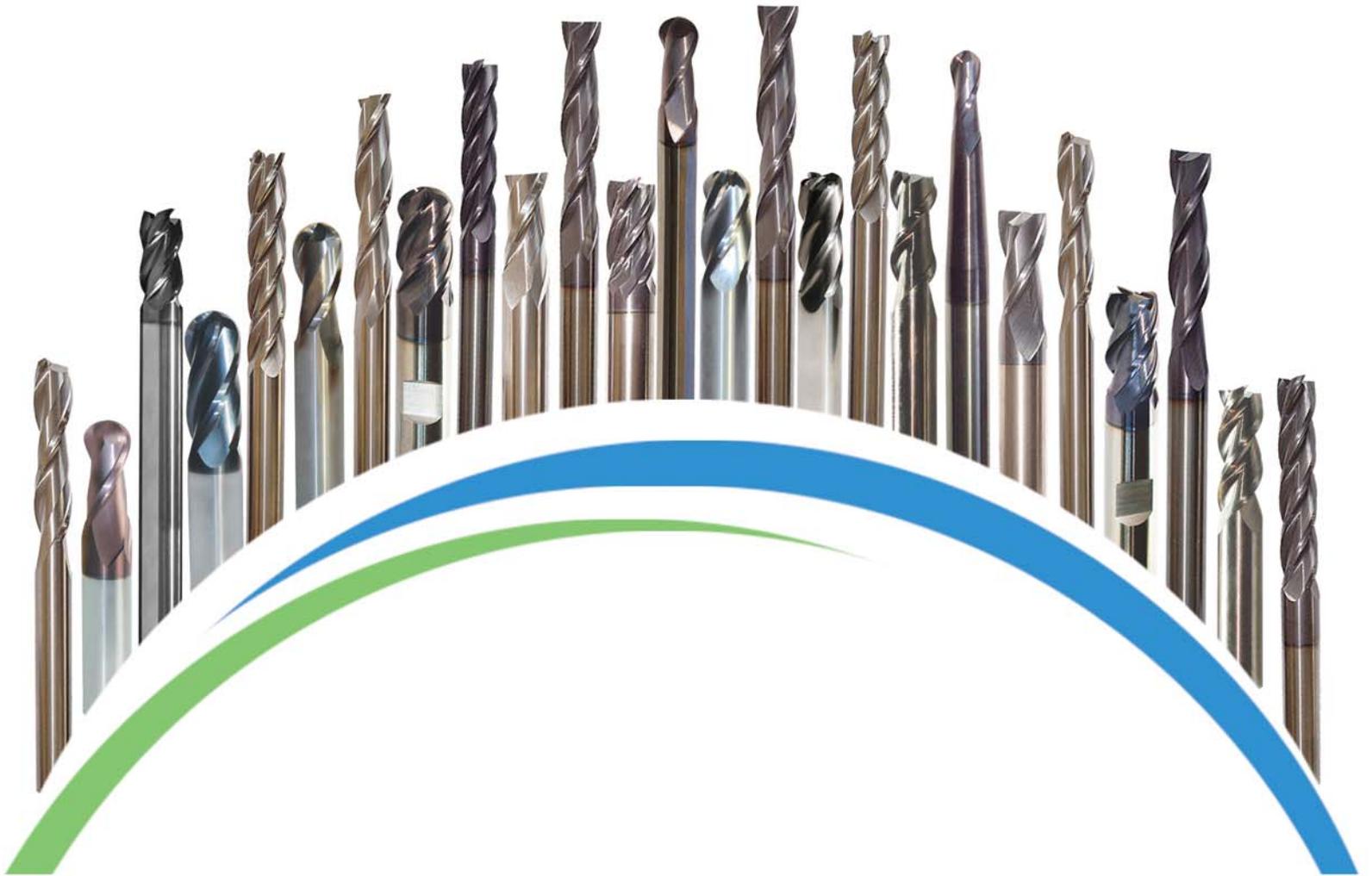


TNT TOOLS INC.®



Scientifically engineered | Technologically proven | Industry approved

100% Satisfaction Guaranteed

1st Edition



What is your definition of the word quality? Is it high endurance? Outstanding performance? Here at TNT Tools we craft our tools to uphold and maintain that interpretation of quality. We implement only the best raw use of complex geometries and specialized coatings ensures satisfaction for both your and your customer.

Corporations recognize the excellence of TNT Tools product not only across the continent but around the world as well.

Quality can also be defined as excellence, which is attributed to our customer service team. Our experienced and knowledgeable staff members are ready and eager to advise and assist our customers expediently.

We greatly appreciate the support afforded to us by our customers, and every day we do what we can to reciprocate it back. TNT Tools encourages all customers to take advantage of our open door policy, and all visits to our facility are welcome with no appointment necessary.

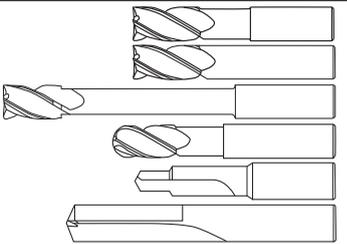
TNT Tools believes in building strong working relationships with our customers and keeping an open pathway for any comments or concerns, because part of perpetuating quality is a willingness to constantly improve. Forward thinking is on the daily agenda for the staff at TNT Tools, but we are here to listen to our customers as well and take into account what you'd like to see from us. Supporting our customers is at the base of our company.

TNT Tools like most companies and corporations, arose from humble beginnings. It is for that reasons that we offer our superior product at affordable prices, making it possible for every company, to be able to supply their customers with the best tool the market has to offer.

We take pride in our work here at TNT Tools, and it is our pleasure to help facilitate the needs our customers whether it be a special tool, technical advice or economical pricing. You can depend on TNT Tools, because quality is our foundation.

Thank you for your trust!



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	2&4 Flute X-Long Uncoated		12
	2&4 Flute X-Long Coated		13
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	2&4 Flute Corner radius Single End Square coated		16 & 17
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Variable Helix	Cool Breeze		22 - 27
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Regular 2 and 4 Flute Solid Micro Grain Carbide End Mills for Maximum Cost Performance

www.pctcarbide.com

2 and 4 Flute Coated and Uncoated End Mills for General Purpose Machining. Square, Corner Radius and Ball Nose

- Special cutting edge design provides high rigidity
- Tight Gennie tolerances improve accuracy and tool life
- Flute design promotes efficient chip evacuation



ABOUT PCT CARBIDE

The creation of shapes, holes and openings requires the use of capable tooling. The design of the tool is of utmost importance, sometimes requiring the tool to be tailored for the specific job. These tools cannot be ordered from a catalogue or picked up from a parts shelf. This is really where PCT Carbide has garnered a successful reputation as a reliable, reputable and distinguished cutting tool manufacturer. We have been building and exporting precision tools across North America and South America.

Some of the tools produced are End Mills, Drills, Reamers, Step Tools, Form Tools, Milling Cutters, Special Radii, Chamfers, Angles, Single or Multi Flute Cutters, etc. In addition to manufacturing new tools, we service our customers with a complete regrind and re-coating program.

We keep a full inventory of standard end mills and variable helix end mills ready for immediate delivery.

Our end mills have been designed for maximum cost performance in carbon steels and alloy steels.

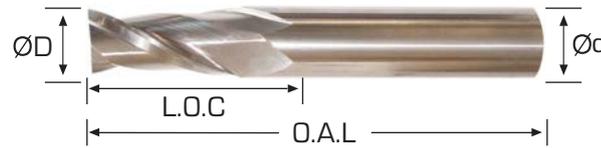
Our cutting geometries and tight tolerances improve accuracy and tool life. Our special coating improves machining efficiency and tool life, and the special nano-composite TiAlN Coating has improved lubrication properties without reducing the hardness. Our Special TiAlN Coating maintains hardness.

Our End Mill design serve to reduce cutting heat therefore improving cutting efficiency and improving tool life.

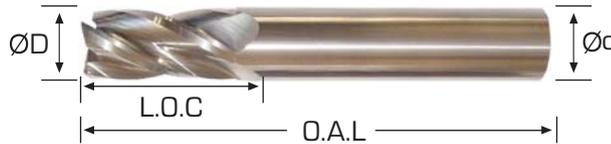
INTRODUCTION

Our Gennie 2 and 4 Flute Series End Mills have been designed for maximum cost performance in most general machining applications. Gennie cutting geometries and tight tolerances improve accuracy and tool life. Our geometry improves machining efficiency and tool life.

2 Flute :



4 Flute :

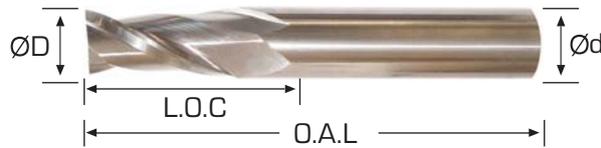


Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

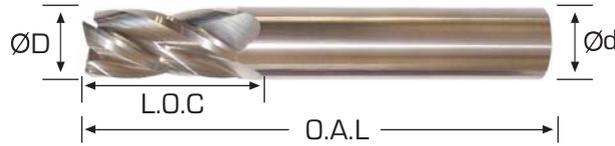
2 & 4 Flute Regular Length Uncoated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GEN0018-2 GEN0018-4	2 4	1/8"	1/2	1 1/2	1/8"	\$5.24
2	GEN0964-2 GEN0964-4	2 4	9/64"	9/16	2	3/16"	\$10.49
3	GEN0532-2 GEN0532-4	2 4	5/32"	9/16	2	3/16"	\$10.49
4	GEN1164-2 GEN1164-4	2 4	1 1/64"	5/8	2	3/16"	\$10.49
5	GEN0316-2 GEN0316-4	2 4	3/16"	5/8	2	3/16"	\$8.39
6	GEN0732-2 GEN0732-4	2 4	7/32"	5/8	2 1/2	1/4"	\$11.54
7	GEN1564-2 GEN1564-4	2 4	15/64"	3/4	2 1/2	1/4"	\$13.64
8	GEN0014-2 GEN0014-4	2 4	1/4"	3/4	2 1/2	1/4"	\$9.44
9	GEN0932-2 GEN0932-4	2 4	9/32"	3/4	2 1/2	5/16"	\$14.69
10	GEN0516-2 GEN0516-4	2 4	5/16"	13/16	2 1/2	5/16"	\$12.59
11	GEN1132-2 GEN1132-4	2 4	1 1/32"	7/8	2 1/2	3/8"	\$16.79
12	GEN0038-2 GEN0038-4	2 4	3/8"	7/8	2 1/2	3/8"	\$16.79

2 Flute :



4 Flute :

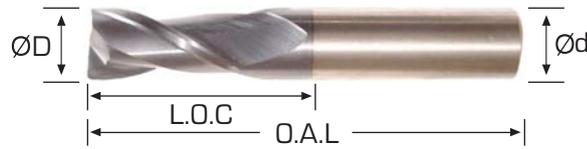


Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Regular Length Uncoated (Continued)

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
13	GEN1332-2 GEN1332-4	2 4	13/32"	7/8"	2 3/4"	7/16"	\$26.24
14	GEN0716-2 GEN0716-4	2 4	7/16"	7/8"	2 3/4"	7/16"	\$23.09
15	GEN1532-2 GEN1532-4	2 4	15/32"	1"	3"	1/2"	\$24.75
16	GEN0012-2 GEN0012-4	2 4	1/2"	1"	3"	1/2"	\$27.29
17	GEN1732-2 GEN1732-4	2 4	17/32"	1 1/8"	3 1/2"	9/16"	\$60.89
18	GEN0916-2 GEN0916-4	2 4	9/16"	1 1/8"	3 1/2"	9/16"	\$52.49
19	GEN1932-2 GEN1932-4	2 4	19/32"	1 1/8"	3 1/2"	5/8"	\$60.89
20	GEN0058-2 GEN0058-4	2 4	5/8"	1 1/4"	3 1/2"	5/8"	\$55.64
21	GEN1116-2 GEN1116-4	2 4	1 1/16"	1 1/4"	4"	3/4"	\$80.84
22	GEN0034-2 GEN0034-4	2 4	3/4"	1 1/2"	4"	3/4"	\$77.69
23	GEN1316-2 GEN1316-4	2 4	13/16"	1 1/2"	4"	7/8"	\$155.39
24	GEN0078-2 GEN0078-4	2 4	7/8"	1 1/2"	4"	7/8"	\$136.49
25	GEN1516-2 GEN1516-4	2 4	15/16"	1 1/2"	4"	1"	\$152.24
26	GEN0001-2 GEN0001-4	2 4	1"	1 1/2"	4"	1"	\$138.59

