.00   | 104.00 | 0.35 | ● |
| 7231724      | GOPR4CH2000R057HAM | 20.00 | 20.00 | 57.00   | 125.00 | 0.35 | ● |
| 7231726      | GOPR4CH2500S045HAM | 25.00 | 25.00 | 45.00   | 121.00 | 0.35 | ● |



# GOMILL PRO

Chamfered • 4 Flutes • Weldon Shank

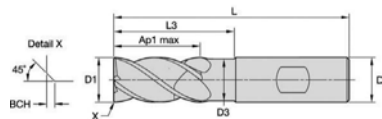


- Primary
- Secondary

|   |   |
|---|---|
| P | ● |
| M | ● |
| K | ● |
| N | ○ |
| S | ○ |
| H | ○ |

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 | ● |



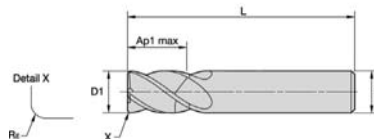
# G0mill PRO

Chamfered • 4 Flutes • Necked • Weldon Shank

- Primary
- Secondary

|   |   |
|---|---|
| P | ● |
| M | ● |
| K | ● |
| N | ○ |
| S | ○ |
| H | ○ |

| 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

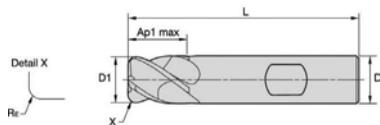
Radiused • 4 Flutes • Plain Shank

- Primary
- Secondary

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

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 | ● |
| 7231664      | GOPR4RA1600S020HAR050M | 16.00 | 16.00 | 20.00   | 82.00  | 0.50 | ● |
| 7231662      | GOPR4RA1600R035HAR050M | 16.00 | 16.00 | 35.00   | 92.00  | 0.50 | ● |
| 7231670      | GOPR4RA2000S025HAR050M | 20.00 | 20.00 | 25.00   | 92.00  | 0.50 | ● |
| 7231668      | GOPR4RA2000R042HAR050M | 20.00 | 20.00 | 42.00   | 104.00 | 0.50 | ● |
| 7231674      | GOPR4RA2500R052HAR050M | 25.00 | 25.00 | 52.00   | 121.00 | 0.50 | ● |



# GOMILL PRO

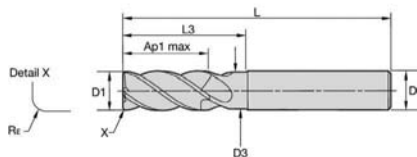
Radiused • 4 Flutes • Weldon Shank

- Primary
- Secondary

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

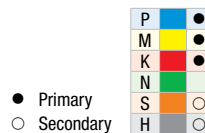
KCU20

| Order Number | Catalog Number         | D1    | D     | AP1 Max | L      | Rε   |   |
|--------------|------------------------|-------|-------|---------|--------|------|---|
| 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 | ● |



