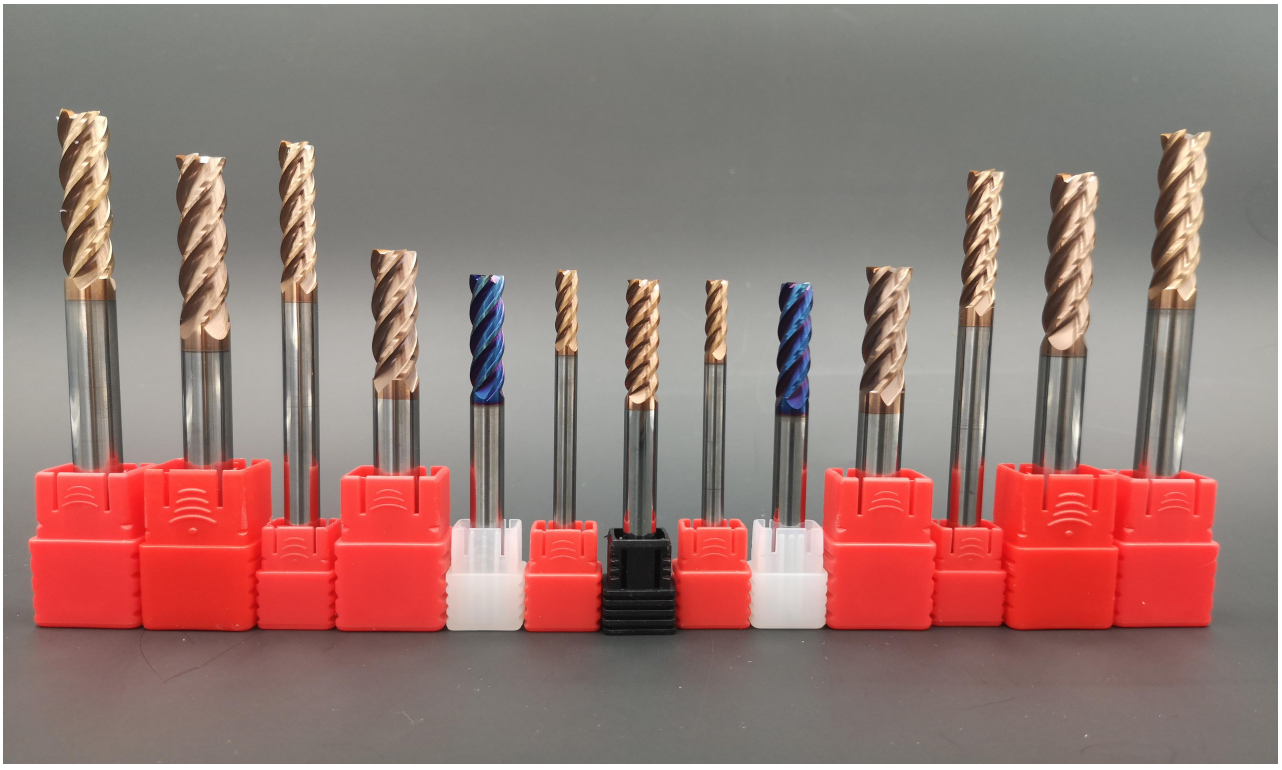
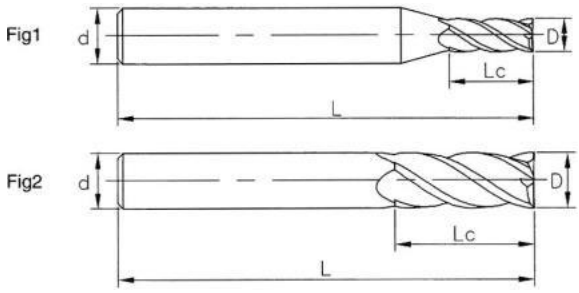
Zhuzhou Ruiao Tungsten Carbide Co.,Ltd

Tel: +86-0731-22580438 / WhatsApp: +86-18307332261
Email: sales@zzcarbidetools.com
Add: Ka Shing Mansion, Hongqi middle Road, Hetang District, Zhuzhou City,412000. China.
Web: www.zzcarbidetools.com

Catalog



65度平底4刃硬质合金铣刀
HRC 65 deg Tungsten Carbide 4 Flute Square End Mills



•原材料
具有高强度和高韧性

Raw Material：
high hardness and high toughness.

• 涂层
AlTiSiN，纳米技术涂层，硬度高达 4000HV，热稳定性达 1200℃

Coating：Use nano-tech，the hardness and thermal stability are up to 4000HV and 1200℃，respectively.

•铣刀直径精度公差
Tolerance of End MillDiameter

1＜	D≤6	-0.010～ -0.030
6＜	D≤10	-0.015～ -0.040
10＜	D≤20	-0.020～ -0.050

•刃数
4刃，刚性高，广泛用于浅槽、侧铣和精加工

Flutes: 4 flutes, high rigidity, widely used in shallow slot, profile milling, and finish machining.

•一般切削参数
Cutting Parameters

切削速度	v_c=130 (120-180)m/min
切深	a_p=1/3D(1/8-1/2D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

•螺旋角度
35度,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

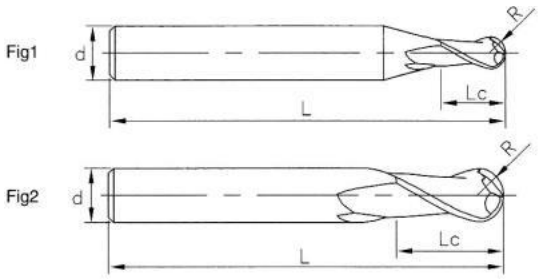
Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

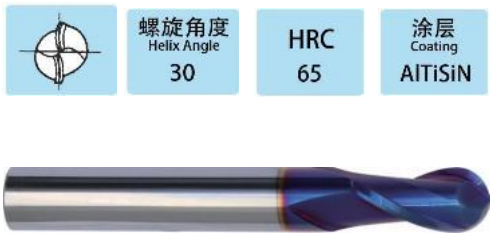
工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y			Y	Y

Y适合 Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
3*8*3*50-4F	3	8	3	50	4	2
3*12*3*75-4F	3	12	3	75	4	2
3*12*3*100-4F	3	12	3	100	4	2
1*3*4*50-4F	1	3	4	50	4	1
1.5*4*4*50-4F	1.5	4	4	50	4	1
2*5*4*50-4F	2	5	4	50	4	1
2.5*7*4*50-4F	2.5	7	4	50	4	1
3*8*4*50-4F	3	8	4	50	4	1
3.5*10*4*50-4F	3.5	10	4	50	4	1
4*10*4*50-4F	4	10	4	50	4	2
4*20*4*75-4F	4	20	4	75	4	2
4*25*4*100-4F	4	25	4	100	4	2
5*13*5*50-4F	5	13	5	50	4	2
5*20*5*75-4F	5	20	5	75	4	2
5*25*5*100-4F	5	25	5	100	4	2
2.5*7*6*50-4F	2.5	7	6	50	4	1
3*8*6*50-4F	3	8	6	50	4	1
3.5*10*6*50-4F	3.5	10	6	50	4	1
4*10*6*50-4F	4	10	6	50	4	1
4.5*12*6*50-4F	4.5	12	6	50	4	1
5*13*6*50-4F	5	13	6	50	4	1
6*15*6*50-4F	6	15	6	50	4	2
6*20*6*75-4F	6	20	6	75	4	2
6*30*6*100-4F	6	30	6	100	4	2
6*40*6*150-4F	6	40	6	150	4	2
7*18*8*60-4F	7	18	8	60	4	1
8*20*8*60-4F	8	20	8	60	4	2
8*25*8*75-4F	8	25	8	75	4	2
8*35*8*100-4F	8	35	8	100	4	2
8*50*8*150-4F	8	50	8	150	4	2
9*23*10*75-4F	9	23	10	75	4	1
10*25*10*75-4F	10	25	10	75	4	2
10*40*10*100-4F	10	40	10	100	4	2
10*50*10*150-4F	10	50	10	150	4	2
11*28*12*75-4F	11	28	12	75	4	1
12*30*12*75-4F	12	30	12	75	4	2
12*45*12*100-4F	12	45	12	100	4	2
12*55*12*150-4F	12	55	12	150	4	2
14*35*14*80-4F	14	35	14	80	4	2
14*45*14*100-4F	14	45	14	100	4	2
14*60*14*150-4F	14	60	14	150	4	2
16*45*16*100-4F	16	45	16	100	4	2
16*60*16*150-4F	16	60	16	150	4	2
18*45*18*100-4F	18	45	18	100	4	2
18*60*18*150-4F	18	60	18	150	4	2
20*45*20*100-4F	20	45	20	100	4	2
20*60*20*150-4F	20	60	20	150	4	2

65度2刃硬质合金球头铣刀
HRC 65 deg Tungsten Carbide 2 Flute Ball Nose End Mills





•原材料
具有高强度和高韧性

Raw Material：
high hardness and high toughness.

