

2022

КАТАЛОГ ФРЕЗ КОНЦЕВЫХ
ТВЕРДОСПЛАВНЫХ

AXIS

Tools for mICRO mACHINING

для фрезерования
сталей, чугуна,
нержавеющих сталей

ООО "Современные Технологии НС"

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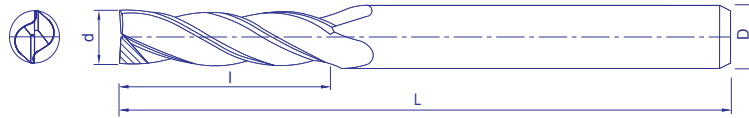


Мы предлагаем полный ассортимент фрез с алмазным покрытием CVD, сверл и специальных инструментов.

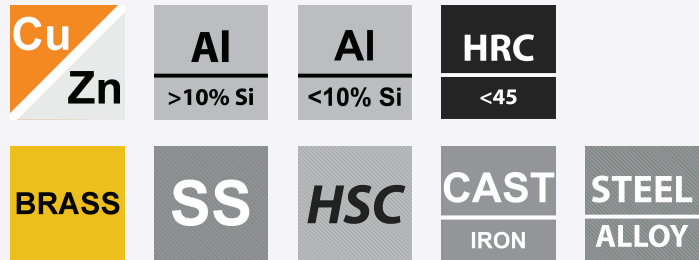
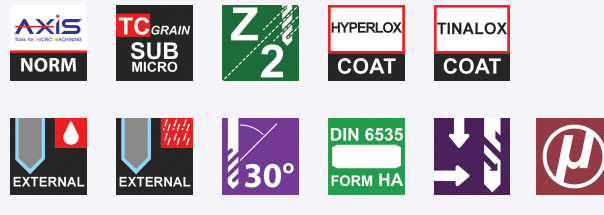
- *Высокая скорость подачи, обеспечивающая более высокую производительность*
- *Чрезвычайная износостойкость, обеспечивающая более длительный срок службы инструмента ~ 5-20x*
- *Частая смена инструментов и время простоя машины, которых удалось избежать*

QUALITY • PRECISION • CONSISTENCY





AXIS E8311



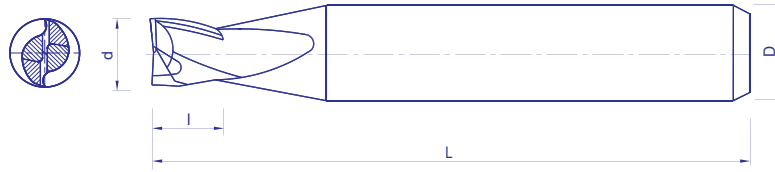
Dia	EFL	Total Length	Shank Dia		Dia	EFL	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
1.00	3.0	38	3.0 / 4.0		5.00	15.0	50	6.0
1.00	5.0	38	3.0 / 4.0		5.00	25.0	60	6.0
1.20	3.6	38	3.0 / 4.0		6.00	18.0	50	6.0
1.20	6.0	38	3.0 / 4.0		6.00	30.0	65	6.0
1.40	4.2	38	3.0 / 4.0		8.00	24.0	75	8.0
1.40	7.0	38	3.0 / 4.0		8.00	40.0	80	8.0
1.50	4.5	38	3.0 / 4.0		10.00	30.0	75	10.0
1.50	7.5	38	3.0 / 4.0		10.00	50.0	95	10.0
1.60	4.8	38	3.0 / 4.0		12.00	36.0	75	12.0
1.60	8.0	38	3.0 / 4.0		12.00	60.0	100	12.0
1.80	5.4	38	3.0 / 4.0					
1.80	9.0	38	3.0 / 4.0					
2.00	6.0	38	3.0 / 4.0					
2.00	10.0	38	3.0 / 4.0					
2.50	7.5	38	6.0					
2.50	12.0	38	6.0					
3.00	9.0	38	6.0					
3.00	15.0	50	6.0					
4.00	12.0	50	6.0					
4.00	20.0	60	6.0					

ON REQUEST :
Inch Sizes / Special sizes

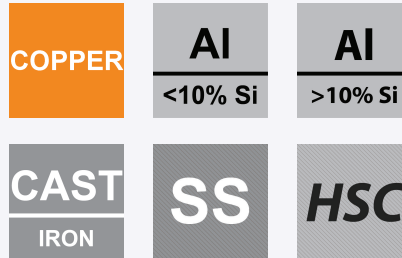
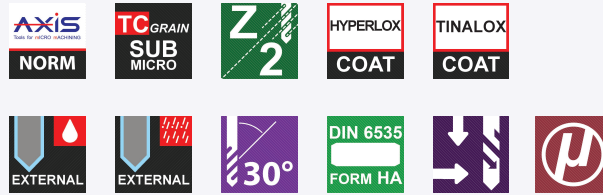
PACKING :
Up to Dia 3.00mm : 10 tools / pack,
Dia > 3.00mm : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9661



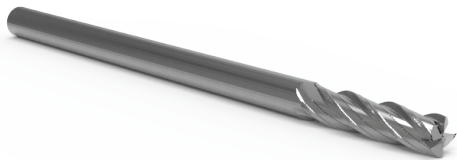
Dia	EFL	Total Length	Shank Dia		Dia	Flute Length	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
0.10	0.2	38	3.0		1.20	2.4	38	3.0
0.10	0.3	38	3.0		1.20	3.6	38	3.0
0.20	0.4	38	3.0		1.40	2.8	38	3.0
0.20	0.6	38	3.0		1.40	4.2	38	3.0
0.30	0.6	38	3.0		1.50	3.0	38	3.0
0.30	0.9	38	3.0		1.50	4.5	38	3.0
0.40	0.8	38	3.0		1.60	3.2	38	3.0
0.40	1.2	38	3.0		1.60	4.8	38	3.0
0.50	1.0	38	3.0		1.80	3.6	38	3.0
0.50	1.5	38	3.0		1.80	5.4	38	3.0
0.60	1.2	38	3.0		2.00	4.0	38	3.0
0.60	1.8	38	3.0		2.00	6.0	38	3.0
0.70	1.4	38	3.0		2.50	5.0	38	3.0
0.70	2.1	38	3.0		2.50	7.5	38	3.0
0.80	1.6	38	3.0		3.00	6.0	38	3.0
0.80	2.4	38	3.0		3.00	9.0	38	3.0
0.90	1.8	38	3.0					
0.90	2.7	38	3.0					
1.00	2.0	38	3.0					
1.00	3.0	38	3.0					

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
10 tools / pack

All Dimensions in mm otherwise specified





AXIS E9671

Dia	EFL	Total Length	Shank Dia
d	l	L	D h6
0.20	0.4	38	3.0
0.20	0.6	38	3.0
0.30	0.6	38	3.0
0.30	0.9	38	3.0
0.40	0.8	38	3.0
0.40	1.2	38	3.0
0.50	1.0	38	3.0
0.50	1.5	38	3.0
0.60	1.2	38	3.0
0.60	1.8	38	3.0
0.70	1.4	38	3.0
0.70	2.1	38	3.0
0.80	1.6	38	3.0
0.80	2.4	38	3.0
0.90	1.8	38	3.0
0.90	2.7	38	3.0
1.00	3.0	38	3.0 / 4.0
1.00	5.0	38	3.0 / 4.0
1.20	3.6	38	3.0 / 4.0
1.20	6.0	38	3.0 / 4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified



Dia	EFL	Total Length	Shank Dia
d	l	L	D h6
1.40	4.2	38	3.0 / 4.0
1.40	7.0	38	3.0 / 4.0
1.50	4.5	38	3.0 / 4.0
1.50	7.5	38	3.0 / 4.0
1.60	4.8	38	3.0 / 4.0
1.60	8.0	38	3.0 / 4.0
1.80	5.4	38	3.0 / 4.0
1.80	9.0	38	3.0 / 4.0
2.00	6.0	38	3.0 / 4.0
2.00	10.0	38	3.0 / 4.0
2.50	7.5	38	6.0
2.50	10.0	38	6.0
3.00	9.0	38	6.0
3.00	12.0	38	6.0
4.00	12.0	45	6.0
4.00	16.0	45	6.0
5.00	10.0	50	6.0
5.00	15.0	50	6.0
6.00	12.0	50	6.0
6.00	18.0	50	6.0
8.00	16.0	50	8.0
8.00	24.0	63	8.0
10.00	20.0	63	10.0
10.00	30.0	75	10.0
12.00	24.0	75	12.0
12.00	36.0	80	12.0

ON REQUEST :
Inch Sizes / Special sizes

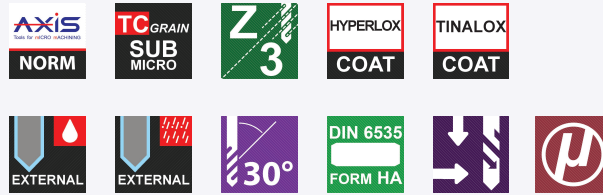
PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9681



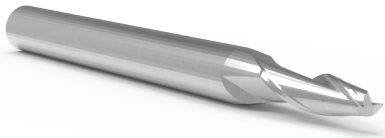
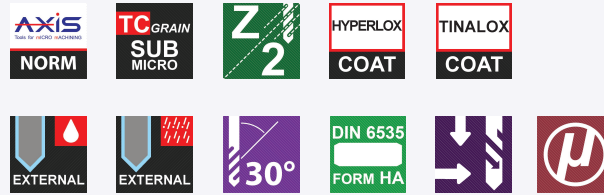
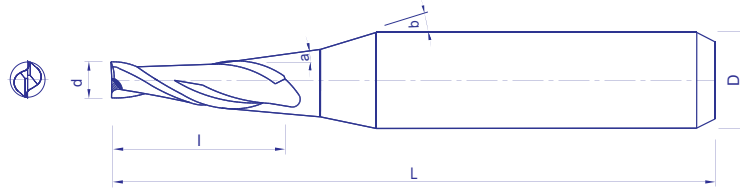
Dia	EFL	Total Length	Shank Dia		Dia	Flute	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
1.00	3.0	38	3.0 / 4.0		5.00	10.0	50	6.0
1.00	5.0	38	3.0 / 4.0		5.00	15.0	50	6.0
1.20	3.6	38	3.0 / 4.0		6.00	12.0	50	6.0
1.20	6.0	38	3.0 / 4.0		6.00	18.0	50	6.0
1.40	4.2	38	3.0 / 4.0		8.00	16.0	50	8.0
1.40	7.0	38	3.0 / 4.0		8.00	24.0	63	8.0
1.50	4.5	38	3.0 / 4.0		10.00	20.0	63	10.0
1.50	7.5	38	3.0 / 4.0		10.00	30.0	75	10.0
1.60	4.8	38	3.0 / 4.0		12.00	24.0	75	12.0
1.60	8.0	38	3.0 / 4.0		12.00	36.0	80	12.0
1.80	5.4	38	3.0 / 4.0					
1.80	9.0	38	3.0 / 4.0					
2.00	6.0	38	3.0 / 4.0					
2.00	10.0	38	3.0 / 4.0					
2.50	7.5	38	6.0					
2.50	10.0	38	6.0					
3.00	9.0	38	6.0					
3.00	12.0	38	6.0					
4.00	12.0	45	6.0					
4.00	16.0	45	6.0					

ON REQUEST :
Inch Sizes / Special sizes

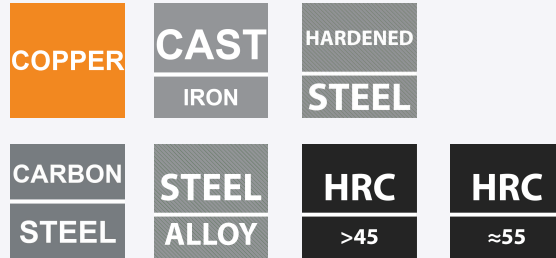
PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9501



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		b	L	D h6
0.20	30'	0.80	0.21	9°	45	4.0
0.20	1°	0.80	0.23	9°	45	4.0
0.20	1°30'	0.80	0.24	9°	45	4.0
0.20	2°	0.80	0.26	9°	45	4.0
0.20	3°	0.80	0.28	9°	45	4.0
0.20	5°	0.80	0.34	9°	45	4.0
0.20	10°	0.80	0.48	-	45	4.0
0.30	30'	1.20	0.32	9°	45	4.0
0.30	1°	1.20	0.34	9°	45	4.0
0.30	1°30'	1.20	0.36	9°	45	4.0
0.30	2°	1.20	0.38	9°	45	4.0
0.30	3°	1.20	0.43	9°	45	4.0
0.30	5°	1.20	0.51	9°	45	4.0
0.30	10°	1.20	0.72	-	45	4.0
0.40	30'	1.60	0.43	9°	45	4.0
0.40	1°	1.60	0.46	9°	45	4.0
0.40	1°30'	1.60	0.48	9°	45	4.0
0.40	2°	1.60	0.51	9°	45	4.0
0.40	3°	1.60	0.57	9°	45	4.0
0.40	5°	1.60	0.68	9°	45	4.0

ON REQUEST :

Inch Sizes / Special sizes

PACKING :

Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
0.40	10°	1.6	0.96	-	45	4.0
0.50	30'	2.0	0.53	9°	45	4.0
0.50	1°	2.0	0.57	9°	45	4.0
0.50	1°30'	2.0	0.60	9°	45	4.0
0.50	2°	2.0	0.64	9°	45	4.0
0.50	3°	2.0	0.71	9°	45	4.0
0.50	4°	2.0	0.78	9°	45	4.0
0.50	5°	2.0	0.85	9°	45	4.0
0.50	6°	2.0	0.92	9°	45	4.0
0.50	7°	2.0	0.99	9°	45	4.0
0.50	10°	2.0	1.21	-	45	4.0
0.50	15°	2.0	1.57	15°	45	4.0
0.50	20°	2.0	1.96	15°	45	4.0
0.60	30'	2.0	0.63	9°	45	4.0
0.60	1°	2.0	0.67	9°	45	4.0
0.60	1°30'	2.0	0.70	9°	45	4.0
0.60	2°	2.0	0.74	9°	45	4.0
0.60	3°	2.0	0.81	9°	45	4.0
0.60	4°	2.0	0.88	9°	45	4.0
0.60	5°	2.0	0.95	9°	45	4.0
0.60	6°	2.0	1.02	9°	45	4.0
0.60	7°	2.0	1.09	9°	45	4.0
0.60	10°	2.0	1.31	-	45	4.0
0.60	15°	2.0	1.67	15°	45	4.0
0.60	20°	2.0	2.06	15°	45	4.0
0.70	30'	2.0	0.73	9°	45	4.0
0.70	1°	2.0	0.77	9°	45	4.0
0.70	1°30'	2.0	0.80	9°	45	4.0
0.70	2°	2.0	0.84	9°	45	4.0
0.70	2°	2.0	0.91	9°	45	4.0
0.70	4°	2.0	0.98	9°	45	4.0
0.70	5°	2.0	1.05	9°	45	4.0
0.70	6°	2.0	1.12	9°	45	4.0
0.70	7°	2.0	1.19	9°	45	4.0
0.70	10°	2.0	1.41	-	45	4.0
0.70	15°	2.0	1.77	15°	45	4.0
0.70	20°	2.0	2.16	15°	45	4.0
0.80	30'	3.0	0.85	9°	45	4.0
0.80	1°	3.0	0.90	9°	45	4.0
0.80	1°30'	3.0	0.96	9°	45	4.0
0.80	2°	3.0	1.01	9°	45	4.0
0.80	3°	3.0	1.11	9°	45	4.0
0.80	4°	3.0	1.21	9°	45	4.0
0.80	5°	3.0	1.32	9°	45	4.0
0.80	6°	3.0	1.43	9°	45	4.0
0.80	7°	3.0	1.54	9°	45	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:
Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
0.80	10°	3.0	1.86	-	45	4.0
0.80	15°	3.0	2.41	15°	45	4.0
0.80	20°	3.0	2.98	-	45	4.0
0.90	30'	3.0	0.95	9°	45	4.0
0.90	1°	3.0	1.00	9°	45	4.0
0.90	1°30'	3.0	1.06	9°	45	4.0
0.90	2°	3.0	1.11	9°	45	4.0
0.90	3°	3.0	1.21	9°	45	4.0
0.90	4°	3.0	1.32	9°	45	4.0
0.90	5°	3.0	1.42	9°	45	4.0
0.90	6°	3.0	1.53	9°	45	4.0
0.90	7°	3.0	1.64	9°	45	4.0
0.90	10°	3.0	1.96	-	45	4.0
0.90	15°	3.0	2.51	15°	45	4.0
0.90	20°	3.0	3.08	9°	45	4.0
1.00	30'	4.0	1.07	9°	45	4.0
1.00	1°	4.0	1.14	9°	45	4.0
1.00	1°30'	4.0	1.21	9°	45	4.0
1.00	2°	4.0	1.28	9°	45	4.0
1.00	3°	4.0	1.42	9°	45	4.0
1.00	4°	4.0	1.56	9°	45	4.0
1.00	5°	4.0	1.70	9°	45	4.0
1.00	6°	4.0	1.84	9°	45	4.0
1.00	7°	4.0	1.98	9°	45	4.0
1.00	10°	4.0	2.41	-	45	4.0
1.00	15°	4.0	3.14	15°	50	6.0
1.00	20°	4.0	3.91	15°	50	6.0
1.50	30'	5.0	1.59	9°	45	4.0
1.50	1°	5.0	1.67	9°	45	4.0
1.50	1°30'	5.0	1.76	9°	45	4.0
1.50	2°	5.0	1.85	9°	45	4.0
1.50	3°	5.0	2.02	9°	45	4.0
1.50	4°	5.0	2.20	9°	45	4.0
1.50	5°	5.0	2.37	9°	45	4.0
1.50	6°	5.0	2.55	9°	45	4.0
1.50	7°	5.0	2.73	9°	45	4.0
1.50	10°	5.0	3.26	-	45	4.0
1.50	15°	5.0	4.18	15°	50	6.0
1.50	20°	5.0	5.14	-	50	6.0
2.00	30'	6.0	2.10	9°	45	4.0
2.00	1°	6.0	2.21	9°	45	4.0
2.00	1°30'	6.0	2.31	9°	45	4.0
2.00	2°	6.0	2.41	9°	45	4.0
2.00	3°	6.0	2.62	9°	45	4.0
2.00	4°	6.0	2.84	9°	45	4.0
2.00	5°	6.0	3.05	9°	45	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
2.00	6°	6.0	3.26	9°	45	4.0
2.00	7°	6.0	3.47	-	45	4.0
2.00	10°	6.0	4.11	-	50	6.0
2.00	15°	6.0	5.22	-	50	6.0
2.00	20°	6.0	6.37	-	50	6.0
2.50	30'	8.0	2.64	9°	45	4.0
2.50	1°	8.0	2.78	9°	45	4.0
2.50	1°30'	8.0	2.91	9°	45	4.0
2.50	2°	8.0	3.05	9°	45	4.0
2.50	3°	8.0	3.33	9°	45	4.0
2.50	4°	8.0	3.62	-	45	4.0
2.50	5°	8.0	3.90	-	45	4.0
2.50	6°	8.0	4.18	-	50	4.0
2.50	7°	8.0	4.46	-	50	4.0
2.50	10°	8.0	5.32	-	50	6.0
2.50	15°	8.0	6.79	-	50	6.0
2.50	20°	8.0	8.32	-	60	8.0
3.00	30'	10.0	3.17	9°	50	6.0
3.00	1°	10.0	3.35	9°	50	6.0
3.00	1°30'	10.0	3.52	9°	50	6.0
3.00	2°	10.0	3.69	9°	50	6.0
3.00	3°	10.0	4.05	9°	50	6.0
3.00	4°	10.0	4.40	9°	50	6.0
3.00	5°	10.0	4.75	9°	50	6.0
3.00	6°	10.0	5.10	-	50	6.0
3.00	7°	10.0	5.46	-	50	6.0
3.00	10°	10.0	6.53	-	50	6.0
3.00	15°	10.0	8.36	-	60	8.0
3.00	20°	10.0	10.30	-	70	10.0
4.00	30'	15.0	4.26	9°	50	6.0
4.00	1°	15.0	4.52	9°	50	6.0
4.00	1°30'	15.0	4.79	9°	50	6.0
4.00	2°	15.0	5.04	9°	50	6.0
4.00	3°	15.0	5.57	9°	50	6.0
4.00	4°	15.0	6.10	-	55	6.0
4.00	5°	15.0	6.62	-	55	6.0
4.00	6°	15.0	7.15	-	55	6.0
4.00	7°	15.0	7.68	-	55	6.0
4.00	10°	15.0	9.29	-	60	8.0
4.00	15°	15.0	12.04	-	80	12.0
4.00	20°	15.0	14.92	-	80	12.0
5.00	30'	20.0	5.34	9°	55	6.0
5.00	1°	20.0	5.70	9°	55	6.0
5.00	1°30'	20.0	6.04	-	55	6.0
5.00	2°	20.0	6.39	-	55	6.0
5.00	3°	20.0	7.10	-	55	6.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
 Dia d 0.201 - 0.400 : -0.010 / -0.030
 Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
5.00	4°	20.0	7.80	-	60	6.0
5.00	5°	20.0	8.50	-	60	8.0
5.00	6°	20.0	9.20	-	60	8.0
5.00	7°	20.0	9.91	-	70	10.0
5.00	10°	20.0	12.05	-	80	12.0
6.00	30'	20.0	6.35	-	55	6.0
6.00	1°	20.0	6.70	-	55	6.0
6.00	1°30'	20.0	7.05	-	55	6.0
6.00	2°	20.0	7.40	-	55	6.0
6.00	3°	20.0	8.10	-	60	8.0
6.00	4°	20.0	8.80	-	65	8.0
6.00	5°	20.0	9.50	-	65	8.0
6.00	6°	20.0	10.20	-	70	10.0
6.00	7°	20.0	10.91	-	70	10.0
6.00	10°	20.0	13.05	-	80	12.0
8.00	30'	25.0	8.44	-	65	8.0
8.00	1°	25.0	8.87	-	65	8.0
8.00	1°30'	25.0	9.31	-	65	8.0
8.00	2°	25.0	9.74	-	65	8.0
8.00	30'	25.0	8.44	-	65	8.0
8.00	1°	25.0	8.87	-	65	8.0
8.00	1°30'	25.0	9.31	-	65	8.0
8.00	2°	25.0	9.74	-	65	8.0
8.00	3°	25.0	10.62	-	70	10.0
8.00	5°	25.0	12.37	-	90	12.0
10.00	30'	35.0	10.61	-	85	10.0
10.00	1°	35.0	11.22	-	85	10.0
10.00	1°30'	35.0	11.83	-	85	10.0
10.00	2°	35.0	12.44	-	90	12.0
10.00	3°	35.0	13.67	-	90	12.0
12.00	30'	35.0	12.61	-	85	12.0
12.00	1°	35.0	13.22	-	90	12.0
12.00	2°	35.0	14.44	-	90	12.0

