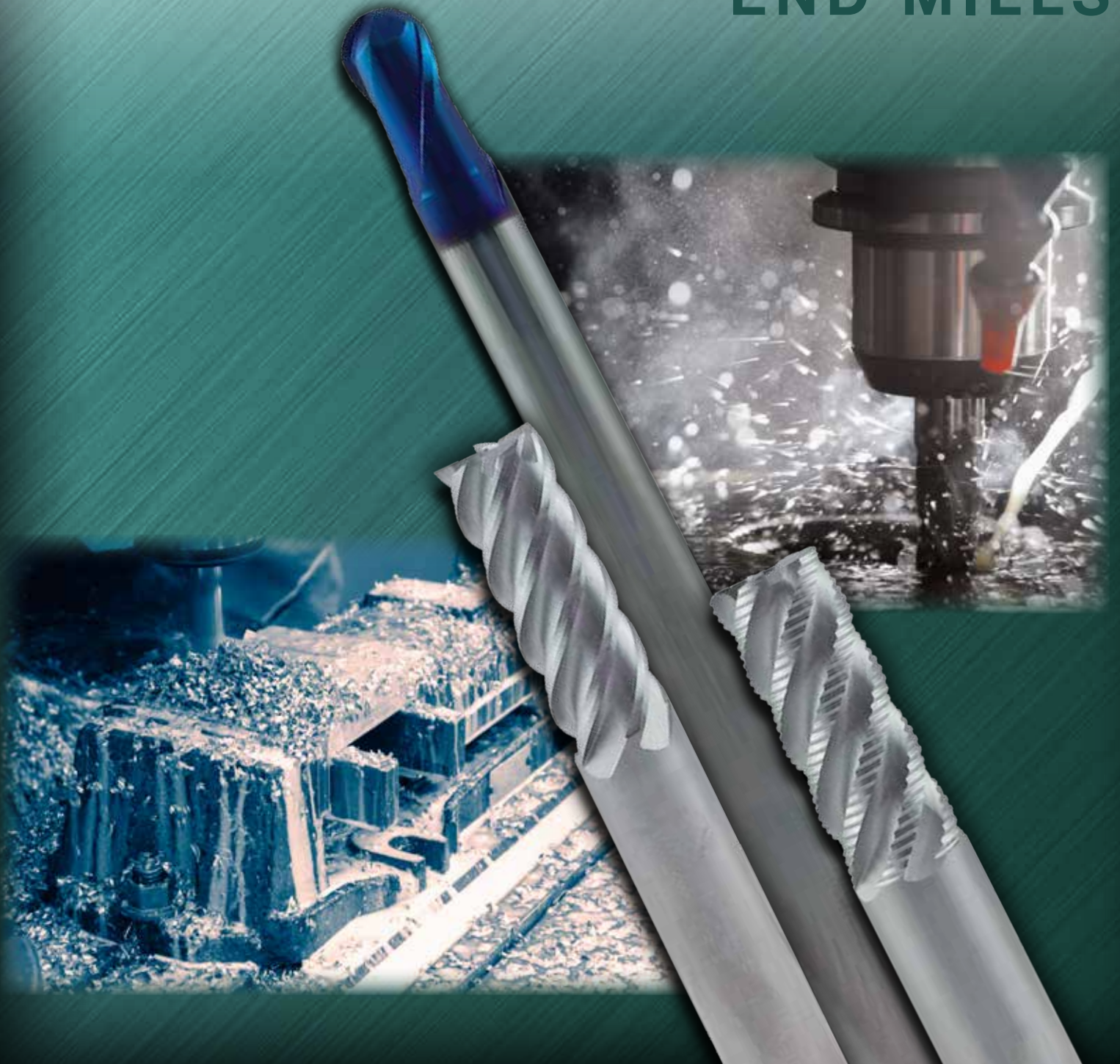


REGAL
CUTTING TOOLS

**MULTI-PURPOSE &
TRIPLE CROWN CARBIDE
END MILLS**



REGAL CUTTING TOOLS

CARBIDE END MILLS FOR ALL YOUR METALWORKING NEEDS

Regal Cutting Tools is pleased to introduce our completely new offering of carbide end mills. These end mills are specifically designed to meet the needs of the cost conscious metalworking customer with demanding applications. We offer both Multi-Purpose end mills for routine jobs and Triple Crown end mills for high production and extremely difficult to machine applications.

The tools are made from the highest quality micrograin carbide available and designed with cutting dimensions to suit various purposes for greater flexibility of choice. If required, a custom radius or coating can be added for a nominal charge.

Choose Regal Cutting Tools Multi-Purpose design for the majority of machining operations in various materials to achieve a high quality surface finish. These uncoated carbide tools will perform under normal conditions, providing excellent productivity at normal feed and speed conditions. Upon request, any of these tools can be coated to enhance production.

For high-production applications, we recommend the Triple Crown line of carbide end mills. Extensive research has resulted in the development of these high-performance tools. Regal uses closely controlled micrograin and nanograin carbide based on the toughness of the cutting requirements. The cutting action design, validated through years of testing, will provide the best combination of feed and speed rates to provide maximum productivity.

Triple Crown end mills, coated to withstand heat under the toughest conditions, are available in various flute conditions to meet the needs of your specific application. Many styles are available with radius blended during the manufacturing process, providing the best continuous cutting action.

Regal Cutting Tools is dedicated to serving customers through industrial distributors with a sales team available to assist in recommending the best application for these carbide end mills.

REGAL CUTTING TOOLS

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REGAL CUTTING TOOLS

GUIDE TO ICONS

END MILLS

Materials



Micrograin Carbide



Nanograin Carbide

Flutes



2 Flute



3 Flute



4 Flute



5 Flute



6 Flute



8 Flute

End Type



Single End



Center Cutting



Ball Nose

Shank Type



Flat Shank

Helix



20° Helix



30° Helix



45° Helix



Variable Helix

Coatings



Aluminum Titanium Nitride



Titanium Carbo-Nitride



Sapphire



Aluminum Chromium Nitride

DESIGNED FOR:



Carbon Steels
~HRc20



Alloy Steels
HRc20~30



Prehardened Steels
HRc30~40



Hardened Steels
HRc40~45



Stainless Steels



Titanium



Aluminum



Cast Iron

MULTI-PURPOSE

2-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

2
FLUTE

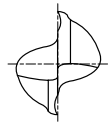
SINGLE
END

CC

30°
HELIX



- Designed for slotting, drilling, pocketing and general operation
- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Multi-Purpose

Single End - 2-Flute - Square End

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090238RM	1/32	1/8	5/64	1 1/2	9.90
090239RM	3/64	1/8	7/64	1 1/2	9.90
090240RM	1/16	1/8	3/16	1 1/2	9.40
090241RM	5/64	1/8	3/16	1 1/2	9.90
090242RM	3/32	1/8	3/8	1 1/2	9.40
090243RM	7/64	1/8	3/8	1 1/2	9.90
090244RM	1/8	1/8	1/2	1 1/2	9.03
090306RM	1/8	1/8	3/4	2 1/4	14.87
090326RM	1/8	1/8	1	3	17.73
090245RM	9/64	3/16	1/2	2	12.93
090246RM	5/32	3/16	9/16	2	12.37
090247RM	11/64	3/16	5/8	2	13.77
090248RM	3/16	3/16	5/8	2	13.77
090307RM	3/16	3/16	3/4	2 1/2	16.87
090339RM	3/16	3/16	1	4	23.83
090327RM	3/16	3/16	1 1/8	3	19.90
090249RM	13/64	1/4	5/8	2 1/2	16.27
090250RM	7/32	1/4	5/8	2 1/2	15.80
090251RM	15/64	1/4	3/4	2 1/2	17.83
090252RM	1/4	1/4	3/4	2 1/2	16.23
090308RM	1/4	1/4	1 1/8	3	20.90
090328RM	1/4	1/4	1 1/2	4	28.77
090253RM	9/32	5/16	3/4	2 1/2	20.77
090254RM	5/16	5/16	13/16	2 1/2	22.73
090309RM	5/16	5/16	1 1/8	3	30.10
090329RM	5/16	5/16	1 5/8	4	36.83
090255RM	3/8	3/8	1	2 1/2	31.57
090310RM	3/8	3/8	1 1/8	3	43.47
090330RM	3/8	3/8	1 3/4	4	52.17
090256RM	7/16	7/16	1	2 3/4	46.33
090311RM	7/16	7/16	2	4	54.43
090257RM	1/2	1/2	1	3	58.07
090312RM	1/2	1/2	2	4	84.30
090332RM	1/2	1/2	3	6	113.80
090258RM	5/8	5/8	1 1/4	3 1/2	113.80
090313RM	5/8	5/8	2 1/4	5	169.20
090333RM	5/8	5/8	3	6	203.20
090259RM	3/4	3/4	1 1/2	4	168.07
090314RM	3/4	3/4	2 1/4	5	219.27
090334RM	3/4	3/4	3	6	263.17
090260RM	1	1	1 1/2	4	297.83
090315RM	1	1	2 1/4	5	381.53
090335RM	1	1	3	6	527.53