•涂层
AlTiSiN，纳米技术涂层，硬度高达4000HV，热稳定性达　1200℃

Coating：Use nano-tech，the hardness and thermal stability are up to 4000HV and 1200℃，respectively.

•铣刀直径精度公差
Tolerance of End MillDiameter

1＜	D≤6	-0.010～	-0.030
6＜	D≤10	-0.015～	-0.040
10＜	D≤20	-0.020～	-0.050

•产品设计
双刃带设计，有效提高刃带刚性和工件表面光洁度；刃口过中心，有效减少切削阻力；大容量排屑槽，方便顺畅排屑，提高加工效率；二刃设计，广泛应用于沟槽，孔加工

Double-edge design improves rigidity and surface finish effectively. Cutting edge over the center reduces the cutting resistance. High capacity of junk slot benefits chip removal and increases machining efficiency. 2 flutes designis good for chip removal, easy for vertical feed processing, widely used in slot and hole processing.

•一般切削参数
Cutting Parameters

切削速度　v_c=130 (120-180)m/min
切深　a_p=1/3D(1/8-1/2D)
单刃进给　f_z=0.15mm(0.02-0.2)

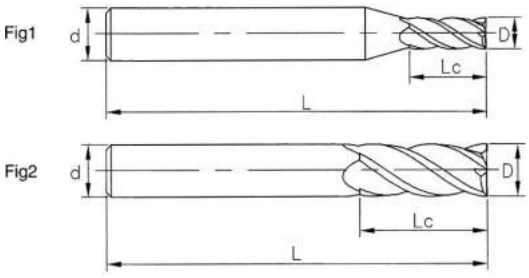
按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

工件材料　Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y			Y	Y

Y适合　Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃半径 R	刃长 Lc	柄径 d	总长 L		
R1.5*6*3*50-2F	1.5	6	3	50	2	2
R1.5*6*3*75-2F	1.5	6	3	75	2	2
R1.5*6*3*100-2F	1.5	6	3	100	2	2
R0.5*2*4*50-2F	0.5	2	4	50	2	1
R0.75*3*4*50-2F	0.75	3	4	50	2	1
R1*4*4*50-2F	1	4	4	50	2	1
R1.25*5*4*50-2F	1.25	5	4	50	2	1
R1.5*6*4*50-2F	1.5	6	4	50	2	1
R1.75*7*4*50-2F	1.75	7	4	50	2	1
R2*8*4*50-2F	2	8	4	50	2	2
R2*8*4*75-2F	2	8	4	75	2	2
R2*8*4*100-2F	2	8	4	100	2	2
R2.5*10*5*50-2F	2.5	10	5	50	2	2
R2.5*10*5*75-2F	2.5	10	5	75	2	2
R2.5*10*5*100-2F	2.5	10	5	100	2	2
R2.5*10*6*50-2F	2.5	10	6	50	2	1
R3*12*6*50-2F	3	12	6	50	2	2
R3*12*6*75-2F	3	12	6	75	2	2
R3*12*6*100-2F	3	12	6	100	2	2
R3*12*6*150-2F	3	12	6	150	2	2
R3.5*16*8*60-2F	3.5	16	8	60	2	1
R4*16*8*60-2F	4	16	8	60	2	2
R4*16*8*75-2F	4	16	8	75	2	2
R4*16*8*100-2F	4	16	8	100	2	2
R4*20*8*150-2F	4	20	8	150	2	2
R4.5*18*10*75-2F	4.5	18	10	75	2	1
R5*20*10*75-2F	5	20	10	75	2	2
R5*20*10*100-2F	5	20	10	100	2	2
R5*30*10*150-2F	5	30	10	150	2	2
R5.5*24*12*75-2F	5.5	24	12	75	2	1
R6*24*12*75-2F	6	24	12	75	2	2
R6*24*12*100-2F	6	24	12	100	2	2
R6*36*12*150-2F	6	36	12	150	2	2
R7*28*14*100-2F	7	28	14	100	2	2
R7*40*14*150-2F	7	40	14	150	2	2
R8*32*16*100-2F	8	32	16	100	2	2
R8*50*16*150-2F	8	50	16	150	2	2
R9*36*18*100-2F	9	36	18	100	2	2
R9*50*18*150-2F	9	50	18	150	2	2
R10*40*20*100-2F	10	40	20	100	2	2
R10*50*20*150-2F	10	50	20	150	2	2

55度平底4刃硬质合金铣刀
HRC 55 deg Tungsten Carbide 4 Flute Square End Mills



•原材料

具有高硬度和, 良好的耐磨度

Raw Material: It has high hardness and good wear resistance

• 涂层

TiSiN，含硅，具有极高的表面硬度和极高的热阻

Coating：TiSiN，containing silica, very high surface hardness and high thermal resistance.

•铣刀直径精度公差

Tolerance of End MillDiameter

1＜	D≤6	-0.010～	-0.030
6＜	D≤10	-0.015～	-0.040
10＜	D≤20	-0.020～	-0.050

•刃数

4刃，刚性高，广泛用于浅槽、侧铣和精加工

Flutes: 4 flutes, high rigidity, widely used in shallow slot, profile milling, and finish machining.

•螺旋角度

35度

,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

•一般切削参数

Cutting Parameters

切削速度 v_c=150 (120-180)m/min

切深 a_p=1/3D(1/8-1/2D)

切宽 a_e=1/2D(1/4-1D)

单刃进给 f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。

Please adjust the parameters accroding to the material and hardness of workpieces.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				Y

Y适合 Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
3*8*3*50-4F	3	8	3	50	4	2
3*12*3*75-4F	3	12	3	75	4	2
3*12*3*100-4F	3	12	3	100	4	2
1*3*4*50-4F	1	3	4	50	4	1
1.5*4*4*50-4F	1.5	4	4	50	4	1
2*5*4*50-4F	2	5	4	50	4	1
2.5*7*4*50-4F	2.5	7	4	50	4	1
3*8*4*50-4F	3	8	4	50	4	1
3.5*10*4*50-4F	3.5	10	4	50	4	1
4*10*4*50-4F	4	10	4	50	4	2
4*20*4*75-4F	4	20	4	75	4	2
4*25*4*100-4F	4	25	4	100	4	2
5*13*5*50-4F	5	13	5	50	4	2
5*20*5*75-4F	5	20	5	75	4	2
5*25*5*100-4F	5	25	5	100	4	2
2.5*7*6*50-4F	2.5	7	6	50	4	1
3*8*6*50-4F	3	8	6	50	4	1
3.5*10*6*50-4F	3.5	10	6	50	4	1
4*10*6*50-4F	4	10	6	50	4	1
4.5*12*6*50-4F	4.5	12	6	50	4	1
5*13*6*50-4F	5	13	6	50	4	1
6*15*6*50-4F	6	15	6	50	4	2
6*20*6*75-4F	6	20	6	75	4	2
6*30*6*100-4F	6	30	6	100	4	2
6*40*6*150-4F	6	40	6	150	4	2
7*18*8*60-4F	7	18	8	60	4	1
8*20*8*60-4F	8	20	8	60	4	2
8*25*8*75-4F	8	25	8	75	4	2
8*35*8*100-4F	8	35	8	100	4	2
8*50*8*150-4F	8	50	8	150	4	2
9*23*10*75-4F	9	23	10	75	4	1
10*25*10*75-4F	10	25	10	75	4	2
10*40*10*100-4F	10	40	10	100	4	2
10*50*10*150-4F	10	50	10	150	4	2
11*28*12*75-4F	11	28	12	75	4	1
12*30*12*75-4F	12	30	12	75	4	2
12*45*12*100-4F	12	45	12	100	4	2
12*55*12*150-4F	12	55	12	150	4	2
14*35*14*80-4F	14	35	14	80	4	2
14*45*14*100-4F	14	45	14	100	4	2
14*60*14*150-4F	14	60	14	150	4	2
16*45*16*100-4F	16	45	16	100	4	2
16*60*16*150-4F	16	60	16	150	4	2
18*45*18*100-4F	18	45	18	100	4	2
18*60*18*150-4F	18	60	18	150	4	2
20*45*20*100-4F	20	45	20	100	4	2
20*60*20*150-4F	20	60	20	150	4	2

55度平底2刃硬质合金铣刀
HRC 55 deg Tungsten Carbide 2 Flute Square End Mills

Fig1

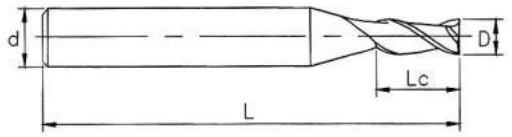
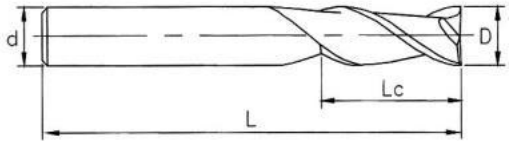


Fig2



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Coating：TiSiN，containing silica, very high surface hardness and high thermal resistance.