ON REQUEST :

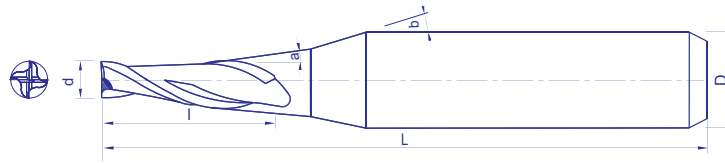
Inch Sizes / Special sizes

PACKING :

Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9511

Dia	Taper Angle	EFL			Shoulder Angle	Total Length	Shank Dia
d	a	l			b	L	D h6
0.20	30'	2.0	----	----	15°	40	3.0
0.20	1°	2.0	----	----	15°	40	3.0
0.20	1'30'	2.0	----	----	15°	40	3.0
0.20	2°	2.0	----	----	15°	40	3.0
0.30	30'	3.0	----	----	15°	40	3.0
0.30	1°	3.0	----	----	15°	40	3.0
0.30	1'30'	3.0	----	----	15°	40	3.0
0.30	2°	3.0	----	----	15°	40	3.0
0.40	30'	4.0	----	----	15°	40	3.0
0.40	1°	4.0	----	----	15°	40	3.0
0.40	1'30'	4.0	----	----	15°	40	3.0
0.40	2°	4.0	----	----	15°	40	3.0
0.50	30'	4.0	----	----	15°	40	3.0
0.50	1°	4.0	----	----	15°	40	3.0
0.50	1'30'	4.0	----	----	15°	40	3.0
0.50	2°	4.0	----	----	15°	40	3.0
0.60	30'	4.0	6.0	----	15°	40	3.0
0.60	1°	4.0	6.0	----	15°	40	3.0
0.60	1'30'	4.0	6.0	----	15°	40	3.0
0.60	2°	4.0	6.0	----	15°	40	3.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



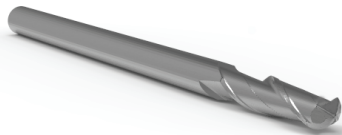
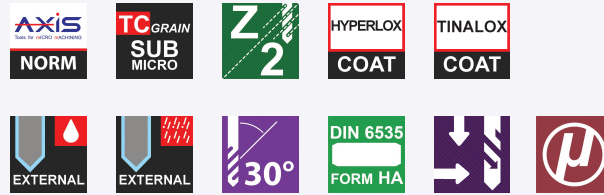
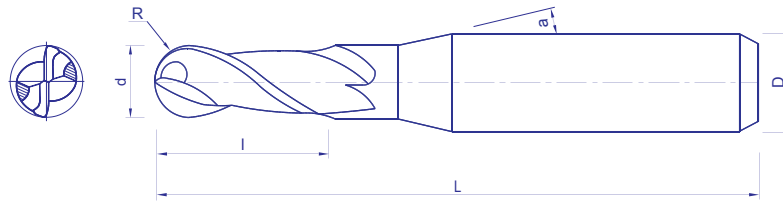
Dia	Taper Angle	EFL			Shoulder Angle	Total Length	Shank Dia
d	a	l			q	L	D h6
0.70	30'	6.0	8.0	-----	15°	40	3.0
0.70	1°	6.0	8.0	-----	15°	40	3.0
0.70	1'30'	6.0	8.0	-----	15°	40	3.0
0.70	2°	6.0	8.0	-----	15°	40	3.0
0.80	30'	6.0	8.0	10.0	15°	45	4.0
0.80	1°	6.0	8.0	10.0	15°	45	4.0
0.80	1'30'	6.0	8.0	10.0	15°	45	4.0
0.80	2°	6.0	8.0	10.0	15°	45	4.0
1.00	30'	6.0	8.0	10.0	15°	45	4.0
1.00	1°	6.0	8.0	10.0	15°	45	4.0
1.00	1'30'	6.0	8.0	10.0	15°	45	4.0
1.00	2°	6.0	8.0	10.0	15°	45	4.0
1.20	30'	10.0	12.0	16.0	15°	50	4.0
1.20	1°	10.0	12.0	16.0	15°	50	4.0
1.20	1'30'	10.0	12.0	16.0	15°	50	4.0
1.20	2°	10.0	12.0	16.0	15°	50	4.0
1.50	30'	10.0	16.0	20.0	15°	55	4.0
1.50	1°	10.0	16.0	20.0	15°	55	4.0
1.50	1'30'	10.0	16.0	20.0	15°	55	4.0
1.50	2°	10.0	16.0	20.0	15°	55	4.0
2.00	30'	10.0	16.0	25.0	15°	60	4.0
2.00	1°	10.0	16.0	25.0	15°	60	4.0
2.00	1'30'	10.0	16.0	25.0	15°	60	4.0
2.00	2°	10.0	16.0	25.0	15°	60	4.0
2.00	3°	10.0	16.0	25.0	15°	60	6.0
2.50	30'	10.0	16.0	25.0	15°	60	4.0
2.50	1°	10.0	16.0	25.0	15°	60	4.0
2.50	1'30'	10.0	16.0	25.0	15°	60	4.0
2.50	2°	10.0	16.0	25.0	15°	60	6.0
3.00	30'	25.0	40.0	-----	15°	60	6.0
3.00	1°	25.0	40.0	-----	15°	60	6.0
3.00	1'30'	25.0	40.0	-----	15°	60	6.0
3.00	2°	25.0	40.0	-----	15°	60	6.0

ON REQUEST :
Inch Sizes / Special sizes

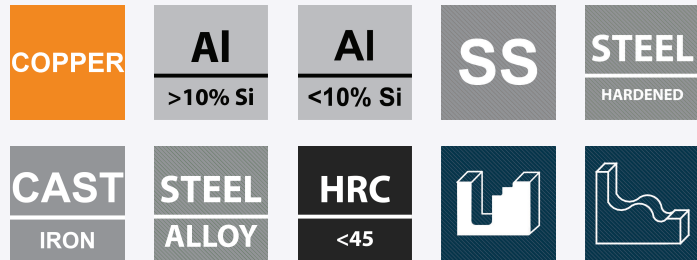
PACKING :
Single tool / pack

All Dimensions in mm otherwise specified





AXIS B9701



BALL RADIUS TOL:
± 0.005 (R 0.10 - R 1.50)
± 0.010 (R 2.00 - R 6.00)

For dia range:
0.20 - 1.499mm a = 11°
1.50 - 12.00mm a = 15°

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 1.80mm : 10 tools / pack,
Dia > 1.80mm : Single tool / pack

All Dimensions in mm otherwise specified

Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.10	0.20	0.2	38	3.0 / 4.0
0.10	0.20	0.4	38	3.0 / 4.0
0.15	0.30	0.3	38	3.0 / 4.0
0.15	0.30	0.6	38	3.0 / 4.0
0.20	0.40	0.4	38	3.0 / 4.0
0.20	0.40	0.8	38	3.0 / 4.0
0.25	0.50	0.5	38	3.0 / 4.0
0.25	0.50	1.0	38	3.0 / 4.0
0.30	0.60	0.6	38	3.0 / 4.0
0.30	0.60	1.2	38	3.0 / 4.0
0.35	0.70	0.7	38	3.0 / 4.0
0.35	0.70	1.4	38	3.0 / 4.0
0.40	0.80	0.8	38	3.0 / 4.0
0.40	0.80	1.6	38	3.0 / 4.0
0.45	0.90	0.9	38	3.0 / 4.0
0.45	0.90	1.8	38	3.0 / 4.0
0.50	1.00	1.0	38	3.0 / 4.0
0.50	1.00	2.0	38	3.0 / 4.0
0.60	1.20	2.4	38	3.0 / 4.0
0.60	1.20	3.6	38	3.0 / 4.0

BALL RADIUS TOL:
± 0.005 (R 0.10 - R 1.50)
± 0.010 (R 2.00 - R 6.00)

For dia range:
0.20 - 1.499mm a = 11°
1.50 - 12.00mm a = 15°

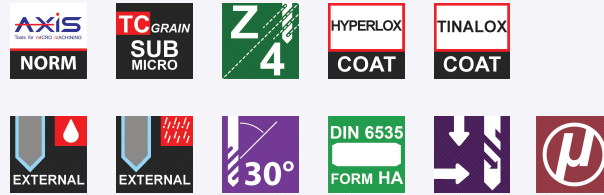
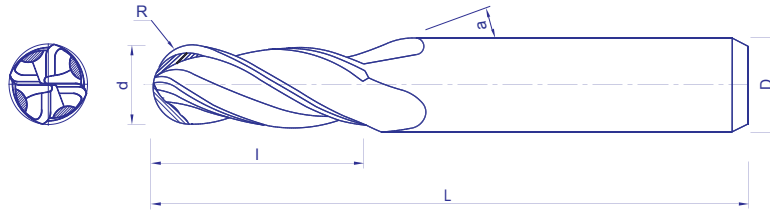
ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 1.80mm : 10 tools / pack,
Dia > 1.80mm : Single tool / pack

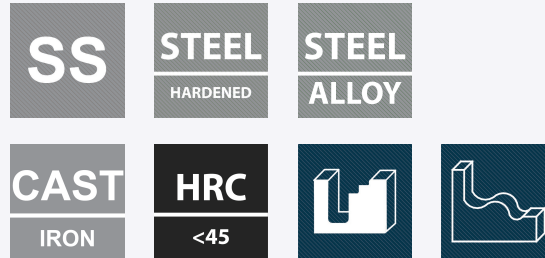
All Dimensions in mm otherwise specified

Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.70	1.40	2.8	38	3.0 / 4.0
0.70	1.40	4.2	38	3.0 / 4.0
0.75	1.50	3.0	38	3.0 / 4.0
0.75	1.50	4.5	38	3.0 / 4.0
0.80	1.60	3.2	38	3.0 / 4.0
0.80	1.60	4.8	38	3.0 / 4.0
0.90	1.80	3.6	38	3.0 / 4.0
0.90	1.80	5.4	38	3.0 / 4.0
1.00	2.00	4.0	38	6.0
1.00	2.00	6.0	38	6.0
1.25	2.50	5.0	38	6.0
1.25	2.50	7.5	38	6.0
1.50	3.00	6.0	38	6.0
1.50	3.00	8.0	38	6.0
2.00	4.00	8.0	45	6.0
2.00	4.00	12.0	45	6.0
2.50	5.00	8.0	50	6.0
2.50	5.00	12.0	50	6.0
3.00	6.00	10.0	50	6.0
3.00	6.00	12.0	50	6.0
4.00	8.00	12.0	50	8.0
4.00	8.00	16.0	63	8.0
5.00	10.00	15.0	63	10.0
5.00	10.00	20.0	75	10.0
6.00	12.00	18.0	75	12.0
6.00	12.00	24.0	75	12.0





AXIS B9721



For dia range:
0.20 - 1.499mm a = 11°
1.50 - 12.00mm a = 15°

Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.10	0.20	0.2	38	3.0 / 4.0*
0.10	0.20	0.6	38	3.0 / 4.0*
0.15	0.30	0.3	38	3.0 / 4.0*
0.15	0.30	0.9	38	3.0 / 4.0*
0.20	0.40	0.8	38	3.0 / 4.0*
0.20	0.40	1.2	38	3.0 / 4.0*
0.25	0.50	1.0	38	3.0 / 4.0*
0.25	0.50	1.5	38	3.0 / 4.0*
0.30	0.60	1.2	38	3.0 / 4.0*
0.30	0.60	1.8	38	3.0 / 4.0*
0.35	0.70	1.4	38	3.0 / 4.0*
0.35	0.70	2.1	38	3.0 / 4.0*
0.40	0.80	1.6	38	3.0 / 4.0*
0.40	0.80	2.4	38	3.0 / 4.0*
0.45	0.90	1.8	38	3.0 / 4.0*
0.45	0.90	2.7	38	3.0 / 4.0*
0.50	1.00	3.0	38	3.0 / 4.0*
0.50	1.00	5.0	38	3.0 / 4.0*
0.60	1.20	3.6	38	3.0 / 4.0*
0.60	1.20	6.0	38	3.0 / 4.0*

ON REQUEST :

* Standard non Stock / Inch Sizes / Special sizes

PACKING :

Up to Dia 1.80mm : 10 tools / pack with Shank 3.00mm
Single / pack with Shank 4.00mm,
Dia 2.00 - 6.00mm : 5 tools / pack,
Dia > 6.00mm : Single tool / pack

All Dimensions in mm otherwise specified



Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.70	1.40	4.2	38	3.0 / 4.0*
0.70	1.40	7.0	38	3.0 / 4.0*
0.75	1.50	4.5	38	3.0 / 4.0*
0.75	1.50	7.5	38	3.0 / 4.0*
0.80	1.60	4.8	38	3.0 / 4.0*
0.80	1.60	8.0	38	3.0 / 4.0*
0.90	1.80	5.4	38	3.0 / 4.0*
0.90	1.80	9.0	38	3.0 / 4.0*
1.00	2.00	6.0	38	6.0
1.00	2.00	10.0	38	6.0
1.25	2.50	7.5	38	6.0
1.25	2.50	10.0	38	6.0
1.50	3.00	9.0	38	6.0
1.50	3.00	12.0	38	6.0
2.00	4.00	12.0	45	6.0
2.00	4.00	16.0	45	6.0
2.50	5.00	10.0	50	6.0
2.50	5.00	15.0	50	6.0
3.00	6.00	12.0	50	6.0
3.00	6.00	18.0	50	6.0
4.00	8.00	16.0	50	8.0
4.00	8.00	20.0	63	8.0
5.00	10.00	22.0	75	10.0
6.00	12.00	25.0	75	12.0

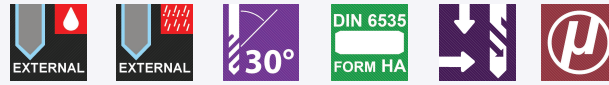
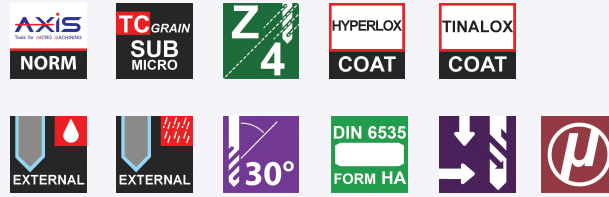
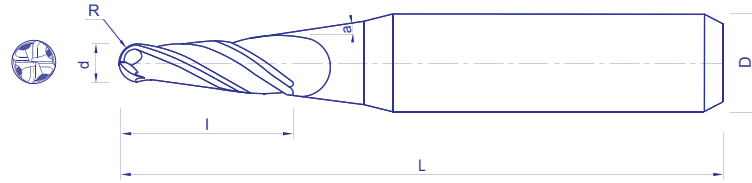
For dia range:
 0.20 - 1.499mm a = 11°
 1.50 - 12.00mm a = 15°

ON REQUEST :
 * Standard non Stock / Inch Sizes /
 Special sizes

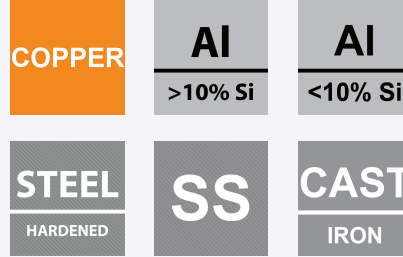
PACKING :
 Up to Dia 1.80mm : 10 tools / pack
 with Shank 3.00mm
 Single / pack with Shank 4.00mm,
 Dia 2.00 - 6.00mm : 5 tools / pack,
 Dia > 6.00mm : Single tool / pack

All Dimensions in mm otherwise
 specified





AXIS B9521



Radius	Dia	Taper Angle	EFL			Total Length	Shank Dia
R	d	a	l			L	D h6
0.30	0.60	30'	4.0	6.0	-----	38	3.0
0.30	0.60	1°	4.0	6.0	-----	38	3.0
0.30	0.60	1'30'	4.0	6.0	-----	38	3.0
0.30	0.60	2°	4.0	6.0	-----	38	3.0
0.40	0.80	30'	6.0	8.0	10.0	45	4.0
0.40	0.80	1°	6.0	8.0	10.0	45	4.0
0.40	0.80	1'30'	6.0	8.0	10.0	45	4.0
0.40	0.80	2°	6.0	8.0	10.0	45	4.0
0.50	1.00	30'	8.0	12.0	20.0	50	4.0
0.50	1.00	1°	8.0	12.0	20.0	50	4.0
0.50	1.00	1'30'	8.0	12.0	20.0	50	4.0
0.50	1.00	2°	8.0	12.0	20.0	50	4.0
0.60	1.20	30'	8.0	12.0	20.0	50	4.0
0.60	1.20	1°	8.0	12.0	20.0	50	4.0
0.60	1.20	1'30'	8.0	12.0	20.0	50	4.0
0.60	1.20	2°	8.0	12.0	20.0	50	4.0
0.75	1.50	30'	8.0	12.0	20.0	50	4.0
0.75	1.50	1°	8.0	12.0	20.0	50	4.0
0.75	1.50	1'30'	8.0	12.0	20.0	50	4.0
0.75	1.50	2°	8.0	12.0	20.0	50	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



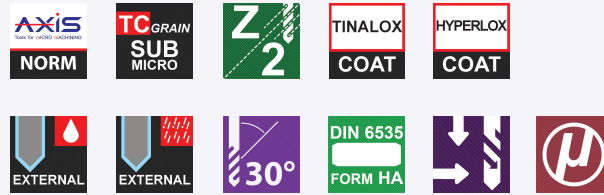
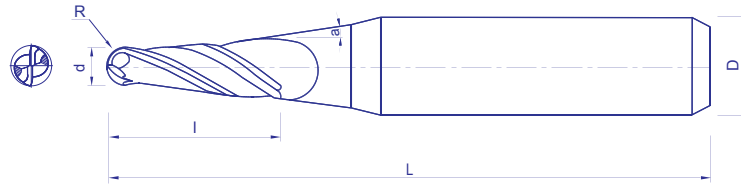
Radius	Dia	Taper Angle	EFL			Total Length	Shank Dia
R	d	a	l			L	D h6
0.80	1.60	30'	8.0	12.0	20.0	60.0	4.0
0.80	1.60	1°	8.0	12.0	20.0	60.0	4.0
0.80	1.60	1'30'	8.0	12.0	20.0	60.0	4.0
0.80	1.60	2°	8.0	12.0	20.0	60.0	4.0
0.90	1.80	30'	8.0	12.0	20.0	60.0	4.0
0.90	1.80	1°	8.0	12.0	20.0	60.0	4.0
0.90	1.80	1'30'	8.0	12.0	20.0	60.0	4.0
0.90	1.80	2°	8.0	12.0	20.0	60.0	4.0
1.00	2.00	30'	10.0	16.0	20.0	60.0	4.0
1.00	2.00	1°	10.0	16.0	20.0	60.0	4.0
1.00	2.00	1'30'	10.0	16.0	20.0	60.0	4.0
1.00	2.00	2°	10.0	16.0	20.0	60.0	4.0
1.25	2.50	30'	10.0	16.0	20.0	60.0	6.0
1.25	2.50	1°	10.0	16.0	20.0	60.0	6.0
1.25	2.50	1'30'	10.0	16.0	20.0	60.0	6.0
1.25	2.50	2°	10.0	16.0	20.0	60.0	6.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified