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:		
CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS

MULTI-PURPOSE

2-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

2
FLUTE

SINGLE
END

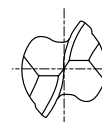
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BALL

30°
HELIX



- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Single End - 2-Flute - Ball Nose

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090282RM	1/8	1/8	1/2	1 1/2	13.67
090412RM	1/8	1/8	3/4	2 1/4	18.90
090432RM	1/8	1/8	1	3	22.60
090283RM	5/32	3/16	9/16	2	19.30
090284RM	3/16	3/16	5/8	2	18.53
090413RM	3/16	3/16	3/4	2 1/2	26.53
090445RM	3/16	3/16	1	4	26.33
090285RM	7/32	1/4	5/8	2 1/2	24.40
090286RM	1/4	1/4	3/4	2 1/2	24.53
090414RM	1/4	1/4	1 1/8	3	34.03
090434RM	1/4	1/4	1 1/2	4	40.87
090287RM	5/16	5/16	13/16	2 1/2	28.83
090415RM	5/16	5/16	1 1/8	3	38.23
090435RM	5/16	5/16	1 5/8	4	45.93
090288RM	3/8	3/8	1	2 1/2	39.13
090416RM	3/8	3/8	1 1/8	3	55.93
090436RM	3/8	3/8	1 3/4	4	67.10
090289RM	7/16	7/16	1	2 3/4	57.53
090417RM	7/16	7/16	2	4	82.30
090437RM	7/16	7/16	3	6	131.77
090290RM	1/2	1/2	1	3	66.80
090418RM	1/2	1/2	2	4	95.57
090438RM	1/2	1/2	3	6	128.97
090291RM	5/8	5/8	1 1/4	3 1/2	135.87
090419RM	5/8	5/8	2 1/4	5	191.93
090439RM	5/8	5/8	3	6	265.30
090292RM	3/4	3/4	1 1/2	4	200.47
090420RM	3/4	3/4	2 1/4	5	283.23
090440RM	3/4	3/4	3	6	339.87
090293RM	1	1	1 1/2	4	355.27
090421RM	1	1	2 1/4	5	501.63
090441RM	1	1	3	6	602.00

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS
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MULTI-PURPOSE

2-FLUTE METRIC END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

2
FLUTE

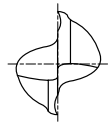
SINGLE
END

CC

30°
HELIX



- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Multi-Purpose

Single End - 2-Flute - Square End

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
098655RM	3.5	3.5	7	50	21.63
098656RM	4.0	4.0	8	50	21.63
098657RM	4.5	4.5	8	50	26.43
098658RM	5.0	5.0	10	50	26.43
098659RM	6.0	6.0	10	57	27.63
098660RM	7.0	7.0	13	60	30.10
098661RM	8.0	8.0	16	63	31.30
098662RM	9.0	9.0	16	67	45.57
098663RM	10.0	10.0	19	72	57.77
098665RM	12.0	12.0	22	83	66.17
098666RM	14.0	14.0	22	83	111.97
098667RM	16.0	16.0	26	92	127.57
098669RM	20.0	20.0	32	104	276.93

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:		
CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS

MULTI-PURPOSE

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

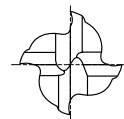
SINGLE
END

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30°
HELIX



- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Single End - 4-Flute - Square End

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090261RM	1/16	1/8	3/16	1 1/2	9.70
090262RM	5/64	1/8	3/16	1 1/2	10.27
090263RM	3/32	1/8	3/8	1 1/2	9.70
090265RM	1/8	1/8	1/2	1 1/2	9.23
090316RM	1/8	1/8	3/4	2 1/4	16.97
090340RM	1/8	1/8	1	3	17.73
090267RM	5/32	3/16	9/16	2	12.70
090269RM	3/16	3/16	5/8	2	14.53
090317RM	3/16	3/16	3/4	2 1/2	16.87
090341RM	3/16	3/16	1 1/8	3	19.70
090271RM	7/32	1/4	5/8	2 1/2	15.97
090273RM	1/4	1/4	3/4	2 1/2	17.93
090318RM	1/4	1/4	1 1/8	3	20.90
090342RM	1/4	1/4	1 1/2	4	27.27
090274RM	9/32	5/16	3/4	2 1/2	21.37
090275RM	5/16	5/16	13/16	2 1/2	22.27
090319RM	5/16	5/16	1 1/8	3	30.10
090343RM	5/16	5/16	1 5/8	4	37.27
090276RM	3/8	3/8	1	2 1/2	31.57
090320RM	3/8	3/8	1 1/8	3	43.47
090344RM	3/8	3/8	1 3/4	4	52.17
090277RM	7/16	7/16	1	2 3/4	46.33
090321RM	7/16	7/16	2	4	68.93
090345RM	7/16	7/16	3	6	110.30
090278RM	1/2	1/2	1	3	58.07
090322RM	1/2	1/2	2	4	84.30
090346RM	1/2	1/2	3	6	113.80
090279RM	5/8	5/8	1 1/4	3 1/2	113.80
090323RM	5/8	5/8	2 1/4	5	169.20
090347RM	5/8	5/8	3	6	203.20
090280RM	3/4	3/4	1 1/2	4	168.07
090324RM	3/4	3/4	2 1/4	5	219.27
090348RM	3/4	3/4	3	6	263.17
090281RM	1	1	1 1/2	4	297.83
090325RM	1	1	2 1/4	5	381.53
090349RM	1	1	3	6	527.53

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:

CARBON
STEELS

ALLOY
STEELS

PREHARDENED
STEELS

MULTI-PURPOSE

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

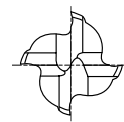
SINGLE
END

CC

30°
HELIX



- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Multi-Purpose

Single End - 4-Flute - Corner Radius

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Price
097895RM	1/8	1/8	1/2	1 1/2	0.015	15.47
097896RM	3/16	3/16	5/8	2	0.020	16.80
097904RM	3/16	3/16	5/8	2	0.030	16.80
097897RM	1/4	1/4	3/4	2 1/2	0.020	22.53
097905RM	1/4	1/4	3/4	2 1/2	0.030	22.53
097912RM	1/4	1/4	3/4	2 1/2	0.045	22.53
097898RM	5/16	5/16	13/16	2 1/2	0.020	34.57
097906RM	5/16	5/16	13/16	2 1/2	0.030	34.57
097913RM	5/16	5/16	13/16	2 1/2	0.045	34.57
097899RM	3/8	3/8	7/8	2 1/2	0.020	34.57
097907RM	3/8	3/8	7/8	2 1/2	0.030	46.33
097914RM	3/8	3/8	7/8	2 1/2	0.045	46.33
097900RM	1/2	1/2	1	3	0.020	79.67
097908RM	1/2	1/2	1	3	0.030	79.67
097915RM	1/2	1/2	1	3	0.045	79.67
097919RM	1/2	1/2	1	3	0.060	79.67
097901RM	5/8	5/8	1 1/4	3 1/2	0.020	96.57
097909RM	5/8	5/8	1 1/4	3 1/2	0.030	96.57
097916RM	5/8	5/8	1 1/4	3 1/2	0.045	96.57
097920RM	5/8	5/8	1 1/4	3 1/2	0.060	118.80
097923RM	5/8	5/8	1 1/4	3 1/2	0.090	121.23
097902RM	3/4	3/4	1 1/2	4	0.020	174.03
097910RM	3/4	3/4	1 1/2	4	0.030	174.03
097917RM	3/4	3/4	1 1/2	4	0.045	174.03
097921RM	3/4	3/4	1 1/2	4	0.060	174.03
097924RM	3/4	3/4	1 1/2	4	0.090	176.97
097903RM	1	1	1 1/2	4	0.020	315.47
097911RM	1	1	1 1/2	4	0.030	315.47
097918RM	1	1	1 1/2	4	0.045	315.47
097922RM	1	1	1 1/2	4	0.060	315.47
097925RM	1	1	1 1/2	4	0.090	318.17

Radius blended in flute design for chip evacuation and longer life.

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:		
CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS

MULTI-PURPOSE

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

SINGLE
END

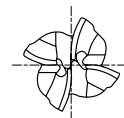
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BALL

45°
HELIX



- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Single End - 4-Flute - Ball Nose

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090294RM	1/8	1/8	1/2	1 1/2	13.67
090422RM	1/8	1/8	3/4	2 1/4	18.90
090446RM	1/8	1/8	1	3	22.60
090295RM	5/32	3/16	9/16	2	19.30
090296RM	3/16	3/16	5/8	2	18.07
090423RM	3/16	3/16	3/4	2 1/2	26.53
090447RM	3/16	3/16	1 1/8	3	31.93
090297RM	7/32	1/4	5/8	2 1/2	23.43
090298RM	1/4	1/4	3/4	2 1/2	24.53
090424RM	1/4	1/4	1 1/8	3	34.03
090448RM	1/4	1/4	1 1/2	4	40.87
090456RM	1/4	1/4	1 1/2	6	57.83
090299RM	5/16	5/16	13/16	2 1/2	28.83
090425RM	5/16	5/16	1 1/8	3	38.23
090449RM	5/16	5/16	1 5/8	4	45.93
090300RM	3/8	3/8	1	2 1/2	36.27
090426RM	3/8	3/8	1 1/8	3	55.93
090450RM	3/8	3/8	1 3/4	4	67.10
090302RM	1/2	1/2	1	3	65.13
090428RM	1/2	1/2	2	4	95.57
090452RM	1/2	1/2	3	6	128.97
090303RM	5/8	5/8	1 1/4	3 1/2	132.40
090429RM	5/8	5/8	2 1/4	5	191.93
090453RM	5/8	5/8	3	6	265.30
090304RM	3/4	3/4	1 1/2	4	195.43
090430RM	3/4	3/4	2 1/4	5	283.23
090454RM	3/4	3/4	3	6	339.87
090305RM	1	1	1 1/2	4	346.17
090431RM	1	1	2 1/4	5	501.63
090455RM	1	1	3	6	602.00

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS
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MULTI-PURPOSE

4-FLUTE METRIC END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

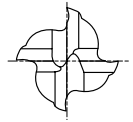
SINGLE
END

CC

45°
HELIX



- Suitable for cutting hardened and high alloy steels, steel casting, chill casting, malleable cast iron, CrNi steels, brass, copper, aluminum with a high percentage of silicon and abrasive plastics



Single End - 4-Flute - Square End

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
098676RM	3.5	3.5	10	50	21.63
098677RM	4.0	4.0	11	50	21.63
098678RM	4.5	4.5	11	50	26.43
098679RM	5.0	5.0	13	50	26.43
098680RM	6.0	6.0	13	57	27.63
098681RM	7.0	7.0	16	60	30.10
098682RM	8.0	8.0	19	63	31.30
098683RM	9.0	9.0	19	67	45.57
098684RM	10.0	10.0	22	72	57.77
098686RM	12.0	12.0	26	83	66.17
098687RM	14.0	14.0	26	83	111.97
098688RM	16.0	16.0	32	92	127.57
098690RM	20.0	20.0	38	104	276.93

Multi-Purpose

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:		
CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS

MULTI-PURPOSE

3-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

3
FLUTE

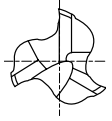
SINGLE
END

CC

45°
HELIX



- Designed to machine stainless steel, inconel, titanium and other hard-to-machine materials
- 3-flute design provides high stability and good chip removal in plunging and slotting operations
- Normal rake angle and 45° medium helix allow for a wide range of applications
- TiAlN coating recommended for maximum performance



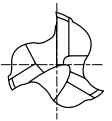
Single End - 3-Flute - Square End

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
099710RM	1/8	1/8	3/8	1 1/2	15.80
099711RM	3/16	3/16	9/16	2	21.27
099712RM	1/4	1/4	3/4	2 1/2	26.50
099713RM	5/16	5/16	13/16	2 1/2	31.70



- Designed to machine stainless steel, inconel, titanium and other hard-to-machine materials
- 3-flute design provides high stability and good chip removal in plunging and slotting operations
- Normal rake angle and 45° medium helix allow for a wide range of applications
- TiAlN coating recommended for maximum performance



Single End - 3-Flute - Flat - Square End

MG
CARBIDE

3
FLUTE

SINGLE
END

CC

FLAT

45°
HELIX

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
099714RM	3/8	3/8	7/8	2 1/2	46.93
099715RM	1/2	1/2	1	3	74.80
099716RM	5/8	5/8	1 1/4	3 1/2	136.07
099717RM	3/4	3/4	1 1/2	4	194.80
099718RM	1	1	1 1/2	4	366.93

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0005

www.regalcuttingtools.com

Designed for:

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS
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MULTI-PURPOSE

5-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

5
FLUTE

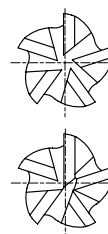
SINGLE
END

CC

45°
HELIX



- Designed to machine stainless steels, inconels and other alloys
- New design of stub length allows cutting at maximum speeds and feeds with minimum deflection
- 5-flute and 45° medium helix allow harmonic balance and smooth cutting



Multi-Purpose

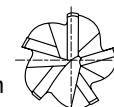
Single End - 5-Flute - Square End

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090462RM	1/8	1/8	1/2	1 1/2	12.90
090464RM	3/16	3/16	9/16	2	18.17
090466RM	1/4	1/4	3/4	2 1/2	23.30
090467RM	5/16	5/16	13/16	2 1/2	30.97
090468RM	3/8	3/8	1	2 1/2	45.43
090470RM	1/2	1/2	1 1/4	3	83.53
090471RM	5/8	5/8	1 5/8	3 1/2	169.80
090472RM	3/4	3/4	1 5/8	4	250.70
090474RM	1	1	2	4	391.50



- Designed to machine stainless steels, inconels and other alloys
- New design of stub length allows cutting at maximum speeds and feeds with minimum deflection
- 5-flute and 45° medium helix allow harmonic balance and smooth cutting



Single End - 5-Flute - Corner Radius

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Price
099720RM	1/4	1/4	3/4	2 1/2	0.030	30.80
099721RM	3/8	3/8	1	2 1/2	0.030	51.40
099722RM	3/8	3/8	1	2 1/2	0.060	51.40
099723RM	1/2	1/2	1 1/4	3	0.030	93.80
099724RM	1/2	1/2	1 1/4	3	0.060	93.80
099725RM	1/2	1/2	1 1/4	3	0.090	98.13
099726RM	5/8	5/8	1 5/8	3 1/2	0.030	190.17
099727RM	5/8	5/8	1 5/8	3 1/2	0.060	190.17
099728RM	5/8	5/8	1 5/8	3 1/2	0.090	198.63
099729RM	3/4	3/4	1 5/8	4	0.030	279.30
099730RM	3/4	3/4	1 5/8	4	0.060	279.30
099731RM	3/4	3/4	1 5/8	4	0.090	291.10
099732RM	3/4	3/4	1 5/8	4	0.125	302.87
099733RM	1	1	2	4	0.030	433.67
099734RM	1	1	2	4	0.060	433.67
099735RM	1	1	2	4	0.090	450.70

Radius blended in flute design for chip evacuation and longer life.