•铣刀直径精度公差

Tolerance of End MillDiameter

1＜	D≤6	-0.010～	-0.030
6＜	D≤10	-0.015～	-0.040
10＜	D≤20	-0.020～	-0.050

•刃数

2刃排削顺畅，纵向进给加工容易，广泛用于切槽和孔加工

Flutes：2 flutes, good for chip removal, easy for vertical feed processing, widely used in slot and hole processing

•螺旋角度

35度,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

•一般切削参数

Cutting Parameters

削速度　v_c=130 (120-180)m/min
切深　　a_p=1/3D(1/8-1/2D)
切宽　　a_e=1/2D(1/4-1D)
单刃进给　f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
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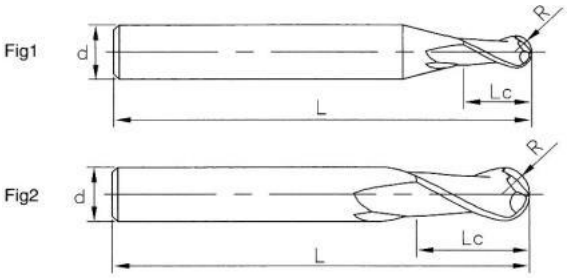
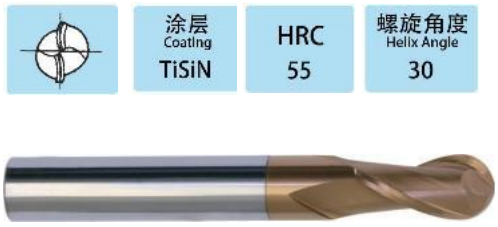
工件材料　Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				Y

Y适合　Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
3*8*3*50-2F	3	8	3	50	2	2
3*12*3*75-2F	3	12	3	75	2	2
3*12*3*100-2F	3	12	3	100	2	2
1*3*4*50-2F	1	3	4	50	2	1
1.5*4*4*50-2F	1.5	4	4	50	2	1
2*5*4*50-2F	2	5	4	50	2	1
2.5*7*4*50-2F	2.5	7	4	50	2	1
3*8*4*50-2F	3	8	4	50	2	1
3.5*10*4*50-2F	3.5	10	4	50	2	1
4*10*4*50-2F	4	10	4	50	2	2
4*20*4*75-2F	4	20	4	75	2	2
4*25*4*100-2F	4	25	4	100	2	2
5*13*5*50-2F	5	13	5	50	2	2
5*20*5*75-2F	5	20	5	75	2	2
5*25*5*100-2F	5	25	5	100	2	2
2.5*7*6*50-2F	2.5	7	6	50	2	1
3*8*6*50-2F	3	8	6	50	2	1
3.5*10*6*50-2F	3.5	10	6	50	2	1
4*10*6*50-2F	4	10	6	50	2	1
4.5*12*6*50-2F	4.5	12	6	50	2	1
5*13*6*50-2F	5	13	6	50	2	1
6*15*6*50-2F	6	15	6	50	2	2
6*20*6*75-2F	6	20	6	75	2	2
6*30*6*100-2F	6	30	6	100	2	2
6*40*6*150-2F	6	40	6	150	2	2
7*18*8*60-2F	7	18	8	60	2	1
8*20*8*60-2F	8	20	8	60	2	2
8*25*8*75-2F	8	25	8	75	2	2
8*35*8*100-2F	8	35	8	100	2	2
8*50*8*150-2F	8	50	8	150	2	2
9*23*10*75-2F	9	23	10	75	2	1
10*25*10*75-2F	10	25	10	75	2	2
10*40*10*100-2F	10	40	10	100	2	2
10*50*10*150-2F	10	50	10	150	2	2
11*28*12*75-2F	11	28	12	75	2	1
12*30*12*75-2F	12	30	12	75	2	2
12*45*12*100-2F	12	45	12	100	2	2
12*55*12*150-2F	12	55	12	150	2	2
14*35*14*80-2F	14	35	14	80	2	2
14*45*14*100-2F	14	45	14	100	2	2
14*60*14*150-2F	14	60	14	150	2	2
16*45*16*100-2F	16	45	16	100	2	2
16*60*16*150-2F	16	60	16	150	2	2
18*45*18*100-2F	18	45	18	100	2	2
18*60*18*150-2F	18	60	18	150	2	2
20*45*20*100-2F	20	45	20	100	2	2
20*60*20*150-2F	20	60	20	150	2	2

55度2刃硬质合金球头铣刀
HRC 55 deg Tungsten Carbide 2 Flutes Ball Nose End Mills





•原材料

具有高硬度和, 良好的耐磨度

Raw Material: It has high hardness and good wear resistance

•涂层

TiSiN，含硅，具有极高的表面硬度和极高的热阻

Coating：TiSiN，containing silica, very high surface hardness and high thermal resistance.

•铣刀直径精度公差

Tolerance of End MillDiameter

1＜	D≤6	-0.010～ -0.030
6＜	D≤10	-0.015～ -0.040
10＜	D≤20	-0.020～ -0.050

•产品设计

双刃带设计，有效提高刃带刚性和工件表面光洁度；刃口过中心设计，有效减少切削阻力；大容量排屑槽，方便顺畅排屑，提高加工效率；二刃设计，广泛应用于沟槽，孔加工

Double-edge design improves rigidity and surface finish effectively. Cutting edge over the center reduces the cutting resistance. High capacity of junk slot benefits chip removal and increases machining efficiency. 2 flutes design is good for chip removal, easy for vertical feed processing, widely used in slot, and hole processing.

•一般切削参数

Cutting Parameters

切削速度 v_c=130 (120-180)m/min
切深 a_p=1/3D(1/8-1/2D)
单刃进给 f_z=0.15mm(0.02-0.2)

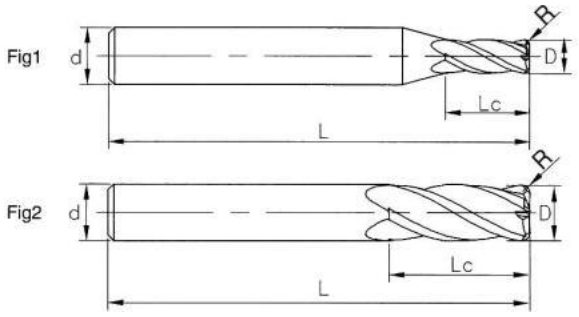
按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				Y