AXIS B9531



Ball Radius Tolerance:
±0.005 (R < 0.25)
±0.010 (R ≥ 0.25)

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a ± 10'	l		L	D h6
0.30	0.60	30'	4.0	0.66	38	3.0
0.30	0.60	30'	6.0	0.70	38	3.0
0.30	0.60	45'	4.0	0.70	38	3.0
0.30	0.60	45'	6.0	0.75	38	3.0
0.30	0.60	1°	4.0	0.73	38	3.0
0.30	0.60	1°	6.0	0.80	38	3.0
0.30	0.60	1°30'	4.0	0.79	38	3.0
0.30	0.60	1°30'	6.0	0.90	38	3.0
0.30	0.60	2°	4.0	0.86	38	3.0
0.30	0.60	2°	6.0	1.00	38	3.0
0.40	0.80	30'	6.0	0.90	38	3.0
0.40	0.80	30'	8.0	0.93	38	3.0
0.40	0.80	30'	10.0	0.97	45	4.0
0.40	0.80	45'	6.0	0.95	38	3.0
0.40	0.80	45'	8.0	1.00	38	3.0
0.40	0.80	45'	10.0	1.05	45	4.0
0.40	0.80	1°	6.0	1.00	38	3.0
0.40	0.80	1°	8.0	1.07	38	3.0
0.40	0.80	1°	10.0	1.14	45	4.0
0.40	0.80	1°30'	6.0	1.09	38	3.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Ball Radius Tolerance:
 ± 0.005 (R < 0.25)
 ± 0.010 (R \geq 0.25)

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a \pm 10'	l		L	D h6
0.40	0.80	1°30'	8.0	1.20	38	3.0
0.40	0.80	1°30'	10.0	1.30	45	4.0
0.40	0.80	2°	6.0	1.19	38	3.0
0.40	0.80	2°	8.0	1.33	38	3.0
0.40	0.80	2°	10.0	1.47	45	4.0
0.50	1.00	30'	8.0	1.13	45	4.0
0.50	1.00	30'	10.0	1.20	45	4.0
0.50	1.00	30'	20.0	1.34	55	4.0
0.50	1.00	45'	8.0	1.20	45	4.0
0.50	1.00	45'	12.0	1.30	45	4.0
0.50	1.00	45'	20.0	1.51	55	4.0
0.50	1.00	1°	8.0	1.26	45	4.0
0.50	1.00	1°	12.0	1.40	45	4.0
0.50	1.00	1°	20.0	1.68	55	4.0
0.50	1.00	1°30'	8.0	1.39	45	4.0
0.50	1.00	1°30'	12.0	1.60	45	4.0
0.50	1.00	1°30'	20.0	2.02	55	4.0
0.50	1.00	2°	8.0	1.52	45	4.0
0.50	1.00	2°	12.0	1.80	45	4.0
0.50	1.00	2°	20.0	2.36	55	4.0
0.60	1.20	30'	8.0	1.33	45	4.0
0.60	1.20	30'	12.0	1.40	45	4.0
0.60	1.20	30'	20.0	1.54	50	4.0
0.60	1.20	45'	8.0	1.39	45	4.0
0.60	1.20	45'	12.0	1.50	45	4.0
0.60	1.20	45'	20.0	1.71	50	4.0
0.60	1.20	1°	8.0	1.46	45	4.0
0.60	1.20	1°	12.0	1.60	45	4.0
0.60	1.20	1°	20.0	1.88	50	4.0
0.60	1.20	1°30'	8.0	1.59	45	4.0
0.60	1.20	1°30'	12.0	1.80	45	4.0
0.60	1.20	1°30'	20.0	2.22	50	4.0
0.60	1.20	2°	8.0	1.72	45	4.0
0.60	1.20	2°	12.0	2.00	45	4.0
0.60	1.20	2°	20.0	2.55	50	4.0
0.75	1.50	30'	8.0	1.63	45	4.0
0.75	1.50	30'	12.0	1.70	45	4.0
0.75	1.50	30'	20.0	1.84	60	4.0
0.75	1.50	45'	8.0	1.69	45	4.0
0.75	1.50	45'	12.0	1.79	45	4.0
0.75	1.50	45'	20.0	2.00	60	4.0
0.75	1.50	1°	8.0	1.75	45	4.0
0.75	1.50	1°	12.0	1.89	45	4.0
0.75	1.50	1°	20.0	2.17	60	4.0
0.75	1.50	1°30'	8.0	1.88	45	4.0
0.75	1.50	1°30'	12.0	2.09	45	4.0

ON REQUEST :
 Inch Sizes / Special sizes

PACKING :
 Single tool / pack

All Dimensions in mm otherwise specified



Ball Radius Tolerance:
±0.005 (R < 0.25)
±0.010 (R ≥ 0.25)

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a ± 10'	l		L	D h6
0.75	1.50	1°30'	20.0	2.51	60	4.0
0.75	1.50	2°	8.0	2.01	45	4.0
0.75	1.50	2°	12.0	2.29	45	4.0
0.75	1.50	2°	20.0	2.85	60	4.0
0.80	1.60	30'	8.0	1.73	45	4.0
0.80	1.60	30'	12.0	1.80	45	4.0
0.80	1.60	30'	20.0	1.94	60	4.0
0.80	1.60	45'	8.0	1.78	45	4.0
0.80	1.60	45'	12.0	1.89	45	4.0
0.80	1.60	45'	20.0	2.10	60	4.0
0.80	1.60	1°	8.0	1.85	45	4.0
0.80	1.60	1°	12.0	1.99	45	4.0
0.80	1.60	1°	20.0	2.27	60	4.0
0.80	1.60	1°30'	8.0	1.98	45	4.0
0.80	1.60	1°30'	12.0	2.19	45	4.0
0.80	1.60	1°30'	20.0	2.61	60	4.0
0.80	1.60	2°	8.0	2.10	45	4.0
0.80	1.60	2°	12.0	2.38	45	4.0
0.80	1.60	2°	20.0	2.94	60	4.0
0.90	1.80	30'	8.0	1.92	45	4.0
0.90	1.80	30'	12.0	1.99	45	4.0
0.90	1.80	30'	20.0	2.13	60	4.0
0.90	1.80	45'	8.0	1.99	45	4.0
0.90	1.80	45'	12.0	2.09	45	4.0
0.90	1.80	45'	20.0	2.30	60	4.0
0.90	1.80	1°	8.0	2.05	45	4.0
0.90	1.80	1°	12.0	2.19	45	4.0
0.90	1.80	1°	20.0	2.47	60	4.0
0.90	1.80	1°30'	8.0	2.17	45	4.0
0.90	1.80	1°30'	12.0	2.38	45	4.0
0.90	1.80	1°30'	20.0	2.80	60	4.0
0.90	1.80	2°	8.0	2.30	45	4.0
0.90	1.80	2°	12.0	2.58	45	4.0
0.90	1.80	2°	20.0	3.14	60	4.0
1.00	2.00	30'	10.0	2.16	45	4.0
1.00	2.00	30'	20.0	2.33	60	4.0
1.00	2.00	30'	30.0	2.51	65	4.0
1.00	2.00	45'	10.0	2.24	45	4.0
1.00	2.00	45'	20.0	2.50	60	4.0
1.00	2.00	45'	30.0	2.76	65	4.0
1.00	2.00	1°	10.0	2.31	45	4.0
1.00	2.00	1°	20.0	2.66	60	4.0
1.00	2.00	1°	30.0	3.01	65	4.0
1.00	2.00	1°30'	10.0	2.47	45	4.0
1.00	2.00	1°30'	20.0	3.00	60	6.0
1.00	2.00	1°30'	30.0	3.52	70	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Ball Radius Tolerance:
±0.005 (R < 0.25)
±0.010 (R ≥ 0.25)

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a ± 10'	l		L	D h6
1.00	2.00	2°	10.0	2.63	45	4.0
1.00	2.00	2°	20.0	3.33	60	4.0
1.00	2.00	2°	30.0	4.03	70	6.0
1.25	2.50	30'	10.0	2.65	60	6.0
1.25	2.50	30'	16.0	2.76	60	6.0
1.25	2.50	30'	25.0	2.91	70	6.0
1.25	2.50	45'	10.0	2.73	60	6.0
1.25	2.50	45'	16.0	2.89	60	6.0
1.25	2.50	45'	25.0	3.12	70	6.0
1.25	2.50	1°	10.0	2.81	60	6.0
1.25	2.50	1°	16.0	3.02	60	6.0
1.25	2.50	1°	25.0	3.33	70	6.0
1.25	2.50	1°30'	10.0	2.96	60	6.0
1.25	2.50	1°30'	16.0	3.27	60	6.0
1.25	2.50	1°30'	25.0	3.74	70	6.0
1.25	2.50	2°	10.0	3.11	60	6.0
1.25	2.50	2°	16.0	3.53	60	6.0
1.25	2.50	2°	25.0	4.16	70	6.0
2.00	4.00	30'	25.0	4.40	65	6.0
2.00	4.00	1°	25.0	4.80	65	6.0
2.00	4.00	1°30'	25.0	5.21	65	6.0
2.00	4.00	2°	25.0	5.61	70	6.0

2022

КАТАЛОГ ФРЕЗ КОНЦЕВЫХ
ТВЕРДОСПЛАВНЫХ

AXIS

Tools for **m**ICRO **m**ACHINING

для фрезерования
цветных металлов



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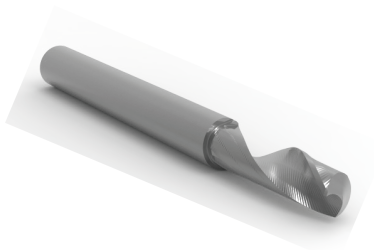
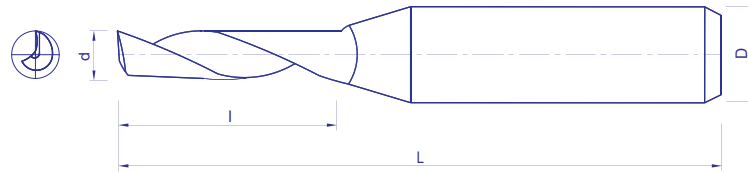
Алмазное
покрытие

Мы предлагаем полный ассортимент фрез с алмазным покрытием CVD, сверл и специальных инструментов.

- *Высокая скорость подачи, обеспечивающая более высокую производительность*
- *Чрезвычайная износостойкость, обеспечивающая более длительный срок службы инструмента ~ 5-20x*
- *Частая смена инструментов и время простоя машины, которых удалось избежать*

QUALITY • PRECISION • CONSISTENCY





AXIS E8231



AI
<10% Si

PLASTIC

ACRYLIC

Dia	EFL	OAL	Shank Dia
d	l	L	D h6
0.10	0.3	38	3.0
0.20	0.6	38	3.0
0.30	1.0	38	3.0
0.40	1.0	38	3.0
0.50	1.5	38	3.0
0.60	3.0	38	3.0
0.80	5.0	38	3.0
1.00	3.0	38	3.0
1.00	5.0	38	3.0
1.00	5.0	40	6.0
1.20	5.0	38	3.0
1.50	5.0	38	3.0
1.50	5.0	40	6.0
1.60	6.0	38	3.0
1.60	6.0	40	6.0
1.80	7.0	38	3.0
2.00	5.0	40	3.0
2.00	5.0	40	6.0
2.00	6.0	38	3.0
2.00	6.0	50	6.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



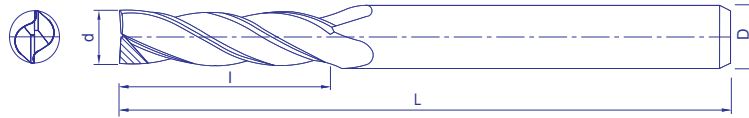
Dia	EFL	OAL	Shank Dia
d	l	L	D h6
2.00	7.0	40	4.0
2.00	7.0	40	6.0
2.00	10.0	38	3.0
2.00	11.0	38	3.0
3.00	5.0	40	3.0
3.00	5.0	40	6.0
3.00	8.0	40	6.0
3.00	10.0	38	3.0
3.00	10.0	40	4.0
3.00	10.0	50	6.0
3.00	10.0	60	6.0
3.00	11.0	38	3.0
3.00	11.0	50	6.0
3.00	12.0	40	3.0
3.00	12.0	50	6.0
3.00	22.0	50	3.0
3.00	22.0	60	6.0
4.00	6.0	40	4.0
4.00	6.0	40	6.0
4.00	12.0	60	6.0
4.00	14.0	50	4.0
4.00	14.0	50	6.0
4.00	22.0	50	6.0
4.00	32.0	64	4.0
5.00	7.0	40	6.0
5.00	14.0	50	6.0
5.00	14.0	60	5.0
5.00	14.0	60	6.0
5.00	16.0	60	6.0
6.00	8.0	40	6.0
6.00	14.0	50	6.0
6.00	16.0	60	6.0
6.00	20.0	60	6.0
6.00	22.0	50	6.0
6.00	32.0	64	6.0
8.00	14.0	50	8.0
8.00	20.0	60	8.0
8.00	20.0	75	8.0
8.00	32.0	64	8.0
10.00	22.0	64	10.0
12.00	22.0	64	12.0

ON REQUEST :
Inch Sizes / Special sizes

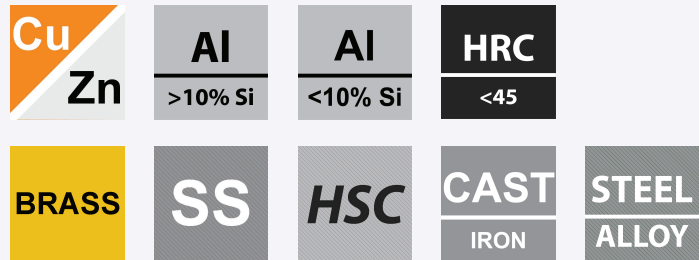
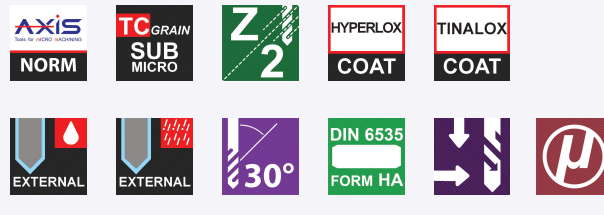
PACKING :
Single tool / pack

All Dimensions in mm otherwise specified





AXIS E8311



Dia	EFL	Total Length	Shank Dia		Dia	EFL	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
1.00	3.0	38	3.0 / 4.0		5.00	15.0	50	6.0
1.00	5.0	38	3.0 / 4.0		5.00	25.0	60	6.0
1.20	3.6	38	3.0 / 4.0		6.00	18.0	50	6.0
1.20	6.0	38	3.0 / 4.0		6.00	30.0	65	6.0
1.40	4.2	38	3.0 / 4.0		8.00	24.0	75	8.0
1.40	7.0	38	3.0 / 4.0		8.00	40.0	80	8.0
1.50	4.5	38	3.0 / 4.0		10.00	30.0	75	10.0
1.50	7.5	38	3.0 / 4.0		10.00	50.0	95	10.0
1.60	4.8	38	3.0 / 4.0		12.00	36.0	75	12.0
1.60	8.0	38	3.0 / 4.0		12.00	60.0	100	12.0
1.80	5.4	38	3.0 / 4.0					
1.80	9.0	38	3.0 / 4.0					
2.00	6.0	38	3.0 / 4.0					
2.00	10.0	38	3.0 / 4.0					
2.50	7.5	38	6.0					
2.50	12.0	38	6.0					
3.00	9.0	38	6.0					
3.00	15.0	50	6.0					
4.00	12.0	50	6.0					
4.00	20.0	60	6.0					

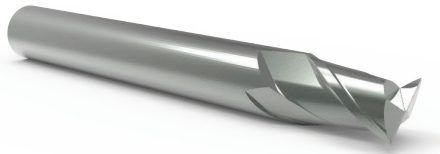
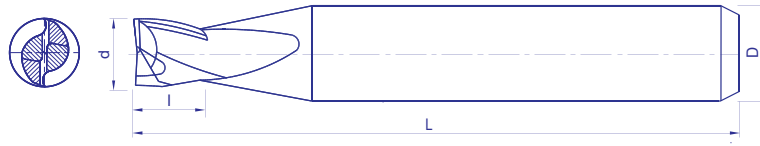
ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 3.00mm : 10 tools / pack,
Dia > 3.00mm : Single tool / pack

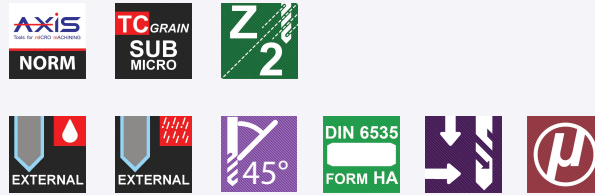
All Dimensions in mm otherwise specified



For Aluminium Application



AXIS E8381



AI
>10% Si

AI
<10% Si

HSC

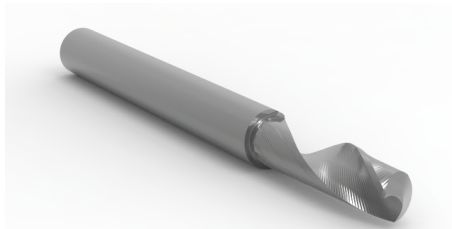
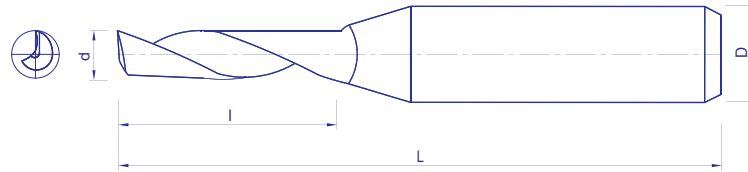
Dia	EFL		Total Length	Shank Dia
d	l		L	D h6
	2d	3d		
0.40	0.8	1.2	38	3.0
0.50	1.0	1.5	38	3.0
0.60	1.2	1.8	38	3.0
0.80	1.6	2.4	38	3.0
0.90	1.8	2.7	38	3.0
1.00	2.0	3.0	38	3.0
1.20	2.4	3.6	38	3.0
1.30	2.6	3.0	38	3.0
1.40	2.8	4.2	38	3.0
1.50	3.0	4.5	38	3.0
1.60	3.2	4.8	38	3.0
1.80	3.6	5.4	38	3.0
2.00	4.0	6.0	38	3.0
2.50	5.0	7.5	38	3.0
3.00	6.0	9.0	50	6.0
3.50	7.0	12.0	50	6.0
4.00	8.0	12.0	50	6.0
4.50	9.0	12.0	50	6.0
5.00	10.0	15.0	60	6.0
5.50	12.0	15.0	60	6.0
6.00	12.0	18.0	60	6.0
8.00	16.0	24.0	75	8.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 2.50mm : 10 tools / pack,
Dia 3.00 - 4.50mm : 5 tools / pack,
Dia > 5.00mm : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9231

AI

 <10% Si

PLASTIC

ACRYLIC

Dia	EFL	OAL	Shank Dia
d	l	L	D h6
0.10	0.3	38	3.0
0.20	0.6	38	3.0
0.30	1.0	38	3.0
0.40	1.0	38	3.0
0.50	1.5	38	3.0
0.60	3.0	38	3.0
0.80	5.0	38	3.0
1.00	3.0	38	3.0
1.00	5.0	38	3.0
1.00	5.0	40	6.0
1.20	5.0	38	3.0
1.50	5.0	38	3.0
1.50	5.0	40	6.0
1.60	6.0	38	3.0
1.60	6.0	40	6.0
1.80	7.0	38	3.0
2.00	5.0	40	3.0
2.00	5.0	40	6.0
2.00	6.0	50	4.0
2.00	6.0	50	6.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 3.00mm : 10 tools / pack,
Dia > 3.00mm : Single tool / pack