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:		
CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS

TRIPLE CROWN

2-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

2
FLUTE

SINGLE
END

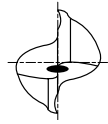
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AlTiN

30°
HELIX



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- Superior workpiece finishes
- Increased feed rate



Single End - 2-Flute - Square End - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
099520RM	1/16	1/16	3/16	1 1/2	24.53
099521RM	1/8	1/8	1/2	1 1/2	24.53
099530RM	1/8	1/8	3/4	2 1/4	32.57
099522RM	3/16	3/16	5/8	2	27.63
099531RM	3/16	3/16	3/4	2 1/2	34.73
099523RM	1/4	1/4	3/4	2 1/2	33.63
099532RM	1/4	1/4	1 1/8	3	44.37
099524RM	5/16	5/16	13/16	2 1/2	48.53
099533RM	5/16	5/16	1 1/8	3	64.13
099525RM	3/8	3/8	1	2 1/2	57.47
099534RM	3/8	3/8	1 1/8	3	68.83
099526RM	1/2	1/2	1	3	91.53
099535RM	1/2	1/2	2	4	120.80
099527RM	5/8	5/8	1 1/4	3 1/2	166.97
099536RM	5/8	5/8	2 1/4	5	259.20
099528RM	3/4	3/4	1 1/2	4	236.03
099537RM	3/4	3/4	2 1/4	5	366.50
099529RM	1	1	1 1/2	4	396.80
099538RM	1	1	2 1/4	5	508.80

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:

ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS
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TRIPLE CROWN

2-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

2
FLUTE

SINGLE
END

CC

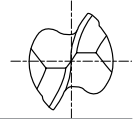
AlTiN

BALL

30°
HELIX



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials



Single End - 2-Flute - Ball Nose - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
099610RM	1/32	1/4	1/32	2 1/2	86.70
099611RM	1/16	1/4	1/16	2 1/2	86.70
099612RM	3/32	1/4	3/32	2 1/2	86.70
090056RM	1/8	1/8	1/8	2 3/4	54.13
099613RM	1/8	1/8	5/16	2 3/8	43.93
090057RM	3/16	3/16	3/16	3 1/8	57.57
099614RM	3/16	3/16	3/8	3 1/8	47.43
099615RM	1/4	1/4	1/2	3 1/2	66.80
099616RM	5/16	5/16	9/16	4	87.10
099617RM	3/8	3/8	3/4	4	101.63
099618RM	1/2	1/2	7/8	4 1/4	153.80
099619RM	5/8	5/8	1 1/4	5 1/2	333.00
099620RM	3/4	3/4	1 1/2	6 1/4	519.40
099621RM	1	1	2	7 1/8	831.10

Triple Crown

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:		
ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS

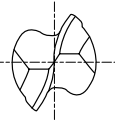
TRIPLE CROWN

2-FLUTE END MILLS

Solid Carbide - Center Cutting



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials



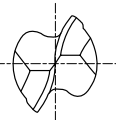
Single End - 2-Flute - Ball Nose - Extended Reach - AITiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Reach	Price
090058RM	1/4	1/4	1/4	3 1/8	7/8	71.03
090059RM	5/16	5/16	5/16	3 1/2	1 1/16	95.60
090060RM	3/8	3/8	3/8	4	1 1/4	113.23
090061RM	1/2	1/2	1/2	4 1/4	1 1/2	171.83
090062RM	5/8	5/8	5/8	5 1/2	2	370.90
090063RM	3/4	3/4	3/4	6 1/4	2 1/4	581.47
090064RM	1	1	1	7 1/8	3	868.97



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials



Single End - 2-Flute - Ball Nose - Extended Reach - Sapphire Coated



Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Reach	Price
090154RM	1/32	1/4	1/32	2	1/16	117.00
090155RM	1/16	1/4	1/16	2	1/8	109.97
090156RM	3/32	1/4	3/32	2	3/16	101.20
090157RM	1/8	1/4	1/8	2 1/2	1/4	101.07
090158RM	3/16	1/4	3/16	3	3/8	89.53
090159RM	1/4	1/4	1/4	3 1/2	1/2	89.53
090160RM	5/16	5/16	5/16	4	5/8	113.53
090161RM	3/8	3/8	3/8	4	3/4	132.17
090162RM	1/2	1/2	1/2	4 1/2	1	228.83

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:



TRIPLE CROWN

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

SINGLE
END

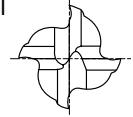
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AlTiN

30°
HELIX



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- 4-flute design provides improved workpiece finishes
- Increased production



Single End - 4-Flute - Square End - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
099590RM	1/16	1/16	3/16	1 1/2	24.53
090010RM	1/16	1/8	5/16	2	28.83
099591RM	1/8	1/8	1/2	1 1/2	24.53
090011RM	1/8	1/8	5/8	2	28.83
099600RM	1/8	1/8	3/4	2 1/4	32.57
099592RM	3/16	3/16	5/8	2	27.63
090012RM	3/16	3/16	3/4	2 1/8	32.53
099601RM	3/16	3/16	3/4	2 1/2	34.73
099593RM	1/4	1/4	3/4	2 1/2	33.63
090013RM	1/4	1/4	1	2 3/4	40.77
099602RM	1/4	1/4	1 1/8	3	44.37
099594RM	5/16	5/16	13/16	2 1/2	48.53
090014RM	5/16	5/16	1	2 3/4	58.80
099603RM	5/16	5/16	1 1/8	3	64.13
099595RM	3/8	3/8	1	2 1/2	57.47
090015RM	3/8	3/8	1	2 3/4	70.37
099604RM	3/8	3/8	1 1/8	3	68.83
099596RM	1/2	1/2	1	3	91.53
090016RM	1/2	1/2	1 1/2	3 1/2	119.10
099605RM	1/2	1/2	2	4	120.80
099597RM	5/8	5/8	1 1/4	3 1/2	166.93
090017RM	5/8	5/8	1 3/4	4	183.37
099606RM	5/8	5/8	2 1/4	5	259.20
099598RM	3/4	3/4	1 1/2	4	236.03
090018RM	3/4	3/4	2	4 1/2	338.30
099607RM	3/4	3/4	2 1/4	5	366.50
099599RM	1	1	1 1/2	4	396.80
090019RM	1	1	2	4 1/2	488.90
099608RM	1	1	2 1/4	5	508.80

Triple Crown

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:		
ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS

TRIPLE CROWN

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

SINGLE
END

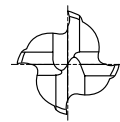
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AlTiN

30°
HELIX



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- Superior workpiece finishes
- Increased feed rate