Y适合 Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃半径 R Lc	刃长	柄径 d	总长 L		
R1.5*6*3*50-2F	1.5	6	3	50	2	2
R1.5*6*3*75-2F	1.5	6	3	75	2	2
R1.5*6*3*100-2F	1.5	6	3	100	2	2
R0.5*2*4*50-2F	0.5	2	4	50	2	1
R0.75*3*4*50-2F	0.75	3	4	50	2	1
R1*4*4*50-2F	1	4	4	50	2	1
R1.25*5*4*50-2F	1.25	5	4	50	2	1
R1.5*6*4*50-2F	1.5	6	4	50	2	1
R1.75*7*4*50-2F	1.75	7	4	50	2	1
R2*8*4*50-2F	2	8	4	50	2	2
R2*8*4*75-2F	2	8	4	75	2	2
R2*8*4*100-2F	2	8	4	100	2	2
R2.5*10*5*50-2F	2.5	10	5	50	2	2
R2.5*10*5*75-2F	2.5	10	5	75	2	2
R2.5*10*5*100-2F	2.5	10	5	100	2	2
R2.5*10*6*50-2F	2.5	10	6	50	2	1
R3*12*6*50-2F	3	12	6	50	2	2
R3*12*6*75-2F	3	12	6	75	2	2
R3*12*6*100-2F	3	12	6	100	2	2
R3*12*6*150-2F	3	12	6	150	2	2
R3.5*16*8*60-2F	3.5	16	8	60	2	1
R4*16*8*60-2F	4	16	8	60	2	2
R4*16*8*75-2F	4	16	8	75	2	2
R4*16*8*100-2F	4	16	8	100	2	2
R4*20*8*150-2F	4	20	8	150	2	2
R4.5*18*10*75-2F	4.5	18	10	75	2	1
R5*20*10*75-2F	5	20	10	75	2	2
R5*20*10*100-2F	5	20	10	100	2	2
R5*30*10*150-2F	5	30	10	150	2	2
R5.5*24*12*75-2F	5.5	24	12	75	2	1
R6*24*12*75-2F	6	24	12	75	2	2
R6*24*12*100-2F	6	24	12	100	2	2
R6*35*12*150-2F	6	36	12	150	2	2
R7*28*14*100-2F	7	28	14	100	2	2
R7*40*14*150-2F	7	40	14	150	2	2
R8*32*16*100-2F	8	32	16	100	2	2
R8*50*16*150-2F	8	50	16	150	2	2
R9*36*18*100-2F	9	36	18	100	2	2
R9*50*18*150-2F	9	50	18	150	2	2
R10*40*20*100-2F	10	40	20	100	2	2
R10*50*20*150-2F	10	50	20	150	2	2

55度4刃硬质合金圆鼻铣刀
HRC 55 deg Tungsten Carbide 4 Flutes Corner Radius End Mills



•原材料

具有高硬度和良好的耐磨度

Raw Material：
high hardness and good wear resistance.

•涂层

TiSiN，含硅，具有极高的表面硬度和极高的热阻

Coating：TiSiN，containing silica, very high surface hardness and high thermal resistance.

•铣刀直径精度公差

Tolerance of End MillDiameter

1＜	D≤6	-0.010～	-0.030
6＜	D≤10	-0.015～	-0.040
10＜	D≤20	-0.020～	-0.050

•刃口设计

刃口倒角，不易崩裂，广泛用于高速加工中

Cutting Edge Design：Corner radius, uneasy to cracking, widly used in high speed cutting

•一般切削参数

Cutting Parameters

切削速度	v_c=130 (120-180)m/min
切深	a_p=1/3D(1/8-1/2D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

•螺旋角度

35度,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

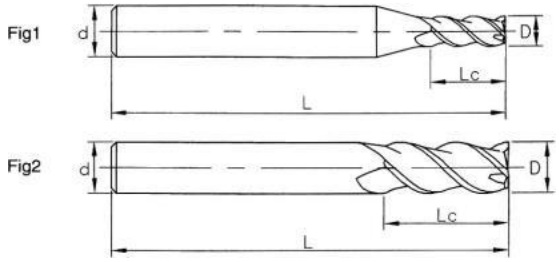
Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				Y

Y适合　Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	R	柄径 d	总长 L		
3R0.5*3*50-4F	3	0.5	3	50	4	2
3R1*3*50-4F	3	1	3	50	4	2
3R0.5*3*75-4F	3	0.5	3	75	4	2
3R1*3*75-4F	3	1	3	75	4	2
3R0.5*3*100-4F	3	0.5	3	100	4	2
3R1*3*100-4F	3	1	3	100	4	2
3R0.5*4*50-4F	3	0.5	4	50	4	1
3R1*4*50-4F	3	1	4	50	4	1
4R0.5*4*50-4F	4	0.5	4	50	4	2
4R1*4*50-4F	4	1	4	50	4	2
4R0.5*4*75-4F	4	0.5	4	75	4	2
4R1*4*75-4F	4	1	4	75	4	2
4R0.5*4*100-4F	4	0.5	4	100	4	2
4R1*4*100-4F	4	1	4	100	4	2
5R0.5*5*50-4F	5	0.5	5	50	4	2
5R1*5*50-4F	5	1	5	50	4	2
5R0.5*6*50-4F	5	0.5	6	50	4	1
5R1*6*50-4F	5	1	6	50	4	1
6R0.5*6*50-4F	6	0.5	6	50	4	2
6R1*6*50-4F	6	1	6	50	4	2
6R0.5*6*75-4F	6	0.5	6	75	4	2
6R1*6*75-4F	6	1	6	75	4	2
6R0.5*6*100-4F	6	0.5	6	100	4	2
6R1*6*100-4F	6	1	6	100	4	2
6R0.5*6*150-4F	6	0.5	6	150	4	2
6R1*6*150-4F	6	1	6	150	4	2
8R0.5*8*60-4F	8	0.5	8	60	4	2
8R1*8*60-4F	8	1	8	60	4	2
8R2*8*60-4F	8	2	8	60	4	2
8R3*8*60-4F	8	3	8	60	4	2
8R0.5*8*75-4F	8	0.5	8	75	4	2
8R1*8*75-4F	8	1	8	75	4	2
8R0.5*8*100-4F	8	0.5	8	100	4	2
8R1*8*100-4F	8	1	8	100	4	2
8R0.5*8*150-4F	8	0.5	8	150	4	2
8R1*8*150-4F	8	1	8	150	4	2
10R0.5*10*75-4F	10	0.5	10	75	4	2
10R1*10*75-4F	10	1	10	75	4	2
10R0.5*10*100-4F	10	0.5	10	100	4	2
10R1*10*100-4F	10	1	10	100	4	2
10R0.5*10*150-4F	10	0.5	10	150	4	2
10R1*10*150-4F	10	1	10	150	4	2
12R0.5*12*75-4F	12	0.5	12	75	4	2
12R1*12*75-4F	12	1	12	75	4	2
12R0.5*12*100-4F	12	0.5	12	100	4	2
12R1*12*100-4F	12	1	12	100	4	2
12R0.5*12*150-4F	12	0.5	12	150	4	2
12R1*12*150-4F	12	1	12	150	4	2

55度3刃铝用铣刀
HRC 55 deg Tungsten Carbide 3 Flute End Mills for Aluminum



•原材料
具有高硬度和良好的耐磨度
Raw Material：
high hardness and good wear resistance.

•刃数
3刃设计，有效防震，切削稳定
Flutes: 3 flutes, effectively mitigate vibration and stable cutting.

•铣刀直径精度公差
Tolerance of End MillDiameter

1＜	D≤6	-0.010～ -0.030
6＜	D≤10	-0.015～ -0.040
10＜	D≤20	-0.020～ -0.050

•A型
双后角设计有效去毛刺，用于工件的半精加工和精加工
A Type：Double-edge design provides good smooth finish and is suitable for semi-finish and finish machining.

•一般切削参数
Cutting Parameters

切削速度	v_c=220 (100-800)m/min
切深	a_p=1/2D(1/8-3/4D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

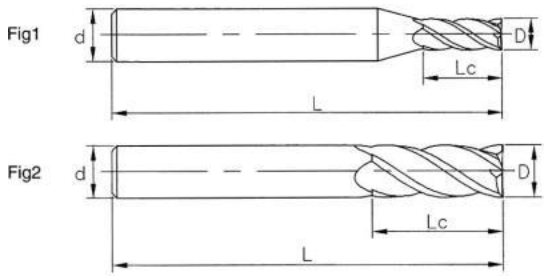
•B型
单后角设计，刀刃锋利，排屑顺畅，切削速度快，广泛应用于工件粗加工中
B Type: Single-edge design, sharp blade, good for chip removal, high cutting speed, widly used in rough machining.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
			Y	Y		

