

CARBIDE



Being the best through innovation



ALU-POWER

- 铝合金以及无声切削

Aluminium Alloys and Silent Cutting

SELECTION GUIDE

项目 ITEM	型号 MODEL	规格 DESCRIPTION	尺寸		页 PAGE
			最小	最大	
			SIZE		
			MIN	MAX	
E5C33		硬质合金, 1刃 CARBIDE, 1 FLUTE	D2.0	D8.0	740
E5C34		硬质合金, 1刃 (顺铣) CARBIDE, 1 FLUTE (DOWN CUT TYPE)	D2.0	D8.0	741
EG930		硬质合金, 2刃 25度螺旋角 圆鼻铣刀 TiCN 涂层 CARBIDE, 2 FLUTE 25° HELIX CORNER RADIUS TiCN COATED	D2.0	D20.0	742
E5522 E5521		硬质合金, 2刃 45度螺旋角 CARBIDE, 2 FLUTE 45° HELIX	D3.0	D20.0	743
EG909		硬质合金, 2刃 圆鼻铣刀 TiCN 涂层 CARBIDE, 2 FLUTE CORNER RADIUS TiCN COATED	D4.0	D20.0	744
EG910		硬质合金, 2刃 50度螺旋角 球头 TiCN 涂层 CARBIDE, 2 FLUTE 50° HELIX BALL NOSE TiCN COATED	R3.0	R10.0	745
EG908		硬质合金, 3刃 40度螺旋角 球头 TiCN 涂层 CARBIDE, 3 FLUTE 40° HELIX BALL NOSE TiCN COATED	R1.0	R8.0	746
E5A18		硬质合金, 3刃 45度螺旋角 CARBIDE, 3 FLUTE 45° HELIX	D3.0	D20.0	747
EP922 EP923		粉末高速钢, 3刃 42度螺旋角 短刃 粗加工 - TiAlN 涂层 PREMIUM HSS-PM, 3 FLUTE 42° HELIX SHORT LENGTH ROUGHING TiAlN COATED	D12.0	D32.0	748
EP924 EP925		粉末高速钢, 3刃 42度螺旋角 长刃 粗加工 - TiAlN 涂层 PREMIUM HSS-PM, 3 FLUTE 42° HELIX LONG LENGTH ROUGHING TiAlN COATED	D12.0	D32.0	749
推荐的切削条件 RECOMMENDED CUTTING CONDITIONS					750

ALU-POWER END MILLS

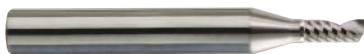
◎ : 优(Excellent) ○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		高硬钢	铜	石墨	铸铁	铝	不锈钢	钛	镍钛合金
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225-325	HRc30-40	HRc40-45	HRc45-55	HRc55-70							
	○							○	◎			
	○							○	◎			
									◎			
									◎			
									◎			
									◎			
									◎			
								○	◎			
								○	◎			

硬质合金, 1刃
CARBIDE, 1 FLUTE

- ▶ 为有色金属和铝、塑料等非金属材料设计的
- ▶ 1刃可得到卓越的工作表面粗糙度和铁屑排除率
- ▶ 普通型和长型可以适用各种尺寸的原材料

- ▶ Designed to non-ferrous metal and non-metal like aluminum and acrylic
- ▶ 1 Flute allows for excellent workpiece finishes and chip-evacuation.
- ▶ Regular and long length types are suitable to apply the variable size work pieces.



单位(Unit) : mm

型号 EDP No.	刃部直径 Mill Diameter	柄部直径 Shank Diameter	刃长 Length of Cut	全长 Overall Length
E5C33020	2.0	6	7	40
E5C3302012	2.0	6	12	50
E5C33030	3.0	6	8	45
E5C33030A	3.0	6	12	45
E5C3303020	3.0	6	20	55
E5C33040	4.0	6	12	50
E5C33040A	4.0	6	16	55
E5C3304022	4.0	6	22	60
E5C33050	5.0	6	22	60
E5C3305028	5.0	6	28	65
E5C33060	6.0	6	27	65
E5C3306032	6.0	6	32	75
E5C33080	8.0	8	32	70

刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.03	h6

◎ : 优(Excellent) ○ : 良(Good)

碳钢 Carbon Steels	合金钢 Alloy Steels	预硬钢 Prehardened Steels	硬化钢 Hardened Steels		高硬钢 High Hardened Steels	铜 Copper	石墨 Graphite	铸铁 Cast Iron	铝 Aluminum	不锈钢 Stainless Steels	钛 Titanium	镍铬铁合金 Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
	○							○	◎			

硬质合金, 1刃 (顺铣)
CARBIDE, 1 FLUTE (Down Cut Type)

- ▶ 为有色金属和铝, 塑料等非铁金属设计的
- ▶ 1刃铣刀可得到出众的工件表面粗糙度和铁屑排除率
- ▶ 普通型和长型可以适用各种尺寸的原材料
- ▶ 顺铣具有稳定的性能

- ▶ Suitable for high speed machining aluminum, aluminum alloys and non-ferrous materials.
- ▶ 1 Flute allows for excellent workpiece finishes and chip-removal.
- ▶ Regular and long length are available to apply the variable size work pieces.
- ▶ Stable performance thanks to down cut type.



