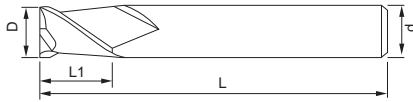


Tungsten steel 2flutes flat milling cutter

钨钢二刃标准平铣刀



Material



Processing graphics



Suitable for finishing and rough processing. The special coating has excellent wear resistance which can reduce friction coefficient;
精加工和粗加工都适应，特殊涂层具有优异的耐磨性，减少了摩擦系数；

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;
应用广泛，HRC60-68均可加工，属于通用型材料加工，如钢、铸铁、不锈钢、钛合金和其它非铁金属；

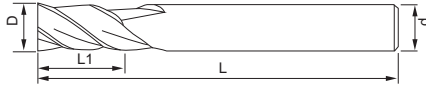
Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

Size(mm)	Tolerance(mm)
D≤5.5	+0~-0.015
D>5.5	+0~-0.020

Code No.	D	L1	L	d	T
N68PPX2101	1.0	3	50	4	2
N68PPX2102	1.0	4	75	4	2
N68PPX2103	1.5	4.5	50	4	2
N68PPX2104	1.5	6	75	4	2
N68PPX2105	2.0	6	50	4	2
N68PPX2106	2.0	8	75	4	2
N68PPX2107	2.5	7.5	50	4	2
N68PPX2108	2.5	10	75	4	2
N68PPX2109	3.0	9	50	4	2
N68PPX2110	3.0	12	75	4	2
N68PPX2111	4.0	12	50	4	2
N68PPX2112	4.0	16	75	4	2
N68PPX2113	4.0	16	100	4	2
N68PPX2114	5.0	15	50	6	2
N68PPX2115	5.0	18	75	6	2
N68PPX2116	5.0	18	100	6	2
N68PPX2117	6.0	18	50	6	2
N68PPX2118	6.0	22	75	6	2
N68PPX2119	6.0	22	100	6	2
N68PPX2120	8.0	25	60	8	2
N68PPX2121	8.0	25	75	8	2
N68PPX2122	8.0	30	100	8	2
N68PPX2123	10.0	30	75	10	2
N68PPX2124	10.0	30	100	10	2
N68PPX2125	12.0	30	75	12	2
N68PPX2126	12.0	35	100	12	2
N68PPX2127	14.0	40	100	14	2
N68PPX2128	16.0	45	100	16	2
N68PPX2129	18.0	45	100	18	2
N68PPX2130	20.0	48	100	20	2

Tungsten steel 4flutes flat milling cutter

钨钢四刃标准平铣刀



Material



Processing graphics



Suitable for finishing and rough processing. The special coating has excellent wear resistance which can reduce friction coefficient;
精加工和粗加工都适应，特殊涂层具有优异的耐磨性，减少了摩擦系数；

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;

应用广泛，HRC60-68均可加工，属于通用型材料加工，如钢、铸铁、不锈钢、钛合金和其它非铁金属；

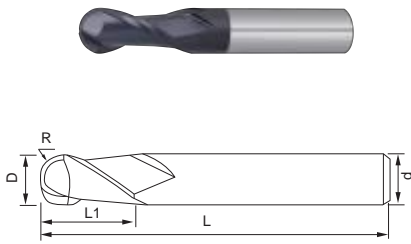
Design of unequal spiral angle could reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

Size(mm)	Tolerance(mm)
D≤5.5	+0~-0.015
D>5.5	+0~-0.020

Code No.	D	L1	L	d	T
N68PPX4101	1.0	3	50	4	4
N68PPX4102	1.0	4	75	4	4
N68PPX4103	1.5	4.5	50	4	4
N68PPX4104	1.5	6	75	4	4
N68PPX4105	2.0	6	50	4	4
N68PPX4106	2.0	8	75	4	4
N68PPX4107	2.5	7.5	50	4	4
N68PPX4108	2.5	10	75	4	4
N68PPX4109	3.0	9	50	4	4
N68PPX4110	3.0	12	75	4	4
N68PPX4111	4.0	12	50	4	4
N68PPX4112	4.0	16	75	4	4
N68PPX4113	4.0	16	100	4	4
N68PPX4114	5.0	15	50	6	4
N68PPX4115	5.0	18	75	6	4
N68PPX4116	5.0	18	100	6	4
N68PPX4117	6.0	18	50	6	4
N68PPX4118	6.0	22	75	6	4
N68PPX4119	6.0	22	100	6	4
N68PPX4120	8.0	25	60	8	4
N68PPX4121	8.0	25	75	8	4
N68PPX4122	8.0	30	100	8	4
N68PPX4123	10.0	30	75	10	4
N68PPX4124	10.0	30	100	10	4
N68PPX4125	12.0	30	75	12	4
N68PPX4126	12.0	35	100	12	4
N68PPX4127	14.0	40	100	14	4
N68PPX4128	16.0	45	100	16	4
N68PPX4129	18.0	45	100	18	4
N68PPX4130	20.0	48	100	20	4

Tungsten steel 2flutes ballnose milling cutter

钨钢二刃标准球铣刀



Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工，特殊涂层具有优异的耐磨性，减少了摩擦系数；

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;
应用广泛，HRC60-68均可加工，属于通用型材料加工，如钢、铸铁、不锈钢、钛合金和其它非铁金属；