Single End - 4-Flute - Corner Radius - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Price
099550RM	1/8	1/4	1/2	2 1/4	0.010	48.23
099551RM	1/8	1/4	1/2	2 1/4	0.020	46.07
099552RM	1/8	1/4	1/2	2 1/4	0.030	46.07
099553RM	3/16	1/4	5/8	2 1/2	0.010	43.83
099554RM	3/16	1/4	5/8	2 1/2	0.020	43.83
099555RM	3/16	1/4	5/8	2 1/2	0.030	43.83
099556RM	1/4	1/4	3/4	3	0.010	43.83
099557RM	1/4	1/4	3/4	3	0.020	43.83
099558RM	1/4	1/4	3/4	3	0.030	43.83
099570RM	1/4	1/4	1 1/8	3	0.020	53.20
099571RM	1/4	1/4	1 1/8	3	0.030	53.20
099559RM	5/16	5/16	13/16	3	0.020	63.50
099560RM	5/16	5/16	13/16	3	0.030	63.50
099572RM	5/16	5/16	1 1/8	3	0.020	77.00
099573RM	5/16	5/16	1 1/8	3	0.030	77.00
099561RM	3/8	3/8	1	3	0.030	68.23
099562RM	3/8	3/8	1	3	0.060	74.50
099563RM	3/8	3/8	1	3	0.090	74.50
099574RM	3/8	3/8	1 1/8	3	0.030	82.60
099575RM	3/8	3/8	1 1/8	3	0.060	90.90
099576RM	3/8	3/8	1 1/8	3	0.090	90.90
099564RM	1/2	1/2	1	4	0.030	119.67
099565RM	1/2	1/2	1	4	0.060	130.50
099566RM	1/2	1/2	1	4	0.090	130.50
099577RM	1/2	1/2	2	4	0.030	144.97
099578RM	1/2	1/2	2	4	0.060	159.60
099579RM	1/2	1/2	2	4	0.090	159.60

Radius blended in flute design for chip evacuation and longer life.

Triple Crown

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com



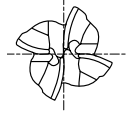
TRIPLE CROWN

4-FLUTE END MILLS

Solid Carbide - Center Cutting



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- 4-flute design provides improved workpiece finishes
- Increased production



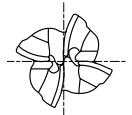
Single End - 4-Flute - Ball Nose - AITiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090065RM	1/8	1/8	1/8	2 3/4	50.73
099622RM	1/8	1/8	5/16	2 3/8	50.73
090066RM	3/16	3/16	3/16	3 1/8	54.80
099623RM	3/16	3/16	3/8	3 1/8	54.80
099624RM	1/4	1/4	1/2	3 1/2	77.10
099625RM	5/16	5/16	9/16	4	100.33
099626RM	3/8	3/8	3/4	4	117.40
099627RM	1/2	1/2	7/8	4 1/4	177.43
099628RM	5/8	5/8	1 1/4	5 1/2	375.70
099629RM	3/4	3/4	1 1/2	6 1/4	625.50
099630RM	1	1	2	7 1/8	1,000.97



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- 4-flute design provides improved workpiece finishes
- Increased production



Single End - 4-Flute - Ball Nose - Extended Reach - AITiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Reach	Price
090067RM	1/4	1/4	1/4	3 1/8	7/8	77.10
090068RM	5/16	5/16	5/16	3 1/2	1 1/16	100.33
090069RM	3/8	3/8	3/8	4	1 1/4	117.40
090070RM	1/2	1/2	1/2	4 1/4	1 1/2	177.43
090071RM	5/8	5/8	5/8	5 1/2	2	375.70
090072RM	3/4	3/4	3/4	6 1/4	2 1/4	625.50
090073RM	1	1	1	7 1/8	3	1,000.97

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:		
ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS

TRIPLE CROWN

4, 6 & 8-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4+
FLUTE

SINGLE
END

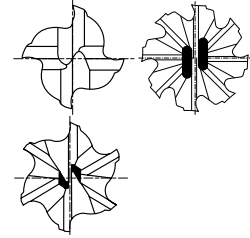
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AlTiN

45°
HELIX



- Designed to machine hardened materials
- High-speed cutting and finish milling with high feed rates
- Superior workpiece finishes and wear resistance
- Suitable for dry milling



Single End - 4, 6 & 8-Flute - High Helix - Square End - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	No. of Flutes	Price
097850RM	1/8	1/8	1/2	1 1/2	4	34.43
097851RM	3/16	3/16	5/8	2	4	45.33
099650RM	1/4	1/4	1/2	2 1/4	6	66.20
097852RM	1/4	1/4	3/4	2 1/2	6	58.90
099657RM	1/4	1/4	1	2 3/4	6	83.53
099651RM	5/16	5/16	3/4	2 1/2	6	83.77
097853RM	5/16	5/16	13/16	2 1/2	6	74.23
099658RM	5/16	5/16	1 1/2	3 5/8	6	113.77
099652RM	3/8	3/8	7/8	2 7/8	6	125.47
097854RM	3/8	3/8	1	2 1/2	6	95.33
099659RM	3/8	3/8	1 3/4	4	6	170.33
097856RM	1/2	1/2	1	3	6	131.07
099653RM	1/2	1/2	1	3 1/4	6	170.50
099660RM	1/2	1/2	2 3/16	4 3/8	6	244.53
097858RM	5/8	5/8	1 1/4	3 1/2	6	198.73
099654RM	5/8	5/8	1 1/4	3 5/8	6	286.80
099661RM	5/8	5/8	2 5/8	5 1/8	6	425.40
097859RM	3/4	3/4	1 1/2	4	6	295.27
099655RM	3/4	3/4	1 1/2	4 1/8	8	421.40
099662RM	3/4	3/4	2 1/4	5	8	542.23
099663RM	3/4	3/4	3 1/4	6	8	596.17
099664RM	3/4	3/4	4 1/8	7	8	683.37
097860RM	7/8	7/8	1 1/2	4	6	447.77
097861RM	1	1	1 1/2	4	8	452.53
099656RM	1	1	1 3/4	4 1/4	8	743.73
099665RM	1	1	4 1/8	7	8	1,054.80

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:



TRIPLE CROWN

6 & 8-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

6+
FLUTE

SINGLE
END

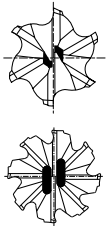
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AlTiN

45°
HELIX



- Designed to machine high-hardened materials
- High-speed cutting and finish milling with high feed rates
- Superior workpiece finishes and wear resistance
- Suitable for dry milling
- Corner protection safeguards against chipping



Single End - 6 & 8-Flute - Corner Radius - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	No. of Flutes	Radius	Price
099670RM	1/4	1/4	1/2	2 1/4	6	0.020	72.63
099671RM	5/16	5/16	3/4	2 1/2	6	0.020	92.17
099672RM	3/8	3/8	7/8	2 7/8	6	0.020	138.00
099673RM	3/8	3/8	7/8	2 7/8	6	0.030	138.00
099674RM	1/2	1/2	1	3 1/4	6	0.020	187.60
099675RM	1/2	1/2	1	3 1/4	6	0.030	187.60
099676RM	5/8	5/8	1 1/4	3 5/8	6	0.030	315.50
099677RM	5/8	5/8	1 1/4	3 5/8	6	0.060	344.20
099678RM	3/4	3/4	1 1/2	4 1/8	8	0.030	463.60
099679RM	3/4	3/4	1 1/2	4 1/8	8	0.060	505.70
099680RM	3/4	3/4	1 1/2	4 1/8	8	0.090	526.83

Radius blended in flute design for chip evacuation and longer life.