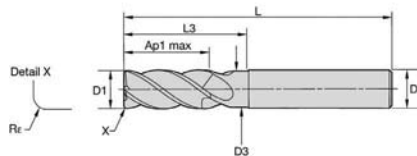
# GOMILL PRO

Radiused • 4 Flutes • Necked • Plain Shank



| 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 | • |
| 7231154      | GOPR4RA0400N011HAR020M | 4.00  | 6.00  | 3.76  | 11.00   | 57.00 | 16.00 | 0.20 | • |
| 7231155      | GOPR4RA0400N011HAR050M | 4.00  | 6.00  | 3.76  | 11.00   | 57.00 | 16.00 | 0.50 | • |
| 7231156      | GOPR4RA0500N013HAR020M | 5.00  | 6.00  | 4.70  | 13.00   | 57.00 | 18.00 | 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 | • |
| 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 | • |
| 7231161      | GOPR4RA0600N013HAR150M | 6.00  | 6.00  | 5.64  | 13.00   | 57.00 | 21.00 | 1.50 | • |
| 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 | • |
| 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 | • |
| 7231167      | GOPR4RA1000N022HAR050M | 10.00 | 10.00 | 9.40  | 22.00   | 72.00 | 32.00 | 0.50 | • |
| 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 | • |
| 7231170      | GOPR4RA1000N022HAR200M | 10.00 | 10.00 | 9.40  | 22.00   | 72.00 | 32.00 | 2.00 | • |
| 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 | • |
| 7231648      | GOPR4RA1200N026HAR250M | 12.00 | 12.00 | 11.28 | 26.00   | 83.00 | 38.00 | 2.50 | • |
| 7231649      | GOPR4RA1200N026HAR300M | 12.00 | 12.00 | 11.28 | 26.00   | 83.00 | 38.00 | 3.00 | • |
| 7231175      | GOPR4RA1200N026HAR400M | 12.00 | 12.00 | 11.28 | 26.00   | 83.00 | 38.00 | 4.00 | • |

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# GOMILL PRO Continued

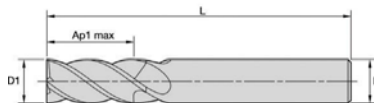
Radiused • 4 Flutes • Necked • Plain Shank

- Primary
- Secondary

|   |                                                                 |                                                                 |
|---|-----------------------------------------------------------------|-----------------------------------------------------------------|
| P | <span style="background-color: #0070C0; color: white;">●</span> | <span style="background-color: #000000; color: white;">●</span> |
| M | <span style="background-color: #FFFF00; color: black;">●</span> | <span style="background-color: #000000; color: white;">●</span> |
| K | <span style="background-color: #FF0000; color: white;">●</span> | <span style="background-color: #000000; color: white;">●</span> |
| N | <span style="background-color: #008000; color: white;">●</span> | <span style="background-color: #000000; color: white;">●</span> |
| S | <span style="background-color: #FFA500; color: black;">○</span> | <span style="background-color: #000000; color: white;">○</span> |
| H | <span style="background-color: #808080; color: white;">○</span> | <span style="background-color: #000000; color: white;">○</span> |

KCU20

| 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 | ● |
| 7231666      | GOPR4RA1600N032HAR050M | 16.00 | 16.00 | 15.04 | 32.00   | 92.00  | 44.00 | 0.50 | ● |
| 7231176      | GOPR4RA1600N032HAR100M | 16.00 | 16.00 | 15.04 | 32.00   | 92.00  | 44.00 | 1.00 | ● |
| 7231177      | GOPR4RA1600N032HAR200M | 16.00 | 16.00 | 15.04 | 32.00   | 92.00  | 44.00 | 2.00 | ● |
| 7231667      | GOPR4RA1600N032HAR250M | 16.00 | 16.00 | 15.04 | 32.00   | 92.00  | 44.00 | 2.50 | ● |
| 7231178      | GOPR4RA1600N032HAR300M | 16.00 | 16.00 | 15.04 | 32.00   | 92.00  | 44.00 | 3.00 | ● |
| 7231179      | GOPR4RA1600N032HAR400M | 16.00 | 16.00 | 15.04 | 32.00   | 92.00  | 44.00 | 4.00 | ● |
| 7231672      | GOPR4RA2000N038HAR050M | 20.00 | 20.00 | 18.80 | 38.00   | 104.00 | 53.00 | 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 | ● |
| 7231673      | GOPR4RA2000N038HAR250M | 20.00 | 20.00 | 18.8  | 38.00   | 104.00 | 53.00 | 2.50 | ● |
| 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 | ● |



# GOMILL PRO

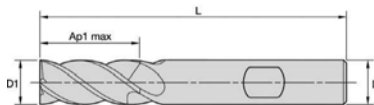
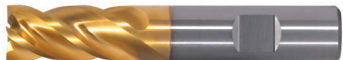
Square End • 4 Flutes • Plain Shank

- Primary
- Secondary

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

KCU20

| Order Number | Catalog Number     | D1    | D     | AP1 Max | L      |   |
|--------------|--------------------|-------|-------|---------|--------|---|
| 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 | ● |