单位(Unit) : mm

型号 EDP No.	刃部直径 Mill Diameter	柄部直径 Shank Diameter	刃长 Length of Cut	全长 Overall Length
E5C34020	2.0	6	7	50
E5C34030	3.0	6	8	50
E5C34030A	3.0	6	12	55
E5C34040	4.0	6	12	55
E5C34040A	4.0	6	16	60
E5C34050	5.0	6	22	60
E5C34060	6.0	6	27	65
E5C34080	8.0	8	32	70

刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.03	h6

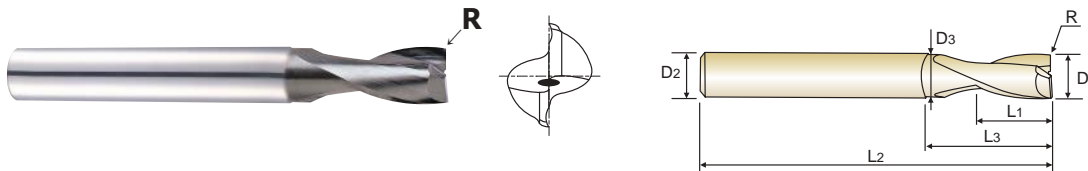
◎ : 优(Excellent) ○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		高硬钢	铜	石墨	铸铁	铝	不锈钢	钛	镍钛合金
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
	○							○	◎			

- CBN END MILLS
- i-Xmill END MILLS
- X5070 END MILLS
- X-POWER END MILLS
- JET-POWER END MILLS
- V7 Mill INOX END MILLS
- V7 Mill STEEL END MILLS
- ALU-POWER END MILLS
- CRX S
- D-POWER END MILLS
- K-2 CARBIDE END MILLS
- GENERAL CARBIDE END MILLS
- TANK-POWER END MILLS
- GENERAL HSS END MILLS
- MILLING CUTTERS
- TECHNICAL DATA

硬质合金, 2刃 25度螺旋角 圆鼻铣刀 TiCN 涂层
CARBIDE, 2 FLUTE 25° HELIX CORNER RADIUS TiCN COATED

- ▶ 设计用于加工铝及铝合金, 有色金属材料.
- ▶ 提高刀具寿命和较高的切削精度.
- ▶ 最大程度的材料去除量, 铁屑排除量和稳定性.
- ▶ 圆弧角防止崩刃.
- ▶ Suitable for high speed machining aluminum, aluminum alloys and non-ferrous materials.
- ▶ Increased tool life and higher cutting accuracy.
- ▶ Maximum stock removal, chip ejection and stability.
- ▶ Corner Radius for avoiding the chipping.



单位(Unit) : mm

型号 EDP No.	圆弧半径 Corner Radius R	刃部直径 Mill Diameter D1	柄部直径 Shank Diameter D2	刃长 Length of Cut L1	颈长 Length Below Shank L3	全长 Overall Length L2	颈径 Neck Diameter D3
EG930020	RO.2	2.0	3	3	6	40	1.9
EG930030	RO.2	3.0	3	4	8	40	2.9
EG930040	RO.2	4.0	4	5	12	50	3.8
EG930050	RO.2	5.0	5	8	14	50	4.8
EG930060	RO.2	6.0	6	8	18	65	5.7
EG930080	RO.2	8.0	8	10	22	70	7.7
EG930100	RO.2	10.0	10	14	28	80	9.7
EG930120	RO.2	12.0	12	16	35	90	11.5
EG930160	RO.2	16.0	16	20	40	90	15.5
EG930200	RO.2	20.0	20	25	50	100	19.5

刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.03	h6

CBN END MILLS

i-Xmill END MILLS

X5070 END MILLS

X-POWER END MILLS

JET-POWER END MILLS

V7 Mill INOX END MILLS

V7 Mill STEEL END MILLS

ALU-POWER END MILLS

CRX S

D-POWER END MILLS

K-2 CARBIDE END MILLS

GENERAL CARBIDE END MILLS

TANK-POWER END MILLS

GENERAL HSS END MILLS

MILLING CUTTERS

TECHNICAL DATA

◎ : 优(Excellent) ○ : 良(Good)

碳钢 Carbon Steels	合金钢 Alloy Steels	预硬钢 Prehardened Steels	硬化钢 Hardened Steels		高硬钢 High Hardened Steels	铜 Copper	石墨 Graphite	铸铁 Cast Iron	铝 Aluminum	不锈钢 Stainless Steels	钛 Titanium	镍铬铁合金 Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
									◎			



硬质合金, 2刃 45度螺旋角
CARBIDE, 2 FLUTE 45° HELIX

- ▶ 适合于铝及其他有色金属材料的高速切削.
- ▶ 具有卓越的表面粗糙度.
- ▶ 及出众的排屑.