Y适合 Suitable

型号 Cat.No		规格 Specifications				刃数 Flutes	图号 Figure No.
		刃径 D	刃长 Lc	柄径 d	总长 L		
3*9*3*50-3FA	3*9*3*50-3FB	3	9	3	50	3	2
3*15*3*75-3FA	3*15*3*75-3FB	3	15	3	75	3	2
3*15*3*100-3FA	3*15*3*100-3FB	3	15	3	100	3	2
1*3*4*50-3FA	1*3*4*50-3FB	1	3	4	50	3	1
1.5*5*4*50-3FA	1.5*5*4*50-3FB	1.5	5	4	50	3	1
2*6*4*50-3FA	2*6*4*50-3FB	2	6	4	50	3	1
2.5*8*4*50-3FA	2.5*8*4*50-3FB	2.5	8	4	50	3	1
3*9*4*50-3FA	3*9*4*50-3FB	3	9	4	50	3	1
3.5*12*4*50-3FA	3.5*12*4*50-3FB	3.5	12	4	50	3	1
4*12*4*50-3FA	4*12*4*50-3FB	4	12	4	50	3	2
4*15*4*75-3FA	4*15*4*75-3FB	4	15	4	75	3	2
4*20*4*100-3FA	4*20*4*100-3FB	4	20	5	100	3	2
5*15*5*50-3FA	5*15*5*50-3FB	5	15	5	50	3	2
5*20*5*75-3FA	5*20*5*75-3FB	5	20	5	75	3	2
5*25*5*100-3FA	5*25*5*100-3FB	5	25	6	100	3	2
2*6*6*50-3FA	2*6*6*50-3FB	2	6	6	50	3	1
3*9*6*50-3FA	3*9*6*50-3FB	3	9	6	50	3	1
4*12*6*50-3FA	4*12*6*50-3FB	4	12	6	50	3	1
5*15*6*50-3FA	5*15*6*50-3FB	5	15	6	50	3	1
6*18*6*50-3FA	6*18*6*50-3FB	6	18	6	50	3	2
6*25*6*75-3FA	6*25*6*75-3FB	6	25	6	75	3	2
6*30*6*100-3FA	6*30*6*100-3FB	6	30	6	100	3	2
6*35*6*150-3FA	6*35*6*150-3FB	6	35	6	150	3	2
7*21*8*60-3FA	7*21*8*60-3FB	7	21	8	60	3	1
8*24*8*60-3FA	8*24*8*60-3FB	8	24	8	60	3	2
8*30*8*75-3FA	8*30*8*75-3FB	8	30	8	75	3	2
8*40*8*100-3FA	8*40*8*100-3FB	8	40	8	100	3	2
8*50*8*150-3FA	8*50*8*150-3FB	8	50	8	150	3	2
9*27*10*75-3FA	9*27*10*75-3FB	9	27	10	75	3	1
10*30*10*75-3FA	10*30*10*75-3FB	10	30	10	75	3	2
10*45*10*100-3FA	10*45*10*100-3FB	10	45	10	100	3	2
10*50*10*150-3FA	10*50*10*150-3FB	10	50	10	150	3	2
11*33*12*75-3FA	11*33*12*75-3FB	11	33	12	75	3	1
12*36*12*75-3FA	12*36*12*75-3FB	12	36	12	75	3	2
12*45*100-3FA	12*45*100-3FB	12	45	12	100	3	2
12*60*12*150-3FA	12*60*12*150-3FB	12	60	12	150	3	2
14*35*14*80-3FA	14*35*14*80-3FB	14	35	14	80	3	2
14*45*14*100-3FA	14*45*14*100-3FB	14	45	14	100	3	2
14*60*14*150-3FA	14*60*14*150-3FB	14	60	14	150	3	2
16*45*16*100-3FA	16*45*16*100-3FB	16	45	16	100	3	2
16*60*16*150-3FA	16*60*16*150-3FB	16	60	16	150	3	2
18*45*18*100-3FA	18*45*18*100-3FB	18	45	18	100	3	2
18*60*18*150-3FA	18*60*18*150-3FB	18	60	18	150	3	2
20*45*20*100-3FA	20*45*20*100-3FB	20	45	20	100	3	2
20*60*20*150-3FA	20*60*20*150-3FB	20	60	20	150	3	2

45度平底4刃硬质合金铣刀
HRC 45 deg Tungsten Carbide 4 Flute Square End Mills



•原材料
具有良好的耐磨性和抗腐蚀性

Raw Material：
high hardness, good wear resistance and corrosion resistance.

•涂层
AlTiN涂层，高铝含量提供了优异的红硬性和抗氧化温度

Coating: AlTiN, high aluminum content provides excellent hot hardness and oxidation resistance.

•铣刀直径精度公差
Tolerance of End MillDiameter

1＜	D≤6	-0.010～ -0.030
6＜	D≤10	-0.015～ -0.040
10＜	D≤20	-0.020～ -0.050

•刃数
4刃，刚性高，广泛用于浅槽、侧铣和精加工

Flutes: 4 flutes, high rigidity, widely used in shallow slot, profile milling, and finish machining.

•螺旋角度
35度,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

•一般切削参数
Cutting Parameters

切削速度	v_c=220 (120-180)m/min
切深	a_p=1/3D(1/8-1/2D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				

Y适合　Suitable

型号 Cat.No	规格 Specifications				4刃数 F4lutes4	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
3*8*3*50-4F	3	8	3	50	4	2
3*12*3*75-4F	3	12	3	75	4	2
3*12*3*100-4F	3	12	3	100	4	2
1*3*4*50-4F	1	3	4	50	4	1
1.5*4*4*50-4F	1.5	4	4	50	4	1
2*5*4*50-4F	2	5	4	50	4	1
2.5*7*4*50-4F	2.5	7	4	50	4	1
3*8*4*50-4F	3	8	4	50	4	1
3.5*10*4*50-4F	3.5	10	4	50	4	1
4*10*4*50-4F	4	10	4	50	4	2
4*20*4*75-4F	4	20	4	75	4	2
4*25*4*100-4F	4	25	4	100	4	2
5*13*5*50-4F	5	13	5	50	4	2
5*20*5*75-4F	5	20	5	75	4	2
5*25*5*100-4F	5	25	5	100	4	2
2.5*7*6*50-4F	2.5	7	6	50	4	1
3*8*6*50-4F	3	8	6	50	4	1
3.5*10*6*50-4F	3.5	10	6	50	4	1
4*10*6*50-4F	4	10	6	50	4	1
4.5*12*6*50-4F	4.5	12	6	50	4	1
5*13*6*50-4F	5	13	6	50	4	1
6*15*6*50-4F	6	15	6	50	4	2
6*20*6*75-4F	6	20	6	75	4	2
6*25*6*100-4F	6	25	6	100	4	2
6*40*6*150-4F	6	40	6	150	4	2
7*18*8*60-4F	7	18	8	60	4	1
8*20*8*60-4F	8	20	8	60	4	2
8*25*8*75-4F	8	25	8	75	4	2
8*35*8*100-4F	8	35	8	100	4	2
8*50*8*150-4F	8	50	8	150	4	2
9*23*10*75-4F	9	23	10	75	4	1
10*25*10*75-4F	10	25	10	75	4	2
10*40*10*100-4F	10	40	10	100	4	2
10*50*10*150-4F	10	50	10	150	4	2
11*28*12*75-4F	11	28	12	75	4	1
12*30*12*75-4F	12	30	12	75	4	2
12*45*12*100-4F	12	45	12	100	4	2
12*55*12*150-4F	12	55	12	150	4	2
14*35*14*80-4F	14	35	14	80	4	2
14*45*14*100-4F	14	45	14	100	4	2
14*60*14*150-4F	14	60	14	150	4	2
16*45*16*100-4F	16	45	16	100	4	2
16*60*16*150-4F	16	60	16	150	4	2
18*45*18*100-4F	18	45	18	100	4	2
18*60*18*150-4F	18	60	18	150	4	2
20*45*20*100-4F	20	45	20	100	4	2
20*60*20*150-4F	20	60	20	150	4	2

45度平底2刃硬质合金铣刀
HRC 45 deg Tungsten Carbide 2 Flute Square End Mills

Fig1

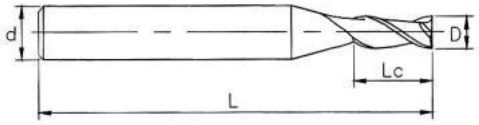
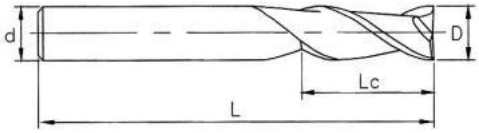
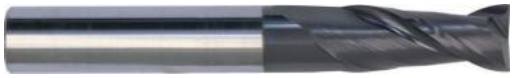


Fig2





•原材料

具有良好的耐磨性和抗腐蚀性

Raw Material：
high hardness, good wear resistance and corrosion resistance.

•涂层

AlTiN涂层，高铝含量提供了优异的红硬性和抗氧化温度

Coating: AlTiN, high aluminum content provides excellent hot hardness and oxidation resistance.