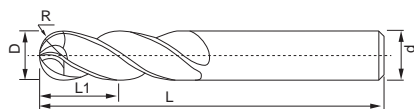
Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Code No.	D	R	L1	L	d	T
N68QPX2101	1.0	0.50R	2	50	4	2
N68QPX2102	1.0	0.50R	2	75	4	2
N68QPX2103	1.5	0.75R	3	50	4	2
N68QPX2104	1.5	0.75R	3	75	4	2
N68QPX2105	2.0	1.00R	4	50	4	2
N68QPX2106	2.0	1.00R	4	75	4	2
N68QPX2107	2.5	1.25R	5	50	4	2
N68QPX2108	2.5	1.25R	5	75	4	2
N68QPX2109	3.0	1.50R	6	50	4	2
N68QPX2110	3.0	1.50R	6	75	4	2
N68QPX2111	4.0	2.00R	8	50	4	2
N68QPX2112	4.0	2.00R	8	75	4	2
N68QPX2113	4.0	2.00R	8	100	4	2
N68QPX2114	5.0	2.50R	10	50	6	2
N68QPX2115	5.0	2.50R	10	75	6	2
N68QPX2116	5.0	2.50R	10	100	6	2
N68QPX2117	6.0	3.00R	12	50	6	2
N68QPX2118	6.0	3.00R	12	75	6	2
N68QPX2119	6.0	3.00R	12	100	6	2
N68QPX2120	8.0	4.00R	16	60	8	2
N68QPX2121	8.0	4.00R	16	75	8	2
N68QPX2122	8.0	4.00R	16	100	8	2
N68QPX2123	10.0	5.00R	20	75	10	2
N68QPX2124	10.0	5.00R	20	100	10	2
N68QPX2125	12.0	6.00R	24	75	12	2
N68QPX2126	12.0	6.00R	24	100	12	2
N68QPX2127	14.0	7.00R	28	100	14	2
N68QPX2128	16.0	8.00R	32	100	16	2
N68QPX2129	20.0	10.0R	40	100	20	2

Tungsten steel 4flutes ballnose milling cutter

钨钢四刃标准球铣刀

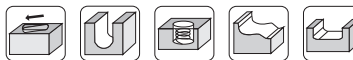


Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工，特殊涂层具有优异的耐磨性，减少了摩擦系数；

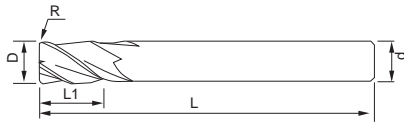
It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals.
应用广泛，HRC60-68均可加工，属于通用型材料加工，如钢、铸铁、不锈钢、钛合金和其它非铁金属；

Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

Code No.	D	R	L1	L	d	T
N68QPX4101	1.0	0.50R	2	50	4	4
N68QPX4101	1.5	0.75R	3	50	4	4
N68QPX4101	2.0	1.00R	4	50	4	4
N68QPX4101	2.5	1.25R	5	50	4	4
N68QPX4101	3.0	1.50R	6	50	4	4
N68QPX4101	4.0	2.00R	8	50	4	4
N68QPX4101	4.0	2.00R	8	75	4	4
N68QPX4101	4.0	2.00R	8	100	4	4
N68QPX4101	5.0	2.50R	10	50	6	4
N68QPX4101	5.0	2.50R	10	75	6	4
N68QPX4101	5.0	2.50R	10	100	6	4
N68QPX4101	6.0	3.00R	12	50	6	4
N68QPX4101	6.0	3.00R	12	75	6	4
N68QPX4101	6.0	3.00R	12	100	6	4
N68QPX4101	8.0	4.00R	16	60	8	4
N68QPX4101	8.0	4.00R	16	75	8	4
N68QPX4101	8.0	4.00R	16	100	8	4
N68QPX4101	10.0	5.00R	20	75	10	4
N68QPX4101	10.0	5.00R	20	100	10	4
N68QPX4101	12.0	6.00R	24	75	12	4
N68QPX4101	12.0	6.00R	24	100	12	4
N68QPX4101	14.0	7.00R	28	100	14	4
N68QPX4101	16.0	8.00R	32	100	16	4
N68QPX4101	20.0	10.0R	40	100	20	4

Tungsten steel 4flutes corner radius milling cutter

钨钢四刃标准圆鼻铣刀



Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工, 特殊涂层具有优异的耐磨性, 减少了摩擦系数;

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;
应用广泛, HRC60-68均可加工, 属于通用型材料加工, 如钢、铸铁、不锈钢、钛合金和其它非铁金属;

Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计, 减少加工过程中的震动;

Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Code No.	D	R	L1	L	d	T
N68YPX4101	1.0	0.1R	3	50	4	4
N68YPX4102	1.0	0.2R	3	50	4	4
N68YPX4103	1.5	0.1R	4.5	50	4	4
N68YPX4104	1.5	0.2R	4.5	50	4	4
N68YPX4105	1.5	0.5R	4.5	50	4	4
N68YPX4106	2.0	0.1R	6	50	4	4
N68YPX4107	2.0	0.2R	6	50	4	4
N68YPX4108	2.0	0.3R	6	50	4	4
N68YPX4109	2.0	0.5R	6	50	4	4
N68YPX4110	2.5	0.1R	7.5	50	4	4
N68YPX4111	2.5	0.2R	7.5	50	4	4
N68YPX4112	2.5	0.3R	7.5	50	4	4
N68YPX4113	2.5	0.5R	7.5	50	4	4
N68YPX4114	3.0	0.2R	9	50	4	4
N68YPX4115	3.0	0.3R	9	50	4	4
N68YPX4116	3.0	0.5R	9	50	4	4
N68YPX4117	3.0	1.0R	9	50	4	4
N68YPX4118	4.0	0.2R	12	50	4	4
N68YPX4119	4.0	0.3R	12	50	4	4
N68YPX4120	4.0	0.5R	12	50	4	4
N68YPX4121	4.0	1.0R	12	50	4	4
N68YPX4122	4.0	1.5R	12	50	4	4
N68YPX4123	5.0	0.2R	13	50	6	4
N68YPX4124	5.0	0.5R	13	50	6	4
N68YPX4125	5.0	1.0R	13	50	6	4
N68YPX4126	6.0	0.2R	15	50	6	4
N68YPX4127	6.0	0.3R	15	50	6	4
N68YPX4128	6.0	0.5R	15	50	6	4
N68YPX4129	6.0	1.0R	15	50	6	4
N68YPX4130	6.0	1.5R	15	50	6	4
N68YPX4131	6.0	2.0R	15	50	6	4
N68YPX4132	8.0	0.2R	20	60	8	4
N68YPX4133	8.0	0.3R	20	60	8	4
N68YPX4134	8.0	0.5R	20	60	8	4
N68YPX4135	8.0	1.0R	20	60	8	4
N68YPX4136	8.0	1.5R	20	60	8	4



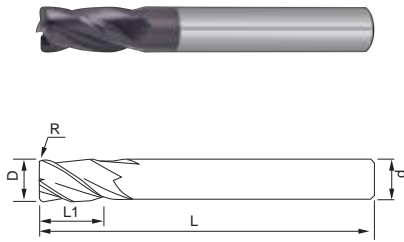
Tungsten steel 4flutes corner radius milling cutter

钨钢四刃标准圆鼻铣刀

Code No.	D	R	L1	L	d	T
N68YPX4137	8.0	2.0R	20	60	8	4
N68YPX4138	10.0	0.2R	25	75	10	4
N68YPX4139	10.0	0.3R	25	75	10	4
N68YPX4140	10.0	0.5R	25	75	10	4
N68YPX4141	10.0	1.0R	25	75	10	4
N68YPX4142	10.0	1.5R	25	75	10	4
N68YPX4143	10.0	2.0R	25	75	10	4
N68YPX4144	12.0	0.5R	30	75	12	4
N68YPX4145	12.0	1.0R	30	75	12	4
N68YPX4146	12.0	1.5R	30	75	12	4
N68YPX4147	12.0	2.0R	30	75	12	4
N68YPX4148	14.0	0.5R	40	100	14	4
N68YPX4149	14.0	1.0R	40	100	14	4
N68YPX4150	16.0	0.5R	45	100	16	4
N68YPX4151	16.0	1.0R	45	100	16	4
N68YPX4152	20.0	0.5R	45	100	18	4
N68YPX4153	20.0	1.0R	45	100	18	4

Tungsten steel 4flutes long corner radius milling cutter

钨钢四刃加长圆鼻铣刀



Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工，特殊涂层具有优异的耐磨性，减少了摩擦系数；

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;
应用广泛，HRC60-68均可加工，属于通用型材料加工，如钢、铸铁、不锈钢、钛合金和其它非铁金属；

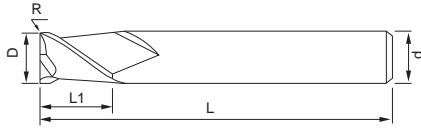
Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Code No.	D	R	L1	L	d	T
N68YPX4154	1.0	0.2R	4	75	4	4
N68YPX4155	1.5	0.2R	6	75	4	4
N68YPX4156	2.0	0.2R	8	75	4	4
N68YPX4157	3.0	0.2R	12	75	4	4
N68YPX4158	4.0	0.2R	16	75	4	4
N68YPX4159	4.0	0.2R	16	100	4	4
N68YPX4160	4.0	0.5R	16	75	4	4
N68YPX4161	4.0	0.5R	16	100	4	4
N68YPX4162	5.0	0.2R	18	75	6	4
N68YPX4163	5.0	0.2R	18	100	6	4
N68YPX4164	5.0	0.5R	18	75	6	4
N68YPX4165	5.0	0.5R	18	100	6	4
N68YPX4166	6.0	0.2R	20	75	6	4
N68YPX4167	6.0	0.2R	20	100	6	4
N68YPX4168	6.0	0.5R	20	75	6	4
N68YPX4169	6.0	0.5R	20	100	6	4
N68YPX4170	6.0	1.0R	20	75	6	4
N68YPX4171	6.0	1.0R	20	100	6	4
N68YPX4172	8.0	0.2R	25	75	8	4
N68YPX4173	8.0	0.2R	30	100	8	4
N68YPX4174	8.0	0.5R	25	75	8	4
N68YPX4175	8.0	0.5R	30	100	8	4
N68YPX4176	8.0	1.0R	25	75	8	4
N68YPX4177	8.0	1.0R	30	100	8	4
N68YPX4178	10.0	0.2R	30	100	10	4
N68YPX4179	10.0	0.5R	30	100	10	4
N68YPX4180	10.0	1.0R	30	100	10	4
N68YPX4181	12.0	0.5R	35	100	12	4
N68YPX4182	12.0	1.0R	35	100	12	4

Tungsten steel 2flutes corner radius milling cutter

钨钢二刃标准圆鼻铣刀



Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工, 特殊涂层具有优异的耐磨性, 减少了摩擦系数;