- ▶ Suitable for high speed machining aluminum, aluminum alloys and non-ferrous materials.
- ▶ Excellent surface finishes.
- ▶ Good chip removal.



单位(Unit) : mm

型号 EDP No.		刃部直径 Mill Diameter	柄部直径 Shank Diameter	刃长 Length of Cut	全长 Overall Length
PLAIN	FLAT				
E5522030	E5521030	3.0	6	8	57
E5522040	E5521040	4.0	6	11	57
E5522050	E5521050	5.0	6	13	57
E5522060	E5521060	6.0	6	13	57
E5522080	E5521080	8.0	8	19	63
E5522100	E5521100	10.0	10	22	72
E5522120	E5521120	12.0	12	26	83
E5522140	E5521140	14.0	14	26	83
E5522160	E5521160	16.0	16	32	92
E5522180	E5521180	18.0	18	32	92
E5522200	E5521200	20.0	20	38	104

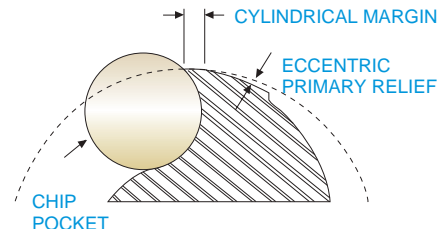
▶ TiN, TiCN涂层或者TiAlN涂层 可根据客户需求进行加工。 / TiN, TiCN - coating & TiAlN - coating is available on your request.



- 加工铝和有色金属时具有很高的性能
High performance in machining aluminum and non-ferrous materials
- 特殊设计的几何尺寸使切削刃具有很高的刚性
Special designed geometry with high rigidity cutting edge
- 提高表面粗糙度 - 具有能严格控制的外周钻边
Improved surface roughness - cylindrical margin which is controlled tightly.
- 出众的铁屑排除率 - 高倾斜角, 高螺旋角(45°), 更大的排屑槽
Excellent chip removal - higher rake angle, higher helix angle(45°), bigger chip pocket.

- 根据您的要求可以进行圆弧角铣刀, 倒角刀, 颈部设计等制作
Corner radius, Corner chamfer, Neck design is available on your request.
- TiN, TiCN & TiAlN & 可根据客户需求进行加工。
TiN, TiCN & TiAlN coating is available on your request.

	UNCOATED	TiN	TiCN	TiAlN
PLAIN SHANK	E5522	E6522	EG522	EH522
FLAT SHANK	E5521	E6521	EG521	EH521



刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.03	h6

◎ : 优(Excellent) ○ : 良(Good)

碳钢 Carbon Steels	合金钢 Alloy Steels	预硬钢 Prehardened Steels	硬化钢 Hardened Steels		高硬钢 High Hardened Steels	铜 Copper	石墨 Graphite	铸铁 Cast Iron	铝 Aluminum	不锈钢 Stainless Steels	钛 Titanium	镍钛合金 Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70					◎		

HSS

CBN
END MILLS

i-Xmill
END MILLS

X5070
END MILLS

X-POWER
END MILLS

JET-POWER
END MILLS

V7 Mill INOX
END MILLS

V7 Mill STEEL
END MILLS

ALU-POWER
END MILLS

CRX S

D-POWER
END MILLS

K-2 CARBIDE
END MILLS

GENERAL
CARBIDE
END MILLS

TANK-POWER
END MILLS

GENERAL
HSS
END MILLS

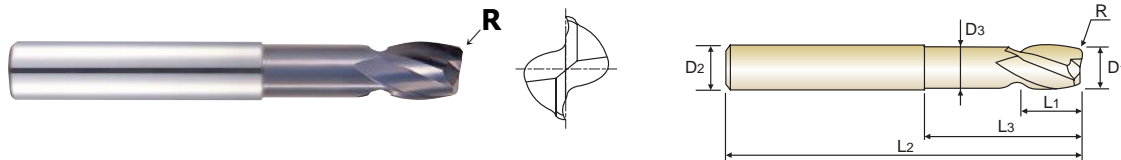
MILLING
CUTTERS

TECHNICAL
DATA

硬质合金, 2刃 圆鼻铣刀 TiCN 涂层
CARBIDE, 2 FLUTE CORNER RADIUS TiCN COATED

- ▶ 对不锈钢, 铝及铜具有卓越的切削质量.
- ▶ 提高刀具寿命和较高的切削精度.

- ▶ Excellent cutting performance when cutting stainless steels, aluminum and copper.
- ▶ Increased tool life and higher cutting accuracy.