2 Flute :



4 Flute :

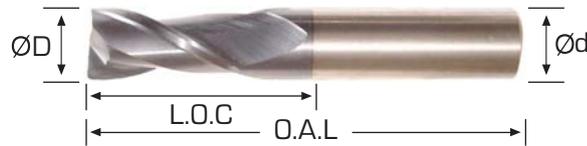


Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Regular Length Coated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GENCO018-2 GENCO018-4	2 4	1/8"	1/2	1 1/2	1/8"	\$6.29
2	GENCO964-2 GENCO964-4	2 4	9/64"	9/16	2	3/16"	\$13.64
3	GENCO532-2 GENCO532-4	2 4	5/32"	9/16	2	3/16"	\$13.64
4	GENC1164-2 GENC1164-4	2 4	1 1/64"	5/8	2	3/16"	\$13.64
5	GENCO316-2 GENCO316-4	2 4	3/16"	5/8	2	3/16"	\$10.08
6	GENCO732-2 GENCO732-4	2 4	7/32"	5/8	2 1/2	1/4"	\$16.79
7	GENC1564-2 GENC1564-4	2 4	15/64"	3/4	2 1/2	1/4"	\$17.84
8	GENCO014-2 GENCO014-4	2 4	1/4"	3/4	2 1/2	1/4"	\$10.45
9	GENCO932-2 GENCO932-4	2 4	9/32"	3/4	2 1/2	5/16"	\$20.99
10	GENCO516-2 GENCO516-4	2 4	5/16"	3/4	2 1/2	5/16"	\$16.25
11	GENC1132-2 GENC1132-4	2 4	1 1/32"	7/8	2 1/2	3/8"	\$24.14
12	GENCO038-2 GENCO038-4	2 4	3/8"	7/8	2 1/2	3/8"	\$19.05
13	GENC1332-2 GENC1332-4	2 4	1 3/32"	7/8	2 3/4	7/16"	\$34.64

2 Flute :



4 Flute :

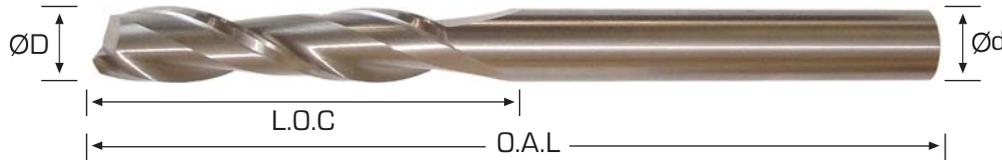


Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Regular Length Coated (Continued)

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
14	GENCO716-2 GENCO716-4	2 4	7/16"	7/8"	2 3/4"	7/16"	\$33.59
15	GENC1532-2 GENC1532-4	2 4	15/32"	1"	3"	1/2"	\$40.94
16	GENCO012-2 GENCO012-4	2 4	1/2"	1"	3"	1/2"	\$31.49
17	GENC1732-2 GENC1732-4	2 4	17/32"	1 1/8"	3 1/2"	9/16"	\$75.59
18	GENCO916-2 GENCO916-4	2 4	9/16"	1 1/8"	3 1/2"	9/16"	\$69.29
19	GENC1932-2 GENC1932-4	2 4	19/32"	1 1/8"	3 1/2"	5/8"	\$81.89
20	GENCO058-2 GENCO058-4	2 4	5/8"	1 1/4"	3 1/2"	5/8"	\$59.07
21	GENC1116-2 GENC1116-4	2 4	1 1/16"	1 1/4"	4"	3/4"	\$104.99
22	GENCO034-2 GENCO034-4	2 4	3/4"	1 1/2"	4"	3/4"	\$87.14
23	GENC1316-2 GENC1316-4	2 4	1 3/16"	1 1/2"	4"	7/8"	\$191.09
24	GENCO078-2 GENCO078-4	2 4	7/8"	1 1/2"	4"	7/8"	\$167.99
25	GENC1516-2 GENC1516-4	2 4	1 5/16"	1 1/2"	4"	1"	\$191.09
26	GENCO001-2 GENCO001-4	2 4	1"	1 1/2"	4"	1"	\$170.09

2 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

4 Flute :



2 & 4 Flute Long Uncoated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GEN0018-2L GEN0018-4L	2 4	1/8"	3/4"	2 1/2"	1/8"	\$9.89
2	GEN0316-2L GEN0316-4L	2 4	3/16"	3/4"	2 1/2"	3/16"	\$14.29
3	GEN0014-2L GEN0014-4L	2 4	1/4"	1 1/8"	3"	1/4"	\$16.49
4	GEN0516-2L GEN0516-4L	2 4	5/16"	1 1/8"	3"	5/16"	\$20.89
5	GEN0038-2L GEN0038-4L	2 4	3/8"	1 1/8"	3"	3/8"	\$28.59
6	GEN0716-2L GEN0716-4L	2 4	7/16"	2"	4"	7/16"	\$45.09
7	GEN0012-2L GEN0012-4L	2 4	1/2"	2"	4"	1/2"	\$49.49
8	GEN0058-2L GEN0058-4L	2 4	5/8"	2 1/4"	5"	5/8"	\$87.99
9	GEN0034-2L GEN0034-4L	2 4	3/4"	2 1/4"	5"	3/4"	\$125.39
10	GEN0001-2L GEN0001-4L	2 4	1"	2 1/4"	5"	1"	\$192.49

GENNIE LONG COATED

2 Flute :



4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Long Coated

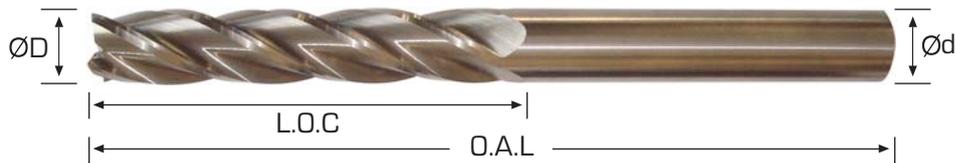
Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GENCO018-2L GENCO018-4L	2 4	1/8"	3/4"	2 1/2"	1/8"	\$11.44
2	GENCO316-2L GENCO316-4L	2 4	3/16"	3/4"	2 1/2"	3/16"	\$16.35
3	GENCO014-2L GENCO014-4L	2 4	1/4"	1 1/8"	3"	1/4"	\$20.45
4	GENCO516-2L GENCO516-4L	2 4	5/16"	1 1/8"	3"	5/16"	\$26.10
5	GENCO038-2L GENCO038-4L	2 4	3/8"	1 1/8"	3"	3/8"	\$33.01
6	GENCO716-2L GENCO716-4L	2 4	7/16"	2"	4"	7/16"	\$52.54
7	GENCO012-2L GENCO012-4L	2 4	1/2"	2"	4"	1/2"	\$58.21
8	GENCO058-2L GENCO058-4L	2 4	5/8"	2 1/4"	5"	5/8"	\$103.39
9	GENCO034-2L GENCO034-4L	2 4	3/4"	2 1/4"	5"	3/4"	\$138.75
10	GENCO001-2L GENCO001-4L	2 4	1"	2 1/4"	5"	1"	\$234.29

GENNIE X-LONG

2 Flute :



4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute X-Long Uncoated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GEN0018-2XL GEN0018-4XL	2 4	1/8"	1"	3"	1/8"	\$16.32
2	GEN0316-2XL GEN0316-4XL	2 4	3/16"	1 1/8"	3"	3/16"	\$17.82
3	GEN0014-2XL GEN0014-4XL	2 4	1/4"	1 1/2"	4"	1/4"	\$25.12
4	GEN0516-2XL GEN0516-4XL	2 4	5/16"	1 1/2"	4"	5/16"	\$31.13
5	GEN0038-2XL GEN0038-4XL	2 4	3/8"	1 3/4"	4"	3/8"	\$38.28
6	GEN0716-2XL GEN0716-4XL	2 4	7/16"	3"	6"	7/16"	\$76.99
7	GEN0012-2XL GEN0012-4XL	2 4	1/2"	3"	6"	1/2"	\$87.99
8	GEN0058-2XL GEN0058-4XL	2 4	5/8"	3"	6"	5/8"	\$119.35
9	GEN0034-2XL GEN0034-4XL	2 4	3/4"	3"	6"	3/4"	\$160.95
10	GEN0034-2XXL GEN0034-4XXL	2 4	3/4"	4"	7"	3/4"	\$197.99
11	GEN0034-2XXXL GEN0034-4XXXL	2 4	3/4"	5"	8"	3/4"	\$219.99
12	GEN0001-2XL GEN0001-4XL	2 4	1"	3"	6"	1"	\$297.37
13	GEN0001-2XXL GEN0001-4XXL	2 4	1"	4"	7"	1"	\$329.99
14	GEN0001-2XXXL GEN0001-4XXXL	2 4	1"	5"	8"	1"	\$357.49

2 Flute :



4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute X-Long Coated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GENCO018-2XL GENCO018-4XL	2 4	1/8"	1"	3"	1/8"	\$18.36
2	GENCO316-2XL GENCO316-4XL	2 4	3/16"	1 1/8"	3"	3/16"	\$20.87
3	GENCO014-2XL GENCO014-4XL	2 4	1/4"	1 1/2"	4"	1/4"	\$29.05
4	GENCO516-2XL GENCO516-4XL	2 4	5/16"	1 1/2"	4"	5/16"	\$35.94
5	GENCO038-2XL GENCO038-4XL	2 4	3/8"	1 3/4"	4"	3/8"	\$43.99
6	GENCO716-2XL GENCO716-4XL	2 4	7/16"	3"	6"	7/16"	\$87.99
7	GENCO012-2XL GENCO012-4XL	2 4	1/2"	3"	6"	1/2"	\$98.99
8	GENCO058-2XL GENCO058-4XL	2 4	5/8"	3"	6"	5/8"	\$134.15
9	GENCO034-2XL GENCO034-4XL	2 4	3/4"	3"	6"	3/4"	\$177.63
10	GENCO034-2XXL GENCO034-4XXL	2 4	3/4"	4"	7"	3/4"	\$208.99
11	GENCO034-2XXXL GENCO034-4XXXL	2 4	3/4"	5"	8"	3/4"	\$241.99
12	GENCO001-2XL GENCO001-4XL	2 4	1"	3"	6"	1"	\$307.84
13	GENCO001-2XXL GENCO001-4XXL	2 4	1"	4"	7"	1"	\$346.49
14	GENCO001-2XXXL GENCO001-4XXXL	2 4	1"	5"	8"	1"	\$384.99

GENNIE RADIUS

2 & 4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Uncoated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Rad
1	GEN0018-2R015	2	1/8"	1/2"	1-1/2"	1/8"	0.015"
	GEN0018-4R015	4					
2	GEN0018-2LR015	2	1/8"	1"	3"	1/8"	0.015"
	GEN0018-4LR015	4					
3	GEN0316-2R015	2	3/16"	5/8"	2-1/2"	3/16"	0.015"
	GEN0316-4R015	4					
4	GEN0316-2LR015	2	3/16"	1-1/8"	3"	3/16"	0.015"
	GEN0316-4LR015	4					
5	GEN0316-2R030	2	3/16"	5/8"	2-1/2"	3/16"	0.030"
	GEN0316-4R030	4					
6	GEN0316-2LR030	2	3/16"	1-1/8"	4"	3/16"	0.030"
	GEN0316-4LR030	4					
7	GEN0014-2R015	2	1/4"	3/4"	2-1/2"	1/4"	0.015"
	GEN0014-4R015	4					
8	GEN0014-2LR015	2	1/4"	1-1/2"	4"	1/4"	0.015"
	GEN0014-4LR015	4					
9	GEN0014-2R030	2	1/4"	3/4"	2-1/2"	1/4"	0.030"
	GEN0014-4R030	4					
10	GEN0014-2LR030	2	1/4"	1-1/2"	4"	1/4"	0.030"
	GEN0014-4LR030	4					
11	GEN0014-2R060	2	1/4"	3/4"	2-1/2"	1/4"	0.060"
	GEN0014-4R060	4					
12	GEN0014-2LR060	2	1/4"	1-1/2"	4"	1/4"	0.060"
	GEN0014-4LR060	4					
13	GEN0516-2R015	2	5/16"	13/16"	2-1/2"	5/16"	0.015"
	GEN0516-4R015	4					
14	GEN0516-2LR015	2	5/16"	1-5/8"	4"	5/16"	0.015"
	GEN0516-4LR015	4					
15	GEN0516-2R030	2	5/16"	13/16"	2-1/2"	5/16"	0.030"
	GEN0516-4R030	4					
16	GEN0516-2LR030	2	5/16"	1-5/8"	4"	5/16"	0.030"
	GEN0516-4LR030	4					
17	GEN0516-2R060	2	5/16"	13/16"	2-1/2"	5/16"	0.060"
	GEN0516-4R060	4					
18	GEN0516-2LR060	2	5/16"	1-5/8"	4"	5/16"	0.060"
	GEN0516-4LR060	4					
19	GEN0038-2R015	2	3/8"	7/8"	2-1/2"	3/8"	0.015"
	GEN0038-4R015	4					
20	GEN0038-2LR015	2	3/8"	1-3/4"	4"	3/8"	0.015"
	GEN0038-4LR015	4					
21	GEN0038-2R030	2	3/8"	7/8"	2-1/2"	3/8"	0.030"
	GEN0038-4R030	4					