All Dimensions in mm otherwise specified

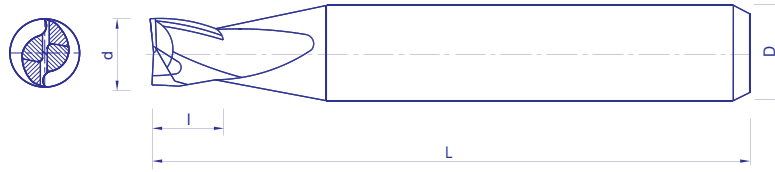


Dia	EFL	OAL	Shank Dia
d	l	L	D h6
2.00	7.0	40	4.0
2.00	7.0	40	6.0
2.00	8.0	40	3.0
2.00	10.0	38	3.0
3.00	5.0	40	3.0
3.00	5.0	40	6.0
3.00	8.0	40	6.0
3.00	10.0	38	3.0
3.00	10.0	40	3.0
3.00	10.0	40	4.0
3.00	10.0	50	6.0
3.00	10.0	60	6.0
3.00	12.0	40	3.0
3.00	12.0	50	6.0
3.00	22.0	50	3.0
3.00	22.0	60	6.0
4.00	6.0	40	4.0
4.00	6.0	40	6.0
4.00	12.0	60	6.0
4.00	14.0	50	4.0
4.00	22.0	50	6.0
4.00	32.0	64	4.0
5.00	7.0	40	6.0
5.00	14.0	50	6.0
5.00	14.0	60	5.0
5.00	14.0	60	6.0
5.00	16.0	60	5.0
6.00	8.0	40	6.0
6.00	14.0	50	6.0
6.00	16.0	60	6.0
6.00	20.0	60	6.0
6.00	25.0	60	6.0
8.00	14.0	50	8.0
8.00	20.0	60	8.0
8.00	20.0	75	8.0
8.00	30.0	75	8.0
8.00	55.0	100	8.0
10.00	25.0	75	10.0
10.00	32.0	75	10.0
10.00	55.0	100	10.0
10.00	75.0	120	10.0
12.00	25.0	75	12.0

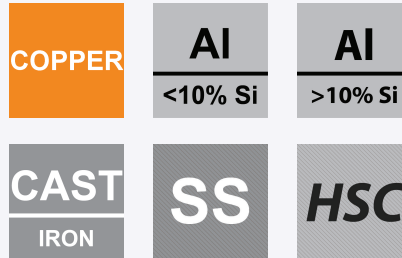
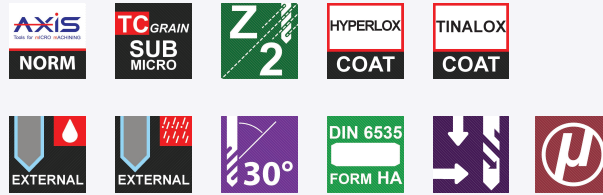
ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 3.00mm : 10 tools / pack,
Dia > 3.00mm : Single tool / pack

All Dimensions in mm otherwise specified



AXIS E9661



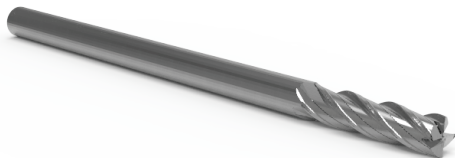
Dia	EFL	Total Length	Shank Dia		Dia	Flute Length	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
0.10	0.2	38	3.0		1.20	2.4	38	3.0
0.10	0.3	38	3.0		1.20	3.6	38	3.0
0.20	0.4	38	3.0		1.40	2.8	38	3.0
0.20	0.6	38	3.0		1.40	4.2	38	3.0
0.30	0.6	38	3.0		1.50	3.0	38	3.0
0.30	0.9	38	3.0		1.50	4.5	38	3.0
0.40	0.8	38	3.0		1.60	3.2	38	3.0
0.40	1.2	38	3.0		1.60	4.8	38	3.0
0.50	1.0	38	3.0		1.80	3.6	38	3.0
0.50	1.5	38	3.0		1.80	5.4	38	3.0
0.60	1.2	38	3.0		2.00	4.0	38	3.0
0.60	1.8	38	3.0		2.00	6.0	38	3.0
0.70	1.4	38	3.0		2.50	5.0	38	3.0
0.70	2.1	38	3.0		2.50	7.5	38	3.0
0.80	1.6	38	3.0		3.00	6.0	38	3.0
0.80	2.4	38	3.0		3.00	9.0	38	3.0
0.90	1.8	38	3.0					
0.90	2.7	38	3.0					
1.00	2.0	38	3.0					
1.00	3.0	38	3.0					

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
10 tools / pack

All Dimensions in mm otherwise specified





AXIS E9671

Dia	EFL	Total Length	Shank Dia
d	l	L	D h6
0.20	0.4	38	3.0
0.20	0.6	38	3.0
0.30	0.6	38	3.0
0.30	0.9	38	3.0
0.40	0.8	38	3.0
0.40	1.2	38	3.0
0.50	1.0	38	3.0
0.50	1.5	38	3.0
0.60	1.2	38	3.0
0.60	1.8	38	3.0
0.70	1.4	38	3.0
0.70	2.1	38	3.0
0.80	1.6	38	3.0
0.80	2.4	38	3.0
0.90	1.8	38	3.0
0.90	2.7	38	3.0
1.00	3.0	38	3.0 / 4.0
1.00	5.0	38	3.0 / 4.0
1.20	3.6	38	3.0 / 4.0
1.20	6.0	38	3.0 / 4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified



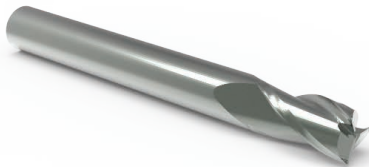
Dia	EFL	Total Length	Shank Dia
d	l	L	D h6
1.40	4.2	38	3.0 / 4.0
1.40	7.0	38	3.0 / 4.0
1.50	4.5	38	3.0 / 4.0
1.50	7.5	38	3.0 / 4.0
1.60	4.8	38	3.0 / 4.0
1.60	8.0	38	3.0 / 4.0
1.80	5.4	38	3.0 / 4.0
1.80	9.0	38	3.0 / 4.0
2.00	6.0	38	3.0 / 4.0
2.00	10.0	38	3.0 / 4.0
2.50	7.5	38	6.0
2.50	10.0	38	6.0
3.00	9.0	38	6.0
3.00	12.0	38	6.0
4.00	12.0	45	6.0
4.00	16.0	45	6.0
5.00	10.0	50	6.0
5.00	15.0	50	6.0
6.00	12.0	50	6.0
6.00	18.0	50	6.0
8.00	16.0	50	8.0
8.00	24.0	63	8.0
10.00	20.0	63	10.0
10.00	30.0	75	10.0
12.00	24.0	75	12.0
12.00	36.0	80	12.0

ON REQUEST :
Inch Sizes / Special sizes

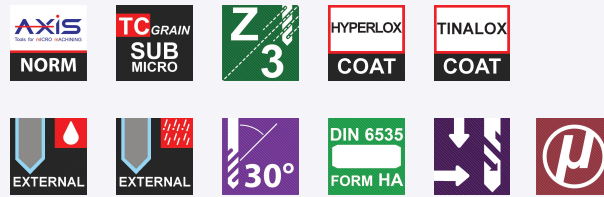
PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9681



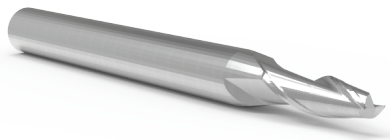
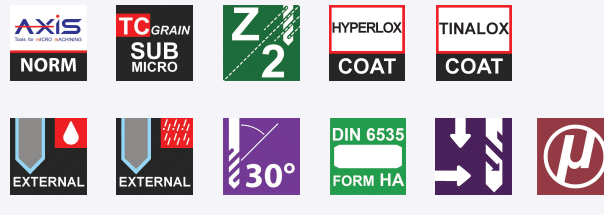
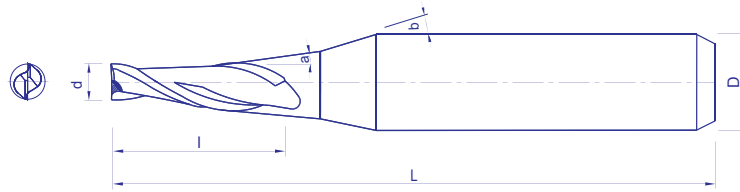
Dia	EFL	Total Length	Shank Dia		Dia	Flute	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
1.00	3.0	38	3.0 / 4.0		5.00	10.0	50	6.0
1.00	5.0	38	3.0 / 4.0		5.00	15.0	50	6.0
1.20	3.6	38	3.0 / 4.0		6.00	12.0	50	6.0
1.20	6.0	38	3.0 / 4.0		6.00	18.0	50	6.0
1.40	4.2	38	3.0 / 4.0		8.00	16.0	50	8.0
1.40	7.0	38	3.0 / 4.0		8.00	24.0	63	8.0
1.50	4.5	38	3.0 / 4.0		10.00	20.0	63	10.0
1.50	7.5	38	3.0 / 4.0		10.00	30.0	75	10.0
1.60	4.8	38	3.0 / 4.0		12.00	24.0	75	12.0
1.60	8.0	38	3.0 / 4.0		12.00	36.0	80	12.0
1.80	5.4	38	3.0 / 4.0					
1.80	9.0	38	3.0 / 4.0					
2.00	6.0	38	3.0 / 4.0					
2.00	10.0	38	3.0 / 4.0					
2.50	7.5	38	6.0					
2.50	10.0	38	6.0					
3.00	9.0	38	6.0					
3.00	12.0	38	6.0					
4.00	12.0	45	6.0					
4.00	16.0	45	6.0					

ON REQUEST :
Inch Sizes / Special sizes

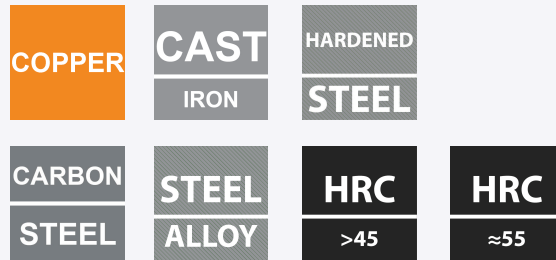
PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9501



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

ON REQUEST :

Inch Sizes / Special sizes

PACKING :

Single tool / pack

All Dimensions in mm otherwise specified

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		b	L	D h6
0.20	30'	0.80	0.21	9°	45	4.0
0.20	1°	0.80	0.23	9°	45	4.0
0.20	1°30'	0.80	0.24	9°	45	4.0
0.20	2°	0.80	0.26	9°	45	4.0
0.20	3°	0.80	0.28	9°	45	4.0
0.20	5°	0.80	0.34	9°	45	4.0
0.20	10°	0.80	0.48	-	45	4.0
0.30	30'	1.20	0.32	9°	45	4.0
0.30	1°	1.20	0.34	9°	45	4.0
0.30	1°30'	1.20	0.36	9°	45	4.0
0.30	2°	1.20	0.38	9°	45	4.0
0.30	3°	1.20	0.43	9°	45	4.0
0.30	5°	1.20	0.51	9°	45	4.0
0.30	10°	1.20	0.72	-	45	4.0
0.40	30'	1.60	0.43	9°	45	4.0
0.40	1°	1.60	0.46	9°	45	4.0
0.40	1°30'	1.60	0.48	9°	45	4.0
0.40	2°	1.60	0.51	9°	45	4.0
0.40	3°	1.60	0.57	9°	45	4.0
0.40	5°	1.60	0.68	9°	45	4.0

Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
0.40	10°	1.6	0.96	-	45	4.0
0.50	30'	2.0	0.53	9°	45	4.0
0.50	1°	2.0	0.57	9°	45	4.0
0.50	1°30'	2.0	0.60	9°	45	4.0
0.50	2°	2.0	0.64	9°	45	4.0
0.50	3°	2.0	0.71	9°	45	4.0
0.50	4°	2.0	0.78	9°	45	4.0
0.50	5°	2.0	0.85	9°	45	4.0
0.50	6°	2.0	0.92	9°	45	4.0
0.50	7°	2.0	0.99	9°	45	4.0
0.50	10°	2.0	1.21	-	45	4.0
0.50	15°	2.0	1.57	15°	45	4.0
0.50	20°	2.0	1.96	15°	45	4.0
0.60	30'	2.0	0.63	9°	45	4.0
0.60	1°	2.0	0.67	9°	45	4.0
0.60	1°30'	2.0	0.70	9°	45	4.0
0.60	2°	2.0	0.74	9°	45	4.0
0.60	3°	2.0	0.81	9°	45	4.0
0.60	4°	2.0	0.88	9°	45	4.0
0.60	5°	2.0	0.95	9°	45	4.0
0.60	6°	2.0	1.02	9°	45	4.0
0.60	7°	2.0	1.09	9°	45	4.0
0.60	10°	2.0	1.31	-	45	4.0
0.60	15°	2.0	1.67	15°	45	4.0
0.60	20°	2.0	2.06	15°	45	4.0
0.70	30'	2.0	0.73	9°	45	4.0
0.70	1°	2.0	0.77	9°	45	4.0
0.70	1°30'	2.0	0.80	9°	45	4.0
0.70	2°	2.0	0.84	9°	45	4.0
0.70	2°	2.0	0.91	9°	45	4.0
0.70	4°	2.0	0.98	9°	45	4.0
0.70	5°	2.0	1.05	9°	45	4.0
0.70	6°	2.0	1.12	9°	45	4.0
0.70	7°	2.0	1.19	9°	45	4.0
0.70	10°	2.0	1.41	-	45	4.0
0.70	15°	2.0	1.77	15°	45	4.0
0.70	20°	2.0	2.16	15°	45	4.0
0.80	30'	3.0	0.85	9°	45	4.0
0.80	1°	3.0	0.90	9°	45	4.0
0.80	1°30'	3.0	0.96	9°	45	4.0
0.80	2°	3.0	1.01	9°	45	4.0
0.80	3°	3.0	1.11	9°	45	4.0
0.80	4°	3.0	1.21	9°	45	4.0
0.80	5°	3.0	1.32	9°	45	4.0
0.80	6°	3.0	1.43	9°	45	4.0
0.80	7°	3.0	1.54	9°	45	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:
Dia d ≤ 0.200 : -0.010 / -0.025
Dia d 0.201 - 0.400 : -0.010 / -0.030
Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
0.80	10°	3.0	1.86	-	45	4.0
0.80	15°	3.0	2.41	15°	45	4.0
0.80	20°	3.0	2.98	-	45	4.0
0.90	30'	3.0	0.95	9°	45	4.0
0.90	1°	3.0	1.00	9°	45	4.0
0.90	1°30'	3.0	1.06	9°	45	4.0
0.90	2°	3.0	1.11	9°	45	4.0
0.90	3°	3.0	1.21	9°	45	4.0
0.90	4°	3.0	1.32	9°	45	4.0
0.90	5°	3.0	1.42	9°	45	4.0
0.90	6°	3.0	1.53	9°	45	4.0
0.90	7°	3.0	1.64	9°	45	4.0
0.90	10°	3.0	1.96	-	45	4.0
0.90	15°	3.0	2.51	15°	45	4.0
0.90	20°	3.0	3.08	9°	45	4.0
1.00	30'	4.0	1.07	9°	45	4.0
1.00	1°	4.0	1.14	9°	45	4.0
1.00	1°30'	4.0	1.21	9°	45	4.0
1.00	2°	4.0	1.28	9°	45	4.0
1.00	3°	4.0	1.42	9°	45	4.0
1.00	4°	4.0	1.56	9°	45	4.0
1.00	5°	4.0	1.70	9°	45	4.0
1.00	6°	4.0	1.84	9°	45	4.0
1.00	7°	4.0	1.98	9°	45	4.0
1.00	10°	4.0	2.41	-	45	4.0
1.00	15°	4.0	3.14	15°	50	6.0
1.00	20°	4.0	3.91	15°	50	6.0
1.50	30'	5.0	1.59	9°	45	4.0
1.50	1°	5.0	1.67	9°	45	4.0
1.50	1°30'	5.0	1.76	9°	45	4.0
1.50	2°	5.0	1.85	9°	45	4.0
1.50	3°	5.0	2.02	9°	45	4.0
1.50	4°	5.0	2.20	9°	45	4.0
1.50	5°	5.0	2.37	9°	45	4.0
1.50	6°	5.0	2.55	9°	45	4.0
1.50	7°	5.0	2.73	9°	45	4.0
1.50	10°	5.0	3.26	-	45	4.0
1.50	15°	5.0	4.18	15°	50	6.0
1.50	20°	5.0	5.14	-	50	6.0
2.00	30'	6.0	2.10	9°	45	4.0
2.00	1°	6.0	2.21	9°	45	4.0
2.00	1°30'	6.0	2.31	9°	45	4.0
2.00	2°	6.0	2.41	9°	45	4.0
2.00	3°	6.0	2.62	9°	45	4.0
2.00	4°	6.0	2.84	9°	45	4.0
2.00	5°	6.0	3.05	9°	45	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025
 Dia d 0.201 - 0.400 : -0.010 / -0.030
 Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
2.00	6°	6.0	3.26	9°	45	4.0
2.00	7°	6.0	3.47	-	45	4.0
2.00	10°	6.0	4.11	-	50	6.0
2.00	15°	6.0	5.22	-	50	6.0
2.00	20°	6.0	6.37	-	50	6.0
2.50	30'	8.0	2.64	9°	45	4.0
2.50	1°	8.0	2.78	9°	45	4.0
2.50	1°30'	8.0	2.91	9°	45	4.0
2.50	2°	8.0	3.05	9°	45	4.0
2.50	3°	8.0	3.33	9°	45	4.0
2.50	4°	8.0	3.62	-	45	4.0
2.50	5°	8.0	3.90	-	45	4.0
2.50	6°	8.0	4.18	-	50	4.0
2.50	7°	8.0	4.46	-	50	4.0
2.50	10°	8.0	5.32	-	50	6.0
2.50	15°	8.0	6.79	-	50	6.0
2.50	20°	8.0	8.32	-	60	8.0
3.00	30'	10.0	3.17	9°	50	6.0
3.00	1°	10.0	3.35	9°	50	6.0
3.00	1°30'	10.0	3.52	9°	50	6.0
3.00	2°	10.0	3.69	9°	50	6.0
3.00	3°	10.0	4.05	9°	50	6.0
3.00	4°	10.0	4.40	9°	50	6.0
3.00	5°	10.0	4.75	9°	50	6.0
3.00	6°	10.0	5.10	-	50	6.0
3.00	7°	10.0	5.46	-	50	6.0
3.00	10°	10.0	6.53	-	50	6.0
3.00	15°	10.0	8.36	-	60	8.0
3.00	20°	10.0	10.30	-	70	10.0
4.00	30'	15.0	4.26	9°	50	6.0
4.00	1°	15.0	4.52	9°	50	6.0
4.00	1°30'	15.0	4.79	9°	50	6.0
4.00	2°	15.0	5.04	9°	50	6.0
4.00	3°	15.0	5.57	9°	50	6.0
4.00	4°	15.0	6.10	-	55	6.0
4.00	5°	15.0	6.62	-	55	6.0
4.00	6°	15.0	7.15	-	55	6.0
4.00	7°	15.0	7.68	-	55	6.0
4.00	10°	15.0	9.29	-	60	8.0
4.00	15°	15.0	12.04	-	80	12.0
4.00	20°	15.0	14.92	-	80	12.0
5.00	30'	20.0	5.34	9°	55	6.0
5.00	1°	20.0	5.70	9°	55	6.0
5.00	1°30'	20.0	6.04	-	55	6.0
5.00	2°	20.0	6.39	-	55	6.0
5.00	3°	20.0	7.10	-	55	6.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Tolerance:

Dia d ≤ 0.200 : -0.010 / -0.025

Dia d 0.201 - 0.400 : -0.010 / -0.030

Dia d 0.401 - 12.00 : -0.010 / -0.050

Dia	Taper Angle	EFL	Dia at larger end	Shoulder Angle	Total Length	Shank Dia
d	a ± 10'	l		q	L	D h6
5.00	4°	20.0	7.80	-	60	6.0
5.00	5°	20.0	8.50	-	60	8.0
5.00	6°	20.0	9.20	-	60	8.0
5.00	7°	20.0	9.91	-	70	10.0
5.00	10°	20.0	12.05	-	80	12.0
6.00	30'	20.0	6.35	-	55	6.0
6.00	1°	20.0	6.70	-	55	6.0
6.00	1°30'	20.0	7.05	-	55	6.0
6.00	2°	20.0	7.40	-	55	6.0
6.00	3°	20.0	8.10	-	60	8.0
6.00	4°	20.0	8.80	-	65	8.0
6.00	5°	20.0	9.50	-	65	8.0
6.00	6°	20.0	10.20	-	70	10.0
6.00	7°	20.0	10.91	-	70	10.0
6.00	10°	20.0	13.05	-	80	12.0
8.00	30'	25.0	8.44	-	65	8.0
8.00	1°	25.0	8.87	-	65	8.0
8.00	1°30'	25.0	9.31	-	65	8.0
8.00	2°	25.0	9.74	-	65	8.0
8.00	30'	25.0	8.44	-	65	8.0
8.00	1°	25.0	8.87	-	65	8.0
8.00	1°30'	25.0	9.31	-	65	8.0
8.00	2°	25.0	9.74	-	65	8.0
8.00	3°	25.0	10.62	-	70	10.0
8.00	5°	25.0	12.37	-	90	12.0
10.00	30'	35.0	10.61	-	85	10.0
10.00	1°	35.0	11.22	-	85	10.0
10.00	1°30'	35.0	11.83	-	85	10.0
10.00	2°	35.0	12.44	-	90	12.0
10.00	3°	35.0	13.67	-	90	12.0
12.00	30'	35.0	12.61	-	85	12.0
12.00	1°	35.0	13.22	-	90	12.0
12.00	2°	35.0	14.44	-	90	12.0