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;
应用广泛, HRC60-68均可加工, 属于通用型材料加工, 如钢、铸铁、不锈钢、钛合金和其它非铁金属;

Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计, 减少加工过程中的震动;

Code No.	D	R	L1	L	d	T
N68YPX2101	1.0	0.1R	3	50	4	2
N68YPX2102	1.0	0.2R	3	50	4	2
N68YPX2103	1.5	0.1R	4.5	50	4	2
N68YPX2104	1.5	0.2R	4.5	50	4	2
N68YPX2105	1.5	0.5R	4.5	50	4	2
N68YPX2106	2.0	0.1R	6	50	4	2
N68YPX2107	2.0	0.2R	6	50	4	2
N68YPX2108	2.0	0.3R	6	50	4	2
N68YPX2109	2.0	0.5R	6	50	4	2
N68YPX2110	2.5	0.1R	7.5	50	4	2
N68YPX2111	2.5	0.2R	7.5	50	4	2
N68YPX2112	2.5	0.3R	7.5	50	4	2
N68YPX2113	2.5	0.5R	7.5	50	4	2
N68YPX2114	3.0	0.2R	9	50	4	2
N68YPX2115	3.0	0.3R	9	50	4	2
N68YPX2116	3.0	0.5R	9	50	4	2
N68YPX2117	3.0	1.0R	9	50	4	2
N68YPX2118	4.0	0.2R	12	50	4	2
N68YPX2119	4.0	0.3R	12	50	4	2
N68YPX2120	4.0	0.5R	12	50	4	2
N68YPX2121	4.0	1.0R	12	50	4	2
N68YPX2122	4.0	1.5R	12	50	4	2
N68YPX2123	5.0	0.2R	13	50	6	2
N68YPX2124	5.0	0.5R	13	50	6	2
N68YPX2125	5.0	1.0R	13	50	6	2
N68YPX2126	6.0	0.2R	15	50	6	2
N68YPX2127	6.0	0.3R	15	50	6	2
N68YPX2128	6.0	0.5R	15	50	6	2
N68YPX2129	6.0	1.0R	15	50	6	2
N68YPX2130	6.0	1.5R	15	50	6	2
N68YPX2131	6.0	2.0R	15	50	6	2
N68YPX2132	8.0	0.2R	20	60	8	2
N68YPX2133	8.0	0.3R	20	60	8	2
N68YPX2134	8.0	0.5R	20	60	8	2
N68YPX2135	8.0	1.0R	20	60	8	2
N68YPX2136	8.0	1.5R	20	60	8	2

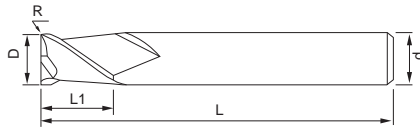
Tungsten steel 2flutes corner radiuse milling cutter

钨钢二刃标准圆鼻铣刀

Code No.	D	R	L1	L	d	T
N68YPX2137	8.0	2.0R	20	60	8	2
N68YPX2138	10.0	0.2R	25	75	10	2
N68YPX2139	10.0	0.3R	25	75	10	2
N68YPX2140	10.0	0.5R	25	75	10	2
N68YPX2141	10.0	1.0R	25	75	10	2
N68YPX2142	10.0	1.5R	25	75	10	2
N68YPX2143	10.0	2.0R	25	75	10	2
N68YPX2144	12.0	0.5R	30	75	12	2
N68YPX2145	12.0	1.0R	30	75	12	2
N68YPX2146	12.0	1.5R	30	75	12	2
N68YPX2147	12.0	2.0R	30	75	12	2
N68YPX2148	14.0	0.5R	40	100	14	2
N68YPX2149	14.0	1.0R	40	100	14	2
N68YPX2150	16.0	0.5R	45	100	16	2
N68YPX2151	16.0	1.0R	45	100	16	2
N68YPX2152	20.0	0.5R	45	100	18	2
N68YPX2153	20.0	1.0R	45	100	18	2

Tungsten steel 2flutes long corner radius milling cutter

钨钢二刃加长圆鼻铣刀



Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工，特殊涂层具有优异的耐磨性，减少了摩擦系数；

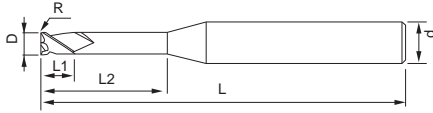
It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals.
应用广泛，HRC60-68均可加工，属于通用型材料加工，如钢、铸铁、不锈钢、钛合金和其它非铁金属；

Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

Code No.	D	R	L1	L	d	T
N68YPX2154	1.0	0.2R	4	75	4	2
N68YPX2155	1.5	0.2R	6	75	4	2
N68YPX2156	2.0	0.2R	8	75	4	2
N68YPX2157	3.0	0.2R	12	75	4	2
N68YPX2158	4.0	0.2R	16	75	4	2
N68YPX2159	4.0	0.2R	16	100	4	2
N68YPX2160	4.0	0.5R	16	75	4	2
N68YPX2161	4.0	0.5R	16	100	4	2
N68YPX2162	5.0	0.2R	18	75	6	2
N68YPX2163	5.0	0.2R	18	100	6	2
N68YPX2164	5.0	0.5R	18	75	6	2
N68YPX2165	5.0	0.5R	18	100	6	2
N68YPX2166	6.0	0.2R	20	75	6	2
N68YPX2167	6.0	0.2R	20	100	6	2
N68YPX2168	6.0	0.5R	20	75	6	2
N68YPX2169	6.0	0.5R	20	100	6	2
N68YPX2170	6.0	1.0R	20	75	6	2
N68YPX2171	6.0	1.0R	20	100	6	2
N68YPX2172	8.0	0.2R	25	75	8	2
N68YPX2173	8.0	0.2R	30	100	8	2
N68YPX2174	8.0	0.5R	25	75	8	2
N68YPX2175	8.0	0.5R	30	100	8	2
N68YPX2176	8.0	1.0R	25	75	8	2
N68YPX2177	8.0	1.0R	30	100	8	2
N68YPX2178	10.0	0.2R	30	100	10	2
N68YPX2179	10.0	0.5R	30	100	10	2
N68YPX2180	10.0	1.0R	30	100	10	2
N68YPX2181	12.0	0.5R	35	100	12	2
N68YPX2182	12.0	1.0R	35	100	12	2

Tungsten steel 2flutes long neck deep groove corner radius milling cutter

钨钢二刃长颈深沟圆鼻铣刀



Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工, 特殊涂层具有优异的耐磨性, 减少了摩擦系数;

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals;
应用广泛, HRC60-68均可加工, 属于通用型材料加工, 如钢、铸铁、不锈钢、钛合金和其它非铁金属;

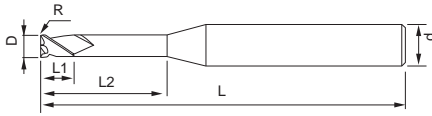
Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计, 减少加工过程中的震动;

Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Code No.	D	R	L1	L2	L	d	T
N68YPX2183	1.0	0.2R	3	6	50	4	2
N68YPX2184	1.0	0.2R	3	9	50	4	2
N68YPX2185	1.0	0.2R	3	12	50	4	2
N68YPX2186	1.5	0.2R	4	9	50	4	2
N68YPX2187	1.5	0.2R	4	12	50	4	2
N68YPX2188	1.5	0.2R	4	15	50	4	2
N68YPX2189	2.0	0.2R	6	9	50	4	2
N68YPX2190	2.0	0.2R	6	12	50	4	2
N68YPX2191	2.0	0.2R	6	15	50	4	2
N68YPX2192	2.5	0.2R	7	12	50	4	2
N68YPX2193	2.5	0.2R	7	16	50	4	2
N68YPX2194	3.0	0.2R	9	15	50	4	2
N68YPX2195	3.0	0.2R	9	20	50	4	2
N68YPX2196	4.0	0.2R	10	20	50	4	2
N68YPX2197	4.0	0.2R	10	25	75	4	2
N68YPX2198	4.0	0.5R	10	20	50	4	2
N68YPX2199	4.0	0.5R	10	25	75	4	2
N68YPX2200	5.0	0.2R	12	20	50	6	2
N68YPX2201	5.0	0.2R	12	25	75	6	2
N68YPX2202	5.0	0.5R	12	20	50	6	2
N68YPX2203	5.0	0.5R	12	25	75	6	2
N68YPX2204	6.0	0.2R	12	30	75	6	2
N68YPX2205	6.0	0.2R	12	30	100	6	2
N68YPX2206	6.0	0.5R	12	30	75	6	2
N68YPX2207	6.0	0.5R	12	30	100	6	2
N68YPX2208	6.0	1.0R	12	30	75	6	2
N68YPX2209	6.0	1.0R	12	30	100	6	2
N68YPX2210	8.0	0.5R	16	40	75	8	2
N68YPX2211	8.0	0.5R	16	40	100	8	2
N68YPX2212	8.0	1.0R	16	40	75	8	2
N68YPX2213	8.0	1.0R	16	40	100	8	2
N68YPX2214	10.0	0.5R	20	50	100	10	2
N68YPX2215	10.0	1.0R	20	50	100	10	2
N68YPX2216	12.0	0.5R	24	50	100	12	2
N68YPX2217	12.0	1.0R	24	50	100	12	2

Tungsten steel 4flutes long neck deep groove corner radius milling cutter

钨钢四刃长颈深沟圆鼻铣刀



Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Material



Processing graphics



Suitable for mould processing, special coating has excellent wear resistance, reducing friction coefficient;
适合模具加工, 特殊涂层具有优异的耐磨性, 减少了摩擦系数;

It is widely used. Can be processed HRC 60-68. It belongs to general material processing, such as steel, cast iron, stainless steel, titanium alloy and other non-ferrous metals.
应用广泛, HRC60-68均可加工, 属于通用型材料加工, 如钢、铸铁、不锈钢、钛合金和其它非铁金属;

Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计, 减少加工过程中的震动;