单位(Unit) : mm

型号 EDP No.	圆弧半径 Corner Radius R	刃部直径 Mill Diameter D1	柄部直径 Shank Diameter D2	刃长 Length of Cut L1	颈长 Length Below Shank L3	全长 Overall Length L2	颈径 Neck Diameter D3
EG909040	RO.3	4.0	6	5	10	50	3.6
EG909060	RO.5	6.0	6	8	20	60	5.4
EG909080	RO.6	8.0	8	10	30	70	7.2
EG909100	RO.8	10.0	10	12	36	80	9
EG909120	R1.0	12.0	12	14	40	90	11
EG909160	R1.3	16.0	16	18	45	100	14.5
EG909200	R1.6	20.0	20	24	45	100	18

刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.03	h6

CBN END MILLS

i-Xmill END MILLS

X5070 END MILLS

X-POWER END MILLS

JET-POWER END MILLS

V7 Mill INOX END MILLS

V7 Mill STEEL END MILLS

ALU-POWER END MILLS

CRX S

D-POWER END MILLS

K-2 CARBIDE END MILLS

GENERAL CARBIDE END MILLS

TANK-POWER END MILLS

GENERAL HSS END MILLS

MILLING CUTTERS

TECHNICAL DATA

◎ : 优(Excellent) ○ : 良(Good)

碳钢 Carbon Steels	合金钢 Alloy Steels	预硬钢 Prehardened Steels	硬化钢 Hardened Steels		高硬钢 High Hardened Steels	铜 Copper	石墨 Graphite	铸铁 Cast Iron	铝 Aluminum	不锈钢 Stainless Steels	钛 Titanium	镍铁合金 Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
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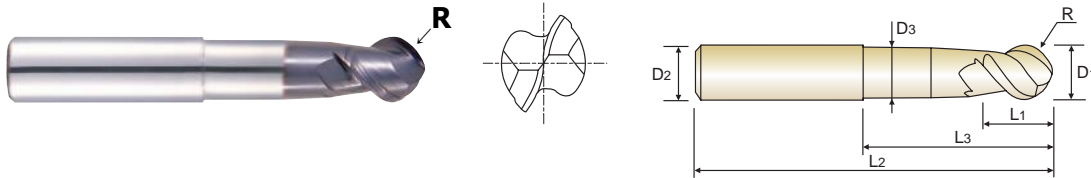
YG ALU-POWER END MILLS

EG910 SERIES PLAIN SHANK

硬质合金, 2刃 50度螺旋角 球头 TiCN 涂层
CARBIDE, 2 FLUTE 50° HELIX BALL NOSE TiCN COATED

- ▶ 对不锈钢, 铝及铜具有卓越的切削质量.
- ▶ 提高刀具寿命和较高的切削精度.

- ▶ Suitable for high speed machining aluminum, aluminum alloys and non-ferrous materials.
- ▶ Increased tool life and higher cutting accuracy.



MG HM 2 50° R ±0.01 PLAIN P.752

单位(Unit) : mm

型号 EDP No.	球头半径 Radius of Ball Nose R (±0.01)	刃部直径 Mill Diameter D1	柄部直径 Shank Diameter D2	刃长 Length of Cut L1	颈长 Length Below Shank L3	全长 Overall Length L2	颈径 Neck Diameter D3
EG910060	R3.0	6.0	6	5.5	25	55	5.4
EG910080	R4.0	8.0	8	7	30	65	7.2
EG910100	R5.0	10.0	10	8.5	35	75	9
EG910120	R6.0	12.0	12	10.5	40	75	11
EG910160	R8.0	16.0	16	14	50	90	14.5
EG910200	R10.0	20.0	20	17	50	100	18

刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
±0.02	h6

◎ : 优(Excellent) ○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		高硬钢	铜	石墨	铸铁	铝	不锈钢	钛	镍铁合金
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70							
									◎			

CBN END MILLS

i-Xmill END MILLS

X5070 END MILLS

X-POWER END MILLS

JET-POWER END MILLS

V7 Mill INOX END MILLS

V7 Mill STEEL END MILLS

ALU-POWER END MILLS

CRX S

D-POWER END MILLS

K-2 CARBIDE END MILLS

GENERAL CARBIDE END MILLS

TANK-POWER END MILLS

GENERAL HSS END MILLS

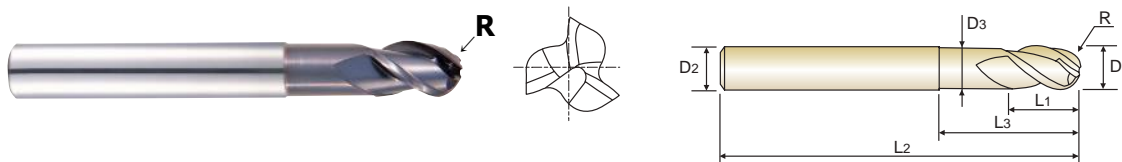
MILLING CUTTERS

TECHNICAL DATA

硬质合金, 3刃 40度螺旋角 球头 TiCN 涂层
CARBIDE, 3 FLUTE 40° HELIX BALL NOSE TiCN COATED

▶ 在加工不锈钢, 铝和铜时具有出众的切削性能
 ▶ 提高刀具寿命和较高的切削精度.