ON REQUEST :

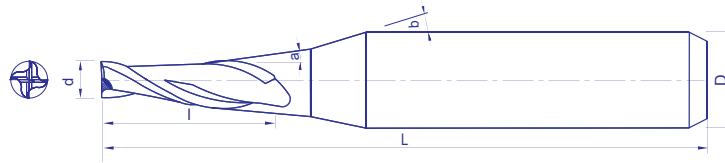
Inch Sizes / Special sizes

PACKING :

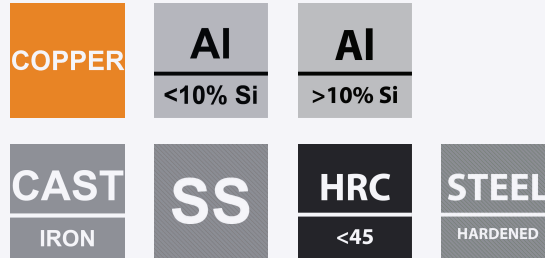
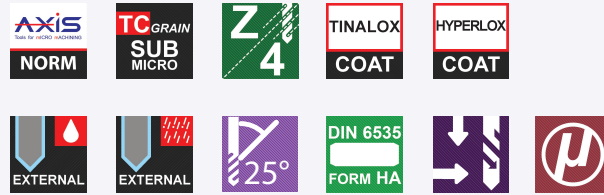
Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9511



Dia	Taper Angle	EFL			Shoulder Angle	Total Length	Shank Dia
d	a	l			b	L	D h6
0.20	30'	2.0	----	----	15°	40	3.0
0.20	1°	2.0	----	----	15°	40	3.0
0.20	1'30'	2.0	----	----	15°	40	3.0
0.20	2°	2.0	----	----	15°	40	3.0
0.30	30'	3.0	----	----	15°	40	3.0
0.30	1°	3.0	----	----	15°	40	3.0
0.30	1'30'	3.0	----	----	15°	40	3.0
0.30	2°	3.0	----	----	15°	40	3.0
0.40	30'	4.0	----	----	15°	40	3.0
0.40	1°	4.0	----	----	15°	40	3.0
0.40	1'30'	4.0	----	----	15°	40	3.0
0.40	2°	4.0	----	----	15°	40	3.0
0.50	30'	4.0	----	----	15°	40	3.0
0.50	1°	4.0	----	----	15°	40	3.0
0.50	1'30'	4.0	----	----	15°	40	3.0
0.50	2°	4.0	----	----	15°	40	3.0
0.60	30'	4.0	6.0	----	15°	40	3.0
0.60	1°	4.0	6.0	----	15°	40	3.0
0.60	1'30'	4.0	6.0	----	15°	40	3.0
0.60	2°	4.0	6.0	----	15°	40	3.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



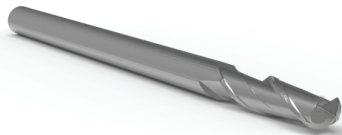
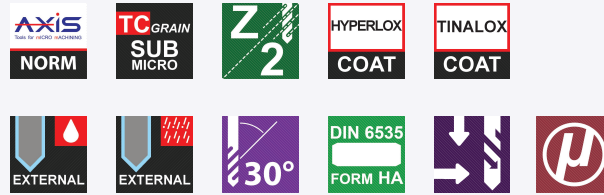
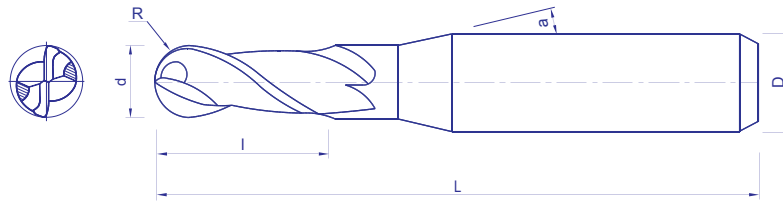
Dia	Taper Angle	EFL			Shoulder Angle	Total Length	Shank Dia
d	a	l			q	L	D h6
0.70	30'	6.0	8.0	-----	15°	40	3.0
0.70	1°	6.0	8.0	-----	15°	40	3.0
0.70	1'30'	6.0	8.0	-----	15°	40	3.0
0.70	2°	6.0	8.0	-----	15°	40	3.0
0.80	30'	6.0	8.0	10.0	15°	45	4.0
0.80	1°	6.0	8.0	10.0	15°	45	4.0
0.80	1'30'	6.0	8.0	10.0	15°	45	4.0
0.80	2°	6.0	8.0	10.0	15°	45	4.0
1.00	30'	6.0	8.0	10.0	15°	45	4.0
1.00	1°	6.0	8.0	10.0	15°	45	4.0
1.00	1'30'	6.0	8.0	10.0	15°	45	4.0
1.00	2°	6.0	8.0	10.0	15°	45	4.0
1.20	30'	10.0	12.0	16.0	15°	50	4.0
1.20	1°	10.0	12.0	16.0	15°	50	4.0
1.20	1'30'	10.0	12.0	16.0	15°	50	4.0
1.20	2°	10.0	12.0	16.0	15°	50	4.0
1.50	30'	10.0	16.0	20.0	15°	55	4.0
1.50	1°	10.0	16.0	20.0	15°	55	4.0
1.50	1'30'	10.0	16.0	20.0	15°	55	4.0
1.50	2°	10.0	16.0	20.0	15°	55	4.0
2.00	30'	10.0	16.0	25.0	15°	60	4.0
2.00	1°	10.0	16.0	25.0	15°	60	4.0
2.00	1'30'	10.0	16.0	25.0	15°	60	4.0
2.00	2°	10.0	16.0	25.0	15°	60	4.0
2.00	3°	10.0	16.0	25.0	15°	60	6.0
2.50	30'	10.0	16.0	25.0	15°	60	4.0
2.50	1°	10.0	16.0	25.0	15°	60	4.0
2.50	1'30'	10.0	16.0	25.0	15°	60	4.0
2.50	2°	10.0	16.0	25.0	15°	60	6.0
3.00	30'	25.0	40.0	-----	15°	60	6.0
3.00	1°	25.0	40.0	-----	15°	60	6.0
3.00	1'30'	25.0	40.0	-----	15°	60	6.0
3.00	2°	25.0	40.0	-----	15°	60	6.0

ON REQUEST :
Inch Sizes / Special sizes

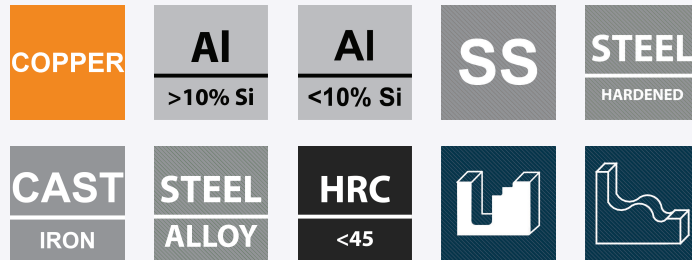
PACKING :
Single tool / pack

All Dimensions in mm otherwise specified





AXIS B9701



BALL RADIUS TOL:
± 0.005 (R 0.10 - R 1.50)
± 0.010 (R 2.00 - R 6.00)

For dia range:
0.20 - 1.499mm a = 11°
1.50 - 12.00mm a = 15°

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 1.80mm : 10 tools / pack,
Dia > 1.80mm : Single tool / pack

All Dimensions in mm otherwise specified

Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.10	0.20	0.2	38	3.0 / 4.0
0.10	0.20	0.4	38	3.0 / 4.0
0.15	0.30	0.3	38	3.0 / 4.0
0.15	0.30	0.6	38	3.0 / 4.0
0.20	0.40	0.4	38	3.0 / 4.0
0.20	0.40	0.8	38	3.0 / 4.0
0.25	0.50	0.5	38	3.0 / 4.0
0.25	0.50	1.0	38	3.0 / 4.0
0.30	0.60	0.6	38	3.0 / 4.0
0.30	0.60	1.2	38	3.0 / 4.0
0.35	0.70	0.7	38	3.0 / 4.0
0.35	0.70	1.4	38	3.0 / 4.0
0.40	0.80	0.8	38	3.0 / 4.0
0.40	0.80	1.6	38	3.0 / 4.0
0.45	0.90	0.9	38	3.0 / 4.0
0.45	0.90	1.8	38	3.0 / 4.0
0.50	1.00	1.0	38	3.0 / 4.0
0.50	1.00	2.0	38	3.0 / 4.0
0.60	1.20	2.4	38	3.0 / 4.0
0.60	1.20	3.6	38	3.0 / 4.0

BALL RADIUS TOL:

± 0.005 (R 0.10 - R 1.50)
± 0.010 (R 2.00 - R 6.00)

For dia range:

0.20 - 1.499mm a = 11°
1.50 - 12.00mm a = 15°

ON REQUEST :

Inch Sizes / Special sizes

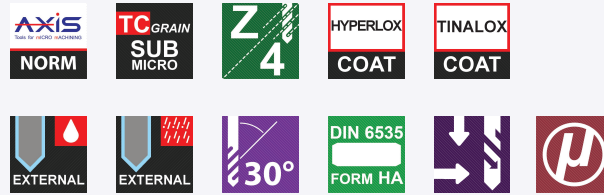
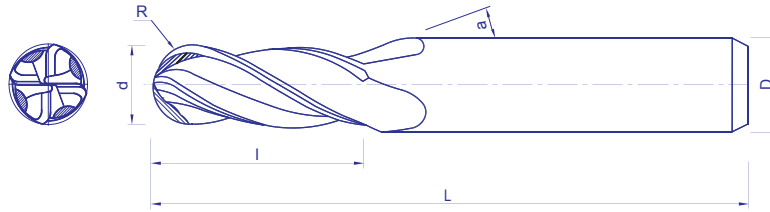
PACKING :

Up to Dia 1.80mm : 10 tools / pack,
Dia > 1.80mm : Single tool / pack

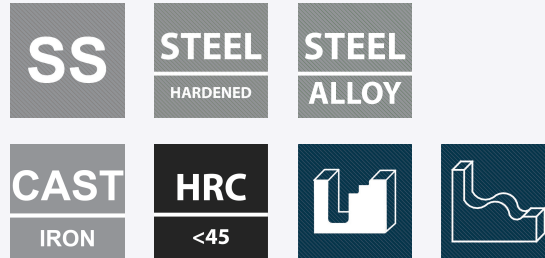
All Dimensions in mm otherwise specified

Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.70	1.40	2.8	38	3.0 / 4.0
0.70	1.40	4.2	38	3.0 / 4.0
0.75	1.50	3.0	38	3.0 / 4.0
0.75	1.50	4.5	38	3.0 / 4.0
0.80	1.60	3.2	38	3.0 / 4.0
0.80	1.60	4.8	38	3.0 / 4.0
0.90	1.80	3.6	38	3.0 / 4.0
0.90	1.80	5.4	38	3.0 / 4.0
1.00	2.00	4.0	38	6.0
1.00	2.00	6.0	38	6.0
1.25	2.50	5.0	38	6.0
1.25	2.50	7.5	38	6.0
1.50	3.00	6.0	38	6.0
1.50	3.00	8.0	38	6.0
2.00	4.00	8.0	45	6.0
2.00	4.00	12.0	45	6.0
2.50	5.00	8.0	50	6.0
2.50	5.00	12.0	50	6.0
3.00	6.00	10.0	50	6.0
3.00	6.00	12.0	50	6.0
4.00	8.00	12.0	50	8.0
4.00	8.00	16.0	63	8.0
5.00	10.00	15.0	63	10.0
5.00	10.00	20.0	75	10.0
6.00	12.00	18.0	75	12.0
6.00	12.00	24.0	75	12.0





AXIS B9721



For dia range:
0.20 - 1.499mm a = 11°
1.50 - 12.00mm a = 15°

Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.10	0.20	0.2	38	3.0 / 4.0*
0.10	0.20	0.6	38	3.0 / 4.0*
0.15	0.30	0.3	38	3.0 / 4.0*
0.15	0.30	0.9	38	3.0 / 4.0*
0.20	0.40	0.8	38	3.0 / 4.0*
0.20	0.40	1.2	38	3.0 / 4.0*
0.25	0.50	1.0	38	3.0 / 4.0*
0.25	0.50	1.5	38	3.0 / 4.0*
0.30	0.60	1.2	38	3.0 / 4.0*
0.30	0.60	1.8	38	3.0 / 4.0*
0.35	0.70	1.4	38	3.0 / 4.0*
0.35	0.70	2.1	38	3.0 / 4.0*
0.40	0.80	1.6	38	3.0 / 4.0*
0.40	0.80	2.4	38	3.0 / 4.0*
0.45	0.90	1.8	38	3.0 / 4.0*
0.45	0.90	2.7	38	3.0 / 4.0*
0.50	1.00	3.0	38	3.0 / 4.0*
0.50	1.00	5.0	38	3.0 / 4.0*
0.60	1.20	3.6	38	3.0 / 4.0*
0.60	1.20	6.0	38	3.0 / 4.0*

ON REQUEST :

* Standard non Stock / Inch Sizes / Special sizes

PACKING :

Up to Dia 1.80mm : 10 tools / pack with Shank 3.00mm
Single / pack with Shank 4.00mm,
Dia 2.00 - 6.00mm : 5 tools / pack,
Dia > 6.00mm : Single tool / pack

All Dimensions in mm otherwise specified



Radius	Dia	EFL	Total Length	Shank Dia
R	d	l	L	D h6
0.70	1.40	4.2	38	3.0 / 4.0*
0.70	1.40	7.0	38	3.0 / 4.0*
0.75	1.50	4.5	38	3.0 / 4.0*
0.75	1.50	7.5	38	3.0 / 4.0*
0.80	1.60	4.8	38	3.0 / 4.0*
0.80	1.60	8.0	38	3.0 / 4.0*
0.90	1.80	5.4	38	3.0 / 4.0*
0.90	1.80	9.0	38	3.0 / 4.0*
1.00	2.00	6.0	38	6.0
1.00	2.00	10.0	38	6.0
1.25	2.50	7.5	38	6.0
1.25	2.50	10.0	38	6.0
1.50	3.00	9.0	38	6.0
1.50	3.00	12.0	38	6.0
2.00	4.00	12.0	45	6.0
2.00	4.00	16.0	45	6.0
2.50	5.00	10.0	50	6.0
2.50	5.00	15.0	50	6.0
3.00	6.00	12.0	50	6.0
3.00	6.00	18.0	50	6.0
4.00	8.00	16.0	50	8.0
4.00	8.00	20.0	63	8.0
5.00	10.00	22.0	75	10.0
6.00	12.00	25.0	75	12.0

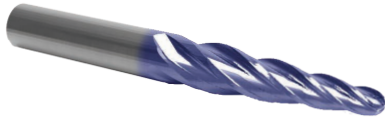
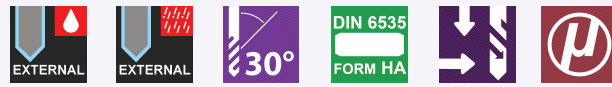
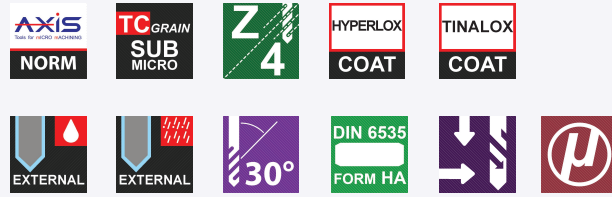
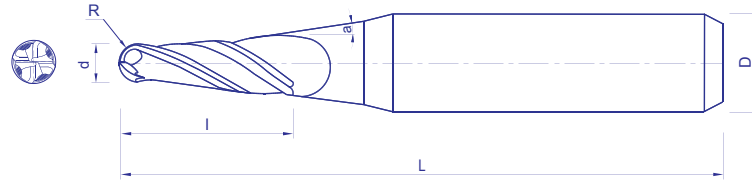
For dia range:
 0.20 - 1.499mm a = 11°
 1.50 - 12.00mm a = 15°

ON REQUEST :
 * Standard non Stock / Inch Sizes /
 Special sizes

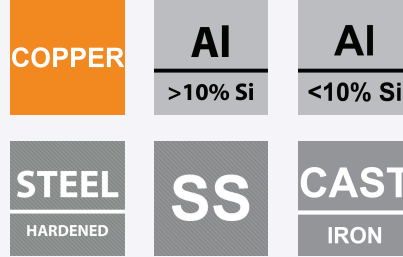
PACKING :
 Up to Dia 1.80mm : 10 tools / pack
 with Shank 3.00mm
 Single / pack with Shank 4.00mm,
 Dia 2.00 - 6.00mm : 5 tools / pack,
 Dia > 6.00mm : Single tool / pack

All Dimensions in mm otherwise
 specified





AXIS B9521



Radius	Dia	Taper Angle	EFL			Total Length	Shank Dia
R	d	a	l			L	D h6
0.30	0.60	30'	4.0	6.0	-----	38	3.0
0.30	0.60	1°	4.0	6.0	-----	38	3.0
0.30	0.60	1'30'	4.0	6.0	-----	38	3.0
0.30	0.60	2°	4.0	6.0	-----	38	3.0
0.40	0.80	30'	6.0	8.0	10.0	45	4.0
0.40	0.80	1°	6.0	8.0	10.0	45	4.0
0.40	0.80	1'30'	6.0	8.0	10.0	45	4.0
0.40	0.80	2°	6.0	8.0	10.0	45	4.0
0.50	1.00	30'	8.0	12.0	20.0	50	4.0
0.50	1.00	1°	8.0	12.0	20.0	50	4.0
0.50	1.00	1'30'	8.0	12.0	20.0	50	4.0
0.50	1.00	2°	8.0	12.0	20.0	50	4.0
0.60	1.20	30'	8.0	12.0	20.0	50	4.0
0.60	1.20	1°	8.0	12.0	20.0	50	4.0
0.60	1.20	1'30'	8.0	12.0	20.0	50	4.0
0.60	1.20	2°	8.0	12.0	20.0	50	4.0
0.75	1.50	30'	8.0	12.0	20.0	50	4.0
0.75	1.50	1°	8.0	12.0	20.0	50	4.0
0.75	1.50	1'30'	8.0	12.0	20.0	50	4.0
0.75	1.50	2°	8.0	12.0	20.0	50	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



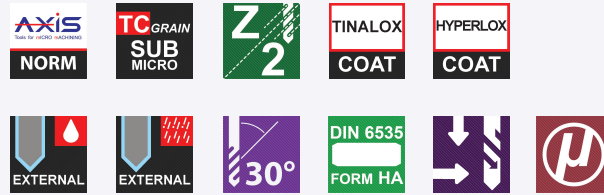
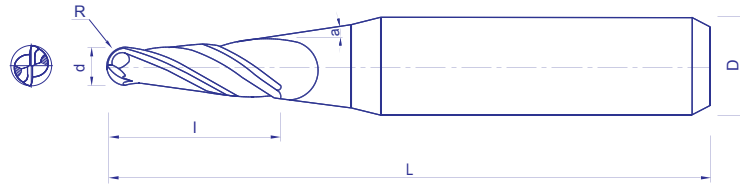
Radius	Dia	Taper Angle	EFL			Total Length	Shank Dia
R	d	a	l			L	D h6
0.80	1.60	30'	8.0	12.0	20.0	60.0	4.0
0.80	1.60	1°	8.0	12.0	20.0	60.0	4.0
0.80	1.60	1'30'	8.0	12.0	20.0	60.0	4.0
0.80	1.60	2°	8.0	12.0	20.0	60.0	4.0
0.90	1.80	30'	8.0	12.0	20.0	60.0	4.0
0.90	1.80	1°	8.0	12.0	20.0	60.0	4.0
0.90	1.80	1'30'	8.0	12.0	20.0	60.0	4.0
0.90	1.80	2°	8.0	12.0	20.0	60.0	4.0
1.00	2.00	30'	10.0	16.0	20.0	60.0	4.0
1.00	2.00	1°	10.0	16.0	20.0	60.0	4.0
1.00	2.00	1'30'	10.0	16.0	20.0	60.0	4.0
1.00	2.00	2°	10.0	16.0	20.0	60.0	4.0
1.25	2.50	30'	10.0	16.0	20.0	60.0	6.0
1.25	2.50	1°	10.0	16.0	20.0	60.0	6.0
1.25	2.50	1'30'	10.0	16.0	20.0	60.0	6.0
1.25	2.50	2°	10.0	16.0	20.0	60.0	6.0