GENNIE RADIUS

2 & 4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Uncoated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Rad
22	GEN0038-2LR030	2	3/8"	1-3/4"	4"	3/8"	0.030"
	GEN0038-4LR030	4					
23	GEN0038-2R060	2	3/8"	7/8"	2-1/2"	3/8"	0.060"
	GEN0038-4R060	4					
24	GEN0038-2LR060	2	3/8"	1-3/4"	4"	3/8"	0.060"
	GEN0038-4LR060	4					
25	GEN0012-2R015	2	1/2"	1"	3"	1/2"	0.015"
	GEN0012-4R015	4					
26	GEN0012-2LR015	2	1/2"	2"	4"	1/2"	0.015"
	GEN0012-4LR015	4					
27	GEN0012-2R030	2	1/2"	1"	3"	1/2"	0.030"
	GEN0012-4R030	4					
28	GEN0012-2LR030	2	1/2"	2"	4"	1/2"	0.030"
	GEN0012-4LR030	4					
29	GEN0012-2R060	2	1/2"	1"	3"	1/2"	0.060"
	GEN0012-4R060	4					
30	GEN0012-2LR060	2	1/2"	2"	4"	1/2"	0.060"
	GEN0012-4LR060	4					
31	GEN0058-2R030	2	5/8"	1-1/4"	3-1/2"	5/8"	0.030"
	GEN0058-4R030	4					
32	GEN0058-2LR030	2	5/8"	1-1/4"	6"	5/8"	0.030"
	GEN0058-4LR030	4					
33	GEN0058-2R060	2	5/8"	1-1/4"	3-1/2"	5/8"	0.060"
	GEN0058-4R060	4					
34	GEN0058-2LR060	2	5/8"	1-1/4"	6"	5/8"	0.060"
	GEN0058-4LR060	4					
35	GEN0034-2R030	2	3/4"	1-1/2"	4"	3/4"	0.030"
	GEN0034-4R030	4					
36	GEN0034-2LR030	2	3/4"	1-1/2"	6"	3/4"	0.030"
	GEN0034-4LR030	4					
37	GEN0034-2R060	2	3/4"	1-1/2"	4"	3/4"	0.060"
	GEN0034-4R060	4					
38	GEN0034-2LR060	2	3/4"	1-1/2"	6"	3/4"	0.060"
	GEN0034-4LR060	4					
39	GEN0001-2R030	2	1"	1-1/2"	4"	1"	0.030"
	GEN0001-4R030	4					
40	GEN0001-2LR030	2	1"	1-1/2"	6"	1"	0.030"
	GEN0001-4LR030	4					
41	GEN0001-2R060	2	1"	1-1/2"	4"	1"	0.060"
	GEN0001-4R060	4					
42	GEN0001-2LR060	2	1"	1-1/2"	6"	1"	0.060"
	GEN0001-4LR060	4					

GENNIE RADIUS COATED

2 & 4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Coated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Rad
1	GENCO018-2R015	2	1/8"	1/2"	1-1/2"	1/8"	0.015"
	GENCO018-4R015	4					
2	GENCO018-2LR015	2	1/8"	1"	3"	1/8"	0.015"
	GENCO018-4LR015	4					
3	GENCO316-2R015	2	3/16"	5/8"	2-1/2"	3/16"	0.015"
	GENCO316-4R015	4					
4	GENCO316-2LR015	2	3/16"	1-1/8"	3"	3/16"	0.015"
	GENCO316-4LR015	4					
5	GENCO316-2R030	2	3/16"	5/8"	2-1/2"	3/16"	0.030"
	GENCO316-4R030	4					
6	GENCO316-2LR030	2	3/16"	1-1/8"	4"	3/16"	0.030"
	GENCO316-4LR030	4					
7	GENCO014-2R015	2	1/4"	3/4"	2-1/2"	1/4"	0.015"
	GENCO014-4R015	4					
8	GENCO014-2LR015	2	1/4"	1-1/2"	4"	1/4"	0.015"
	GENCO014-4LR015	4					
9	GENCO014-2R030	2	1/4"	3/4"	2-1/2"	1/4"	0.030"
	GENCO014-4R030	4					
10	GENCO014-2LR030	2	1/4"	1-1/2"	4"	1/4"	0.030"
	GENCO014-4LR030	4					
11	GENCO014-2R060	2	1/4"	3/4"	2-1/2"	1/4"	0.060"
	GENCO014-4R060	4					
12	GENCO014-2LR060	2	1/4"	1-1/2"	4"	1/4"	0.060"
	GENCO014-4LR060	4					
13	GENCO516-2R015	2	5/16"	13/16"	2-1/2"	5/16"	0.015"
	GENCO516-4R015	4					
14	GENCO516-2LR015	2	5/16"	1-5/8"	4"	5/16"	0.015"
	GENCO516-4LR015	4					
15	GENCO516-2R030	2	5/16"	13/16"	2-1/2"	5/16"	0.030"
	GENCO516-4R030	4					
16	GENCO516-2LR030	2	5/16"	1-5/8"	4"	5/16"	0.030"
	GENCO516-4LR030	4					
17	GENCO516-2R060	2	5/16"	13/16"	2-1/2"	5/16"	0.060"
	GENCO516-4R060	4					
18	GENCO516-2LR060	2	5/16"	1-5/8"	4"	5/16"	0.060"
	GENCO516-4LR060	4					
19	GENCO038-2R015	2	3/8"	7/8"	2-1/2"	3/8"	0.015"
	GENCO038-4R015	4					
20	GENCO038-2LR015	2	3/8"	1-3/4"	4"	3/8"	0.015"
	GENCO038-4LR015	4					
21	GENCO038-2R030	2	3/8"	7/8"	2-1/2"	3/8"	0.030"
	GENCO038-4R030	4					

GENNIE RADIUS COATED

2 & 4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

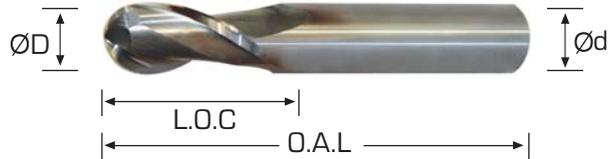
2 & 4 Flute Coated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Rad
22	GENCO038-2LR030	2	3/8"	1-3/4"	4"	3/8"	0.030"
	GENCO038-4LR030	4					
23	GENCO038-2R060	2	3/8"	7/8"	2-1/2"	3/8"	0.060"
	GENCO038-4R060	4					
24	GENCO038-2LR060	2	3/8"	1-3/4"	4"	3/8"	0.060"
	GENCO038-4LR060	4					
25	GENCO012-2R015	2	1/2"	1"	3"	1/2"	0.015"
	GENCO012-4R015	4					
26	GENCO012-2LR015	2	1/2"	2"	4"	1/2"	0.015"
	GENCO012-4LR015	4					
27	GENCO012-2R030	2	1/2"	1"	3"	1/2"	0.030"
	GENCO012-4R030	4					
28	GENCO012-2LR030	2	1/2"	2"	4"	1/2"	0.030"
	GENCO012-4LR030	4					
29	GENCO012-2R060	2	1/2"	1"	3"	1/2"	0.060"
	GENCO012-4R060	4					
30	GENCO012-2LR060	2	1/2"	2"	4"	1/2"	0.060"
	GENCO012-4LR060	4					
31	GENCO058-2R030	2	5/8"	1-1/4"	3-1/2"	5/8"	0.030"
	GENCO058-4R030	4					
32	GENCO058-2LR030	2	5/8"	1-1/4"	6"	5/8"	0.030"
	GENCO058-4LR030	4					
33	GENCO058-2R060	2	5/8"	1-1/4"	3-1/2"	5/8"	0.060"
	GENCO058-4R060	4					
34	GENCO058-2LR060	2	5/8"	1-1/4"	6"	5/8"	0.060"
	GENCO058-4LR060	4					
35	GENCO034-2R030	2	3/4"	1-1/2"	4"	3/4"	0.030"
	GENCO034-4R030	4					
36	GENCO034-2LR030	2	3/4"	1-1/2"	6"	3/4"	0.030"
	GENCO034-4LR030	4					
37	GENCO034-2R060	2	3/4"	1-1/2"	4"	3/4"	0.060"
	GENCO034-4R060	4					
38	GENCO034-2LR060	2	3/4"	1-1/2"	6"	3/4"	0.060"
	GENCO034-4LR060	4					
39	GENCO001-2R030	2	1"	1-1/2"	4"	1"	0.030"
	GENCO001-4R030	4					
40	GENCO001-2LR030	2	1"	1-1/2"	6"	1"	0.030"
	GENCO001-4LR030	4					
41	GENCO001-2R060	2	1"	1-1/2"	4"	1"	0.060"
	GENCO001-4R060	4					
42	GENCO001-2LR060	2	1"	1-1/2"	6"	1"	0.060"
	GENCO001-4LR060	4					

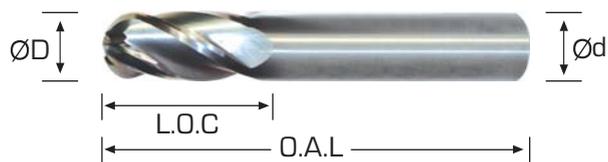
GENNIE BALL NOSE UNCOATED

GENNIE

2 Flute :



4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

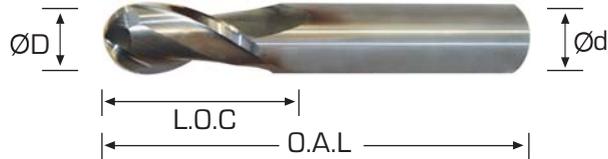
2 & 4 Flute Uncoated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GENO132-2BN	2	1/32"	3/32"	1-1/2"	1/8"	\$9.90
	GENO132-4BN	4					
2	GENO364-2BN	2	3/64"	1/8"	1-1/2"	1/8"	\$9.90
	GENO364-4BN	4					
3	GENO116-2BN	2	1/16"	3/16"	1-1/2"	1/8"	\$8.80
	GENO116-4BN	4					
4	GENO564-2BN	2	5/64"	1/4"	1-1/2"	1/8"	\$8.80
	GENO564-4BN	4					
5	GENO332-2BN	2	3/32"	3/8"	1-1/2"	1/8"	\$8.80
	GENO332-4BN	4					
6	GENO764-2BN	2	7/64"	3/8"	1-1/2"	1/8"	\$8.80
	GENO764-4BN	4					
7	GENO018-2BN	2	1/8"	1/2"	1-1/2"	1/8"	\$7.04
	GENO018-4BN	4					
8	GENO964-2BN	2	9/64"	9/16"	2-1/2"	3/16"	\$12.14
	GENO964-4BN	4					
9	GENO532-2BN	2	5/32"	9/16"	2-1/2"	3/16"	\$11.66
	GENO532-4BN	4					
10	GEN1164-2BN	2	11/64"	9/16"	2-1/2"	3/16"	\$12.10
	GEN1164-4BN	4					
11	GENO316-2BN	2	3/16"	5/8"	2-1/2"	3/16"	\$10.60
	GENO316-4BN	4					
12	GEN1364-2BN	2	13/64"	5/8"	2-1/2"	1/4"	\$15.29
	GEN1364-4BN	4					
13	GENO732-2BN	2	7/32"	5/8"	2-1/2"	1/4"	\$14.30
	GENO732-4BN	4					
14	GEN1564-2BN	2	15/64"	3/4"	2-1/2"	1/4"	\$15.29
	GEN1564-4BN	4					
15	GENO014-2BN	2	1/4"	3/4"	2-1/2"	1/4"	\$12.20
	GENO014-4BN	4					
16	GENO932-2BN	2	9/32"	7/8"	2-1/2"	5/16"	\$18.70
	GENO932-4BN	4					

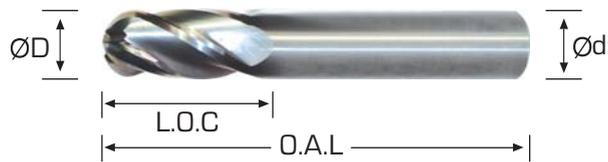
GENNIE BALL NOSE UNCOATED

GENNIE

2 Flute :



4 Flute :



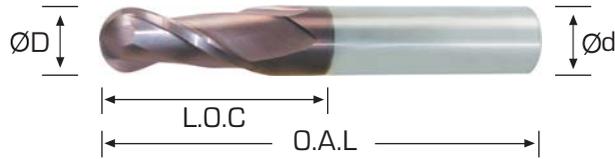
Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