▶ Suitable for high speed machining aluminum, aluminum alloys and non-ferrous materials.
 ▶ Increased tool life and higher cutting accuracy.



单位(Unit) : mm

型号 EDP No.	球头半径 Radius of Ball Nose R (±0.01)	刃部直径 Mill Diameter D1	柄部直径 Shank Diameter D2	刃长 Length of Cut L1	颈长 Length Below Shank L3	全长 Overall Length L2	颈径 Neck Diameter D3
EG908020	R1.0	2.0	6	3	5	60	1.9
EG908025	R1.25	2.5	6	4	6	60	2.4
EG908030	R1.5	3.0	6	4.5	6.5	60	2.8
EG908035	R1.75	3.5	6	5	7	65	3.2
EG908040	R2.0	4.0	6	6	8	65	3.7
EG908050	R2.5	5.0	6	7.5	10	65	4.6
EG908060	R3.0	6.0	6	9	12	75	5.6
EG908080	R4.0	8.0	8	12	25	75	7.4
EG908100	R5.0	10.0	10	15	30	80	9.4
EG908120	R6.0	12.0	12	18	36	90	11.4
EG908160	R8.0	16.0	16	24	40	100	15.4

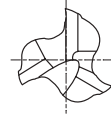
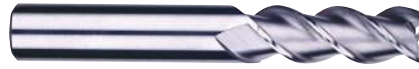
刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.03	h6

碳钢 Carbon Steels	合金钢 Alloy Steels	预硬钢 Prehardened Steels	硬化钢 Hardened Steels	高硬钢 High Hardened Steels	铜 Copper	石墨 Graphite	铸铁 Cast Iron	铝 Aluminum	不锈钢 Stainless Steels	钛 Titanium	镍铬铁合金 Inconel
~HB225	HB225~325	HRc30~40	HRc40~45 HRc45~55	HRc55~70							
								◎			

硬质合金, 3刃 45度螺旋角
CARBIDE, 3 FLUTE 45° HELIX

- ▶ 为铝, 铝合金以及有色金属合成材料设计的
- ▶ 由于切削刃的镜面研磨具有出众的表面粗糙度
- ▶ 特殊的沟槽几何形状可以消除振动
- ▶ 使用准确的外径公差

- ▶ Suitable for high speed machining aluminum, aluminum alloys and non-ferrous materials.
- ▶ Excellent surface roughness thanks to Mirror Face of cutting edges.
- ▶ Special flute geometry eliminates vibrations.
- ▶ Precise tolerance of outside diameter is applied.



单位(Unit) : mm

型号 EDP No.	刃部直径 Mill Diameter	柄部直径 Shank Diameter	刃长 Length of Cut	全长 Overall Length
E5A18030	3.0	6	10	50
E5A18040	4.0	6	13	50
E5A18050	5.0	6	17	55
E5A18060	6.0	6	17	55
E5A18070	7.0	8	22	65
E5A18080	8.0	8	22	65
E5A18090	9.0	10	27	70
E5A18100	10.0	10	27	70
E5A18110	11.0	12	32	80
E5A18120	12.0	12	32	80
E5A18130	13.0	12	35	85
E5A18140	14.0	16	37	85
E5A18150	15.0	16	42	90
E5A18160	16.0	16	42	90
E5A18180	18.0	18	47	110
E5A18200	20.0	20	47	110

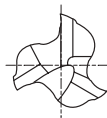
刃部公差 Mill Dia. Tolerance(mm)	柄部公差 Shank Dia. Tolerance
0~-0.015	h6

碳钢	合金钢	预硬钢	硬化钢		高硬钢	铜	石墨	铸铁	铝	不锈钢	钛	镍铁合金
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70							
									◎			

◎ : 优(Excellent) ○ : 良(Good)

粉末高速钢, 3刃 42度螺旋角 短刃 粗加工 - TiAlN 涂层
PREMIUM HSS-PM, 3 FLUTE 42° HELIX ROUGHING SHORT LENGTH TiAlN COATED

- ▶ 在高速条件下有着最大的空间排屑率。
- ▶ 减少振动提高表面粗糙度。
- ▶ Maximum stock removal rates at High Speed Condition.
- ▶ Reduces vibrations and improves surface roughness.