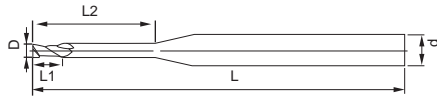
Code No.	D	R	L1	L2	L	d	T
N68YPX4183	1.0	0.2R	3	6	50	4	4
N68YPX4184	1.0	0.2R	3	9	50	4	4
N68YPX4185	1.0	0.2R	3	12	50	4	4
N68YPX4186	1.5	0.2R	4	9	50	4	4
N68YPX4187	1.5	0.2R	4	12	50	4	4
N68YPX4188	1.5	0.2R	4	15	50	4	4
N68YPX4189	2.0	0.2R	6	9	50	4	4
N68YPX4190	2.0	0.2R	6	12	50	4	4
N68YPX4191	2.0	0.2R	6	15	50	4	4
N68YPX4192	2.5	0.2R	7	12	50	4	4
N68YPX4193	2.5	0.2R	7	16	50	4	4
N68YPX4194	3.0	0.2R	9	15	50	4	4
N68YPX4195	3.0	0.2R	9	20	50	4	4
N68YPX4196	4.0	0.2R	10	20	50	4	4
N68YPX4197	4.0	0.2R	10	25	75	4	4
N68YPX4198	4.0	0.5R	10	20	50	4	4
N68YPX4199	4.0	0.5R	10	25	75	4	4
N68YPX4200	5.0	0.2R	12	20	50	6	4
N68YPX4201	5.0	0.2R	12	25	75	6	4
N68YPX4202	5.0	0.5R	12	20	50	6	4
N68YPX4203	5.0	0.5R	12	25	75	6	4
N68YPX4204	6.0	0.2R	12	30	75	6	4
N68YPX4205	6.0	0.2R	12	30	100	6	4
N68YPX4206	6.0	0.5R	12	30	75	6	4
N68YPX4207	6.0	0.5R	12	30	100	6	4
N68YPX4208	6.0	1.0R	12	30	75	6	4
N68YPX4209	6.0	1.0R	12	30	100	6	4
N68YPX4210	8.0	0.5R	16	40	75	8	4
N68YPX4211	8.0	0.5R	16	40	100	8	4
N68YPX4212	8.0	1.0R	16	40	75	8	4
N68YPX4213	8.0	1.0R	16	40	100	8	4
N68YPX4214	10.0	0.5R	20	50	100	10	4
N68YPX4215	10.0	1.0R	20	50	100	10	4
N68YPX4216	12.0	0.5R	24	50	100	12	4
N68YPX4217	12.0	1.0R	24	50	100	12	4

N680 deep groove cutter Series



Tungsten steel 2 flutes deep hook flat milling cutter

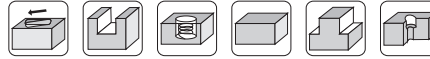
钨钢二刃深勾标准平铣刀



Material



Processing graphics



In deep cavity processing, adopted by special coatings have excellent wear resistance and reduce friction coefficient;
深型腔加工, 特殊涂层具有优异的耐磨性, 减少了摩擦系数;

It is widely used, Can be processed the materials below HRC68, It belongs to general material processing, such as steel, cast iron, Titanium alloy, and heat-resistant alloy;
应用广泛, HRC68以下材料加工, 属于通用型材料加工, 如钢、铸铁、钛合金、耐热合金和其它非铁金属;

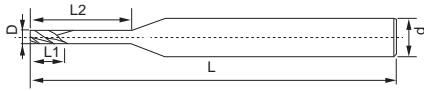
Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计, 减少加工过程中的震动;

Size(mm)	Tolerance(mm)
D≤5.5	+0~-0.015
D>5.5	+0~-0.020

Code No.	D	L1	L2	L	d	T
N68PSX2101	1.0	3	6	50	4	2
N68PSX2102	1.0	3	6	75	4	2
N68PSX2103	1.0	3	9	50	4	2
N68PSX2104	1.0	3	9	75	4	2
N68PSX2105	1.0	3	12	50	4	2
N68PSX2106	1.0	3	12	75	4	2
N68PSX2107	1.5	4	9	50	4	2
N68PSX2108	1.5	4	9	75	4	2
N68PSX2109	1.5	4	12	50	4	2
N68PSX2110	1.5	4	12	75	4	2
N68PSX2111	1.5	4	15	50	4	2
N68PSX2112	1.5	4	15	75	4	2
N68PSX2113	2.0	6	9	50	4	2
N68PSX2114	2.0	6	9	75	4	2
N68PSX2115	2.0	6	12	50	4	2
N68PSX2116	2.0	6	12	75	4	2
N68PSX2117	2.0	6	15	50	4	2
N68PSX2118	2.0	6	15	75	4	2
N68PSX2119	2.5	7	12	50	4	2
N68PSX2120	2.5	7	12	75	4	2
N68PSX2121	2.5	7	16	50	4	2
N68PSX2122	2.5	7	16	75	4	2
N68PSX2123	3.0	9	15	50	4	2
N68PSX2124	3.0	9	15	75	4	2
N68PSX2125	3.0	9	20	50	4	2
N68PSX2126	3.0	9	20	75	4	2
N68PSX2127	4.0	10	20	50	4	2
N68PSX2128	4.0	10	20	75	4	2
N68PSX2129	4.0	10	25	75	4	2
N68PSX2130	4.0	10	20	50	4	2
N68PSX2131	4.0	10	20	75	4	2
N68PSX2132	4.0	10	25	75	4	2

Tungsten steel 4 flutes deep hook flat milling cutter

钨钢四刃深勾标准平铣刀

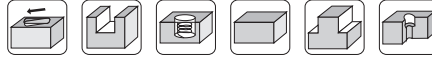


Size(mm)	Tolerance(mm)
D≤5.5	+0~-0.015
D>5.5	+0~-0.020

Material



Processing graphics



In deep cavity processing, adopted by special coatings have excellent wear resistance and reduce friction coefficient;
深型腔加工，特殊涂层具有优异的耐磨性，减少了摩擦系数；

It is widely used. Can be processed the materials below HRC68, It belongs to general material processing, such as steel, cast iron, Titanium alloy, and heat-resistant alloy;
应用广泛，HRC68以下材料加工，属于通用型材料加工，如钢、铸铁、钛合金、耐热合金和其它非铁金属；