2 & 4 Flute Uncoated

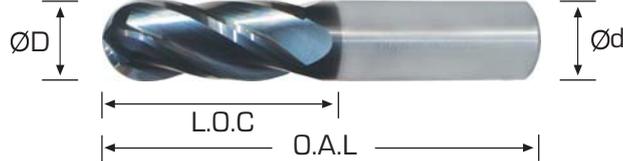
Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
17	GEN0516-2BN	2	5/16"	7/8"	2-1/2"	5/16"	\$17.16
	GEN0516-4BN	4					
18	GEN1132-2BN	2	11/32"	7/8"	2-1/2"	3/8"	\$20.90
	GEN1132-4BN	4					
19	GEN0038-2BN	2	3/8"	7/8"	2-1/2"	3/8"	\$20.90
	GEN0038-4BN	4					
20	GEN1332-2BN	2	13/32"	7/8"	2-1/2"	7/16"	\$34.10
	GEN1332-4BN	4					
21	GEN0716-2BN	2	7/16"	1"	2-1/2"	7/16"	\$33.00
	GEN0716-4BN	4					
22	GEN1532-2BN	2	15/32"	1"	3"	1/2"	\$37.29
	GEN1532-4BN	4					
23	GEN0012-2BN	2	1/2"	1"	3"	1/2"	\$32.00
	GEN0012-4BN	4					
24	GEN1732-2BN	2	17/32"	1-1/4"	3-1/2"	9/16"	\$77.00
	GEN1732-4BN	4					
25	GEN0916-2BN	2	9/16"	1-1/4"	3-1/2"	9/16"	\$67.10
	GEN0916-4BN	4					
26	GEN1932-2BN	2	19/32"	1-1/4"	3-1/2"	5/8"	\$78.10
	GEN1932-4BN	4					
27	GEN0058-2BN	2	5/8"	1-1/4"	3-1/2"	5/8"	\$67.10
	GEN0058-4BN	4					
28	GEN1116-2BN	2	11/16"	1-1/2"	4"	3/4"	\$105.60
	GEN1116-4BN	4					
29	GEN0034-2BN	2	3/4"	1-1/2"	4"	3/4"	\$92.40
	GEN0034-4BN	4					
30	GEN1316-2BN	2	13/16"	1-1/2"	4"	7/8"	\$204.49
	GEN1316-4BN	4					
31	GEN0078-2BN	2	7/8"	1-1/2"	4"	7/8"	\$180.40
	GEN0078-4BN	4					
32	GEN1516-2BN	2	15/16"	1-1/2"	4"	1"	\$200.75
	GEN1516-4BN	4					
33	GEN0001-2BN	2	1"	1-1/2"	4"	1"	\$182.60
	GEN0001-4BN	4					

GENNIE BALL NOSE COATED

2 Flute :



4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

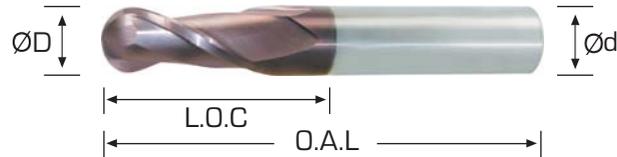
GENNIE

2 & 4 Flute Coated

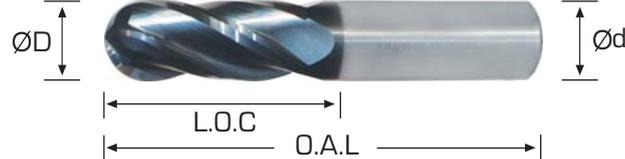
Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
1	GENCO132-2BN	2	1/32"	3/32"	1-1/2"	1/8"	\$11.86
	GENCO132-4BN	4					
2	GENCO364-2BN	2	3/64"	1/8"	1-1/2"	1/8"	\$11.86
	GENCO364-4BN	4					
3	GENCO116-2BN	2	1/16"	3/16"	1-1/2"	1/8"	\$10.76
	GENCO116-4BN	4					
4	GENCO564-2BN	2	5/64"	1/4"	1-1/2"	1/8"	\$10.76
	GENCO564-4BN	4					
5	GENCO332-2BN	2	3/32"	3/8"	1-1/2"	1/8"	\$10.76
	GENCO332-4BN	4					
6	GENCO764-2BN	2	7/64"	3/8"	1-1/2"	1/8"	\$9.24
	GENCO764-4BN	4					
7	GENCO018-2BN	2	1/8"	1/2"	1-1/2"	1/8"	\$9.00
	GENCO018-4BN	4					
8	GENCO964-2BN	2	9/64"	9/16"	2-1/2"	3/16"	\$15.93
	GENCO964-4BN	4					
9	GENCO532-2BN	2	5/32"	9/16"	2-1/2"	3/16"	\$14.52
	GENCO532-4BN	4					
10	GENC1164-2BN	2	11/64"	9/16"	2-1/2"	3/16"	\$15.60
	GENC1164-4BN	4					
11	GENCO316-2BN	2	3/16"	5/8"	2-1/2"	3/16"	\$13.20
	GENCO316-4BN	4					
12	GENC1364-2BN	2	13/64"	5/8"	2-1/2"	1/4"	\$20.81
	GENC1364-4BN	4					
13	GENCO732-2BN	2	7/32"	5/8"	2-1/2"	1/4"	\$19.43
	GENCO732-4BN	4					
14	GENC1564-2BN	2	15/64"	3/4"	2-1/2"	1/4"	\$20.20
	GENC1564-4BN	4					
15	GENCO014-2BN	2	1/4"	3/4"	2-1/2"	1/4"	\$16.85
	GENCO014-4BN	4					
16	GENCO932-2BN	2	9/32"	7/8"	2-1/2"	5/16"	\$24.82
	GENCO932-4BN	4					

GENNIE BALL NOSE COATED

2 Flute :



4 Flute :



Helix Angle	30
ØD	0/-0.002"
Ød	0/-0.0005"

GENNIE

2 & 4 Flute Coated

Item No.	Part No.	Flutes	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
17	GENCO516-2BN	2	5/16"	7/8"	2-1/2"	5/16"	\$24.38
	GENCO516-4BN	4					
18	GENC1132-2BN	2	11/32"	7/8"	2-1/2"	3/8"	\$28.12
	GENC1132-4BN	4					
19	GENCO038-2BN	2	3/8"	7/8"	2-1/2"	3/8"	\$28.12
	GENCO038-4BN	4					
20	GENC1332-2BN	2	13/32"	7/8"	2-1/2"	7/16"	\$43.65
	GENC1332-4BN	4					
21	GENCO716-2BN	2	7/16"	1"	2-1/2"	7/16"	\$43.32
	GENCO716-4BN	4					
22	GENC1532-2BN	2	15/32"	1"	3"	1/2"	\$48.40
	GENC1532-4BN	4					
23	GENCO012-2BN	2	1/2"	1"	3"	1/2"	\$41.38
	GENCO012-4BN	4					
24	GENC1732-2BN	2	17/32"	1-1/4"	3-1/2"	9/16"	\$100.25
	GENC1732-4BN	4					
25	GENCO916-2BN	2	9/16"	1-1/4"	3-1/2"	9/16"	\$83.20
	GENCO916-4BN	4					
26	GENC1932-2BN	2	19/32"	1-1/4"	3-1/2"	5/8"	\$94.80
	GENC1932-4BN	4					
27	GENCO058-2BN	2	5/8"	1-1/4"	3-1/2"	5/8"	\$83.20
	GENCO058-4BN	4					
28	GENC1116-2BN	2	1 1/16"	1-1/2"	4"	3/4"	\$122.21
	GENC1116-4BN	4					
29	GENCO034-2BN	2	3/4"	1-1/2"	4"	3/4"	\$110.79
	GENCO034-4BN	4					
30	GENC1316-2BN	2	13/16"	1-1/2"	4"	7/8"	\$234.74
	GENC1316-4BN	4					
31	GENCO078-2BN	2	7/8"	1-1/2"	4"	7/8"	\$212.59
	GENCO078-4BN	4					
32	GENC1516-2BN	2	15/16"	1-1/2"	4"	1"	\$237.16
	GENC1516-4BN	4					
33	GENCO001-2BN	2	1"	1-1/2"	4"	1"	\$214.79
	GENCO001-4BN	4					

UTILITY SERIES

Solid Micro-Grain Carbide End Mills

www.pctcarbide.com

Coated Ball Nose & Coated Variable Helix End Mills for Materials up to 55HRC

- Coating for improved lubrication and high hardness
- Special cutting edge design provides high rigidity
- Cool Breeze® tight tolerances
- Flute design promotes efficient chip evacuation



INTRODUCTION

Our Cool Breeze® utility series end mills have been designed for maximum cost performance in carbon steels and alloy steels. Cool Breeze® cutting geometries and tight tolerances improve accuracy and tool life. Our special coating improves machining efficiency and tool life.



Small corner chamfer for improved tool life

COOL BREEZE

FEATURES

1. TiAlN COATING

The special nano-composite TiAlN Coating has improved lubrication properties without reducing the hardness. Our special TiAlN Coating maintains hardness.

These properties serve to reduce cutting heat therefore improving cutting efficiency and improving tool life.



Helix Angle	Variable
ØD	0/-0.002"
Ød	0/-0.0005"

INTRODUCTION - BALL NOSE SERIES

The Cool Breeze® Ball Nose Series have been designed for maximum cost performance in carbon steels, alloy steels, pre-hardened steels and hardened steels up to 55HRC. Special cutting geometries and tight tolerances improve accuracy and tools life. The special coating improves machining efficiency and tool life.



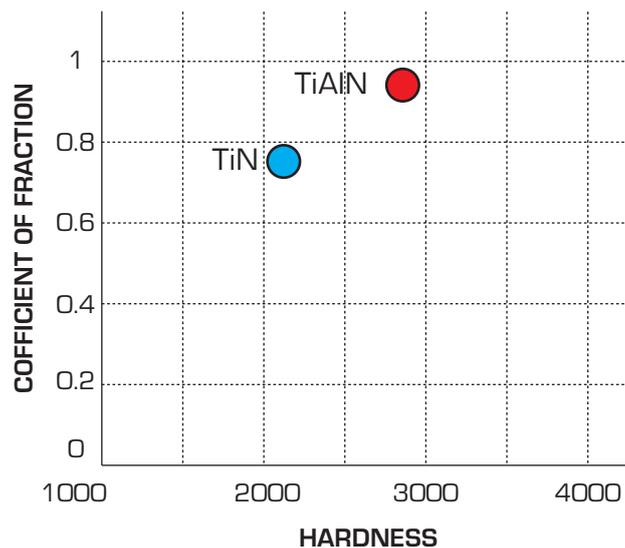
Tight diameter and shank tolerance for improved accuracy and tool life.

FEATURES

1. Coating TiAlN

The special nano-composite TiAlN Coating has improved lubrication properties without reducing the hardness.

These properties serve to reduce cutting heat therefore improving cutting efficiency and improving tool life. Dry machining is possible for many applications.



VARIABLE HELIX END MILLS

Speed & Feed Data

Material	SFM	Chip Load per Tooth			
		1/8"	1/4"	1/2"	1"
Aluminium Alloys	1200	.0010	.0020	.0040	.0080
Carbon Steel	300-600	.0010	.0015	.0030	.0060
Cast Iron	350-550	.0010	.0015	.0030	.0060
Copper Alloys	500-900	.0010	.0020	.0030	.0060
Steel - Annealed	350-500	.0010	.0020	.0030	.0050
Steel - Rc 18-24	150-500	.0004	.0008	.0015	.0045
Steel - Rc 25-37	125-200	.0003	.0005	.0010	.0030
Stainless Steel – Free Machining	250-400	.0005	.0010	.0020	.0030
Stainless Steel – Other	150-300	.0005	.0010	.0020	.0030
Inconel/Monel	60-100	.0005	.0010	.0015	.0030
Titanium	175-300	.0005	.0008	.0015	.0030

All speeds and feeds are suggested starting points. They may be increased or decreased depending on machine condition, depth of cut, finished required, coolant, etc.