单位(Unit) : mm

型号 EDP No.		刃部直径 Mill Diameter	柄部直径 Shank Diameter	刃长 Length of Cut	全长 Overall Length
PLAIN	FLAT	js12	h6		
EP922120	EP923120	12.0	12	26	83
EP922140	EP923140	14.0	12	26	83
EP922160	EP923160	16.0	16	32	92
EP922180	EP923180	18.0	16	32	92
EP922200	EP923200	20.0	20	38	104
EP922220	EP923220	22.0	20	38	104
EP922250	EP923250	25.0	25	45	121
EP922280	EP923280	28.0	25	45	121
EP922320	EP923320	32.0	32	53	133

DIN 7160 & 7161规定的精度
Tolerances according to DIN 7160 & 7161

精度范围单位 / Tolerance range in μm						
公称直径单位 / Nominal-Diameter in mm						
	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50
js12	± 50	± 60	± 75	± 90	± 105	± 125
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13	0 - 16

◎ : 优(Excellent) ○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		高硬钢	铜	石墨	铸铁	铝	不锈钢	钛	镍铬铁合金
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRc30~40	HRc40~45	HRc45~55	HRc55~70							
								○	◎			



粉末高速钢, 3刃 42度螺旋角 长刃 粗加工 - TiAlN 涂层
 PREMIUM HSS-PM, 3 FLUTE 42° HELIX ROUGHING LONG LENGTH TiAlN COATED

- ▶ 在高速条件下有着最大的空间排屑率。
- ▶ 减少振动提高表面粗糙度。
- ▶ Maximum stock removal rates at High Speed Condition.
- ▶ Reduces vibrations and improves surface roughness.



单位(Unit) : mm

型号 EDP No.		刃部直径 Mill Diameter	柄部直径 Shank Diameter	刃长 Length of Cut	全长 Overall Length
PLAIN	FLAT	js12	h6		
EP924120	EP925120	12.0	12	53	110
EP924140	EP925140	14.0	12	53	110
EP924160	EP925160	16.0	16	63	123
EP924180	EP925180	18.0	16	63	123
EP924200	EP925200	20.0	20	75	141
EP924220	EP925220	22.0	20	75	141
EP924250	EP925250	25.0	25	90	166
EP924280	EP925280	28.0	25	90	166
EP924320	EP925320	32.0	32	106	186

DIN 7160 & 7161规定的精度
 Tolerances according to DIN 7160 & 7161

精度范围单位 / Tolerance range in μm						
公称直径单位 / Nominal-Diameter in mm						
	from 1 to 3	over 3 to 6	over 6 to 10	over 10 to 18	over 18 to 30	over 30 to 50
js12	± 50	± 60	± 75	± 90	± 105	± 125
h6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13	0 - 16

◎ : 优(Excellent) ○ : 良(Good)

碳钢	合金钢	预硬钢	硬化钢		高硬钢	铜	石墨	铸铁	铝	不锈钢	钛	镍钛合金
Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRC40~45	HRC45~55	HRC55~70							
								○	◎			

HSS

CBN
END MILLS

i-Xmill
END MILLS

X5070
END MILLS

X-POWER
END MILLS

JET-POWER
END MILLS

V7 Mill INOX
END MILLS

V7 Mill STEEL
END MILLS

ALU-POWER
END MILLS

CRX S

D-POWER
END MILLS

K-2 CARBIDE
END MILLS

GENERAL
CARBIDE
END MILLS

TANK-POWER
END MILLS

GENERAL
HSS
END MILLS

MILLING
CUTTERS

TECHNICAL
DATA



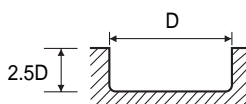
**ALU-POWER
END MILLS**

**推荐的切削条件
RECOMMENDED CUTTING CONDITIONS**

**硬质合金, 1刃
CARBIDE, 1 FLUTE**

E5C33, E5C34 SERIES

材质	压克力		合金钢, 铸铁	
MATERIAL	ACRYLIC		ALLOY STEELS CAST IRON	
DIAMETER	RPM	FEED	RPM	FEED
2.0	32000	2200	23000	1500
3.0	25000	2400	18000	1700
4.0	20000	2400	15000	1800
5.0	15000	2200	12000	1800
6.0	13500	2300	10000	1800
8.0	10000	2400	7800	1900
10.0	8000	2400	6000	2000

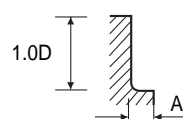
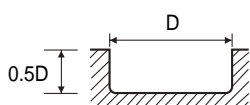


RPM = rev./min. (转速/分钟)
FEED = mm/min. (进给量)