ON REQUEST :
Inch Sizes / Special sizes

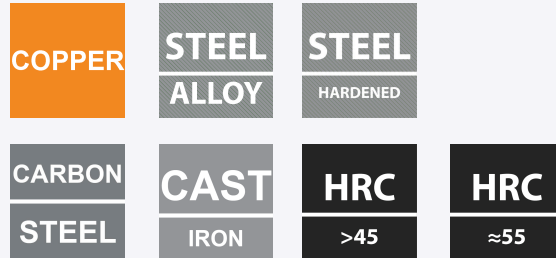
PACKING :
Single tool / pack

All Dimensions in mm otherwise specified





AXIS B9531



Ball Radius Tolerance:
±0.005 (R < 0.25)
±0.010 (R ≥ 0.25)

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a ± 10'	l		L	D h6
0.30	0.60	30'	4.0	0.66	38	3.0
0.30	0.60	30'	6.0	0.70	38	3.0
0.30	0.60	45'	4.0	0.70	38	3.0
0.30	0.60	45'	6.0	0.75	38	3.0
0.30	0.60	1°	4.0	0.73	38	3.0
0.30	0.60	1°	6.0	0.80	38	3.0
0.30	0.60	1°30'	4.0	0.79	38	3.0
0.30	0.60	1°30'	6.0	0.90	38	3.0
0.30	0.60	2°	4.0	0.86	38	3.0
0.30	0.60	2°	6.0	1.00	38	3.0
0.40	0.80	30'	6.0	0.90	38	3.0
0.40	0.80	30'	8.0	0.93	38	3.0
0.40	0.80	30'	10.0	0.97	45	4.0
0.40	0.80	45'	6.0	0.95	38	3.0
0.40	0.80	45'	8.0	1.00	38	3.0
0.40	0.80	45'	10.0	1.05	45	4.0
0.40	0.80	1°	6.0	1.00	38	3.0
0.40	0.80	1°	8.0	1.07	38	3.0
0.40	0.80	1°	10.0	1.14	45	4.0
0.40	0.80	1°30'	6.0	1.09	38	3.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Ball Radius Tolerance:
±0.005 (R < 0.25)
±0.010 (R ≥ 0.25)

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a ± 10'	l		L	D h6
0.40	0.80	1°30'	8.0	1.20	38	3.0
0.40	0.80	1°30'	10.0	1.30	45	4.0
0.40	0.80	2°	6.0	1.19	38	3.0
0.40	0.80	2°	8.0	1.33	38	3.0
0.40	0.80	2°	10.0	1.47	45	4.0
0.50	1.00	30'	8.0	1.13	45	4.0
0.50	1.00	30'	10.0	1.20	45	4.0
0.50	1.00	30'	20.0	1.34	55	4.0
0.50	1.00	45'	8.0	1.20	45	4.0
0.50	1.00	45'	12.0	1.30	45	4.0
0.50	1.00	45'	20.0	1.51	55	4.0
0.50	1.00	1°	8.0	1.26	45	4.0
0.50	1.00	1°	12.0	1.40	45	4.0
0.50	1.00	1°	20.0	1.68	55	4.0
0.50	1.00	1°30'	8.0	1.39	45	4.0
0.50	1.00	1°30'	12.0	1.60	45	4.0
0.50	1.00	1°30'	20.0	2.02	55	4.0
0.50	1.00	2°	8.0	1.52	45	4.0
0.50	1.00	2°	12.0	1.80	45	4.0
0.50	1.00	2°	20.0	2.36	55	4.0
0.60	1.20	30'	8.0	1.33	45	4.0
0.60	1.20	30'	12.0	1.40	45	4.0
0.60	1.20	30'	20.0	1.54	50	4.0
0.60	1.20	45'	8.0	1.39	45	4.0
0.60	1.20	45'	12.0	1.50	45	4.0
0.60	1.20	45'	20.0	1.71	50	4.0
0.60	1.20	1°	8.0	1.46	45	4.0
0.60	1.20	1°	12.0	1.60	45	4.0
0.60	1.20	1°	20.0	1.88	50	4.0
0.60	1.20	1°30'	8.0	1.59	45	4.0
0.60	1.20	1°30'	12.0	1.80	45	4.0
0.60	1.20	1°30'	20.0	2.22	50	4.0
0.60	1.20	2°	8.0	1.72	45	4.0
0.60	1.20	2°	12.0	2.00	45	4.0
0.60	1.20	2°	20.0	2.55	50	4.0
0.75	1.50	30'	8.0	1.63	45	4.0
0.75	1.50	30'	12.0	1.70	45	4.0
0.75	1.50	30'	20.0	1.84	60	4.0
0.75	1.50	45'	8.0	1.69	45	4.0
0.75	1.50	45'	12.0	1.79	45	4.0
0.75	1.50	45'	20.0	2.00	60	4.0
0.75	1.50	1°	8.0	1.75	45	4.0
0.75	1.50	1°	12.0	1.89	45	4.0
0.75	1.50	1°	20.0	2.17	60	4.0
0.75	1.50	1°30'	8.0	1.88	45	4.0
0.75	1.50	1°30'	12.0	2.09	45	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Ball Radius Tolerance:
±0.005 (R < 0.25)
±0.010 (R ≥ 0.25)

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a ± 10'	l		L	D h6
0.75	1.50	1°30'	20.0	2.51	60	4.0
0.75	1.50	2°	8.0	2.01	45	4.0
0.75	1.50	2°	12.0	2.29	45	4.0
0.75	1.50	2°	20.0	2.85	60	4.0
0.80	1.60	30'	8.0	1.73	45	4.0
0.80	1.60	30'	12.0	1.80	45	4.0
0.80	1.60	30'	20.0	1.94	60	4.0
0.80	1.60	45'	8.0	1.78	45	4.0
0.80	1.60	45'	12.0	1.89	45	4.0
0.80	1.60	45'	20.0	2.10	60	4.0
0.80	1.60	1°	8.0	1.85	45	4.0
0.80	1.60	1°	12.0	1.99	45	4.0
0.80	1.60	1°	20.0	2.27	60	4.0
0.80	1.60	1°30'	8.0	1.98	45	4.0
0.80	1.60	1°30'	12.0	2.19	45	4.0
0.80	1.60	1°30'	20.0	2.61	60	4.0
0.80	1.60	2°	8.0	2.10	45	4.0
0.80	1.60	2°	12.0	2.38	45	4.0
0.80	1.60	2°	20.0	2.94	60	4.0
0.90	1.80	30'	8.0	1.92	45	4.0
0.90	1.80	30'	12.0	1.99	45	4.0
0.90	1.80	30'	20.0	2.13	60	4.0
0.90	1.80	45'	8.0	1.99	45	4.0
0.90	1.80	45'	12.0	2.09	45	4.0
0.90	1.80	45'	20.0	2.30	60	4.0
0.90	1.80	1°	8.0	2.05	45	4.0
0.90	1.80	1°	12.0	2.19	45	4.0
0.90	1.80	1°	20.0	2.47	60	4.0
0.90	1.80	1°30'	8.0	2.17	45	4.0
0.90	1.80	1°30'	12.0	2.38	45	4.0
0.90	1.80	1°30'	20.0	2.80	60	4.0
0.90	1.80	2°	8.0	2.30	45	4.0
0.90	1.80	2°	12.0	2.58	45	4.0
0.90	1.80	2°	20.0	3.14	60	4.0
1.00	2.00	30'	10.0	2.16	45	4.0
1.00	2.00	30'	20.0	2.33	60	4.0
1.00	2.00	30'	30.0	2.51	65	4.0
1.00	2.00	45'	10.0	2.24	45	4.0
1.00	2.00	45'	20.0	2.50	60	4.0
1.00	2.00	45'	30.0	2.76	65	4.0
1.00	2.00	1°	10.0	2.31	45	4.0
1.00	2.00	1°	20.0	2.66	60	4.0
1.00	2.00	1°	30.0	3.01	65	4.0
1.00	2.00	1°30'	10.0	2.47	45	4.0
1.00	2.00	1°30'	20.0	3.00	60	6.0
1.00	2.00	1°30'	30.0	3.52	70	4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Single tool / pack

All Dimensions in mm otherwise specified



Ball Radius Tolerance:
 ± 0.005 (R < 0.25)
 ± 0.010 (R \geq 0.25)

ON REQUEST :
 Inch Sizes / Special sizes

PACKING :
 Single tool / pack

All Dimensions in mm otherwise specified

Radius	Dia	Taper Angle	EFL	Dia at larger end	Total Length	Shank Dia
R	d	a \pm 10'	l		L	D h6
1.00	2.00	2°	10.0	2.63	45	4.0
1.00	2.00	2°	20.0	3.33	60	4.0
1.00	2.00	2°	30.0	4.03	70	6.0
1.25	2.50	30'	10.0	2.65	60	6.0
1.25	2.50	30'	16.0	2.76	60	6.0
1.25	2.50	30'	25.0	2.91	70	6.0
1.25	2.50	45'	10.0	2.73	60	6.0
1.25	2.50	45'	16.0	2.89	60	6.0
1.25	2.50	45'	25.0	3.12	70	6.0
1.25	2.50	1°	10.0	2.81	60	6.0
1.25	2.50	1°	16.0	3.02	60	6.0
1.25	2.50	1°	25.0	3.33	70	6.0
1.25	2.50	1°30'	10.0	2.96	60	6.0
1.25	2.50	1°30'	16.0	3.27	60	6.0
1.25	2.50	1°30'	25.0	3.74	70	6.0
1.25	2.50	2°	10.0	3.11	60	6.0
1.25	2.50	2°	16.0	3.53	60	6.0
1.25	2.50	2°	25.0	4.16	70	6.0
2.00	4.00	30'	25.0	4.40	65	6.0
2.00	4.00	1°	25.0	4.80	65	6.0
2.00	4.00	1°30'	25.0	5.21	65	6.0
2.00	4.00	2°	25.0	5.61	70	6.0

2022

КАТАЛОГ ФРЕЗ КОНЦЕВЫХ
ТВЕРДОСПЛАВНЫХ

AXIS

Tools for **m**ICRO **m**ACHINING

для фрезерования
супер сплавов



ООО "Современные Технологии НС"

125310, г. Москва, Пятницкое шоссе,
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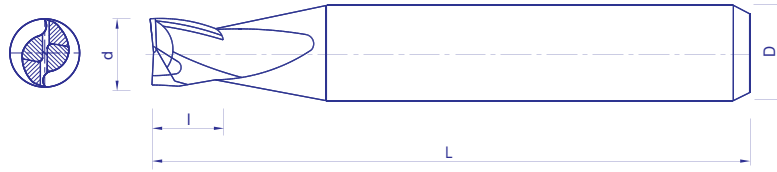


Мы предлагаем полный ассортимент фрез с алмазным покрытием CVD, сверл и специальных инструментов.

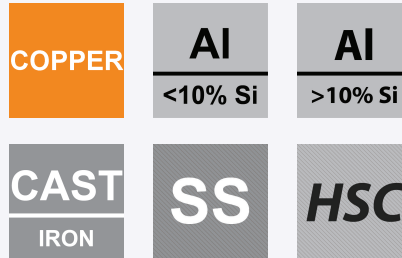
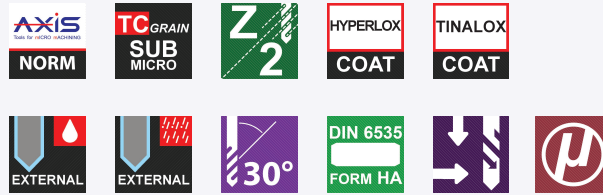
- *Высокая скорость подачи, обеспечивающая более высокую производительность*
- *Чрезвычайная износостойкость, обеспечивающая более длительный срок службы инструмента ~ 5-20x*
- *Частая смена инструментов и время простоя машины, которых удалось избежать*

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AXIS E9661



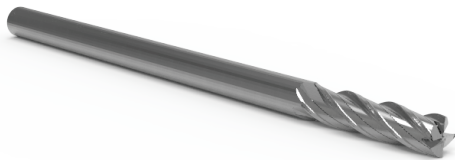
Dia	EFL	Total Length	Shank Dia		Dia	Flute Length	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
0.10	0.2	38	3.0		1.20	2.4	38	3.0
0.10	0.3	38	3.0		1.20	3.6	38	3.0
0.20	0.4	38	3.0		1.40	2.8	38	3.0
0.20	0.6	38	3.0		1.40	4.2	38	3.0
0.30	0.6	38	3.0		1.50	3.0	38	3.0
0.30	0.9	38	3.0		1.50	4.5	38	3.0
0.40	0.8	38	3.0		1.60	3.2	38	3.0
0.40	1.2	38	3.0		1.60	4.8	38	3.0
0.50	1.0	38	3.0		1.80	3.6	38	3.0
0.50	1.5	38	3.0		1.80	5.4	38	3.0
0.60	1.2	38	3.0		2.00	4.0	38	3.0
0.60	1.8	38	3.0		2.00	6.0	38	3.0
0.70	1.4	38	3.0		2.50	5.0	38	3.0
0.70	2.1	38	3.0		2.50	7.5	38	3.0
0.80	1.6	38	3.0		3.00	6.0	38	3.0
0.80	2.4	38	3.0		3.00	9.0	38	3.0
0.90	1.8	38	3.0					
0.90	2.7	38	3.0					
1.00	2.0	38	3.0					
1.00	3.0	38	3.0					

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
10 tools / pack

All Dimensions in mm otherwise specified





AXIS E9671

Dia	EFL	Total Length	Shank Dia
d	l	L	D h6
0.20	0.4	38	3.0
0.20	0.6	38	3.0
0.30	0.6	38	3.0
0.30	0.9	38	3.0
0.40	0.8	38	3.0
0.40	1.2	38	3.0
0.50	1.0	38	3.0
0.50	1.5	38	3.0
0.60	1.2	38	3.0
0.60	1.8	38	3.0
0.70	1.4	38	3.0
0.70	2.1	38	3.0
0.80	1.6	38	3.0
0.80	2.4	38	3.0
0.90	1.8	38	3.0
0.90	2.7	38	3.0
1.00	3.0	38	3.0 / 4.0
1.00	5.0	38	3.0 / 4.0
1.20	3.6	38	3.0 / 4.0
1.20	6.0	38	3.0 / 4.0

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified



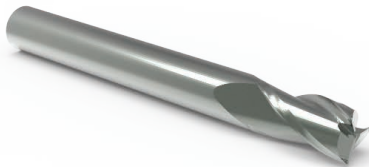
Dia	EFL	Total Length	Shank Dia
d	l	L	D h6
1.40	4.2	38	3.0 / 4.0
1.40	7.0	38	3.0 / 4.0
1.50	4.5	38	3.0 / 4.0
1.50	7.5	38	3.0 / 4.0
1.60	4.8	38	3.0 / 4.0
1.60	8.0	38	3.0 / 4.0
1.80	5.4	38	3.0 / 4.0
1.80	9.0	38	3.0 / 4.0
2.00	6.0	38	3.0 / 4.0
2.00	10.0	38	3.0 / 4.0
2.50	7.5	38	6.0
2.50	10.0	38	6.0
3.00	9.0	38	6.0
3.00	12.0	38	6.0
4.00	12.0	45	6.0
4.00	16.0	45	6.0
5.00	10.0	50	6.0
5.00	15.0	50	6.0
6.00	12.0	50	6.0
6.00	18.0	50	6.0
8.00	16.0	50	8.0
8.00	24.0	63	8.0
10.00	20.0	63	10.0
10.00	30.0	75	10.0
12.00	24.0	75	12.0
12.00	36.0	80	12.0

ON REQUEST :
Inch Sizes / Special sizes

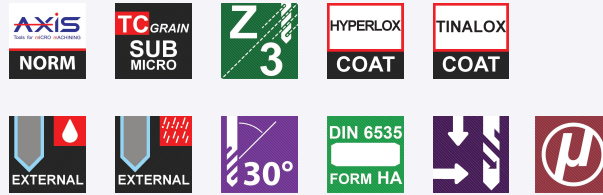
PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified





AXIS E9681



Dia	EFL	Total Length	Shank Dia		Dia	Flute	Total Length	Shank Dia
d	l	L	D h6		d	l	L	D h6
1.00	3.0	38	3.0 / 4.0		5.00	10.0	50	6.0
1.00	5.0	38	3.0 / 4.0		5.00	15.0	50	6.0
1.20	3.6	38	3.0 / 4.0		6.00	12.0	50	6.0
1.20	6.0	38	3.0 / 4.0		6.00	18.0	50	6.0
1.40	4.2	38	3.0 / 4.0		8.00	16.0	50	8.0
1.40	7.0	38	3.0 / 4.0		8.00	24.0	63	8.0
1.50	4.5	38	3.0 / 4.0		10.00	20.0	63	10.0
1.50	7.5	38	3.0 / 4.0		10.00	30.0	75	10.0
1.60	4.8	38	3.0 / 4.0		12.00	24.0	75	12.0
1.60	8.0	38	3.0 / 4.0		12.00	36.0	80	12.0
1.80	5.4	38	3.0 / 4.0					
1.80	9.0	38	3.0 / 4.0					
2.00	6.0	38	3.0 / 4.0					
2.00	10.0	38	3.0 / 4.0					
2.50	7.5	38	6.0					
2.50	10.0	38	6.0					
3.00	9.0	38	6.0					
3.00	12.0	38	6.0					
4.00	12.0	45	6.0					
4.00	16.0	45	6.0					

ON REQUEST :
Inch Sizes / Special sizes

PACKING :
Up to Dia 4.00mm : 10 tools / pack,
Dia > 4.00 : Single tool / pack

All Dimensions in mm otherwise specified



2022

КАТАЛОГ СПЕЦИАЛЬНОГО ТВЕРДОСПЛАВНОГО ИНСТРУМЕНТА

AXIS

Tools for mICRO mACHINING



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Алмазное
покрытие

Мы предлагаем полный ассортимент фрез с алмазным покрытием CVD, сверл и специальных инструментов.