LIST OF SYMBOLS

F	=	Number of Flutes
D	=	Diameter of Cutters
R.P.M.	=	Revolutions Per Minute
S.F.M.	=	Surface Feet Per Minute
I.P.M.	=	Feed Rate: Inches Per Minute
I.P.R.	=	Feed Rate: Inches Per Revolution

MACHINING FORMULAS

S.F.M. = 0.262 x D x R.P.M.
R.P.M. = $\frac{3.82 \times \text{S.F.M.}}{D}$
I.P.R. = $\frac{\text{I.P.M.}}{\text{R.P.M.}}$ or Chip Load x F
I.P.M. = R.P.M. x I.P.R.
CHIP LOAD = $\frac{\text{I.P.M.}}{\text{R.P.M.} \times F}$ or $\frac{\text{I.P.R.}}{F}$

COOL BREEZE[®] END MILLS

COOL BREEZE

Part No.	Diameter	L.O.C.	O.A.L.	Shank Diameter	Chamfer	Price
TNT1875-CB	3/16"	5/8"	2 1/2"	3/16"	.006"x45°	\$11.99
TNT2500-CB	1/4"	3/4"	2 1/2"	1/4"	.008"x45°	\$13.64
TNT2500-CBL	1/4"	7/8"	4"	1/4"	.008"x45°	\$18.89
TNT3125-CB	5/16"	1 3/16"	2 1/2"	5/16"	.008"x45°	\$18.89
TNT3750-CB	3/8"	7/8"	2 1/2"	3/8"	.012"x45°	\$24.12
TNT3750-CBL	3/8"	1"	4"	3/8"	.012"x45°	\$32.54
TNT5000-CB	1/2"	1"	3"	1/2"	.012"x45°	\$39.89
TNT5000-CBL	1/2"	1 1/2"	4"	1/2"	.012"x45°	\$52.49
TNT5000-CBXL	1/2"	1"	6"	1/2"	.012"x45°	\$72.44
TNT5000-CBXXL	1/2"	1"	8"	1/2"	.012"x45°	\$91.34
TNT6250-CB	5/8"	1 1/4"	3 1/2"	5/8"	.015"x45°	\$68.24
TNT6250-CBL	5/8"	1 1/2"	6"	5/8"	.015"x45°	\$104.99
TNT7500-CB	3/4"	1 1/2"	4"	3/4"	.015"x45°	\$103.94
TNT7500-CBL	3/4"	1 1/2"	6"	3/4"	.015"x45°	\$143.84
TNT1000-CB	1"	1 1/2"	4"	1"	.020"x45°	\$197.39
TNT1000-CBL	1"	2 1/4"	6"	1"	.020"x45°	\$251.99

C.N.C. VARIABLE HELIX: 4 Flutes 10% Co, 0.6 µm grain size

TiAIN COATED CARBIDE END MILLS



Your Cutting Tool Specialist

COOL BREEZE[®] UTILITY SERIES

COOL BREEZE[®] BALL NOSE SERIES

Part No.	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
TNT1875-CBB	Ø3/16"	5/8"	2 1/2"	Ø3/16"	\$15.74
TNT2500-CBB	Ø1/4"	3/4"	2 1/2"	Ø1/4"	\$16.79
TNT3125-CBB	Ø5/16"	1 3/16"	2 1/2"	Ø5/16"	\$23.09
TNT3750-CBB	Ø3/8"	7/8"	2 1/2"	Ø3/8"	\$28.34
TNT5000-CBB	Ø1/2"	1"	3"	Ø1/2"	\$45.14
TNT6250-CBB	Ø5/8"	1 1/4"	3 1/2"	Ø5/8"	\$77.69
TNT7500-CBB	Ø3/4"	1 1/2"	4"	Ø3/4"	\$117.59
TNT1000-CBB	Ø1"	1 1/2"	4"	Ø1"	\$237.29

COOL BREEZE

PCT
CARBIDE

Your Cutting Tool Specialist

DIE MOLD SERIES

LONG REACH

Solid Micro-Grain Carbide Ball Nose End Mills

www.pctcarbide.com

Coated Ball Nose End Mills for Materials up to 55HRC

- Coating for improved lubrication and high hardness
- Special cutting edge design provides high rigidity
- Tight diameter and shank tolerances improve accuracy and tool life
- Flute design promotes efficient chip evacuation



PCT Carbide

DIE MOLD

INTRODUCTION

Our Vesuvius Series Ball End Mills have been designed for maximum cost performance in P20 and H13 steels. Special cutting geometries and tight tolerances improve accuracy and tool life. The special coating improves machining efficiency and tool life.



Special cutting edge design provides high rigidity.

FEATURES

1. COATING

The special nano-composite TiAlN Coating has improved lubrication properties without reducing the hardness. Our special TiAlN Coating maintains hardness.

These properties serve to reduce cutting heat therefore improving cutting efficiency and improving tool life.

DIE MOLD

Coating	Colour	Thickness	Mirohardness (HV)	Max. Operating Temp	Friction Coefficient	Features	Most common Applications
TiAlN	Burgundy Violet	1 - 4	3100	800 Deg C/ 1500 Deg F	0.4	- Universal high speed cutting tools protection - High hardness and toughness	Cutting Tool
TiAlN	Violet Grey	2 - 5	3000	900 Deg C	0.3 -0.4	Nanocoating grain size in the range of 20-40nm	Regular coating for wide range of steel machining

Speed & Feed Data - Applications in Various Materials

Material	SFM	Chip Load per Tooth			
		1/8"	1/4"	1/2"	1"
Aluminum Alloys	600-1200	.0010	.0020	.0040	.0080
Brass	200-350	.0010	.0020	.0030	.0050
Bronze	200-350	.0010	.0020	.0030	.0050
Carbon Steel	100-600	.0010	.0015	.0030	.0060
Cast Iron	80-350	.0010	.0015	.0030	.0060
Cast Steel	200-350	.0005	.0010	.0020	.0040
Cobalt Base Alloys	20-80	.0005	.0008	.0010	.0020
Copper	350-900	.0010	.0020	.0030	.0060
Die Steel	50-300	.0005	.0010	.0020	.0040
Graphite	600-1000	.0020	.0050	.0080	.0100
Inconel/Monel	30-50	.0005	.0010	.0015	.0030
Magnesium	900-1300	.0010	.0020	.0040	.0080
Malleable Iron	200-500	.0005	.0010	.0030	.0070
Nickel Base Alloys	50-100	.0002	.0008	.0010	.0020
Plastic	600-1200	.0010	.0030	.0060	.0100
Stainless Steel - Free Machining	100-300	.0005	.0010	.0020	.0030
Stainless Steel - Other	50-250	.0005	.0010	.0020	.0030
Steel - Annealed	100-350	.0010	.0020	.0030	.0050
Steel -Rc 18-24	100-500	.0004	.0008	.0015	.0045
Steel -Rc 25-37	25-120	.0003	.0005	.0010	.0030
Titanium	100-200	.0005	.0008	.0015	.0030

DIE MOLD

All speeds and feeds are suggested starting points. They may be increased or decreased depending on machine condition, depth of cut, finished required, coolant, etc.

LIST OF SYMBOLS	
F	= Number of Flutes
D	= Diameter of Cutters
R.P.M.	= Revolutions Per Minute
S.F.M.	= Surface Feet Per Minute
I.P.M.	= Feed Rate: Inches Per Minute
I.P.R.	= Feed Rate: Inches Per Revolution

MACHINING FORMULAS	
S.F.	= 0.262 x D x R.P.M.
R.P.M.	= $\frac{3.82 \times \text{S.F.M.}}{D}$
I.P.R.	= $\frac{\text{I.P.M.}}{\text{R.P.M.}}$ or Chip Load x F
I.P.M.	= R.P.M. x I.P.R.
CHIP LOAD	= $\frac{\text{I.P.M.}}{\text{R.P.M.} \times F}$ or $\frac{\text{I.P.R.}}{F}$

DIE MOLD SERIES END MILLS

DIE MOLD EXTENDED LENGTH VESUVIUS SERIES	2 & 4Flute Diameter	L.O.C.	O.A.L(mm)	Shank Diameter	Price
VS1250-2	Ø1/8"	1/2"	4"	Ø1/8"	\$15.99
VS1250-4	Ø1/8"	1/2"	4"	Ø1/8"	\$15.99
VS1875-2	Ø3/16"	1/2"	4"	Ø3/16"	\$21.99
VS1875-4	Ø3/16"	1/2"	4"	Ø3/16"	\$21.99
VS2500-2	Ø1/4"	3/4"	6"	Ø1/4"	\$31.99
VS2500-4	Ø1/4"	3/4"	6"	Ø1/4"	\$31.99
VS3125-2	Ø5/16"	1"	6"	Ø5/16"	\$42.99
VS3125-4	Ø5/16"	1"	6"	Ø5/16"	\$42.99
VS3750-2	Ø3/8"	1"	6"	Ø3/8"	\$52.99
VS3750-4	Ø3/8"	1"	6"	Ø3/8"	\$52.99
VS5000-2	Ø1/2"	1"	6"	Ø1/2"	\$74.99
VS5000-4	Ø1/2"	1"	6"	Ø1/2"	\$74.99
VS6250-2	Ø5/8"	1"	6"	Ø5/8"	\$109.99
VS6250-4	Ø5/8"	1"	6"	Ø5/8"	\$109.99
VS7500-2	Ø3/4"	1"	6"	Ø3/4"	\$174.99
VS7500-4	Ø3/4"	1"	6"	Ø3/4"	\$174.99

DIE MOLD



C.N.C. GROUND: 2 or 4 Flutes 10% Co, 0.6 µm grain size
TiAIN COATED LONG REACH CARBIDE BALL NOSE END MILLS

PCT

CARBIDE

Your Cutting Tool Specialist

DIE MOLD SERIES

Solid Micro-Grain Carbide End Mills for Maximum Cost Performance

www.pctcarbide.com

Coated Ball Nose End Mills for P20 and H13 Materials

- H/V Coating for improved lubrication and high hardness
- Special cutting edge design provides high rigidity
- Tight diameter (0,-0.001 mm) and shank (H5) tolerances improve accuracy and tool life
- Flute design promotes efficient chip evacuation



PCT Carbide

DIE MOLD

DIE MOLD SERIES

INTRODUCTION

The 3D H/V Series End Mills have been designed for maximum cost performance in carbon steels, alloy steels, pre-hardened steels and hardened steels up to 55HRC. Special cutting geometries and tight tolerances improve accuracy and tool life. The special H/V Coating improves machining efficiency and tool life.

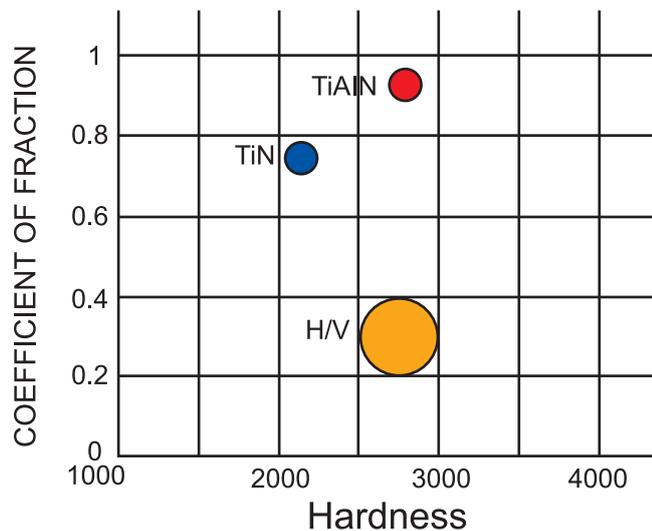


Tight diameter and shank tolerance for improve accuracy and tool life

FEATURES

H/V Coating (ALTiN)

The special nano-composite H/V coating has improved lubrication properties without reducing the hardness. Our special H/V Coating maintains a hardness close to TiAlN but the coefficient of friction is less than that of either TiAlN or TiN.