**硬质合金, 2刃 25度螺旋角 圆鼻铁刀 TiCN 涂层
CARBIDE, 2 FLUTE 25° HELIX CORNER RADIUS TiCN COATED**

EG930 SERIES

材质	铝, 低硅铝			
MATERIAL	ALUMINUM LOW SILICON ALUMINUM			
DIAMETER	RPM	FEED	RPM	FEED
3.0	13000	900	13000	1200
4.0	13000	1200	13000	1400
5.0	13000	1300	13000	1700
6.0	13000	1500	13000	2000
8.0	10000	1800	10000	2300
10.0	10000	2200	10000	2700
12.0	10000	2700	10000	3400
16.0	8000	2500	8000	3100
20.0	5000	2000	5000	2500



A : $\varnothing 3 \sim \varnothing 10 = 0.25 \times D$
 $\varnothing 12 \sim \varnothing 20 = 0.5 \times D$

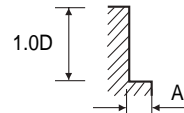
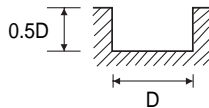
RPM = rev./min. (转速/分钟)
FEED = mm/min. (进给量)

**硬质合金, 2刃 45度螺旋角
CARBIDE, 2 FLUTE 45° HELIX**
CBN
END MILLSi-Xmill
END MILLSX5070
END MILLSX-POWER
END MILLSJET-POWER
END MILLSV7 Mill INOX
END MILLSV7 Mill STEEL
END MILLSALU-POWER
END MILLS

CRX S

D-POWER
END MILLSK-2 CARBIDE
END MILLSGENERAL
CARBIDE
END MILLSTANK-POWER
END MILLSGENERAL
HSS
END MILLSMILLING
CUTTERSTECHNICAL
DATA
E5522, E5521 SERIES

材质	铝, 低硅铝			
MATERIAL	ALUMINUM LOW SILICON ALUMINUM			
DIAMETER	RPM	FEED	RPM	FEED
3.0	10000	700	10000	900
4.0	10000	900	10000	1100
5.0	10000	1000	10000	1300
6.0	10000	1200	10000	1500
8.0	8000	1400	8000	1800
10.0	8000	1700	8000	2100
12.0	8000	2100	8000	2600
14.0	6000	1800	6000	2200
16.0	6000	1900	6000	2400
18.0	4000	1400	4000	1800
20.0	4000	1600	4000	1900

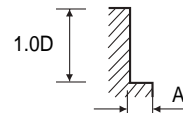
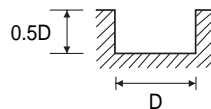


A : $\varnothing 3 \sim \varnothing 10 = 0.25 \times D$
 $\varnothing 12 \sim \varnothing 20 = 0.5 \times D$

RPM = rev./min. (转速/分钟)
 FEED = mm/min. (进给量)

**硬质合金, 2刃 45度螺旋角 TiCN 涂层
CARBIDE, 2 FLUTE 45° HELIX TiCN COATED**
EG522, EG521 SERIES

材质	铝, 低硅铝			
MATERIAL	ALUMINUM LOW SILICON ALUMINUM			
DIAMETER	RPM	FEED	RPM	FEED
3.0	13000	900	13000	1200
4.0	13000	1200	13000	1400
5.0	13000	1300	13000	1700
6.0	13000	1500	13000	2000
8.0	10000	1800	10000	2300
10.0	10000	2200	10000	2700
12.0	10000	2700	10000	3400
14.0	8000	2300	8000	2800
16.0	8000	2500	8000	3100
18.0	5000	1800	5000	2300
20.0	5000	2000	5000	2500



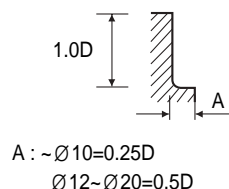
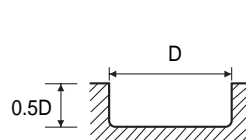
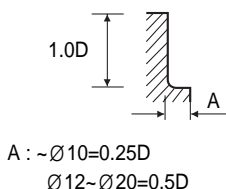
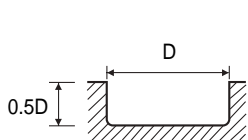
A : $\varnothing 3 \sim \varnothing 10 = 0.25 \times D$
 $\varnothing 12 \sim \varnothing 20 = 0.5 \times D$

RPM = rev./min. (转速/分钟)
 FEED = mm/min. (进给量)

硬质合金, 2刃 圆鼻铣刀 TiCN 涂层
CARBIDE, 2 FLUTE CORNER RADIUS TiCN COATED

EG909 SERIES

材质	铝, 铝合金				铜合金			
MATERIAL	ALUMINUM ALUMINUM ALLOY				COPPER ALLOY			
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
4.0	13000	1200	13000	1400	3900	300	3900	350
6.0	13000	1500	13000	2000	3900	380	3900	500
8.0	10000	1800	10000	2300	3000	450	3000	580
10.0	10000	2200	10000	2700	3000	550	3000	680
12.0	10000	2700	10000	3400	3000	680	3000	850
16.0	8000	2500	8000	3100	2400	630	2400	780
20.0	5000	2000	5000	2500	1500	500	1500	630