•铣刀直径精度公差

Tolerance of End MillDiameter

1＜	D≤6	-0.010～	-0.030
6＜	D≤10	-0.015～	-0.040
10＜	D≤20	-0.020～	-0.050

•刃数

2刃排削顺畅，纵向进给加工容易，广泛用于切槽和孔加工

Flutes：2 flutes, good for chip removal, easy for vertical feed processing, widely used in slot and hole processing

•一般切削参数

Cutting Parameters

切削速度	v_c=130 (120-180)m/min
切深	a_p=1/3D(1/8-1/2D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

•螺旋角度

35度,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

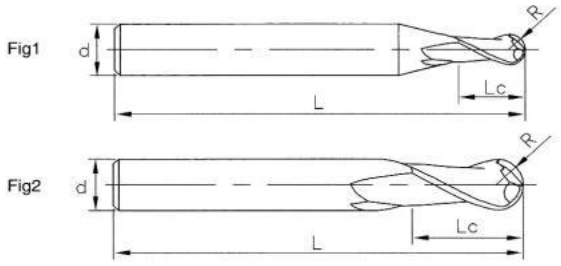
Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				

Y适合　Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
3*8*3*50-2F	3	8	3	50	2	2
3*12*3*75-2F	3	12	3	75	2	2
3*12*3*100-2F	3	12	3	100	2	2
1*3*4*50-2F	1	3	4	50	2	1
1.5*4*4*50-2F	1.5	4	4	50	2	1
2*5*4*50-2F	2	5	4	50	2	1
2.5*7*4*50-2F	2.5	7	4	50	2	1
3*8*4*50-2F	3	8	4	50	2	1
3.5*10*4*50-2F	3.5	10	4	50	2	1
4*10*4*50-2F	4	10	4	50	2	2
4*20*4*75-2F	4	20	4	75	2	2
4*25*4*100-2F	4	25	4	100	2	2
5*13*5*50-2F	5	13	5	50	2	2
5*20*5*75-2F	5	20	5	75	2	2
5*25*5*100-2F	5	25	5	100	2	2
2.5*7*6*50-2F	2.5	7	6	50	2	1
3*8*6*50-2F	3	8	6	50	2	1
3.5*10*6*50-2F	3.5	10	6	50	2	1
4*10*6*50-2F	4	10	6	50	2	1
4.5*12*6*50-2F	4.5	12	6	50	2	1
5*13*6*50-2F	5	13	6	50	2	1
6*15*6*50-2F	6	15	6	50	2	2
6*20*6*75-2F	6	20	6	75	2	2
6*25*6*100-2F	6	25	6	100	2	2
6*40*6*150-2F	6	40	6	150	2	2
7*18*8*60-2F	7	18	8	60	2	1
8*20*8*60-2F	8	20	8	60	2	2
8*25*8*75-2F	8	25	8	75	2	2
8*35*8*100-2F	8	35	8	100	2	2
8*50*8*150-2F	8	50	8	150	2	2
9*23*10*75-2F	9	23	10	75	2	1
10*25*10*75-2F	10	25	10	75	2	2
10*40*10*100-2F	10	40	10	100	2	2
10*50*10*150-2F	10	50	10	150	2	2
11*28*12*75-2F	11	28	12	75	2	1
12*30*12*75-2F	12	30	12	75	2	2
12*45*12*100-2F	12	45	12	100	2	2
12*55*12*150-2F	12	55	12	150	2	2
14*35*14*80-2F	14	35	14	80	2	2
14*45*14*100-2F	14	45	14	100	2	2
14*60*14*150-2F	14	60	14	150	2	2
16*45*16*100-2F	16	45	16	100	2	2
16*60*16*150-2F	16	60	16	150	2	2
18*45*18*100-2F	18	45	18	100	2	2
18*60*18*150-2F	18	60	18	150	2	2
20*45*20*100-2F	20	45	20	100	2	2
20*60*20*150-2F	20	60	20	150	2	2

45度2刃硬质合金球头铣刀
HRC 45 deg Tungsten Carbide 2 Flute Ball Nose End Mills



•原材料
具有良好的耐磨性和抗腐蚀性

Raw Material:
high hardness, good wear resistance and corrosion resistance.

•涂层
AlTiN涂层，高铝含量提供了优异的红硬性和抗氧化温度

Coating: AlTiN, high aluminum content provides excellent hot hardness and oxidation resistance.

•铣刀直径精度公差
Tolerance of End MillDiameter

1＜	D≤6	-0.010～ -0.030
6＜	D≤10	-0.015～ -0.040
10＜	D≤20	-0.020～ -0.050

•产品设计
双刃带设计，有效提高刃带刚性和工件表面光洁度；刃口过中心设计，有效减少切削阻力；大容量排屑槽，方便顺畅排屑，提高加工效率；二刃设计，广泛应用于沟槽，孔加工

Double-edge design improves rigidity and surface finish effectively. Cutting edge over the center reduces the cutting resistance. High capacity of junk slot benefits chip removal and increases machining efficiency. 2 flutes design is good for chip removal, easy for vertical feed processing, widely used in slot, profile, and hole processing.

•一般切削参数
Cutting Parameters

切削速度	v_c=130 (120-180)m/min
切深	a_p=1/3D(1/8-1/2D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。

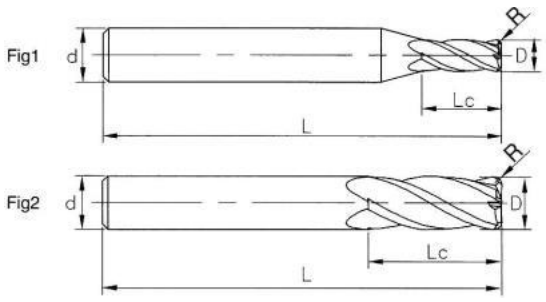
Please adjust the parameters accroding to the material and hardness of workpieces.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				

Y适合 Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃半径 R	刃长 Lc	柄径 d	总长 L		
R1.5*6*3*50-2F	1.5	6	3	50	2	2
R1.5*6*3*75-2F	1.5	6	3	75	2	2
R1.5*6*3*100-2F	1.5	6	3	100	2	2
R0.5*2*4*50-2F	0.5	2	4	50	2	1
R0.75*3*4*50-2F	0.75	3	4	50	2	1
R1*4*4*50-2F	1	4	4	50	2	1
R1.25*5*4*50-2F	1.25	5	4	50	2	1
R1.5*6*4*50-2F	1.5	6	4	50	2	1
R1.75*7*4*50-2F	1.75	7	4	50	2	1
R2*8*4*50-2F	2	8	4	50	2	2
R2*8*4*75-2F	2	8	4	75	2	2
R2*8*4*100-2F	2	8	4	100	2	2
R2.5*10*5*50-2F	2.5	10	5	50	2	2
R2.5*10*5*75-2F	2.5	10	5	75	2	2
R2.5*10*5*100-2F	2.5	10	5	100	2	2
R2.5*10*6*50-2F	2.5	10	6	50	2	1
R3*12*6*50-2F	3	12	6	50	2	2
R3*12*6*75-2F	3	12	6	75	2	2
R3*12*6*100-2F	3	12	6	100	2	2
R3*12*6*150-2F	3	12	6	150	2	2
R3.5*16*8*60-2F	3.5	16	8	60	2	1
R4*16*8*60-2F	4	16	8	60	2	2
R4*16*8*75-2F	4	16	8	75	2	2
R4*16*8*100-2F	4	16	8	100	2	2
R4*20*8*150-2F	4	20	8	150	2	2
R4.5*18*10*75-2F	4.5	18	10	75	2	1
R5*20*10*75-2F	5	20	10	75	2	2
R5*20*10*100-2F	5	20	10	100	2	2
R5*30*10*150-2F	5	30	10	150	2	2
R5.5*24*12*75-2F	5.5	24	12	75	2	1
R6*24*12*75-2F	6	24	12	75	2	2
R6*24*12*100-2F	6	24	12	100	2	2
R6*35*12*150-2F	6	36	12	150	2	2
R7*28*14*100-2F	7	28	14	100	2	2
R7*40*14*150-2F	7	40	14	150	2	2
R8*32*16*100-2F	8	32	16	100	2	2
R8*50*16*150-2F	8	50	16	150	2	2
R9*36*18*100-2F	9	36	18	100	2	2
R9*50*18*150-2F	9	50	18	150	2	2
R10*40*20*100-2F	10	40	20	100	2	2
R10*50*20*150-2F	10	50	20	150	2	2

45度4刃硬质合金圆鼻铣刀
HRC 45 deg Tungsten Carbide 4 Flutes Corner Radius End Mills



•原材料

采用高硬度的自贡 YG10X，具有良好的耐磨性和抗腐蚀性

Raw Material：Use Zigong YG10X, high hardness, good wear resistance and corrosion resistance.