Triple Crown

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:		
ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS

TRIPLE CROWN VARIABLE HELIX V-MILL

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

SINGLE
END

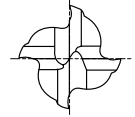
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AlTiN

V
HELIX



- Special flute geometry eliminates vibrations
- Designed for mild steels, stainless steel, cast iron, tool steel, titanium alloys, prehardened steel and low hardness materials
- Excellent workpiece finishes
- Higher speeds and metal removal rates with deeper cuts



Single End - 4-Flute - Square End - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090163RM	1/8	1/8	3/8	1 1/2	21.80
090164RM	5/32	3/16	7/16	2	30.27
090165RM	3/16	3/16	7/16	2	28.63
090166RM	7/32	1/4	7/16	2 1/2	38.13
090167RM	1/4	1/4	1/2	2 1/2	34.97
090168RM	9/32	5/16	5/8	2 1/2	48.00
090169RM	5/16	5/16	13/16	2 1/2	48.00
090170RM	11/32	3/8	13/16	2 1/2	57.70
090171RM	3/8	3/8	7/8	2 1/2	57.70
090175RM	1/2	1/2	1	3	94.40
090177RM	5/8	5/8	1 1/4	3 1/2	176.97
090178RM	3/4	3/4	1 1/2	4	260.77
090179RM	1	1	1 1/2	4	421.77

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	h6

www.regalcuttingtools.com

Designed for:

CARBON STEELS	STAINLESS STEELS	TITANIUM
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TRIPLE CROWN VARIABLE HELIX V-MILL

4-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4
FLUTE

SINGLE
END

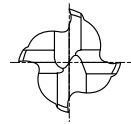
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AlTiN

V
HELIX



- Special flute geometry eliminates vibrations
- Designed for mild steels, stainless steel, cast iron, tool steel, titanium alloys, prehardened steel and low hardness materials
- Excellent workpiece finishes
- Higher speeds and metal removal rates with deeper cuts



Single End - 4-Flute - Corner Radius - AlTiN Coated

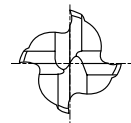
Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Price
090193RM	1/8	1/8	3/8	1 1/2	0.015	22.90
090194RM	3/16	3/16	7/16	2	0.015	30.13
090195RM	1/4	1/4	1/2	2 1/2	0.020	36.80
090196RM	5/16	5/16	13/16	2 1/2	0.020	50.60
090197RM	3/8	3/8	7/8	2 1/2	0.020	60.80
090198RM	7/16	7/16	1	2 3/4	0.020	82.83
090199RM	1/2	1/2	1	3	0.030	99.40
090201RM	5/8	5/8	1 1/4	3 1/2	0.040	186.37
090202RM	3/4	3/4	1 1/2	4	0.040	274.37
090203RM	1	1	1 1/2	4	0.040	431.10

Radius blended in flute design for chip evacuation and longer life.



- Special flute geometry eliminates vibrations
- Designed for mild steels, stainless steel, cast iron, tool steel, titanium alloys, prehardened steel and low hardness materials
- Excellent workpiece finishes
- Higher speeds and metal removal rates with deeper cuts



Single End - 4-Flute - Flat - Corner Radius - AlTiN Coated

MG
CARBIDE

4
FLUTE

SINGLE
END

CC

AlTiN

FLAT

V
HELIX

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Price
090206RM	3/8	3/8	7/8	2 1/2	0.020	63.23
090208RM	1/2	1/2	1	3	0.030	103.37
090210RM	5/8	5/8	1 1/4	3 1/2	0.040	193.83
090211RM	3/4	3/4	1 1/2	4	0.040	285.33
090212RM	1	1	1 1/2	4	0.040	448.37

Radius blended in flute design for chip evacuation and longer life.

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	h6

www.regalcuttingtools.com

Designed for:		
CARBON STEELS	STAINLESS STEELS	TITANIUM

TRIPLE CROWN RIB PROCESSING

2-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

2
FLUTE

SINGLE
END

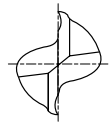
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AlTiN

30°
HELIX



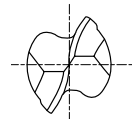
- Designed for 3-D milling, deep slotting and pocketing
- For depths of 6-to-10 times cutting diameter
- For machining carbon steel, alloy steel, tool steel, die steel and mold steel
- Suitable for high-speed cutting and high-precision machining
- Reinforced shank provides greater stability and rigidity
- Long neck design allows deep machining near walls



Single End - 2-Flute - Square End - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090081RM	1/32	1/8	3/64	1 7/8	33.07
090082RM	1/32	1/8	3/64	1 7/8	33.07
090083RM	3/64	1/8	1/16	1 7/8	29.90
090084RM	3/64	1/8	1/16	1 7/8	29.90
090085RM	3/64	1/8	1/16	1 7/8	29.90
090086RM	1/16	1/8	3/32	1 7/8	29.90
090087RM	1/16	1/8	3/32	1 7/8	29.90
090088RM	1/16	1/8	3/32	1 7/8	29.90
090089RM	1/16	1/8	3/32	1 7/8	29.90
090090RM	5/64	1/8	1/8	1 7/8	29.90
090091RM	5/64	1/8	1/8	1 7/8	29.90
090092RM	3/32	1/8	9/64	1 7/8	29.90
090093RM	3/32	1/8	9/64	1 7/8	29.90
090094RM	1/8	1/4	3/16	2 1/8	39.20
090095RM	1/8	1/4	3/16	2 1/8	39.20



Single End - 2-Flute - Ball Nose - AlTiN Coated

MG
CARBIDE

2
FLUTE

SINGLE
END

CC

AlTiN

BALL

30°
HELIX

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090096RM	1/32	1/8	3/64	1 7/8	56.93
090097RM	1/32	1/8	3/64	1 7/8	56.93
090098RM	3/64	1/8	1/16	1 7/8	50.13
090099RM	3/64	1/8	1/16	1 7/8	50.13
090100RM	3/64	1/8	1/16	1 7/8	50.13
090101RM	1/16	1/8	3/32	1 7/8	50.13
090102RM	1/16	1/8	3/32	1 7/8	50.13
090103RM	1/16	1/8	3/32	1 7/8	50.13
090104RM	5/64	1/8	1/8	1 7/8	50.13
090105RM	5/64	1/8	1/8	1 7/8	50.13
090107RM	3/32	1/8	9/64	1 7/8	50.13
090108RM	3/32	1/8	9/64	1 7/8	50.13
090109RM	1/8	1/4	3/16	2 1/8	68.03
090110RM	1/8	1/4	3/16	2 1/8	68.03

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0006	0 ~ - .0003

www.regalcuttingtools.com

Designed for:

ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS
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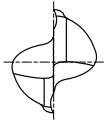
TRIPLE CROWN ALU-MILL

2 & 3-FLUTE END MILLS

Solid Carbide - Center Cutting



- Excellent cutting qualities on stainless steel, aluminum and copper
- Increased tool life and higher cutting accuracy
- Provides excellent surface finishes



Single End - 2-Flute - Corner Radius - Extended Reach - AlTiN Coated

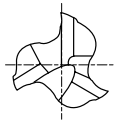
Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Reach	Price
090213RM	5/32	1/4	5/32	1 7/8	0.012	5/16	45.47
090214RM	1/4	1/4	9/32	2 1/4	0.020	11/16	45.47
090215RM	5/16	5/16	5/16	2 5/8	0.024	1 1/16	57.17
090216RM	3/8	3/8	7/16	3	0.031	1 1/4	68.37
090217RM	1/2	1/2	1/2	3 3/8	0.040	1 1/4	128.00
090218RM	5/8	5/8	5/8	3 7/8	0.051	1 1/2	204.93
090219RM	3/4	3/4	7/8	3 7/8	0.063	1 1/2	284.40

Radius blended in flute design for chip evacuation and longer life.