DIE MOLD

DIE MOLD SERIES

B/N DIE MOLD CUTTERS

B/N DIE MOLD CUTTERS Part No.	Series 2 Flute Diameter	Ballnose L.O.C.	Coated O.A.L. (mm)	Tapered Neck Angle	Shank Diameter	Price
TNT0312-2HVBN	Ø1/32"	Ø1/32"	3"	5°	Ø1/4"	\$35.99
TNT0394-2HVBN	Ø1mm	Ø1mm	75mm	5°	Ø6mm	\$34.99
TNT0591-2HVBN	Ø1.5mm	Ø1.5mm	75mm	5°	Ø6mm	\$33.99
TNT0625-2HVBN	Ø1/16"	Ø1/16"	3"	5°	Ø1/4"	\$32.99
TNT0787-2HVBN	Ø2mm	Ø2mm	75mm	5°	Ø6mm	\$31.99
TNT0938-2HVBN	Ø3/32"	Ø3/32"	3"	5°	Ø1/4"	\$29.99
TNT1181-2HVBN	Ø3mm	Ø3mm	75mm	5°	Ø6mm	\$28.99
TNT1250-2HVBN	Ø1/8"	Ø1/8"	3"	5°	Ø1/4"	\$28.99
TNT1575-2HVBN	Ø4mm	Ø4mm	75mm	5°	Ø6mm	\$27.99
TNT1875-2HVBN	Ø3/16"	Ø3/16"	3"	5°	Ø1/4"	\$27.99
TNT1969-2HVBN	Ø5mm	Ø5mm	75mm	5°	Ø6mm	\$27.99
TNT2362-2HPBN	Ø6mm	Ø6mm	75mm	-	Ø6mm	\$24.99
TNT2500-2HPBN	Ø1/4"	Ø1/4"	3"	-	Ø1/4"	\$24.99
TNT3125-2HPBN	Ø5/16"	Ø5/16"	4"	-	Ø5/16"	\$34.99
TNT3150-2HPBN	Ø8mm	Ø8mm	100mm	-	Ø8mm	\$39.99
TNT3750-2HPBN	Ø3/8"	Ø3/8"	4"	-	Ø3/8"	\$44.99
TNT3937-2HPBN	Ø10mm	Ø10mm	100mm	-	Ø10mm	\$49.99
TNT4724-2HPBN	Ø12mm	Ø12mm	100mm	-	Ø12mm	\$59.99
TNT5000-2HPBN	Ø1/2"	Ø1/2"	4"	-	Ø1/2"	\$59.99

DIE MOLD



Helix Angle	15
ØD	0/-0.001"
Ød	0/-0.0005"

DIE MOLD SERIES

RADIUS DIE MOLD CUTTER

RADIUS DIE MOLD CUTTERS Part No.	COATED 2 & 4 Flute	Diameter	L.O.C (m.m.)	O.A.L (m.m.)	Neck Reach	Shank Diameter (m.m.)	Corner Radius	Price
TNT0787-50-2HPR0.5	2	Ø2mm	3mm	50mm	6mm	Ø6mm	0.5mm	\$20.99
TNT0787-50-4HPR0.5	4							
TNT0787-60-2HPR0.5	2	Ø2mm	3mm	60mm	10mm	Ø6mm	0.5mm	\$23.99
TNT0787-60-4HPR0.5	4							
TNT0787-65-2HPR0.5	2	Ø2mm	3mm	65mm	15mm	Ø6mm	0.5mm	\$24.99
TNT0787-65-4HPR0.5	4							
TNT1181-60-2HPR0.5	2	Ø3mm	4mm	60mm	10mm	Ø6mm	0.5mm	\$21.99
TNT1181-60-4HPR0.5	4							
TNT1181-65-2HPR0.5	2	Ø3mm	4mm	65mm	15mm	Ø6mm	0.5mm	\$23.99
TNT1181-65-4HPR0.5	4							
TNT1181-70-2HPR0.5	2	Ø3mm	4mm	70mm	20mm	Ø6mm	0.5mm	\$24.99
TNT1181-70-4HPR0.5	4							
TNT1575-50-2HPR0.5	2	Ø4mm	5mm	50mm	12mm	Ø6mm	0.5mm	\$20.99
TNT1575-50-4HPR0.5	4							
TNT1575-65-2HPR0.5	2	Ø4mm	5mm	65mm	20mm	Ø6mm	0.5mm	\$23.99
TNT1575-65-4HPR0.5	4							
TNT1575-80-2HPR0.5	2	Ø4mm	5mm	80mm	30mm	Ø6mm	0.5mm	\$29.99
TNT1575-80-4HPR0.5	4							
TNT1575-50-2HPR1.0	2	Ø4mm	5mm	50mm	12mm	Ø6mm	1.0mm	\$20.99
TNT1575-50-4HPR1.0	4							
TNT1575-65-2HPR1.0	2	Ø4mm	5mm	65mm	20mm	Ø6mm	1.0mm	\$23.99
TNT1575-65-4HPR1.0	4							
TNT2362-60-2HPR0.5	2	Ø6mm	8mm	60mm	20mm	Ø6mm	0.5mm	\$22.99
TNT2362-60-4HPR0.5	4							
TNT2362-80-2HPR0.5	2	Ø6mm	8mm	80mm	30mm	Ø6mm	0.5mm	\$29.99
TNT2362-80-4HPR0.5	4							
TNT2362-100-2HPR0.5	2	Ø6mm	8mm	100mm	40mm	Ø6mm	0.5mm	\$34.99
TNT2362-100-4HPR0.5	4							
TNT2362-60-2HPR1.0	2	Ø6mm	8mm	60mm	20mm	Ø6mm	1.0mm	\$22.99
TNT2362-60-4HPR1.0	4							
TNT2362-80-2HPR1.0	2	Ø6mm	8mm	80mm	30mm	Ø6mm	1.0mm	\$29.99
TNT2362-80-4HPR1.0	4							
TNT2362-100-2HPR1.0	2	Ø6mm	8mm	100mm	40mm	Ø6mm	1.0mm	\$34.99
TNT2362-100-4HPR1.0	4							
TNT2362-100-2HPR1.5	2	Ø6mm	8mm	100mm	40mm	Ø6mm	1.5mm	\$34.99
TNT2362-100-4HPR1.5	4							
TNT3150-100-2HPR0.5	2	Ø8mm	10mm	100mm	40mm	Ø8mm	0.5mm	\$42.99
TNT3150-100-4HPR0.5	4							
TNT3150-100-2HPR1.0	2	Ø8mm	10mm	100mm	40mm	Ø8mm	1.0mm	\$42.99
TNT3150-100-4HPR1.0	4							
TNT3150-100-2HPR2.0	2	Ø8mm	10mm	100mm	40mm	Ø8mm	2.0mm	\$42.99
TNT3150-100-4HPR2.0	4							
TNT3937-100-2HPR1.0	2	Ø10mm	12mm	100mm	40mm	Ø10mm	1.0mm	\$49.99
TNT3937-100-4HPR1.0	4							
TNT3937-100-2HPR2.0	2	Ø10mm	12mm	100mm	40mm	Ø10mm	2.0mm	\$49.99
TNT3937-100-4HPR2.0	4							
TNT4724-110-2HPR1.0	2	Ø12mm	14mm	110mm	50mm	Ø12mm	1.0mm	\$64.99
TNT4724-110-4HPR1.0	4							
TNT4724-110-2HPR1.5	2	Ø12mm	14mm	110mm	50mm	Ø12mm	1.5mm	\$64.99
TNT4724-110-4HPR1.5	4							
TNT4724-110-2HPR2.0	2	Ø12mm	14mm	110mm	50mm	Ø12mm	2.0mm	\$64.99
TNT4724-110-4HPR2.0	4							
TNT4724-110-2HPR3.0	2	Ø12mm	14mm	110mm	50mm	Ø12mm	3.0mm	\$64.99
TNT4724-110-4HPR3.0	4							

DIE MOLD

MULTI FLUTE SERIES

Sub-Micrograin Carbide Tools for High-Performance Machining of Hardened Steels

www.pctcarbide.com



High-Precision End Mills for Maximum Efficiency and Tool Life

- PCT Carbide Coating has excellent hardness and heat resistance properties
- Newly designed flute geometry increases rigidity and improves chip evacuation
- Multi-Flute Square End Mills for high performance side milling & finishing

INTRODUCTION

The Multi Flute Series end mills achieve extraordinary performance in the cutting of hardened steels. In fact, machining efficiency is more than twice that of competitors' solid carbide end mills.

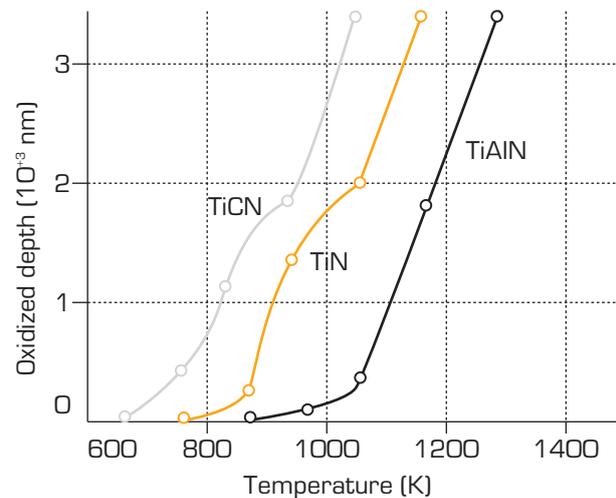
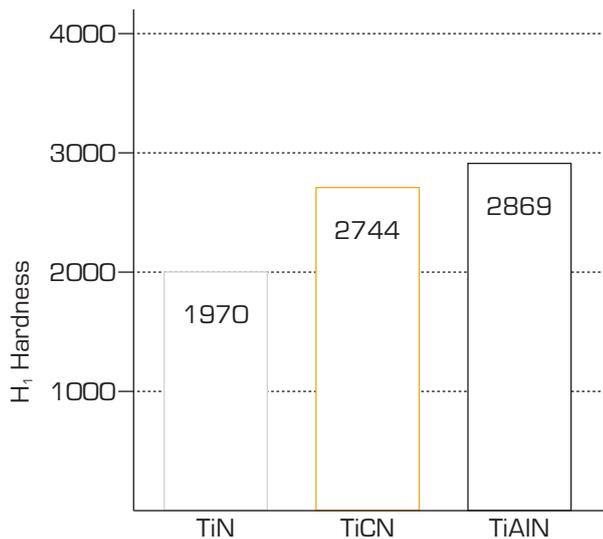
In addition to newly designed tool geometries, these tools feature PCT Carbide's unique nano-composite Coating. Due to the new composite layer (consisting of nano-crystal material), the TiAlN achieves a new level of hardness and heat resistance.



FEATURES

1. TiAlN Coating Hardness and Oxidation Resistance

As the charts demonstrate, the revolutionary TiAlN Coating has excellent hardness and oxidation resistance compared conventional coatings. These properties allow the Multi Flute Series End Mills to offer greater performance in hard steels and a vast improvement in cutting tool life.



MULTI FLUTE

5 flute MULTIFLUTE

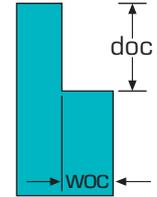
Part No.	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
TNT1875-MF5	Ø3/16"	5/8"	2 1/2"	Ø3/16"	\$14.53
TNT2500-MF5	Ø1/4"	3/4"	2 1/2"	Ø1/4"	\$17.18
TNT2500-MFL5	Ø1/4"	1 1/8"	3"	Ø1/4"	\$26.44
TNT2500-MFXL5	Ø1/4"	1 1/2"	4"	Ø1/4"	\$30.40
TNT3125-MF5	Ø5/16"	7/8"	2 1/2"	Ø5/16"	\$23.79
TNT3125-MFL5	Ø5/16"	1 1/8"	3"	Ø5/16"	\$27.76
TNT3125-MFXL5	Ø5/16"	1 5/8"	4"	Ø5/16"	\$33.05
TNT3750-MF5	Ø3/8"	1"	2 1/2"	Ø3/8"	\$30.40
TNT3750-MFL5	Ø3/8"	1 1/8"	3"	Ø3/8"	\$37.02
TNT3750-MFXL5	Ø3/8"	1 3/4"	4"	Ø3/8"	\$39.66
TNT5000-MF5	Ø1/2"	1 1/4"	3"	Ø1/2"	\$52.89
TNT5000-MFL5	Ø1/2"	2"	4"	Ø1/2"	\$60.82
TNT5000-MFXL5	Ø1/2"	3"	6"	Ø1/2"	\$93.88
TNT6250-MF5	Ø5/8"	1 5/8"	3 1/2"	Ø5/8"	\$88.59
TNT6250-MFL5	Ø5/8"	2 1/4"	5"	Ø5/8"	\$119.01
TNT6250-MFXL5	Ø5/8"	3"	6"	Ø5/8"	\$148.11
TNT7500-MF5	Ø3/4"	1 3/4"	4"	Ø3/4"	\$132.24
TNT7500-MFL5	Ø3/4"	2 1/4"	5"	Ø3/4"	\$167.94
TNT7500-MFXL5	Ø3/4"	3"	6"	Ø3/4"	\$197.04
TNT1000-MF5	Ø1"	2"	4"	Ø1"	\$226.13
TNT1000-MFL5	Ø1"	2 1/2"	5"	Ø1"	\$284.32
TNT1000-MFXL5	Ø1"	3 1/4"	6"	Ø1"	\$334.58
TNT1000-MFXXL5	Ø1"	4"	7"	Ø1"	\$391.45