•涂层

AlTiN涂层，高铝含量提供了优异的红硬性和抗氧化温度

Coating: AlTiN, high aluminum content provides excellent hot hardness and oxidation resistance.

•铣刀直径精度公差

Tolerance of End MillDiameter

1＜ D≤6 -0.010～ -0.030
6＜ D≤10 -0.015～ -0.040
10＜ D≤20 -0.020～ -0.050

•刃口设计

刃口倒角，不易崩裂，广泛用于高速加工中

Cutting Edge Design：Corner radius, uneasy to cracking, widly used in high speed cutting

•一般切削参数

Cutting Parameters

切削速度 v_c=130 (120-180)m/min
切深 a_p=1/3D(1/8-1/2D)
切宽 a_e=1/2D(1/4-1D)
单刃进给 f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。

Please adjust the parameters accroding to the material and hardness of workpieces.

•螺旋角度

35度,对被加工材料的材质和硬度适应性强，广泛应用于模具和产品加工，有较高的性价比

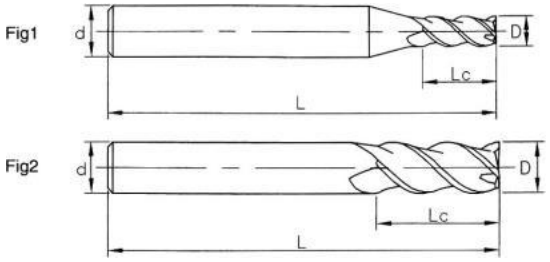
Helix Angle：35 deg，high adaptability to the material and hardness of workpieces, widely used to mold and product processing and cost efficient.

工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
Y	Y	Y				

Y适合 Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	R	柄径 d	总长 L		
3R0.5*3*50-4F	3	0.5	3	50	4	2
3R1*3*50-4F	3	1	3	50	4	2
3R0.5*3*75-4F	3	0.5	3	75	4	2
3R1*3*75-4F	3	1	3	75	4	2
3R0.5*3*100-4F	3	0.5	3	100	4	2
3R1*3*100-4F	3	1	3	100	4	2
3R0.5*4*50-4F	3	0.5	4	50	4	1
3R1*4*50-4F	3	1	4	50	4	1
4R0.5*4*50-4F	4	0.5	4	50	4	2
4R1*4*50-4F	4	1	4	50	4	2
4R0.5*4*75-4F	4	0.5	4	75	4	2
4R1*4*75-4F	4	1	4	75	4	2
4R0.5*4*100-4F	4	0.5	4	100	4	2
4R1*4*100-4F	4	1	4	100	4	2
5R0.5*5*50-4F	5	0.5	5	50	4	2
5R1*5*50-4F	5	1	5	50	4	2
5R0.5*6*50-4F	5	0.5	6	50	4	1
5R1*6*50-4F	5	1	6	50	4	1
6R0.5*6*50-4F	6	0.5	6	50	4	2
6R1*6*50-4F	6	1	6	50	4	2
6R0.5*6*75-4F	6	0.5	6	75	4	2
6R1*6*75-4F	6	1	6	75	4	2
6R0.5*6*100-4F	6	0.5	6	100	4	2
6R1*6*100-4F	6	1	6	100	4	2
6R0.5*6*150-4F	6	0.5	6	150	4	2
6R1*6*150-4F	6	1	6	150	4	2
8R0.5*8*60-4F	8	0.5	8	60	4	2
8R1*8*60-4F	8	1	8	60	4	2
8R2*8*60-4F	8	2	8	60	4	2
8R3*8*60-4F	8	3	8	60	4	2
8R0.5*8*75-4F	8	0.5	8	75	4	2
8R1*8*75-4F	8	1	8	75	4	2
8R0.5*8*100-4F	8	0.5	8	100	4	2
8R1*8*100-4F	8	1	8	100	4	2
8R0.5*8*150-4F	8	0.5	8	150	4	2
8R1*8*150-4F	8	1	8	150	4	2
10R0.5*10*75-4F	10	0.5	10	75	4	2
10R1*10*75-4F	10	1	10	75	4	2
10R0.5*10*100-4F	10	0.5	10	100	4	2
10R1*10*100-4F	10	1	10	100	4	2
10R0.5*10*150-4F	10	0.5	10	150	4	2
10R1*10*150-4F	10	1	10	150	4	2
12R0.5*12*75-4F	12	0.5	12	75	4	2
12R1*12*75-4F	12	1	12	75	4	2
12R0.5*12*100-4F	12	0.5	12	100	4	2
12R1*12*100-4F	12	1	12	100	4	2
12R0.5*12*150-4F	12	0.5	12	150	4	2
12R1*12*150-4F	12	1	12	150	4	2

45度3刃铝用铣刀
HRC 45 deg Tungsten Carbide 3 Flute End Mills for Aluminum



•铣刀直径精度公差

Tolerance of End MillDiameter

1＜ D≤6 -0.010～ -0.030
6＜ D≤10 -0.015～ -0.040
10＜ D≤20 -0.020～ -0.050

•一般切削参数

Cutting Parameters

切削速度 v_c=220(100-800)m/min

切深 a_p=1/2D(1/8-3/4D)
切宽 a_e=1/2D(1/4-1D)

单刃进给 f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。
Please adjust the parameters accroding to the material and hardness of workpieces.

•刃数

3刃设计，有效防震，切削稳定Flutes: 3flutes, effectivelymitigatevibra- tion and stable cutting.

•A型

双后角设计有效去毛刺，用于工件的半精加工和精加工

A Type:Double-edge designprovides good smooth finish and is suitablefor semi-finish and finish machining

•B型

单后角设计，刀刃锋利，排屑顺畅，切削速度快，广泛应用于工件粗加工中

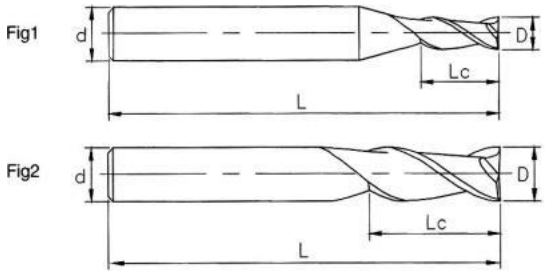
B Type: Single-edge design, sharp blade, good for chip removal, high cutting speed, widly used in rough machining.

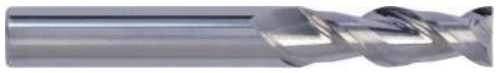
工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
			Y	Y		