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

- High velocity milling of aluminum and other non-ferrous materials
- 3-flute and 45° helix allow harmonic balance at high-speed conditions and smooth cutting
- Tightly controlled and improved surface roughness-cylindrical margin
- Maximum metal removal rate
- Superior chip evacuation
- Provides excellent surface finishes



Single End - 3-Flute - Square End



Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
099740RM	3/16	3/16	9/16	2	29.73
099741RM	1/4	1/4	5/8	2 1/2	33.47
099748RM	1/4	1/4	1 1/4	3 1/4	54.50
099742RM	5/16	5/16	5/8	2 1/2	37.23
099749RM	5/16	5/16	1 1/4	3 1/2	70.57
099743RM	3/8	3/8	1	2 1/2	43.47
099750RM	3/8	3/8	1 1/2	3 1/2	88.43
099744RM	1/2	1/2	1 1/4	3	80.90
099751RM	1/2	1/2	2	4	123.87
099745RM	5/8	5/8	1 5/8	3 1/2	174.43
099752RM	5/8	5/8	2 1/2	5	256.83
099746RM	3/4	3/4	1 5/8	4	215.97
099753RM	3/4	3/4	3 1/4	6	290.93
099747RM	1	1	2	5	512.57
099754RM	1	1	3 1/4	6	558.53

Tolerance	
Mill Diameter	Shank Diameter
0 ~ - .0005	0 ~ - .0003

www.regalcuttingtools.com

Designed for:
ALUMINUM

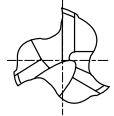
TRIPLE CROWN ALU-MILL

3-FLUTE END MILLS

Solid Carbide - Center Cutting



- High velocity milling of aluminum and other non-ferrous materials
- 3-flute and 45° helix allow harmonic balance at high-speed conditions and smooth cutting
- Tightly controlled and improved surface roughness-cylindrical margin
- Maximum metal removal rate
- Superior chip evacuation
- Provides excellent surface finishes



Single End - 3-Flute - Corner Radius

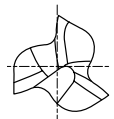
Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Radius	Price
099760RM	1/2	1/2	1 1/4	3	0.060	138.27
099764RM	1/2	1/2	1 1/4	3	0.120	91.77
099768RM	1/2	1/2	2	4	0.060	138.27
099772RM	1/2	1/2	2	4	0.120	138.27
099761RM	5/8	5/8	1 5/8	3 1/2	0.060	282.17
099765RM	5/8	5/8	1 5/8	3 1/2	0.120	191.97
099769RM	5/8	5/8	2 1/2	5	0.060	274.27
099773RM	5/8	5/8	2 1/2	5	0.120	274.27
099762RM	3/4	3/4	1 5/8	4	0.060	240.70
099766RM	3/4	3/4	1 5/8	4	0.120	240.67
099770RM	3/4	3/4	3 1/4	6	0.060	313.23
099774RM	3/4	3/4	3 1/4	6	0.120	313.23
099763RM	1	1	2	5	0.060	551.07
099767RM	1	1	2	5	0.120	551.07
099771RM	1	1	3 1/4	6	0.060	606.27
099775RM	1	1	3 1/4	6	0.120	606.27

Radius blended in flute design for chip evacuation and longer life.



- Excellent cutting qualities on stainless steel, aluminum and copper
- Increased tool life and higher cutting accuracy
- Provides excellent surface finishes



Single End - 3-Flute - Ball Nose - TiCN Coated



Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
090220RM	1/8	1/8	1/2	1 1/2	37.07
090221RM	3/16	3/16	5/8	2	39.73
090222RM	1/4	1/4	3/4	2 1/2	48.23
090223RM	5/16	5/16	13/16	2 1/2	55.23
090224RM	3/8	3/8	1	2 1/2	69.87
090225RM	1/2	1/2	1	3	116.53
090226RM	5/8	5/8	1 1/4	3 1/2	240.57
090227RM	3/4	3/4	1 1/2	4	308.80
090228RM	1	1	1 1/2	4	574.37

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0012	0 ~ - .0003

www.regalcuttingtools.com

Designed for:
ALUMINUM

TRIPLE CROWN ROUGHING

3, 4 & 5-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

3+
FLUTE

SINGLE
END

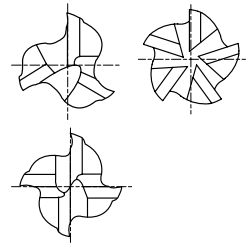
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AlTiN

20°
HELIX



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- High velocity milling of hardened steels
- For dry and wet milling
- Fast chip ejection



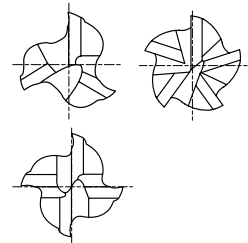
Single End - 3, 4 & 5-Flute - Coarse Pitch 20° - AlTiN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	No. of Flutes	Price
090074RM	1/4	1/4	5/16	2 1/2	3	47.10
090075RM	5/16	5/16	3/8	2 1/2	3	65.63
090076RM	3/8	3/8	9/16	2 1/2	3	77.63
090077RM	1/2	1/2	5/8	3	4	123.83
090078RM	5/8	5/8	7/8	4	4	225.60
090079RM	3/4	3/4	1	4 3/8	4	319.10
090080RM	1	1	1	5	5	495.20



- Designed to machine tool steel, alloy steel, mold steel and other high-hardened materials
- High velocity milling of hardened steels
- For dry and wet milling
- Fast chip ejection



Single End - 3, 4 & 5-Flute - Fine Pitch 20°

MG
CARBIDE

3+
FLUTE

SINGLE
END

CC

20°
HELIX

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	No. of Flutes	Price
099500RM	1/4	1/4	5/16	2 1/8	3	25.30
099506RM	1/4	1/4	3/4	2 1/2	3	42.90
099501RM	3/8	3/8	9/16	2 1/2	3	43.47
099507RM	3/8	3/8	7/8	2 1/2	3	70.23
099502RM	1/2	1/2	5/8	3	4	81.10
099508RM	1/2	1/2	1	3	4	87.77
099503RM	5/8	5/8	7/8	3 1/2	4	136.17
099509RM	5/8	5/8	1 1/4	3 1/2	4	139.07
099504RM	3/4	3/4	1	3 3/4	4	205.50
099510RM	3/4	3/4	1 5/8	4	4	227.57
099505RM	1	1	1	4	5	345.03
099511RM	1	1	1 3/4	4	5	352.63

Tolerance

Mill Diameter		Shank Diameter	
1/4 ~ 3/8	0 ~ - .0022	0 ~ - .0003	
1/2 ~ 5/8	0 ~ - .0027	0 ~ - .0003	
3/4 ~ 1	0 ~ - .0033	0 ~ - .0003	



TRIPLE CROWN ROUGHING

4 & 5-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

4+
FLUTE

SINGLE
END

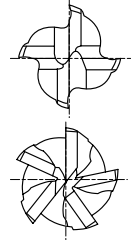
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AlCrN

V
HELIX



- Unique flute design for excellent chip removal and vibration reduction
- Optimal roughing tooth profile to reduce cutting forces
- Special tool geometry for high feed rate and heavy cutting
- Strong end tooth design for plunge and pocket milling
- Custom engineered coating provides long tool life and excellent chip evacuation



Single End - 4 & 5-Flute - Fine Pitch - Corner Radius - AlCrN Coated

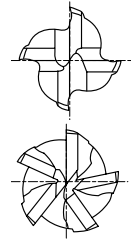
Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	No. of Flutes	Radius	Price
099700RM	1/4	1/4	5/8	2 1/2	4	0.020	57.10
099701RM	3/8	3/8	7/8	2 1/2	4	0.020	92.23
099702RM	1/2	1/2	1	3	4	0.020	142.27
099703RM	5/8	5/8	1 1/4	3 1/2	5	0.040	255.17
099704RM	3/4	3/4	1 5/8	4	5	0.040	360.30
099705RM	1	1	1 3/4	4 1/4	5	0.040	544.00

Radius blended in flute design for chip evacuation and longer life.