Design of unequal spiral angle could to reduce vibration during processing;
不等距螺旋角设计，减少加工过程中的震动；

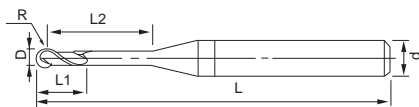
Code No.	D	L1	L2	L	d	T
N68PSX4101	1.0	3	6	50	4	4
N68PSX4102	1.0	3	6	75	4	4
N68PSX4103	1.0	3	9	50	4	4
N68PSX4104	1.0	3	9	75	4	4
N68PSX4105	1.0	3	12	50	4	4
N68PSX4106	1.0	3	12	75	4	4
N68PSX4107	1.5	4	9	50	4	4
N68PSX4108	1.5	4	9	75	4	4
N68PSX4109	1.5	4	12	50	4	4
N68PSX4110	1.5	4	12	75	4	4
N68PSX4111	1.5	4	15	50	4	4
N68PSX4112	1.5	4	15	75	4	4
N68PSX4113	2.0	6	9	50	4	4
N68PSX4114	2.0	6	9	75	4	4
N68PSX4115	2.0	6	12	50	4	4
N68PSX4116	2.0	6	12	75	4	4
N68PSX4117	2.0	6	15	50	4	4
N68PSX4118	2.0	6	15	75	4	4
N68PSX4119	2.5	7	12	50	4	4
N68PSX4120	2.5	7	12	75	4	4
N68PSX4121	2.5	7	16	50	4	4
N68PSX4122	2.5	7	16	75	4	4
N68PSX4123	3.0	9	15	50	4	4
N68PSX4124	3.0	9	15	75	4	4
N68PSX4125	3.0	9	20	50	4	4
N68PSX4126	3.0	9	20	75	4	4
N68PSX4127	4.0	10	20	50	4	4
N68PSX4128	4.0	10	20	75	4	4
N68PSX4129	4.0	10	25	75	4	4
N68PSX4130	4.0	10	20	50	4	4
N68PSX4131	4.0	10	20	75	4	4
N68PSX4132	4.0	10	25	75	4	4

N680 deep groove cutter Series



Tungsten steel 2 flutes deep hook ballnose milling cutter

钨钢二刃深勾标准球铣刀



Material



Processing graphics



Suitable for both finishing and rough processing ,the special coating has excellent wear resistance and reduces friction coefficient;
精加工和粗加工都适应，特殊涂层具有优异的耐磨性，减少了摩擦系数;

Suitable materials: steel, cast iron, stainless steel, non-ferrous metal;
适应材料：钢、铸铁、不锈钢、非铁金属;

Suitable for mould processing, processing material is HRC68;
适合模具加工，加工材料硬度HRC68;

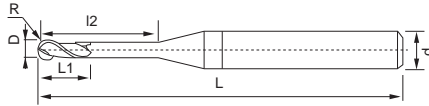
The R angle is lapped with high precision, and the product has high precision;
R角经过高精度研磨，产品精度较高;

Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Code No.	D	R	L1	L2	L	d	T
N68QSX2101	1.0	0.50R	3	6	50	4	2
N68QSX2102	1.0	0.50R	3	6	75	4	2
N68QSX2103	1.0	0.50R	3	9	50	4	2
N68QSX2104	1.0	0.50R	3	9	75	4	2
N68QSX2105	1.0	0.50R	3	12	50	4	2
N68QSX2106	1.0	0.50R	3	12	75	4	2
N68QSX2107	1.5	0.75R	4	9	50	4	2
N68QSX2108	1.5	0.75R	4	9	75	4	2
N68QSX2109	1.5	0.75R	4	12	50	4	2
N68QSX2110	1.5	0.75R	4	12	75	4	2
N68QSX2111	1.5	0.75R	4	15	50	4	2
N68QSX2112	1.5	0.75R	4	15	75	4	2
N68QSX2113	2.0	1.00R	6	9	50	4	2
N68QSX2114	2.0	1.00R	6	9	75	4	2
N68QSX2115	2.0	1.00R	6	12	50	4	2
N68QSX2116	2.0	1.00R	6	12	75	4	2
N68QSX2117	2.0	1.00R	6	15	50	4	2
N68QSX2118	2.0	1.00R	6	15	75	4	2
N68QSX2119	2.5	1.25R	7	12	50	4	2
N68QSX2120	2.5	1.25R	7	12	75	4	2
N68QSX2121	2.5	1.25R	7	16	50	4	2
N68QSX2122	2.5	1.25R	7	16	75	4	2
N68QSX2123	3.0	1.50R	9	15	50	4	2
N68QSX2124	3.0	1.50R	9	15	75	4	2
N68QSX2125	3.0	1.50R	9	20	50	4	2
N68QSX2126	3.0	1.50R	9	20	75	4	2
N68QSX2127	4.0	2.00R	10	20	50	4	2
N68QSX2128	4.0	2.00R	10	20	75	4	2
N68QSX2129	4.0	2.00R	10	25	75	4	2
N68QSX2130	4.0	2.00R	10	20	50	4	2
N68QSX2131	4.0	2.00R	10	20	75	4	2
N68QSX2132	4.0	2.00R	10	25	75	4	2