MULTI FLUTE

6 flute MULTIFLUTE

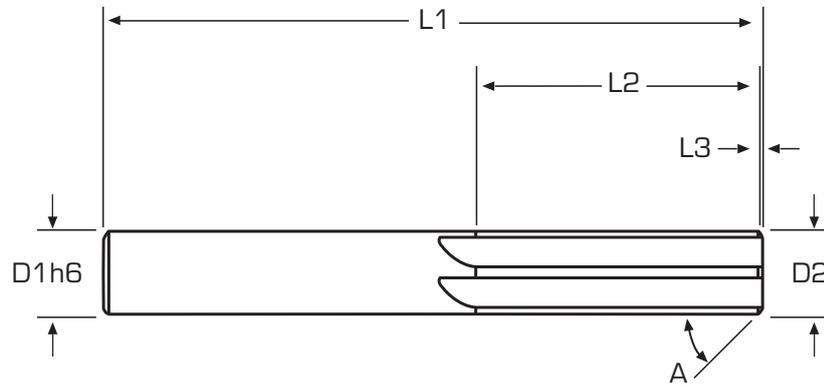
Part No.	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price
TNT1875-MF6	Ø3/16"	5/8"	2 1/2"	Ø3/16"	\$12.64
TNT2500-MF6	Ø1/4"	3/4"	2 1/2"	Ø1/4"	\$14.94
TNT2500-MFL6	Ø1/4"	1 1/8"	3"	Ø1/4"	\$22.99
TNT2500-MFXL6	Ø1/4"	1 1/2"	4"	Ø1/4"	\$26.44
TNT3125-MF6	Ø5/16"	7/8"	2 1/2"	Ø5/16"	\$20.69
TNT3125-MFL6	Ø5/16"	1 1/8"	3"	Ø5/16"	\$24.12
TNT3125-MFXL6	Ø5/16"	1 5/8"	4"	Ø5/16"	\$28.74
TNT3750-MF6	Ø3/8"	1"	2 1/2"	Ø3/8"	\$26.44
TNT3750-MFL6	Ø3/8"	1 1/8"	3"	Ø3/8"	\$32.19
TNT3750-MFXL6	Ø3/8"	1 3/4"	4"	Ø3/8"	\$34.49
TNT5000-MF6	Ø1/2"	1 1/4"	3"	Ø1/2"	\$45.99
TNT5000-MFL6	Ø1/2"	2"	4"	Ø1/2"	\$52.89
TNT5000-MFXL6	Ø1/2"	3"	6"	Ø1/2"	\$81.64
TNT6250-MF6	Ø5/8"	1 5/8"	3 1/2"	Ø5/8"	\$77.04
TNT6250-MFL6	Ø5/8"	2 1/4"	5"	Ø5/8"	\$103.49
TNT6250-MFXL6	Ø5/8"	3"	6"	Ø5/8"	\$128.79
TNT7500-MF6	Ø3/4"	1 3/4"	4"	Ø3/4"	\$114.99
TNT7500-MFL6	Ø3/4"	2 1/4"	5"	Ø3/4"	\$146.04
TNT7500-MFXL6	Ø3/4"	3"	6"	Ø3/4"	\$171.34
TNT1000-MF6	Ø1"	2"	4"	Ø1"	\$196.64
TNT1000-MFL6	Ø1"	2 1/2"	5"	Ø1"	\$247.24
TNT1000-MFXL6	Ø1"	3 1/4"	6"	Ø1"	\$290.94
TNT1000-MFXXL6	Ø1"	4"	7"	Ø1"	\$340.39

MULTI FLUTE



Work Material (Hardness)	Cutting Range	Depth of cut	Cutting Cond.	Total Dia. (mm)									
				1	2	3	4	6	8	10	12	16	20
Tool Steel (25-35HRC)	High Speed	Doc=1.5-2D woc=0.1D	Vc (sfm)	250	250	250	280	280	280	280	280	280	280
			N (rpm)	79600	39800	26500	22300	14900	11100	3900	7400	5600	4500
			fz (in/t)	0.0003	0.001	0.001	0.002	0.002	0.003	0.004	0.004	0.005	0.007
	General	Doc=1.5-2D woc=0.1D	Vf (in/min)	100	110	120	210	210	210	210	190	170	180
			Vc (sfm)	60	120	120	140	140	140	140	140	140	140
			N (rpm)	19100	19100	12700	11100	7400	5600	4500	3700	2800	2200
Pre-hardened Steel (35-45HRC)	High Speed	Doc=1.5-2D woc=0.1D	Vc (sfm)	250	250	250	260	260	260	260	260	260	260
			N (rpm)	79600	39800	26500	20700	13800	10300	8300	6900	5200	4100
			fz (in/t)	0.0003	0.001	0.001	0.001	0.002	0.003	0.004	0.004	0.004	0.006
	General	Doc=0.5-2D woc=0.1D	Vf (in/min)	100	100	110	120	180	180	180	160	140	150
			Vc (sfm)	60	100	100	120	120	120	120	120	120	120
			N (rpm)	19100	15900	10600	9500	6400	4800	3800	3200	2400	1900
Hardened Steel (45-55HRC)	High Speed	Doc=1.5-2D woc=0.03D	Vc (sfm)	200	200	200	230	230	230	230	230	230	230
			N (rpm)	63700	31800	21200	18300	12200	9200	7300	6100	4600	3700
			fz (in/t)	0.0003	0.001	0.001	0.001	0.002	0.003	0.003	0.004	0.004	0.005
	General	Doc=1.5-2D woc=0.06D	Vf (in/min)	70	70	80	100	140	140	140	130	110	110
			Vc (sfm)	60	80	80	100	100	100	100	100	100	100
			N (rpm)	19100	12700	8500	8000	5300	4000	3200	2700	2000	1600
Hardened Steel (55-65HRC)	High Speed	Doc=1-1.5D woc=0.02D	fz (in/t)	0.0002	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.004	0.005
			Vf (in/min)	50	50	50	70	100	100	90	90	80	80
			Vc (sfm)	150	150	150	180	180	180	180	180	180	180
	General	Doc=1-1.5D woc=0.04D	N (rpm)	47700	23900	15900	14300	9500	7200	5700	4800	3600	2900
			fz (in/t)	0.0002	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.004	0.005
			Vf (in/min)	10	10	20	20	30	30	30	30	20	20
Hardened Steel (65-70HRC)	High Speed	Doc=1-1.5D woc=0.02D	Vc (sfm)	60	60	60	80	80	80	60	50	80	80
			N (rpm)	19100	9500	6400	6400	4200	3200	2500	2100	1600	1300
			fz (in/t)	0.0002	0.0004	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.003
	General	Doc=1-1.5D woc=0.04D	Vf (in/min)	30	30	30	40	70	70	60	60	50	50
			Vc (sfm)	40	40	40	60	60	60	60	60	60	60
			N (rpm)	12700	6400	4200	4800	3200	2400	1900	1600	1200	1000
General	Doc=1-1.5D woc=0.04D	fz (in/t)	0.0002	0.0003	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	
		Vf (in/min)	10	10	10	10	20	20	20	20	20	20	
		Vc (sfm)	100	100	100	130	130	130	130	130	130	130	

MULTI FLUTE



D1: _____
 D2: _____ TOL: _____
 L1: _____
 L2: _____ TOL: _____
 L3- CHAMFER LENGTH: _____
 A- CHAMFER ANGLE: _____

NO. FLUTES: _____
 COOLANT FEED: YES NO
 SPIRAL: R/H L/H STR
 CUT: R/H L/H
 HELIX ANGLE: _____
 END CUT STYLE: _____

COATING: _____

MAT'L BEING CUT: _____

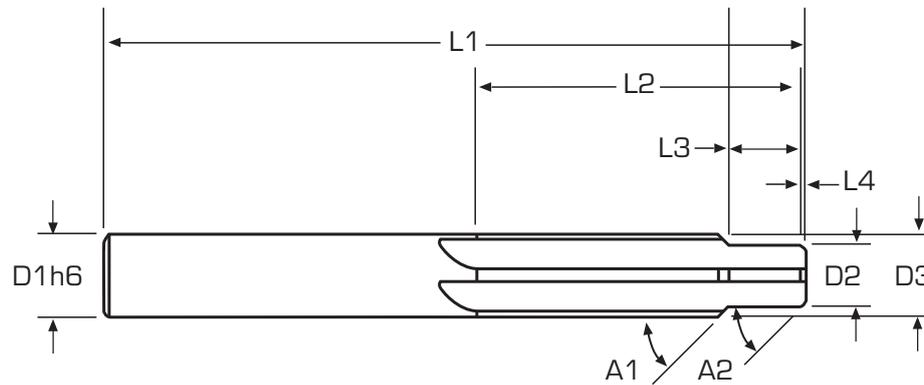
DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
 TOLERANCES ARE BEFORE ANY COATING IS APPLIED

PCT CARBIDE[®]

NOTES:

Appr. By:	Date:
Title:	REAMER
Customer:	Dwg. No.:

MULTI FLUTE



D1: _____
 D2: _____ TOL: _____
 D3: _____ TOL: _____
 L1: _____
 L2: _____ TOL: _____
 L3: _____ TOL: _____
 L4- CHAMFER LENGTH: _____
 A1- CHAMFER ANGLE: _____
 A2- STEP ANGLE: _____

NO. FLUTES: _____
 SPIRAL: R/H L/H STR
 CUT: R/H L/H
 HELIX ANGLE: _____
 END CUT STYLE: _____

COATING: _____
 MAT'L BEING CUT: _____

PCT CARBIDE[®]

DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
 TOLERANCES ARE BEFORE ANY COATING IS APPLIED

NOTES:

Appr. By:	Date:
Title: STEP REAMER	
Customer:	Dwg. No.:

MULTI FLUTE

**PCT CARBIDE IS PLEASED TO OFFER A COMPLETE LINEUP OF
 PRODUCTIVITY ENHANCING CUTTING TOOLS**

STARDUST

STARDUST SERIES

Sub-Micrograin Carbide Tools for High Performance
Machining of Alloy Steels and Plastics

www.pctcarbide.com

High Performance, High-Reliability, Two and three Flute Power Mills

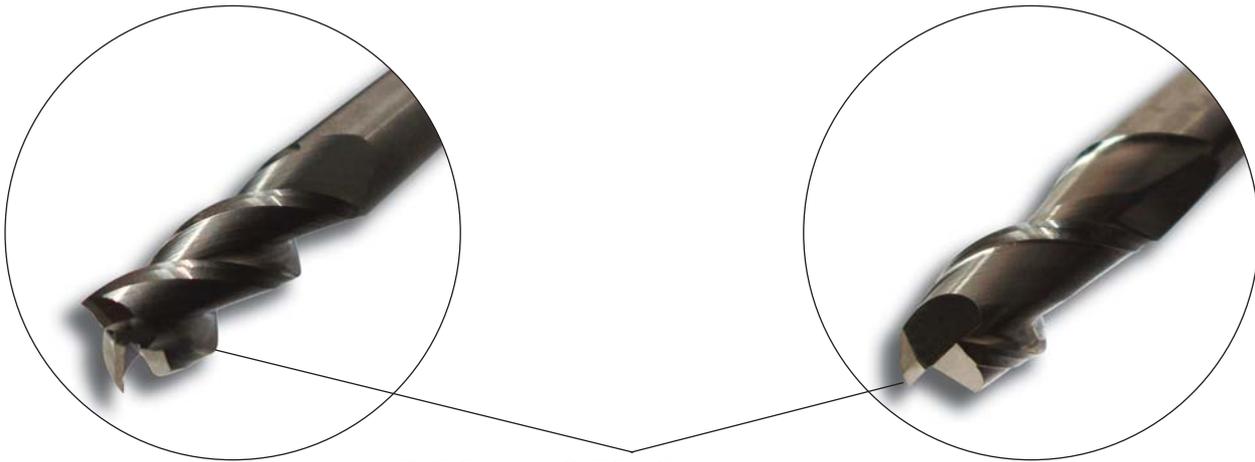
- Extremely rigid design and optional thin coating layer provide highly accurate finishes
- Improved flute design provides exceptional chip evacuation



INTRODUCTION

An innovation in end mill design. Stardust Series Power Mills Can Be effectively used on older equipment, but are designed to take full advantage of today's high-performance CNC machining centers.

The high helix angle of the stardust Power Mills reduces the possibility of chatter. The flute design ensures smooth chip evacuation, preventing chip re-cutting and edge damage and increasing tool life. The extremely rigid design and optional thin coating layer provide highly accurate finishes.



DLC Coating & TiCN Coating available

FEATURES

1. DLC Coating for High-Speed, High-Efficiency Machining

The high hardness and oxidation resistance of the revolutionary DLC Coating ensure excellent performance and long tool life. High heat resistance makes DLC Coated tools suitable for High Silicon Aluminium.

2. TiCN Coating for High-Efficiency Machining

Nano-crystal technology helps to reduce the friction-resistance of the coating while maintaining the hardness. This reduction in friction decreases tool wear also makes dry cutting possible.