- *Высокая скорость подачи, обеспечивающая более высокую производительность*
- *Чрезвычайная износостойкость, обеспечивающая более длительный срок службы инструмента ~ 5-20x*
- *Частая смена инструментов и время простоя машины, которых удалось избежать*

QUALITY • PRECISION • CONSISTENCY



	Series	Dia Range (mm)	Description	Tool Image	Page
Drilling	H305	0.80 - 6.00	INDrill Cool_5xd		16
	H310	0.80 - 6.00	INDrill Cool_10xd		17
	H315	0.80 - 6.00	INDrill Cool_15xd		18
	H320	0.80 - 6.00	INDrill Cool_20xd		19
	H325	1.00 - 6.00	INDrill Cool_25xd		20
	H330	1.00 - 6.00	INDrill Cool_30xd		21
	T210	1.00 - 6.00	Pilot Drills		22
	T311	0.30 - 3.00	INDrill+ Short Flute Length Series		24-26
	T312	0.30 - 3.00	INDrill+ Medium Flute Length Series		27-29
	T313	0.30 - 3.00	INDrill+ Longer Flute Length Series		30-32
	T301	0.30 - 3.00	INDrill Short Flute Length Series		34-36
	T302	0.10 - 3.00	INDrill Medium Flute Length Series		37-39
	T303	0.015 - 3.00	INDrill Longer Flute Length Series		40-42
	T580 /T581	0.05 - 6.00	NC Pointing Drills		43
	T698	0.05 - 1.50	Reinforced Shank mICRO Drills		44-45
	T732	0.60 - 16.00	Parallel Shank Drills Stub Series		46-47
	T832	0.50 - 16.00	Parallel Shank Drills Jobber Series		48-49
	R90X/H90X	0.90 - 12.15	High Precision Reamers		50
Milling	E305	1.00 - 12.00	High Performance End Mills		52
	E307	1.00 - 12.00	High Performance End Mills		53
	E923	0.10 - 6.00	Single Flute End Mills		55
	E966	0.05 - 6.00	2 Flute End Mills		56
	E967	0.20 - 6.00	4 Flute End Mills		57
	E968	1.00 - 6.00	3 Flute End Mills		58
	B970 / B870	0.20 - 6.00	2 Flute Ballnose End Mills		60
	B972	0.20 - 6.00	4 Flute Ballnose End Mills		61
	G847	0.05 - 0.20	Engravers		62
C676	3.00 - 12.00	Chamfering Cutter		63	

Application Guide

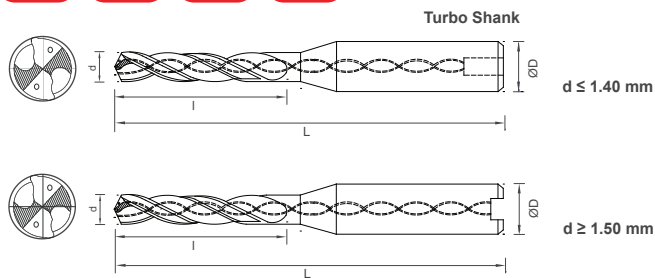
Type	Description	ISO P			ISO M		
		Low/Unalloyed Steel	Low/Unalloyed Steel	High Alloyed Steel	Ferritic/Martensitic	Austenitic	Duplex/Martensitic/PH
		<600 N/mm2	600-850 N/mm2	700-1500 N/mm2			> 800 N/mm2
T580 / T581	NC Pointing Drills	●	●	●	●	●	●
T698	Reinforced Shank mICRO Drills	●	●	◐	◐	◐	◐
T732 / T832	Parallel Shank Drills Stub and Jobber Series	◐	◐	◐	◐	◐	◐
T301 / T302 / T303	INDRILL	●	●	◐	◐	◐	◐
T311 / T312 / T313	INDRILL+	◐	◐	●	●	●	●
T210	Pilot Drills	●	●	●	●	●	●
H305 / H310 / H315 / H320 / H325 / H330	INDRILL Cool	●	●	●	●	●	●
R901/R904	High Precision Reamers	●	●	●	●	●	●
E923	Single Flute Endmills	○	○	○	○	○	○
E966	2 Flute Endmills	●	●	◐	◐	◐	◐
E967	4 Flute Endmills	◐	◐	●	◐	◐	◐
E968	3 Flute Endmills	●	●	◐	◐	◐	◐
E305/ E307	High Performance Endmills	◐	◐	◐	●	●	●
B970 / B870	2 Flute Ballnose Endmills	●	●	●	◐	◐	◐
B972	4 Flute Ballnose Endmills	◐	◐	●	◐	◐	◐
G847	Engraver	◐	◐	◐	◐	◐	◐
C676	Chamfering	●	●	●	●	●	●

ISO K		ISO N		Plastics	ISO S	
GCI / NCI		Al Alloys	Cu Alloys		Ti Based Alloy	Fe, Ni, Co Based Alloy
< 180 BHN	200-250 BHN					
●	●	●	●	○	○	○
◐	◐	◐	◐	◐	○	○
◐	◐	◐	◐	○	○	○
◐	◐	●	●	●	○	○
●	●	◐	◐	○	◐	●
●	●	◐	◐	○	●	◐
●	●	●	●	○	◐	◐
○	○	●	◐	●	○	○
◐	◐	●	●	◐	◐	◐
●	●	○	◐	○	◐	◐
◐	◐	◐	◐	○	◐	○
○	○	○	○	○	●	●
◐	◐	●	●	○	◐	◐
●	●	○	○	○	○	○
◐	◐	●	●	●	○	○
●	●	●	●	●	●	●

Description : ● Optimal ◐ Suitable ○ Not Suitable



- Steel
- SS
- Cast Iron
- Non-Ferrous
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- Z
2
- 135°
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TiAlN
- AXIS+
VVVV
- Edge Prep
- Form HA
DIN 6535

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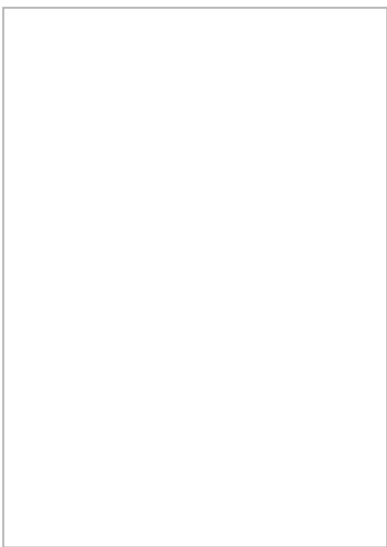
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Wavy cutting edges and specially designed flute geometry for controlled chip formation and evacuation

Differentiated web construction supports excellent hole form and quality with efficient chip evacuation

High performance ultra fine carbide substrate developed specifically for mICRO machining applications

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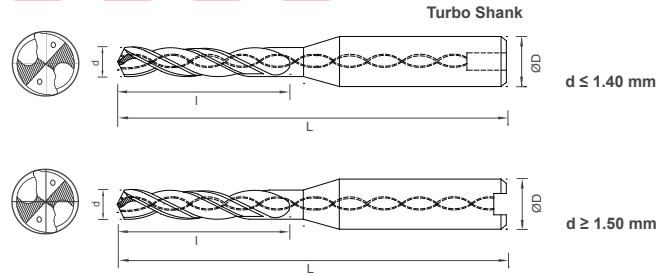
World of mICRO Tools

Ød	l	L	ØD h6	Prices €
				Coated
0.80	8.00	45.00	3.00	
0.90				
1.00				
1.10	10.00	45.00	3.00	
1.20				
1.30				
1.40	12.00	55.00	3.00	
1.50				
1.60				
1.70	16.00	60.00	3.00	
1.80				
1.90				
2.00	16.00	60.00	4.00	
2.10				
2.20				
2.30	18.00	60.00	4.00	
2.40				
2.50				
2.60	22.00	60.00	4.00	
2.70				
2.80				
2.90	24.00	65.00	4.00	
3.00				
3.10				
3.20	26.00	75.00	4.00	
3.30				
3.40				
3.50	28.00	75.00	4.00	
3.60				
3.70				
3.80	36.00	75.00	6.00	
3.90				
4.00				
4.10	44.00	80.00	6.00	
4.20				
4.30				
4.40				
4.50				
4.60				
4.70				
4.80				
4.90				
5.00				
5.10	48.00	80.00	6.00	
5.20				
5.30				
5.40				
5.50				
5.60				
5.70				
5.80				
5.90				
6.00				

* Non Stockable



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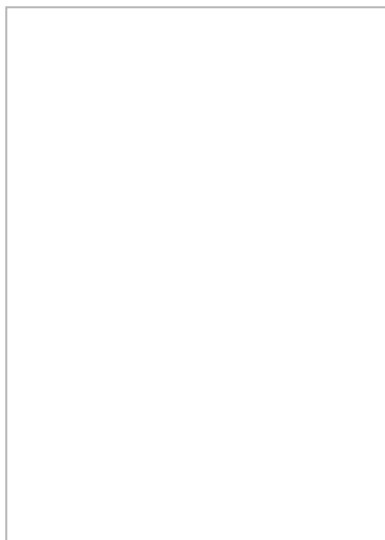
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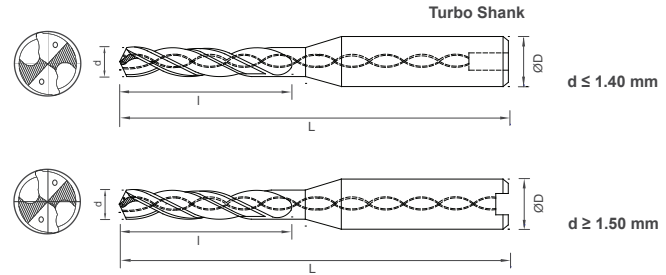
World of mICRO Tools

Ød	l	L	ØD h6	Prices €
				Coated
0.80	12.00	55.00	3.00	
0.90				
1.00				
1.10	16.00	55.00	3.00	
1.20				
1.30				
1.40	18.00	55.00	3.00	
1.50				
1.60				
1.70	26.00	65.00	3.00	
1.80				
1.90				
2.00	26.00	65.00	4.00	
2.10				
2.20				
2.30	33.00	75.00	4.00	
2.40				
2.50				
2.60	40.00	80.00	4.00	
2.70				
2.80				
2.90	42.00	80.00	4.00	
3.00				
3.10				
3.20	45.00	90.00	4.00	
3.30				
3.40				
3.50	52.00	90.00	4.00	
3.60				
3.70				
3.80	60.00	100.0	6.00	
3.90				
4.00				
4.10	65.00	108.0	6.00	
4.20				
4.30				
4.40	72.00	108.0	6.00	
4.50				
4.60				
4.70	78.00	120.0	6.00	
4.80				
4.90				
5.00	78.00	120.0	6.00	
5.10				
5.20				
5.30	78.00	120.0	6.00	
5.40				
5.50				
5.60	78.00	120.0	6.00	
5.70				
5.80				
5.90	78.00	120.0	6.00	
6.00				

* Non Stockable



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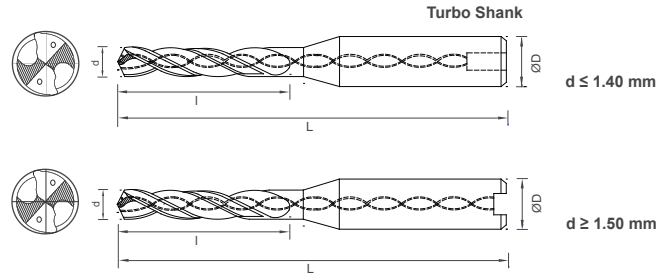
Finely honed cutting edge and highly polished flutes by MMP Superfinishing process provide superior edge strength, excellent chip evacuation, better coating adhesion and longer tool life



World of mICRO Tools

Ød	l	L	ØD h6	Prices €
				Coated
0.80	16.00	55.00	3.00	
0.90				
1.00	18.00	75.00	3.00	
1.10				
1.20	24.00	75.00	3.00	
1.30				
1.40	27.00	75.00	3.00	
1.50				
1.60	30.00	75.00	3.00	
1.70				
1.80	35.00	75.00	3.00	
1.90				
2.00	35.00	80.00	4.00	
2.10				
2.20	40.00	80.00	4.00	
2.30				
2.40	45.00	90.00	4.00	
2.50				
2.60	48.00	90.00	4.00	
2.70				
2.80	50.00	90.00	4.00	
2.90				
3.00	55.00	100.0	6.00	
3.10				
3.20	60.00	100.0	6.00	
3.30				
3.40	65.00	108.0	6.00	
3.50				
3.60	70.00	108.0	6.00	
3.70				
3.80	75.00	120.0	6.00	
3.90				
4.00	80.00	120.0	6.00	
4.10				
4.20	85.00	125.0	6.00	
4.30				
4.40	90.00	140.0	6.00	
4.50				
4.60	95.00	140.0	6.00	
4.70				
4.80	100.0	150.0	6.00	
4.90				
5.00	100.0	150.0	6.00	
5.10				
5.20	100.0	150.0	6.00	
5.30				
5.40	100.0	150.0	6.00	
5.50				
5.60	100.0	150.0	6.00	
5.70				
5.80	100.0	150.0	6.00	
5.90				
6.00	100.0	150.0	6.00	
6.00				

* Non Stockable



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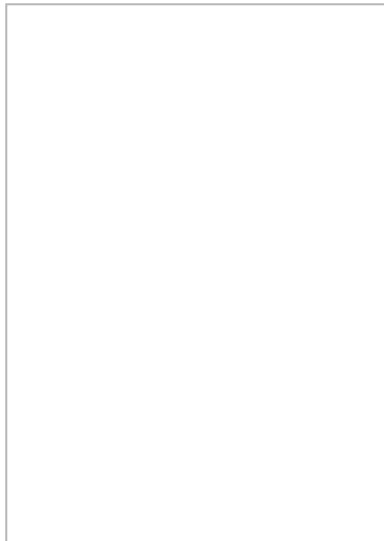
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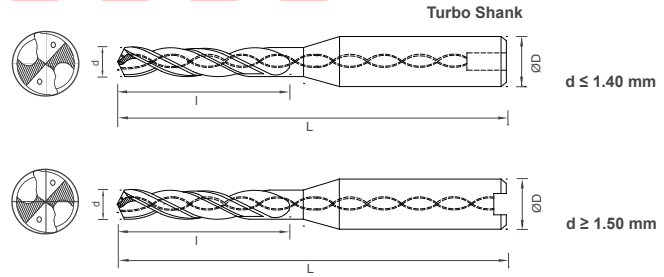
World of mICRO Tools

Ød	l	L	ØD h6	Prices €
				Coated
0.80	20.00	65.00	3.00	
0.90				
1.00	25.00	75.00	3.00	
1.10				
1.20	28.00	75.00	3.00	
1.30				
1.40	30.00	75.00	3.00	
1.50				
1.60	32.00	75.00	3.00	
1.70				
1.80	36.00	80.00	3.00	
1.90				
2.00	40.00	85.00	3.00	
2.10				
2.20	45.00	95.00	4.00	
2.30				
2.40	50.00	95.00	4.00	
2.50				
2.60	55.00	95.00	4.00	
2.70				
2.80	60.00	108.0	4.00	
2.90				
3.00	65.00	108.0	4.00	
3.10				
3.20	68.00	112.0	4.00	
3.30				
3.40	68.00	112.0	6.00	
3.50				
3.60	75.00	120.0	6.00	
3.70				
3.80	80.00	130.0	6.00	
3.90				
4.00	85.00	130.0	6.00	
4.10				
4.20	90.00	140.0	6.00	
4.30				
4.40	95.00	120.0	6.00	
4.50				
4.60	100.0	150.0	6.00	
4.70				
4.80	110.0	160.0	6.00	
4.90				
5.00	115.0	160.0	6.00	
5.10				
5.20	125.0	165.0	6.00	
5.30				
5.40	140.0	185.0	6.00	
5.50				
5.60	140.0	185.0	6.00	
5.70				
5.80	140.0	185.0	6.00	
5.90				
6.00				

* Non Stockable



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Ød	l	L	ØD h6	Prices €
				Coated
1.00	30.0	75.0	3.00	
1.10				
1.20	35.0	75.0	3.00	
1.30				
1.40	40.0	85.0	3.00	
1.50				
1.60	45.0	85.0	3.00	
1.70				
1.80	50.0	95.0	3.00	
1.90				
2.00	55.0	95.0	4.00	
2.10				
2.20	60.0	108.0	4.00	
2.30				
2.40	65.0	108.0	4.00	
2.50				
2.60	70.0	112.0	4.00	
2.70				
2.80	75.0	120.0	4.00	
2.90				
3.00	80.0	125.0	4.00	
3.10				
3.20	85.0	130.0	6.00	
3.30				
3.40	95.0	140.0	6.00	
3.50				
3.60	100.0	150.0	6.00	
3.70				
3.80	105.0	150.0	6.00	
3.90				
4.00	110.0	160.0	6.00	
4.10				
4.20	120.0	170.0	6.00	
4.30				
4.40	130.0	180.0	6.00	
4.50				
4.60	130.0	180.0	6.00	
4.70				
4.80	140.0	190.0	6.00	
4.90				
5.00	140.0	190.0	6.00	
5.10				
5.20	150.0	200.0	6.00	
5.30				
5.40	150.0	200.0	6.00	
5.50				
5.60	160.0	210.0	6.00	
5.70				
5.80	160.0	210.0	6.00	
5.90				
6.00	170.0	220.0	6.00	

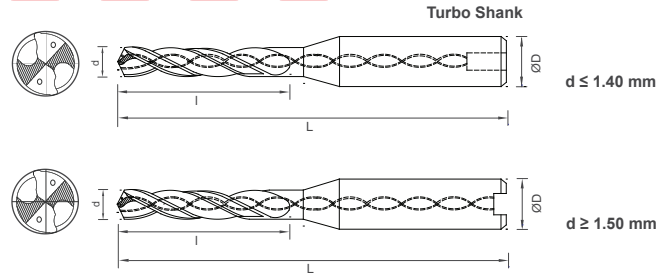
* Non Stockable

World of mICRO Tools





- Steel
- SS
- Cast Iron
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- Z
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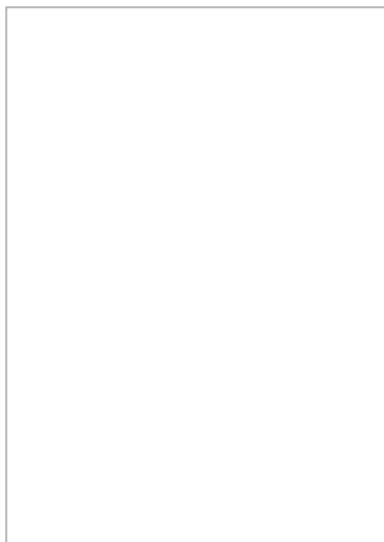
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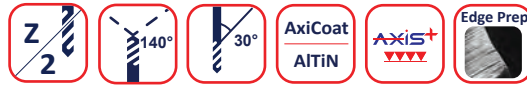
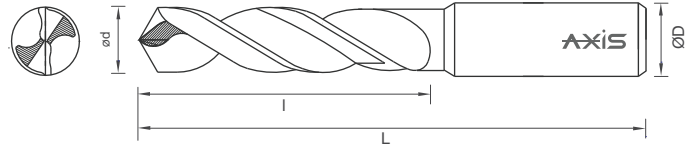
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World of mICRO Tools

Ød	l	L	ØD h6	Prices €
				Coated
1.00	35.0	75.0	3.00	
1.10				
1.20				
1.30	45.0	85.0	3.00	
1.40				
1.50				
1.60	55.0	95.0	3.00	
1.70				
1.80				
1.90	65.0	105.0	3.00	
2.00				
2.10				
2.20	75.0	115.0	4.00	
2.30				
2.40				
2.50	85.0	130.0	4.00	
2.60				
2.70				
2.80	95.0	140.0	4.00	
2.90				
3.00				
3.10	105.0	150.0	6.00	
3.20				
3.30				
3.40	115.0	160.0	6.00	
3.50				
3.60				
3.70	125.0	175.0	6.00	
3.80				
3.90				
4.00	135.0	185.0	6.00	
4.10				
4.20				
4.30	145.0	195.0	6.00	
4.40				
4.50				
4.60	155.0	205.0	6.00	
4.70				
4.80				
4.90	165.0	210.0	6.00	
5.00				
5.10				
5.20	175.0	220.0	6.00	
5.30				
5.40				
5.50	190.0	240.0	6.00	
5.60				
5.70				
5.80				
5.90				
6.00				

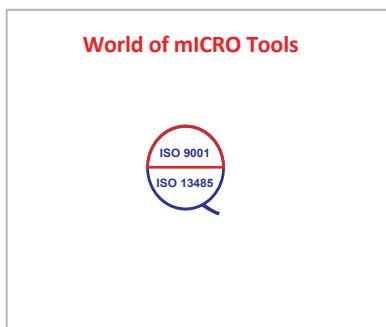
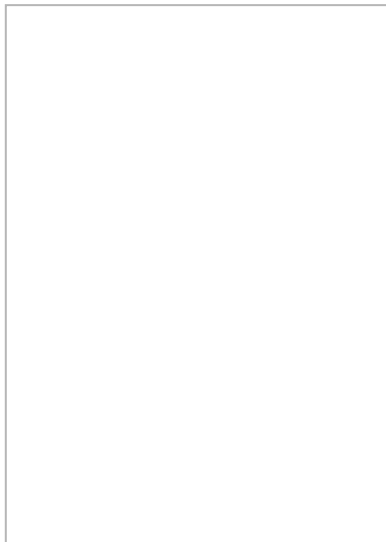
* Non Stockable



Excellent self centering ability and short flute length ensures better positional accuracy

Diameter Tolerance and Point angle aligned in accordance with INDrill Cool series

Made from micro fine grade carbide with a balanced mix of high toughness and excellent hardness



ød m7	l	L	ØD h5	Prices €	
				Coated	Uncoated
0.80					
0.90	5.00	45.00	3.00		
1.00					
1.10					
1.20	6.00	45.00	3.00		
1.30					
1.40					
1.50					
1.60					
1.70	8.00	45.00	3.00		
1.80					
1.90					
2.00					
2.10	10.00	45.00	4.00		
2.20					
2.30					
2.40					
2.50					
2.60	12.00	55.00	4.00		
2.70					
2.80					
2.90					
3.00					
3.10					
3.20					
3.30					
3.40	20.00	60.00	4.00		
3.50					
3.60					
3.70					
3.80					
3.90	24.00	64.00	4.00		
4.00					
4.10					
4.20					
4.30	24.00	64.00	6.00		
4.40					
4.50					
4.60					
4.70					
4.80					
4.90					
5.00					
5.10					
5.20					
5.30					
5.40	28.00	64.00	6.00		
5.50					
5.60					
5.70					
5.80					
5.90					
6.00					