# G0mill PRO

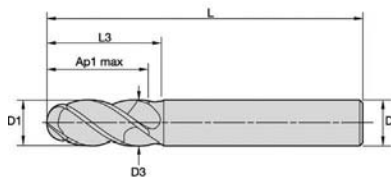
Square End • 4 Flutes • Weldon Shank

- 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

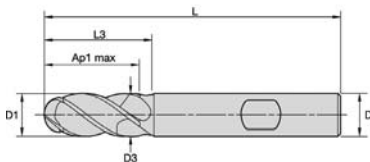
Ball Nose • 4 Flutes • Necked • Plain Shank

- Primary
- Secondary

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

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 | ● |



# G0mill PRO

Ball Nose • 4 Flutes • Necked • Weldon Shank

● Primary  
○ Secondary

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

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 | ● |

# GOMill PRO APPLICATION DATA



| Material Group |    |  |  |                  |     | Recommended Feed per Tooth (Fz=mm/th) is for Side Milling (A). For Slotting (B) Reduce Fz by 20% |  |     |    |       |       |       |       |       |       |       |       |       |       |       |       |       |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
|----------------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------|-----|--------------------------------------------------------------------------------------------------|--|-----|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|--|------|--|------|--|------|--|------|--|------|--|------|--|------|--|
|                |    |                                                                                   |                                                                                   |                  |     |                                                                                                  |  |     |    |       |       |       |       |       |       |       |       |       |       |       |       |       |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
|                |    |                                                                                   |                                                                                   | KCU20            |     |                                                                                                  |  |     |    |       |       |       |       |       |       |       |       |       |       |       |       |       |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
|                |    |                                                                                   |                                                                                   | Cutting Speed Vc |     | D1 - Diameter                                                                                    |  |     |    |       |       |       |       |       |       |       |       |       |       |       |       |       |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
| m/min          |    |                                                                                   |                                                                                   |                  |     |                                                                                                  |  |     |    |       |       |       |       |       |       |       |       |       |       |       |       |       |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
| 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 |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
| M              | 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 |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
|                | 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 |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
| K              | 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 |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
|                | 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 |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
| S              | 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 |     |  |      |  |      |  |      |  |      |  |      |  |      |  |      |  |
|                | 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.

# G0mill 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%   |
|---------------------|------|-----------|---------|-----------|-------|-------|-------|-------|-------|-------|-------|--------|
| <b>Speed Factor</b> | 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      |
| <b>Feed Factor</b>  | KFz  | 3.58      | 2.56    | 2.3       | 1.84  | 1.67  | 1.54  | 1.25  | 1.09  | 1.02  | 1     | 0.9    |
| <b>phi [°]</b>      |      | 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.

$V_c \text{ new} = V_c * K_v$

$F_z \text{ new} = F_z * K_{Fz}$

## Calculation Example:

Application:

D1= 14.0mm

Material Group P5

Ae= 20% of D

Vc= 80 m/min

Fz= 0.063 mm/th

Cutting data recommendation:

Adjustment coefficient:

Kv= 1.30

KFz= 1.25

## Final cutting data recommendation:

$V_c \text{ new} = 80 * 1.30 = 104$

$F_z \text{ new} = 0.06328 * 1.25 = 0.0791$

# G0mill PRO APPLICATION DATA - Long



| Material Group |  |               | KCU20<br>Cutting Speed Vc<br>m/min |     |  |    | Recommended Feed per Tooth (Fz=mm/th) is for Side Milling (A). No Slotting operations recommended. |       |       |       |       |       |       |       |       |       |       |       |
|----------------|-----------------------------------------------------------------------------------|---------------|------------------------------------|-----|--|----|----------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                |                                                                                   |               |                                    |     |  |    | D1 - Diameter                                                                                      |       |       |       |       |       |       |       |       |       |       |       |
|                | Side Milling                                                                      |               |                                    |     |  |    |                                                                                                    |       |       |       |       |       |       |       |       |       |       |       |
|                | 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.



# GOMILL PRO

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

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