STARDUST END MILLS 2 FLUTE

Part No.	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price 2 Flute	Price 2 Flute DCL
STD1250-SQ	Ø1/8"	1/2"	1 1/2"	Ø1/8"	\$5.74	\$9.19
STD1875-SQ	Ø3/16"	5/8"	2 1/2"	Ø3/16"	\$8.04	\$13.79
STD2500-SQ	Ø1/4"	3/4"	2 1/2"	Ø1/4"	\$10.34	\$18.39
STD3125-SQ	Ø5/16"	13/16"	2 1/2"	Ø5/16"	\$13.79	\$25.29
STD3750-SQ	Ø3/8"	7/8"	2 1/2"	Ø3/8"	\$17.24	\$28.74
STD5000-SQ	Ø1/2"	1"	3"	Ø1/2"	\$31.04	\$45.99
STD5000-SQL	Ø1/2"	2"	4"	Ø1/2"	\$41.39	\$56.34
STD6250-SQ	Ø5/8"	1 1/4"	3 1/2"	Ø5/8"	\$52.89	\$77.04
STD7500-SQ	Ø3/4"	1 1/2"	4"	Ø3/4"	\$86.24	\$120.74
STD1000-SQ	Ø1"	2"	4"	Ø1"	\$160.99	\$210.44

Note: TiCN coating available on request

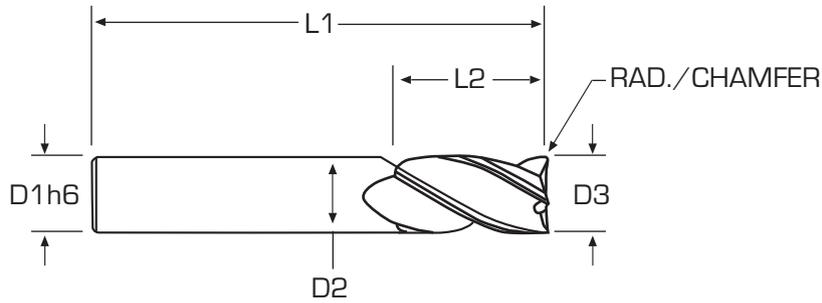
STARDUST END MILLS 3 FLUTE

Part No.	Diameter	L.O.C.	O.A.L.	Shank Diameter	Price 3 Flute	Price 3 Flute DLC
STD1250-SQ3	Ø1/8"	5/8"	2"	Ø1/8"	\$8.04	\$11.49
STD1875-SQ3	Ø3/16"	3/4"	2 1/2"	Ø3/16"	\$10.34	\$16.09
STD2500-SQ3	Ø1/4"	1"	2 1/2"	Ø1/4"	\$13.79	\$21.84
STD3125-SQ3	Ø5/16"	1"	2 1/2"	Ø5/16"	\$18.39	\$29.89
STD3750-SQ3	Ø3/8"	1"	2 1/2"	Ø3/8"	\$21.84	\$33.34
STD5000-SQ3	Ø1/2"	1 1/4"	3"	Ø1/2"	\$39.09	\$54.04
STD5000-SQL3	Ø1/2"	2"	4"	Ø1/2"	\$52.89	\$67.84
STD6250-SQ3	Ø5/8"	1 1/2"	3 1/2"	Ø5/8"	\$71.29	\$89.69
STD7500-SQ3	Ø3/4"	2"	4"	Ø3/4"	\$109.24	\$143.74
STD1000-SQ3	Ø1"	2"	4"	Ø1"	\$183.99	\$233.44

Note: TiCN coating available on request

4478 Chesswood Drive | Units #11 & #12 | Downsview | ON | M3J-2B9 | Canada

STARDUST



D1: _____

CHAMFER ANGLE: _____ LENGTH: _____ TOL: _____

D2: _____ TOL: _____

NO. OF FLUTES: _____

L1: _____

L2: _____ TOL: _____

RAD: _____ TOL: _____

COATING: _____

MAT'L BEING CUT: _____

PCT CARBIDE®

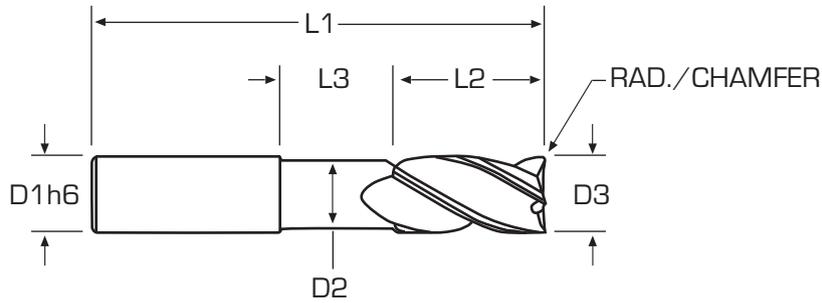
DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
TOLERANCES ARE BEFORE ANY COATING IS APPLIED

NOTES:

Appr. By: _____ Date: _____

Title: **END MILL WITH RADIUS**

Customer: _____ Dwg. No.: _____



D1: _____
 D2: _____ TOL: _____
 D3: _____ TOL: _____
 L1: _____
 L2: _____ TOL: _____
 L3: _____ TOL: _____
 RAD: _____ TOL: _____

CHAMFER ANGLE: _____ LENGTH: _____ TOL: _____
 NO. OF FLUTES: _____

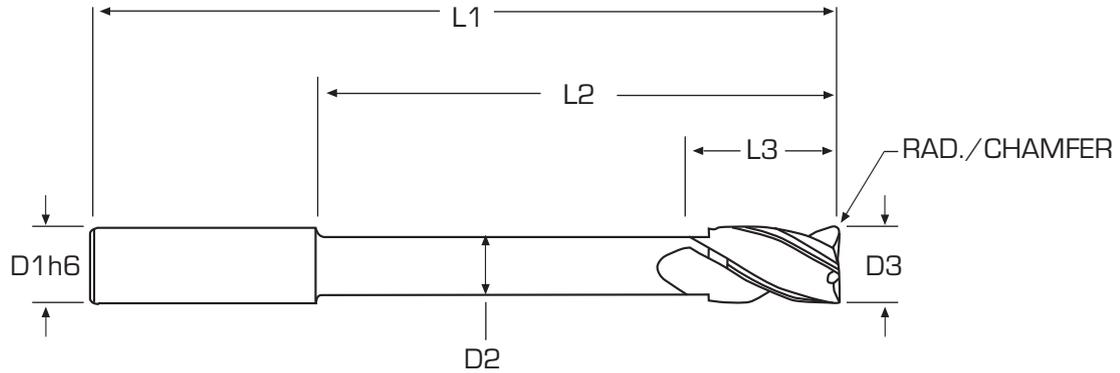
COATING: _____
 MAT'L BEING CUT: _____

PCT CARBIDE®

DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
 TOLERANCES ARE BEFORE ANY COATING IS APPLIED

NOTES:

Appr. By:	Date:
Title: END MILL WITH REACH	
Customer:	Dwg. No.:



D1: _____
 D2: _____ TOL: _____
 D3: _____ TOL: _____
 L1: _____
 L2: _____ TOL: _____
 L3: _____ TOL: _____
 RAD: _____ TOL: _____

CHAMFER ANGLE: _____ LENGTH: _____ TOL: _____
 NO. OF FLUTES: _____

COATING: _____

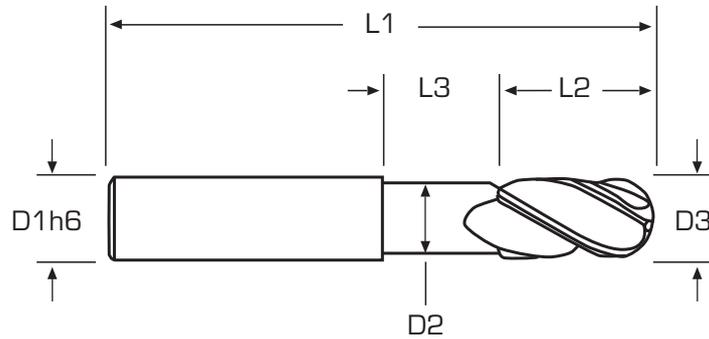
MAT'L BEING CUT: _____

PCT CARBIDE®

DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
 TOLERANCES ARE BEFORE ANY COATING IS APPLIED

NOTES:

Appr. By:	Date:
Title:	EXTENDED REACH END MILL
Customer:	Dwg. No.:



D1: _____
 D2: _____ TOL: _____
 D3: _____ TOL: _____
 L1: _____
 L2: _____ TOL: _____
 L3: _____ TOL: _____

NO. FLUTES: _____
 SPIRAL: R/H L/H STR
 CUT: R/H L/H
 HELIX ANGLE: _____

COATING: _____

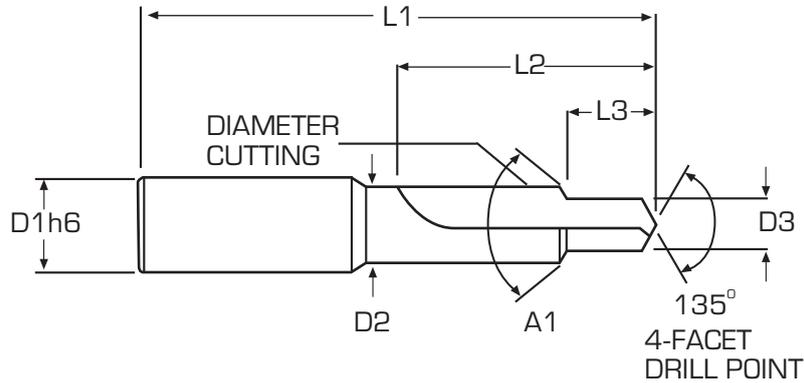
MAT'L BEING CUT: _____

PCT CARBIDE®

DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
 TOLERANCES ARE BEFORE ANY COATING IS APPLIED

NOTES:

Appr. By:	Date:
Title: BALL NOSE END MILL WITH NECK	
Customer:	Dwg. No.:



D1: _____
 D2: _____ TOL: _____
 D3: _____ TOL: _____
 L1: _____
 L2: _____ TOL: _____
 L3: _____ TOL: _____
 DRILLING DEPTH Lmax: _____
 A1: _____

COOLANT FEED: YES NO

COATING: _____

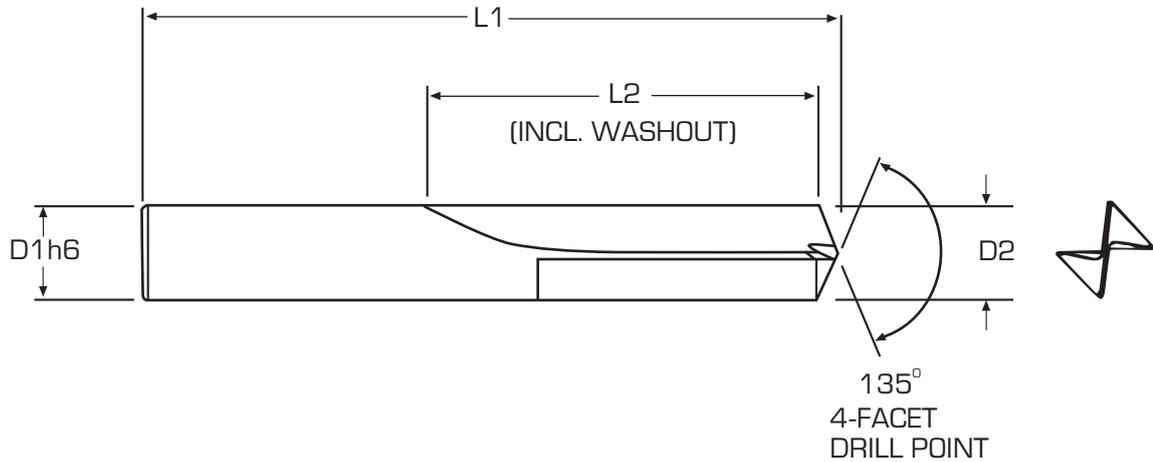
MAT'L BEING CUT: _____

PCT CARBIDE®

DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
 TOLERANCES ARE BEFORE ANY COATING IS APPLIED

NOTES:

Appr. By:	Date:
DOUBLE MARGIN STRAIGHT FLUTE STEP DRILL	
Customer:	Dwg. No.:



D1: _____

D2: _____ TOL: _____

L1: _____

L2: _____ TOL: _____

DRILLING DEPTH L_{max}: _____

COOLANT FEED: YES NO

COATING: _____

MAT'L BEING CUT: _____

PCT CARBIDE®

DIMENSIONS NOT SHOWN TO PCT CARBIDE STANDARDS
TOLERANCES ARE BEFORE ANY COATING IS APPLIED

Appr. By: _____ Date: _____

NOTES:

Title: **DOUBLE MARGIN STRAIGHT
FLUTE STEP DRILL**

Customer: _____ Dwg. No.: _____