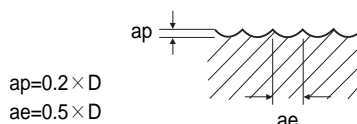


RPM = rev./min. (转速/分钟)
FEED = mm/min. (进给量)

硬质合金, 2刃 50度螺旋角 球头 TiCN 涂层
CARBIDE, 2 FLUTE 50° HELIX BALL NOSE TiCN COATED

EG910 SERIES

材质	铝, 铝合金		铜合金	
MATERIAL	ALUMINUM ALUMINUM ALLOY		COPPER ALLOY	
DIAMETER	RPM	FEED	RPM	FEED
R3.0 × 6.0	18000	1750	5500	440
R4.0 × 8.0	14000	2000	4200	500
R5.0 × 10.0	14000	2350	4200	580
R6.0 × 12.0	14000	3000	4200	750
R8.0 × 16.0	11000	2700	3300	670
R10.0 × 20.0	7000	2200	2100	550



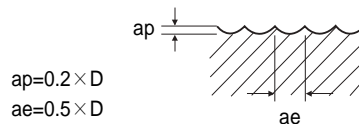
RPM = rev./min. (转速/分钟)
FEED = mm/min. (进给量)

**硬质合金, 3刃 40度螺旋角 球头 TiCN 涂层
CARBIDE, 3 FLUTE 40° HELIX BALL NOSE TiCN COATED**
CBN
END MILLSi-Xmill
END MILLSX5070
END MILLSX-POWER
END MILLSJET-POWER
END MILLSV7 Mill INOX
END MILLSV7 Mill STEEL
END MILLSALU-POWER
END MILLS

CRX S

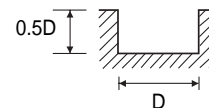
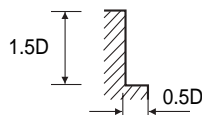
D-POWER
END MILLSK-2 CARBIDE
END MILLSGENERAL
CARBIDE
END MILLSTANK-POWER
END MILLSGENERAL
HSS
END MILLSMILLING
CUTTERSTECHNICAL
DATA
EG908 SERIES

材质	铝, 低硅铝		铜合金	
MATERIAL	ALUMINUM LOW SILICON ALUMINUM		COPPER ALLOY	
DIAMETER	RPM	FEED	RPM	FEED
R1.0 × 2.0	27000	950	8000	240
R1.25 × 2.5	22000	950	6500	240
R1.5 × 3.0	18000	950	5500	240
R2.0 × 4.0	18000	1250	5500	310
R2.5 × 5.0	18000	1350	5500	340
R3.0 × 6.0	18000	1750	5500	440
R4.0 × 8.0	14000	2000	4200	500
R5.0 × 10.0	14000	2350	4200	580
R6.0 × 12.0	14000	3000	4200	750
R8.0 × 16.0	11000	2700	3300	670


 RPM = rev./min. (转速/分钟)
 FEED = mm/min. (进给量)

**粉末高速钢, 3刃 42度螺旋角 粗加工 - TiAlN 涂层
PREMIUM HSS-PM, 3 FLUTE 42° HELIX ROUGHING TiAlN COATED**
EP922, EP923, EP924, EP925 SERIES

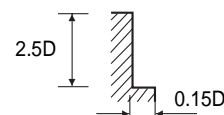
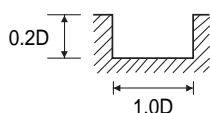
材质	铝, 铝合金			
MATERIAL	ALUMINUM ALUMINUM ALLOY			
DIAMETER	RPM	FEED	RPM	FEED
12.0	2800	550	2800	410
16.0	2200	625	2200	465
20.0	1700	700	1700	525
25.0	1400	625	1400	465
32.0	1100	700	1100	525


 * 对长和超长型进给应减少约50%
 The FEED, in long & long reach types, should be reduced by around 50%

 RPM = rev./min. (转速/分钟)
 FEED = mm/min. (进给量)


硬质合金, 3刃 45度螺旋角
CARBIDE, 3 FLUTE 45° HELIX
E5A18 SERIES

材质	铝, 有色金属			
MATERIAL	ALUMINIUM NONFERROUS METALS			
DIAMETER	RPM	FEED	RPM	FEED
3.0	10000	500	10000	650
4.0	10000	630	10000	780
5.0	10000	720	10000	930
6.0	10000	865	10000	1080
8.0	8000	1000	8000	1230
10.0	8000	1220	8000	1500
12.0	8000	1500	8000	1260
14.0	6000	1290	6000	1580
16.0	6000	1350	6000	1730
18.0	4000	1000	4000	1300
20.0	4000	1150	4000	1365



RPM = rev./min. (转速/分钟)
FEED = mm/min. (进给量)