- Unique flute design for excellent chip removal and vibration reduction
- Optimal roughing tooth profile to reduce cutting forces
- Special tool geometry for high feed rate and heavy cutting
- Strong end tooth design for plunge and pocket milling
- Custom engineered coating provides long tool life and excellent chip evacuation



Single End - 4 & 5-Flute - Fine Pitch - Corner Radius - Extended Reach - AlCrN Coated

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	No. of Flutes	Radius	Reach	Price
099690RM	1/4	1/4	3/8	2 1/2	4	0.020	7/8	53.77
099691RM	3/8	3/8	1/2	2 3/4	4	0.020	1	93.43
099692RM	1/2	1/2	5/8	3 1/4	4	0.020	1 1/4	151.87
099693RM	5/8	5/8	3/4	4	5	0.040	2	233.47
099694RM	3/4	3/4	1	4 1/2	5	0.040	2 3/8	420.40

Radius blended in flute design for chip evacuation and longer life.

Tolerance

Mill Diameter	Shank Diameter
0 ~ - .0020	h6

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Designed for:

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS	CAST IRON
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TRIPLE CROWN ROUGHING

5-FLUTE END MILLS

Solid Carbide - Center Cutting

MG
CARBIDE

5
FLUTE

SINGLE
END

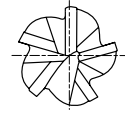
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FLAT

45°
HELIX



- Increased metal removal at faster rates
- Free cutting action
- Decreased horsepower requirements



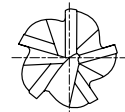
Single End - 5-Flute - Flat - Fine Pitch 45°

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
098600RM	3/8	3/8	1	2 1/2	82.27
098601RM	1/2	1/2	1 1/4	3	128.50
098602RM	5/8	5/8	1 5/8	3 1/2	260.23
098603RM	3/4	3/4	1 5/8	4	321.47
098604RM	1	1	2	4	471.90



- Increased metal removal at faster rates
- Free cutting action
- Decreased horsepower requirements



Single End - 5-Flute - Flat - Fine Pitch 45° - TiCN Coated

MG
CARBIDE

5
FLUTE

SINGLE
END

CC

TICN

FLAT

45°
HELIX

Packaging: All (1)

EDP #	Diameter of Mill	Diameter of Shank	Length of Cut	Overall Length	Price
098600RM85	3/8	3/8	1	2 1/2	90.50
098601RM85	1/2	1/2	1 1/4	3	141.33
098602RM85	5/8	5/8	1 5/8	3 1/2	283.60
098603RM85	3/4	3/4	1 5/8	4	332.37
098604RM85	1	1	2	4	488.30

Tolerance		
	Mill Diameter	Shank Diameter
~ 3/8	0 ~ - .0022	0 ~ - .0003
1/2 ~ 5/8	0 ~ - .0027	0 ~ - .0003
3/4 ~ 1	0 ~ - .0033	0 ~ - .0003

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TRIPLE CROWN SERIES

CARBIDE END MILL SPEED & FEED CHARTS

Multi-Purpose Carbide End Mills

Recommended Chip Loads Per Tooth

Material	SFM	1/8"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	1"
Grey Cast Iron	200	.0005	.0015	.0020	.0020	.0025	.0030	.0030	.0040	.0050
Soft Steels (>25 Rc)	150	.0005	.0010	.0012	.0014	.0020	.0020	.0025	.0030	.0035
Alloy Steels (4140)	200	.0004	.0006	.0008	.0010	.0010	.0010	.0015	.0020	.0030
Tool Steels (A2, D2)	150	.0004	.0006	.0008	.0010	.0010	.0010	.0015	.0020	.0020
Die Steels (H13, P20)	100	.0004	.0006	.0008	.0010	.0010	.0010	.0015	.0020	.0020
Stainless Steel (303)	100	.0002	.0005	.0007	.0012	.0018	.0020	.0025	.0030	.00353
Difficult Stainless Steel	80	.0001	.0003	.0005	.0005	.0005	.0015	.0020	.0025	.0030
High Temp Alloys	80	.0005	.0010	.0010	.0012	.0014	.0015	.0015	.0020	.0030
Titanium	50	.0005	.0005	.0008	.0010	.0010	.0014	.0020	.0030	.0035
Aluminum	600	.0008	.0015	.0015	.0020	.0020	.0030	.0030	.0040	.0045

Triple Crown Coated Carbide End Mills

Recommended Chip Loads Per Tooth

Material	SFM	1/8"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	1"
Grey Cast Iron	300	.0005	.0020	.0025	.0030	.0035	.0040	.0050	.0060	.0080
Soft Steels (>25 Rc)	200	.0008	.0015	.0015	.0018	.0025	.0030	.0035	.0040	.0045
Alloy Steels (4140)	300	.0006	.0008	.0010	.0015	.0015	.0015	.0020	.0030	.0040
Tool Steels (A2, D2)	225	.0006	.0008	.0010	.0015	.0015	.0015	.0020	.0030	.0040
Die Steels (H13, P20)	150	.0006	.0008	.0010	.0015	.0015	.0015	.0020	.0030	.0040
Stainless Steel (303)	150	.0008	.0011	.0012	.0015	.0020	.0025	.0028	.0035	.0040
Difficult Stainless Steel	120	.0002	.0004	.0006	.0006	.0008	.0010	.0015	.0020	.0025
High Temp Alloys	120	.0008	.0014	.0014	.0018	.0020	.0020	.0020	.0030	.0040
Titanium	75	.0008	.0008	.0010	.0012	.0014	.0018	.0025	.0035	.0040
Aluminum	1000	.0010	.0020	.0020	.0030	.0030	.0040	.0040	.0050	.0060

Conditions That Affect SFM & Chip Load:

- Rigidity of Fixture
- Spindle Tightness
- Hardness of Material
- Tensile Strength
- Coolant Flow
- Required Surface Finish

REGAL CUTTING TOOLS



WARRANTY

Regal Cutting Tools ("Seller") warrants to original equipment manufacturers, distributors and industrial and commercial users ("Buyer") of its products that each new product manufactured or supplied by Seller shall be commercially free from defects in material and workmanship at the time of shipment of the goods. All claims for allegedly defective goods must be made within 10 days after Buyer learns of such alleged defects limited to a maximum period of one year from the date of sale by Seller. All claims not made in writing and received by Seller within such 10-day period shall be deemed waived. Seller's sole obligation under this warranty is limited to furnishing without additional charge a replacement, or at its option, repairing or issuing credit for any product which shall be returned freight prepaid to the plant designated by a Seller representative and which upon inspection is determined by Seller to be defective in material or workmanship. Complete information as to operating conditions, machine setup, and application of cutting fluid should accompany any product returned for inspection. The provisions of this Warranty shall not apply to any Seller product which has been subjected to misuse, abuse, improper operating conditions (machine setup or application of cutting fluid), or which has been repaired or altered if such repair or alteration in the judgment of Seller would adversely affect performance of the product. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Seller's sole liability on any claim of any kind, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of the products sold hereunder shall in no case exceed the cost of replacement or repair as provided herein. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. There are no other warranties, expressed or implied, made by Seller except the warranty against defects in material and workmanship set forth above. Unless authorized in writing by a corporate officer or vice president, no agent, employee or representative of Seller has any authority to bind Seller to any affirmation, representation or warranty concerning the goods sold under the sales contract and such affirmation, representation or warranty has not formed a part of the basis of the bargain and shall be unenforceable.



Cutting tools may shatter if broken. Wear safety glasses and use safeguards. Grinding this product may produce a dust containing chemicals known to the state of California to cause cancer. Please refer to the Material Safety Data Sheet. A copy of the MSDS can be obtained by request from the Regal Cutting Tools Customer Service department.



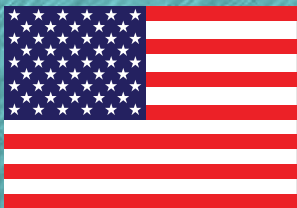
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Certificate Numbers
2007-022 2007-023
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