Y适合 Suitable

型号 Cat.No		规格 Specifications				刃数 Flutes	图号 Figure No.
		刃径 D	刃长 Lc	柄径 d	总长 L		
3*9*3*50-3FA	3*9*3*50-3FB	3	9	3	50	3	2
3*15*3*75-3FA	3*15*3*75-3FB	3	15	3	75	3	2
3*15*3*100-3FA	3*15*3*100-3FB	3	15	3	100	3	2
1*3*4*50-3FA	1*3*4*50-3FB	1	3	4	50	3	1
1.5*5*4*50-3FA	1.5*5*4*50-3FB	1.5	5	4	50	3	1
2*6*4*50-3FA	2*6*4*50-3FB	2	6	4	50	3	1
2.5*8*4*50-3FA	2.5*8*4*50-3FB	2.5	8	4	50	3	1
3*9*4*50-3FA	3*9*4*50-3FB	3	9	4	50	3	1
3.5*12*4*50-3FA	3.5*12*4*50-3FB	3.5	12	4	50	3	1
4*12*4*50-3FA	4*12*4*50-3FB	4	12	4	50	3	2
4*15*4*75-3FA	4*15*4*75-3FB	4	15	4	75	3	2
4*20*4*100-3FA	4*20*4*100-3FB	4	20	5	100	3	2
5*15*5*50-3FA	5*15*5*50-3FB	5	15	5	50	3	2
5*20*5*75-3FA	5*20*5*75-3FB	5	20	5	75	3	2
5*25*5*100-3FA	5*25*5*100-3FB	5	25	6	100	3	2
2*6*6*50-3FA	2*6*6*50-3FB	2	6	6	50	3	1
3*9*6*50-3FA	3*9*6*50-3FB	3	9	6	50	3	1
4*12*6*50-3FA	4*12*6*50-3FB	4	12	6	50	3	1
5*15*6*50-3FA	5*15*6*50-3FB	5	15	6	50	3	1
6*18*6*50-3FA	6*18*6*50-3FB	6	18	6	50	3	2
6*25*6*75-3FA	6*25*6*75-3FB	6	25	6	75	3	2
6*30*6*100-3FA	6*30*6*100-3FB	6	30	6	100	3	2
6*35*6*150-3FA	6*35*6*150-3FB	6	35	6	150	3	2
7*21*8*60-3FA	7*21*8*60-3FB	7	21	8	60	3	1
8*24*8*60-3FA	8*24*8*60-3FB	8	24	8	60	3	2
8*30*8*75-3FA	8*30*8*75-3FB	8	30	8	75	3	2
8*40*8*100-3FA	8*40*8*100-3FB	8	40	8	100	3	2
8*50*8*150-3FA	8*50*8*150-3FB	8	50	8	150	3	2
9*27*10*75-3FA	9*27*10*75-3FB	9	27	10	75	3	1
10*30*10*75-3FA	10*30*10*75-3FB	10	30	10	75	3	2
10*45*10*100-3FA	10*45*10*100-3FB	10	45	10	100	3	2
10*50*10*150-3FA	10*50*10*150-3FB	10	50	10	150	3	2
11*33*12*75-3FA	11*33*12*75-3FB	11	33	12	75	3	1
12*36*12*75-3FA	12*36*12*75-3FB	12	36	12	75	3	2
12*45*100-3FA	12*45*100-3FB	12	45	12	100	3	2
12*60*12*150-3FA	12*60*12*150-3FB	12	60	12	150	3	2
14*35*14*80-3FA	14*35*14*80-3FB	14	35	14	80	3	2
14*45*14*100-3FA	14*45*14*100-3FB	14	45	14	100	3	2
14*60*14*150-3FA	14*60*14*150-3FB	14	60	14	150	3	2
16*45*16*100-3FA	16*45*16*100-3FB	16	45	16	100	3	2
16*60*16*150-3FA	16*60*16*150-3FB	16	60	16	150	3	2
18*45*18*100-3FA	18*45*18*100-3FB	18	45	18	100	3	2
18*60*18*150-3FA	18*60*18*150-3FB	18	60	18	150	3	2
20*45*20*100-3FA	20*45*20*100-3FB	20	45	20	100	3	2
20*60*20*150-3FA	20*60*20*150-3FB	20	60	20	150	3	2

45度2刃硬质合金铝用铣刀
HRC 45 deg Tungsten Carbide 2 Flute End Mills





•铣刀直径精度公差

Tolerance of End MillDiameter

1＜	D≤6	-0.010～	-0.030
6＜	D≤10	-0.015～	-0.040
10＜	D≤20	-0.020～	-0.050

•后角设计

双后角设计有效去毛刺，用于工件的半精加工和精加工

Double-edge design provides good smooth finish and is suitable for semi-finish and finish machining

•刃数

2刃，大容量的排屑槽使排屑顺畅，不易粘刀

2 Flutes: Large capacity of junk slot and smooth chip evacuation.

•一般切削参数

Cutting Parameters

切削速度	v_c=220 (100-800)m/min
切深	a_p=1/2D(1/8-3/4D)
切宽	a_e=1/2D(1/4-1D)
单刃进给	f_z=0.15mm(0.02-0.2)

按照被加工材料的不同材质和硬度，切削参数做适当的调整。

Please adjust the parameters accroding to the material and hardness of workpieces.

•刃口设计

刃口过中心，有效减少切削阻力，增加了刀具的刚性

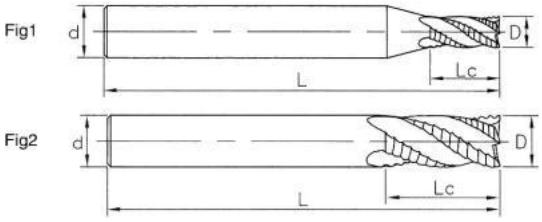
Edge Design: Cutting edge over the center reduces the cutting resistance and increases the rigidity of tools.

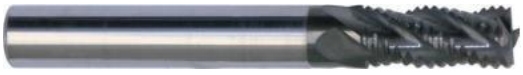
工件材料 Workpiece Material						
碳钢 Carbon Steel	合金钢 Alloy Steel	铸铁 Cast Iron	铝合金 Aluminum Alloy	铜合金 Copper Alloy	不锈钢 Stainless Steel	高硬钢 Hardened Steel
			Y	Y		

Y适合　Suitable

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
3*9*3*50-2F	3	9	3	50	2	2
3*15*3*75-2F	3	15	3	75	2	2
3*15*3*100-2F	3	15	3	100	2	2
1*3*4*50-2F	1	3	4	50	2	1
1.5*5*4*50-2F	1.5	5	4	50	2	1
2*6*4*50-2F	2	6	4	50	2	1
2.5*8*4*50-2F	2.5	8	4	50	2	1
3*9*4*50-2F	3	9	4	50	2	1
3.5*12*4*50-2F	3.5	12	4	50	2	1
4*12*4*50-2F	4	12	4	50	2	2
4*15*4*75-2F	4	15	4	75	2	2
4*20*4*100-2F	4	20	5	100	2	2
5*15*5*50-2F	5	15	5	50	2	2
5*20*5*75-2F	5	20	5	75	2	2
5*25*5*100-2F	5	25	6	100	2	2
2*6*6*50-2F	2	6	6	50	2	1
3*9*6*50-2F	3	9	6	50	2	1
4*12*6*50-2F	4	12	6	50	2	1
5*15*6*50-2F	5	15	6	50	2	1
6*18*6*50-2F	6	18	6	50	2	2
6*25*6*75-2F	6	25	6	75	2	2
6*30*6*100-2F	6	30	6	100	2	2
6*35*6*150-2F	6	35	6	150	2	2
7*21*8*60-2F	7	21	8	60	2	1
8*24*8*60-2F	8	24	8	60	2	2
8*30*8*75-2F	8	30	8	75	2	2
8*40*8*100-2F	8	40	8	100	2	2
8*50*8*150-2F	8	50	8	150	2	2
9*27*10*75-2F	9	27	10	75	2	1
10*30*10*75-2F	10	30	10	75	2	2
10*45*10*100-2F	10	45	10	100	2	2
10*50*10*150-2F	10	50	10	150	2	2
11*33*12*75-2F	11	33	12	75	2	1
12*36*12*75-2F	12	36	12	75	2	2
12*45*100-2F	12	45	12	100	2	2
12*60*12*150-2F	12	60	12	150	2	2
14*35*14*80-2F	14	35	14	80	2	2
14*45*14*100-2F	14	45	14	100	2	2
14*60*14*150-2F	14	60	14	150	2	2
16*45*16*100-2F	16	45	16	100	2	2
16*60*16*150-2F	16	60	16	150	2	2
18*45*18*100-2F	18	45	18	100	2	2
18*60*18*150-2F	18	60	18	150	2	2
20*45*20*100-2F	20	45	20	100	2	2
20*60*20*150-2F	20	60	20	150	2	2

4刃硬质合金波型铣刀
Tungsten Carbide 4 Flute Roughing End Mills





•适应切削材料

压铸钢、普通钢、铸铁、模具钢、镍合金、铝合金、铜合金、 45#钢等

Workpiece Material：Die casting steel, general steel, cast iron, mould steel,nickel alloy, aluminum alloy, copper alloy, 45# steel, etc.

•涂层

库存商品均为不涂层，可根据客户的需求进行涂层

Coating: Products in stock are uncoated, various coatings available according to your needs.

•产品设计

锋利波纹，35度螺旋角设计，提高排屑能力，广泛应用于工件槽切屑、侧切屑、粗加工中

Product Design: Sharp wave and 35 helix angle design improve the chip removal capacity,widely used in slot, profile, rough milling.

型号 Cat.No	规格 Specifications				刃数 Flutes	图号 Figure No.
	刃径 D	刃长 Lc	柄径 d	总长 L		
6*15*6*50-4F	6	15	6	50	4	2
8*20*8*60-4F	8	20	8	60	4	2
10*25*10*75-4F	10	25	10	75	4	2
10*40*10*100-4F	10	40	10	100	4	2
12*30*12*75-4F	12	30	12	75	4	2
12*45*12*100-4F	12	45	12	100	4	2
14*45*14*100-4F	14	45	14	100	4	2
16*45*16*100-4F	16	45	16	100	4	2
18*45*18*100-4F	18	45	18	100	4	2
20*45*20*100-4F	20	45	20	100	4	2