Tungsten steel 4 flutes deep hook ballnose milling cutter

钨钢四刃深勾标准球铣刀



Size(mm)	Tolerance(mm)
R≤2.5	±0.015
R>2.5	±0.020

Material



Processing graphics



Suitable for both finishing and rough processing ,the special coating has excellent wear resistance and reduces friction coefficient;
精加工和粗加工都适应，特殊涂层具有优异的耐磨性，减少了摩擦系数;

Suitable materials: steel, cast iron, stainless steel, non - ferrous metal;
适应材料：钢、铸铁、不锈钢、非铁金属;

Suitable for mould processing, processing material is HRC68;
适合模具加工，加工材料硬度HRC68;

The R angle is lapped with high precision, and the product has high precision;
R角经过高精密度研磨，产品精度较高;

Code No.	D	R	L1	L2	L	d	T
N68QSX4101	1.0	0.50R	3	6	50	4	4
N68QSX4102	1.0	0.50R	3	6	75	4	4
N68QSX4103	1.0	0.50R	3	9	50	4	4
N68QSX4104	1.0	0.50R	3	9	75	4	4
N68QSX4105	1.0	0.50R	3	12	50	4	4
N68QSX4106	1.0	0.50R	3	12	75	4	4
N68QSX4107	1.5	0.75R	4	9	50	4	4
N68QSX4108	1.5	0.75R	4	9	75	4	4
N68QSX4109	1.5	0.75R	4	12	50	4	4
N68QSX4110	1.5	0.75R	4	12	75	4	4
N68QSX4111	1.5	0.75R	4	15	50	4	4
N68QSX4112	1.5	0.75R	4	15	75	4	4
N68QSX4113	2.0	1.00R	6	9	50	4	4
N68QSX4114	2.0	1.00R	6	9	75	4	4
N68QSX4115	2.0	1.00R	6	12	50	4	4
N68QSX4116	2.0	1.00R	6	12	75	4	4
N68QSX4117	2.0	1.00R	6	15	50	4	4
N68QSX4118	2.0	1.00R	6	15	75	4	4
N68QSX4119	2.5	1.25R	7	12	50	4	4
N68QSX4120	2.5	1.25R	7	12	75	4	4
N68QSX4121	2.5	1.25R	7	16	50	4	4
N68QSX4122	2.5	1.25R	7	16	75	4	4
N68QSX4123	3.0	1.50R	9	15	50	4	4
N68QSX4124	3.0	1.50R	9	15	75	4	4
N68QSX4125	3.0	1.50R	9	20	50	4	4
N68QSX4126	3.0	1.50R	9	20	75	4	4
N68QSX4127	4.0	2.00R	10	20	50	4	4
N68QSX4128	4.0	2.00R	10	20	75	4	4
N68QSX4129	4.0	2.00R	10	25	75	4	4
N68QSX4130	4.0	2.00R	10	20	50	4	4
N68QSX4131	4.0	2.00R	10	20	75	4	4
N68QSX4132	4.0	2.00R	10	25	75	4	4

Recommended Cutting Conditions

推荐切削参数

Working material	Hardened steel (HRC65-68 SKT、SKD)		Stainless steel (HRC25-30 SUS)		Cast iron (HRC25-30 HT250、QT550)		Non-ferrous metal (AL、ADC、CU)	
Vc	50-90(m/min)		70-100(m/min)		80-120(m/min)		300-600(m/min)	
Diameter	R.P.M	Fz(mm/r)	R.P.M	Fz(mm/r)	R.P.M	Fz(mm/r)	R.P.M	Fz(mm/r)
1.0mm	19,000	0.010	2,700	0.010	31,000	0.013	95,000	0.013
1.5mm	12,700	0.010	18,000	0.011	2,100	0.014	63,000	0.016
2.0mm	9,500	0.012	13,500	0.012	16,000	0.015	47,000	0.017
2.5mm	7,600	0.013	10,800	0.012	12,700	0.016	38,000	0.018
3.0mm	6,300	0.014	9,000	0.013	10,600	0.017	31,000	0.022
4.0mm	4,700	0.018	6,700	0.014	8,000	0.023	23,000	0.030
5.0mm	3,800	0.020	5,400	0.016	6,300	0.025	19,000	0.040
6.0mm	3,100	0.027	4,500	0.021	5,300	0.035	16,000	0.045
7.0mm	2,700	0.030	3,800	0.025	4,500	0.040	136,000	0.050
8.0mm	2,300	0.036	3,300	0.028	4,000	0.046	12,000	0.060
9.0mm	2,100	0.400	3,000	0.030	3,500	0.050	10,600	0.075
10.0mm	1,900	0.050	2,700	0.040	3,100	0.066	9,500	0.092
12.0mm	1,600	0.060	2,200	0.048	2,600	0.079	7,900	0.110
14.0mm	1,300	0.070	1,900	0.052	2,200	0.090	6,800	0.130
16.0mm	1,200	0.080	1,600	0.060	2,000	0.110	5,900	0.150
18.0mm	1,000	0.090	1,500	0.070	1,700	0.120	5,300	0.170
20.0mm	950	0.100	1,200	0.080	1,600	0.130	4,700	0.180

Milling Amount (mm)



ap	ae	ap	ae	ap	ae
1.5D	0.05D	1.5D	0.03D	1.0D	0.02D
aeMax ≤ 1.0mm		aeMax ≤ 0.5mm		aeMax ≤ 0.5mm	

	ap	Pf
R ≤ 8	0.02D	0.1D
R > 8	0.32mm	0.1D