* Non Stockable

INDRILL+

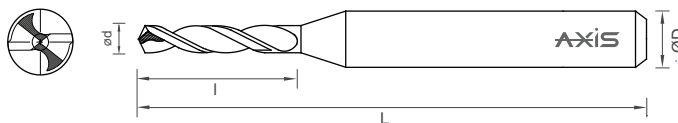
T311



Short Flute Length Series

Dia Range : \varnothing 0.30-3.00mm

Flute Length : ~3-5d



A versatile drill crafted with good centering and keen cutting abilities for use across different materials and applications

Special point geometry for increased penetration for center cutting abilities

Differentiated web taper for faster chip evacuation

Web thinned geometry for better centering and chip formation and evacuation

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

Finely honed cutting edge and highly polished flutes by *MMP Superfinishing* process for superior edge strength, chip evacuation, better coating adhesion and longer tool life

\varnothing d	l	L	\varnothing D h6	Prices €
0.30	1.50	38.00	3.00	
0.31				
0.32				
0.33				
0.34				
0.35				
0.36				
0.37				
0.38				
0.39				
0.40				
0.41	2.00	38.00	3.00	
0.42				
0.43				
0.44				
0.45				
0.46				
0.47				
0.48				
0.49				
0.50				
0.51	2.50	38.00	3.00	
0.52				
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0.66				
0.67	3.00	38.00	3.00	
0.68				
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0.70				
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0.73				
0.74				
0.75				
0.76				
0.77				
0.78				
0.79				
0.80	4.00	38.00	3.00	
0.81				

World of mICRO Tools



T311

ød	l	L	ØD h6	Prices €
0.82	4.00	38.00	3.00	
0.83				
0.84				
0.85				
0.86				
0.87				
0.88				
0.89				
0.90	5.00	38.00	3.00	
0.91				
0.92				
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1.08				
1.09				
1.10	6.00	38.00	3.00	
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1.41				
1.42				
1.43				
1.44				
1.45				
1.46				
1.47				
1.48				
1.49				
1.50	8.00	38.00	3.00	

ød	l	L	ØD h6	Prices €
1.51	8.00	38.00	3.00	
1.52				
1.53				
1.54				
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1.57				
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1.98				
1.99				
2.00				
2.01	12.00	38.00	3.00	
2.02				
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T311

ød	l	L	ØD h6	Prices €
2.20				
2.21				
2.22				
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2.39				
2.40	12.00	38.00	3.00	
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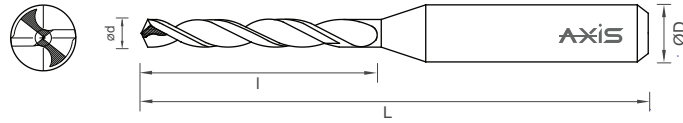
ød	l	L	ØD h6	Prices €
2.61				
2.62				
2.63				
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2.65				
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2.68				
2.69				
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2.71				
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2.77				
2.78				
2.79				
2.80				
2.81	12.00	38.00	3.00	
2.82				
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2.95				
2.96				
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2.98				
2.99				
3.00				

* Non Stockable





- SS
- Titanium Alloy
- Steel High Alloyed
- Steel Low/Unalloyed
- Nickel Alloy
- Cast Iron
- Non-Ferrous



- Z
2
- 135°
- 30°
-
- AxiCoat
TiAlN
- AXIS+
VVVV
- Edge Prep

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ød	l	L	ØD h6	Prices €
0.30	3.00	38.00	3.00	
0.31				
0.32				
0.33				
0.34				
0.35				
0.36				
0.37				
0.38				
0.39				
0.40	4.00	38.00	3.00	
0.41				
0.42				
0.43				
0.44				
0.45				
0.46				
0.47				
0.48				
0.49				
0.50	5.00	38.00	3.00	
0.51				
0.52				
0.53				
0.54				
0.55				
0.56				
0.57				
0.58				
0.59				
0.60	6.00	38.00	3.00	
0.61				
0.62				
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0.78				
0.79				
0.80				
0.81				

World of mICRO Tools



T312

ød	l	L	ØD h6	Prices €
0.82	6.00	38.00	3.00	
0.83				
0.84				
0.85				
0.86				
0.87				
0.88				
0.89				
0.90				
0.91				8.00
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1.10	10.00	38.00	3.00	
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1.41				
1.42				
1.43				
1.44				
1.45				
1.46				
1.47				
1.48				
1.49				
1.50	12.00	45.00	3.00	

ød	l	L	ØD h6	Prices €
1.51	12.00	38.00	3.00	
1.52				
1.53				
1.54				
1.55				
1.56				
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1.99				
2.00				
2.01	14.00	45.00	3.00	
2.02				
2.03				
2.04				
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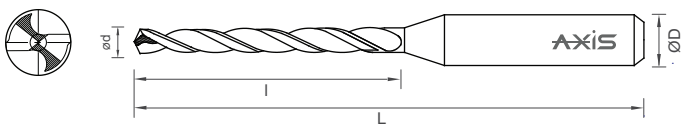
T312

ød	l	L	ØD h6	Prices €
2.20	14.00	45.00	3.00	
2.21				
2.22				
2.23				
2.24				
2.25				
2.26				
2.27				
2.28				
2.29				
2.30				
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2.32				
2.33				
2.34				
2.35				
2.36				
2.37				
2.38				
2.39				
2.40				
2.41	16.00	45.00	3.00	
2.42				
2.43				
2.44				
2.45				
2.46				
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2.59				
2.60				

ød	l	L	ØD h6	Prices €
2.61	16.00	45.00	3.00	
2.62				
2.63				
2.64				
2.65				
2.66				
2.67				
2.68				
2.69				
2.70				
2.71	18.00	45.00	3.00	
2.72				
2.73				
2.74				
2.75				
2.76				
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2.92				
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2.94				
2.95				
2.96				
2.97				
2.98				
2.99				
3.00				

* Non Stockable





A versatile drill crafted with good centering and keen cutting abilities for use across different materials and applications

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World of mICRO Tools

ød	l	L	ØD h6	Prices €
0.30	5.50	38.00	3.00	
0.31				
0.32				
0.33				
0.34				
0.35				
0.36				
0.37				
0.38				
0.39				
0.40	6.00	38.00	3.00	
0.41				
0.42				
0.43				
0.44				
0.45				
0.46				
0.47				
0.48				
0.49				
0.50				
0.51				
0.52				
0.53				
0.54				
0.55	8.00	38.00	3.00	
0.56				
0.57				
0.58				
0.59				
0.60				
0.61				
0.62				
0.63				
0.64				
0.65				
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0.74				
0.75				
0.76				
0.77				
0.78				
0.79				
0.80				
0.81				



T313

ød	l	L	ØD h6	Prices €
0.82	8.00	38.00	3.00	
0.83				
0.84				
0.85				
0.86				
0.87				
0.88				
0.89				
0.90				
0.91	10.00	38.00	3.00	
0.92				
0.93				
0.94				
0.95				
0.96				
0.97				
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0.99				
1.00				
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1.03				
1.04				
1.05				
1.06				
1.07				
1.08				
1.09				
1.10	12.00	38.00	3.00	
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1.27				
1.28				
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1.30	14.00	45.00	3.00	
1.31				
1.32				
1.33				
1.34				
1.35				
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1.37				
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1.40				
1.41				
1.42				
1.43				
1.44				
1.45				
1.46				
1.47				
1.48				
1.49				
1.50	16.00	45.00	3.00	

ød	l	L	ØD h6	Prices €
1.51	16.00	45.00	3.00	
1.52				
1.53				
1.54				
1.55				
1.56				
1.57				
1.58				
1.59				
1.60				
1.61	18.00	45.00	3.00	
1.62				
1.63				
1.64				
1.65				
1.66				
1.67				
1.68				
1.69				
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1.92				
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1.94				
1.95				
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1.97				
1.98				
1.99				
2.00	20.00	50.00	3.00	
2.01				
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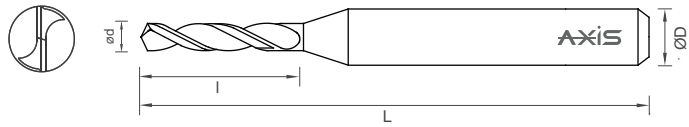
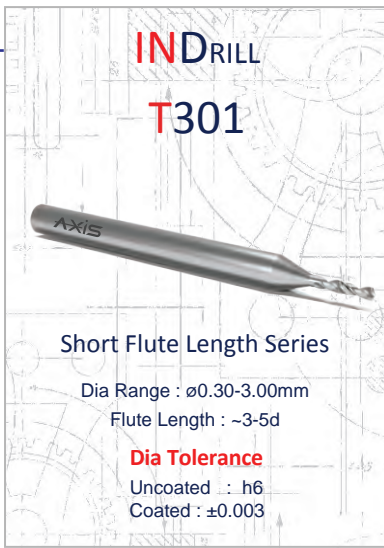
T313

ød	l	L	ØD h6	Prices €
2.20	20.00	50.00	3.00	
2.21				
2.22				
2.23				
2.24				
2.25				
2.26				22.00
2.27				
2.28				
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2.41				
2.42				
2.43				
2.44				
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2.46				
2.47				
2.48				
2.49				
2.50	24.00	50.00	3.00	
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2.60				

ød	l	L	ØD h6	Prices €
2.61	24.00	50.00	3.00	
2.62				
2.63				
2.64				
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2.66				
2.67				
2.68				
2.69				
2.70				
2.71	26.00	50.00	3.00	
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2.98				
2.99				
3.00				

* Non Stockable





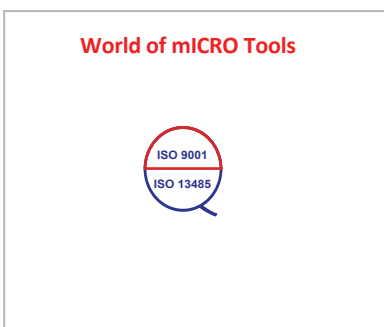
\varnothing d < 0.40mm \varnothing d \geq 0.40mm

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\varnothing d	l	L	\varnothing D h6	Prices €	
				Coated	Uncoated
0.30	1.50	38.00	3.00		
0.31					
0.32					
0.33					
0.34					
0.35					
0.36					
0.37					
0.38					
0.39					
0.40	2.00	38.00	3.00		
0.41					
0.42					
0.43					
0.44					
0.45					
0.46					
0.47					
0.48					
0.49					
0.50	2.50	38.00	3.00		
0.51					
0.52					
0.53					
0.54					
0.55					
0.56					
0.57					
0.58					
0.59					
0.60	3.00	38.00	3.00		
0.61					
0.62					
0.63					
0.64					
0.65					
0.66					
0.67					
0.68					
0.69					
0.70	4.00	38.00	3.00		
0.71					
0.72					
0.73					
0.74					
0.75					
0.76					
0.77					
0.78					
0.79					
0.80					
0.81					



T301

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.82	4.00	38.00	3.00		
0.83					
0.84					
0.85					
0.86					
0.87					
0.88					
0.89					
0.90	5.00	38.00	3.00		
0.91					
0.92					
0.93					
0.94					
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0.97					
0.98					
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1.08					
1.09					
1.10	6.00	38.00	3.00		
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1.41					
1.42					
1.43					
1.44					
1.45					
1.46					
1.47					
1.48					
1.49					
1.50	8.00	38.00	3.00		

ød	l	L	ØD h6	Prices €			
				Coated	Uncoated		
1.51	8.00	38.00	3.00				
1.52							
1.53							
1.54							
1.55							
1.56							
1.57							
1.58							
1.59							
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1.98							
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2.01	12.00	38.00	3.00				
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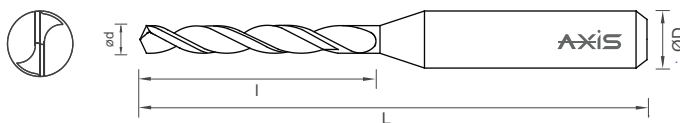
T301

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
2.20					
2.21					
2.22					
2.23					
2.24					
2.25					
2.26					
2.27					
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2.31					
2.32					
2.33					
2.34					
2.35					
2.36					
2.37					
2.38					
2.39					
2.40	12.00	38.00	3.00		
2.41					
2.42					
2.43					
2.44					
2.45					
2.46					
2.47					
2.48					
2.49					
2.50					
2.51					
2.52					
2.53					
2.54					
2.55					
2.56					
2.57					
2.58					
2.59					
2.60					

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
2.61					
2.62					
2.63					
2.64					
2.65					
2.66					
2.67					
2.68					
2.69					
2.70					
2.71					
2.72					
2.73					
2.74					
2.75					
2.76					
2.77					
2.78					
2.79					
2.80					
2.81	12.00	38.00	3.00		
2.82					
2.83					
2.84					
2.85					
2.86					
2.87					
2.88					
2.89					
2.90					
2.91					
2.92					
2.93					
2.94					
2.95					
2.96					
2.97					
2.98					
2.99					
3.00					

* Non Stockable





ød <0.40mm ød ≥0.40mm

A versatile drill crafted with good centering and keen cutting abilities for use across different materials and applications

Differentiated web taper for faster chip evacuation

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

Finely honed cutting edge and highly polished flutes by MMP Superfinishing process for superior edge strength, chip evacuation, better coating adhesion and longer tool life

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.10	0.80	38.00	3.00		
0.11					
0.12					
0.13					
0.14	1.00	38.00	3.00		
0.15					
0.16					
0.17					
0.18	1.50	38.00	3.00		
0.19					
0.20					
0.21					
0.22	2.00	38.00	3.00		
0.23					
0.24					
0.25					
0.26	2.00	38.00	3.00		
0.27					
0.28					
0.29					
0.30	3.00	38.00	3.00		
0.31					
0.32					
0.33					
0.34	3.00	38.00	3.00		
0.35					
0.36					
0.37					
0.38	3.00	38.00	3.00		
0.39					
0.40					
0.41					
0.42	4.00	38.00	3.00		
0.43					
0.44					
0.45					
0.46	4.00	38.00	3.00		
0.47					
0.48					
0.49					
0.50	5.00	38.00	3.00		
0.51					
0.52					
0.53					
0.54	5.00	38.00	3.00		
0.55					
0.56					
0.57					
0.58	5.00	38.00	3.00		
0.59					
0.60					
0.61					

World of mICRO Tools



T302

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.62	5.00	38.00	3.00		
0.63					
0.64					
0.65					
0.66					
0.67					
0.68					
0.69					
0.70					
0.71					
0.72					
0.73					
0.74					
0.75					
0.76					
0.77					
0.78					
0.79					
0.80	6.00	38.00	3.00		
0.81					
0.82					
0.83					
0.84					
0.85					
0.86					
0.87					
0.88					
0.89					
0.90					
0.91				8.00	38.00
0.92					
0.93					
0.94					
0.95					
0.96					
0.97					
0.98					
0.99					
1.00					
1.01					
1.02					
1.03					
1.04					
1.05					
1.06					
1.07					
1.08					
1.09					
1.10	10.00	38.00	3.00		
1.11					
1.12					
1.13					
1.14					
1.15					
1.16					
1.17					
1.18					
1.19					
1.20					
1.21					
1.22					
1.23					
1.24					
1.25					
1.26					
1.27					
1.28					
1.29					
1.30					

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
1.31	10.00	38.00	3.00		
1.32					
1.33					
1.34					
1.35					
1.36					
1.37					
1.38					
1.39					
1.40					
1.41					
1.42					
1.43					
1.44					
1.45					
1.46					
1.47					
1.48					
1.49	12.00	38.00	3.00		
1.50					
1.51					
1.52					
1.53					
1.54					
1.55					
1.56					
1.57					
1.58					
1.59					
1.60					
1.61					
1.62					
1.63					
1.64					
1.65					
1.66					
1.67					
1.68					
1.69					
1.70					
1.71					
1.72					
1.73					
1.74					
1.75					
1.76					
1.77					
1.78					
1.79					
1.80					
1.81					
1.82					
1.83					
1.84					
1.85					
1.86					
1.87					
1.88					
1.89					
1.90					
1.91					
1.92					
1.93					
1.94					
1.95					
1.96					
1.97					
1.98					
1.99					

T302

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
2.00	12.00	38.00	3.00		
2.01	14.00	45.00	3.00		
2.02					
2.03					
2.04					
2.05					
2.06					
2.07					
2.08					
2.09					
2.10					
2.11					
2.12					
2.13					
2.14					
2.15					
2.16					
2.17					
2.18					
2.19					
2.20					
2.21					
2.22					
2.23					
2.24					
2.25					
2.26					
2.27					
2.28					
2.29					
2.30					
2.31					
2.32					
2.33					
2.34					
2.35					
2.36					
2.37					
2.38					
2.39					
2.40					
2.41	16.00	45.00	3.00		
2.42					
2.43					
2.44					
2.45					
2.46					
2.47					
2.48					
2.49					
2.50					

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
2.51	16.00	45.00	3.00		
2.52					
2.53					
2.54					
2.55					
2.56					
2.57					
2.58					
2.59					
2.60					
2.61					
2.62					
2.63					
2.64					
2.65					
2.66					
2.67					
2.68					
2.69					
2.70					
2.71	18.00	45.00	3.00		
2.72					
2.73					
2.74					
2.75					
2.76					
2.77					
2.78					
2.79					
2.80					
2.81					
2.82					
2.83					
2.84					
2.85					
2.86					
2.87					
2.88					
2.89					
2.90					
2.91					
2.92					
2.93					
2.94					
2.95					
2.96					
2.97					
2.98					
2.99					
3.00					

* Non Stockable



INDRILL
T303

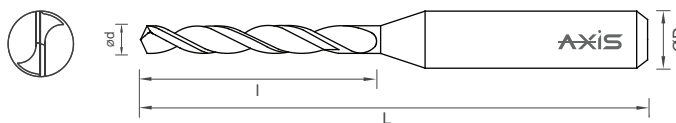


Longer Flute Length Series

Dia Range : $\varnothing 0.015-3.00\text{mm}$
Flute Length : $\sim 8-12d$

Dia Tolerance
Uncoated : h6
Coated : ± 0.003

- Steel Low/Unalloyed
- Steel High Alloyed
- SS
- Cast Iron
- Non-Ferrous
- Plastics



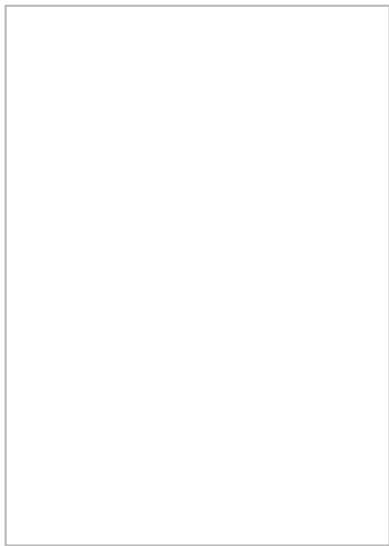
- Z/2
 - 118°
 - 130°
 - 30°
 - AxiCoat
AlTiN
 - FORM HA
DIN 6535
- ød < 0.40mm ød ≥ 0.40mm

A versatile drill crafted with good centering and keen cutting abilities for use across different materials and applications


Differentiated web taper for faster chip evacuation

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

Finely honed cutting edge and highly polished flutes by *MMP Superfinishing* process for superior edge strength, chip evacuation, better coating adhesion and longer tool life



World of mICRO Tools



ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.015	0.15	38.00	3.00		
0.020	0.20				
0.030	0.30				
0.040	0.40				
0.050	0.50				
0.060	0.60				
0.070	0.70				
0.080	0.80				
0.090	0.90				
0.10	1.00	38.00	3.00		
0.11	1.50	38.00	3.00		
0.12					
0.13					
0.14					
0.15	2.00	38.00	3.00		
0.16					
0.17					
0.18					
0.19					
0.20					
0.21					
0.22	4.00	38.00	3.00		
0.23					
0.24					
0.25					
0.26					
0.27					
0.28					
0.29					
0.30	5.50	38.00	3.00		
0.31					
0.32					
0.33					
0.34					
0.35					
0.36					
0.37					
0.38					
0.39					
0.40				6.00	38.00
0.41					
0.42					
0.43					
0.44					
0.45					
0.46					
0.47					
0.48					
0.49					
0.50					
0.51					
0.52					



T303

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.53	6.00	38.00	3.00		
0.54					
0.55					
0.56					
0.57					
0.58					
0.59					
0.60					
0.61					
0.62					
0.63					
0.64					
0.65					
0.66					
0.67					
0.68					
0.69					
0.70					
0.71					
0.72	8.00	38.00	3.00		
0.73					
0.74					
0.75					
0.76					
0.77					
0.78					
0.79					
0.80					
0.81					
0.82					
0.83					
0.84					
0.85					
0.86					
0.87					
0.88					
0.89					
0.90					
0.91	10.00	38.00	3.00		
0.92					
0.93					
0.94					
0.95					
0.96					
0.97					
0.98					
0.99					
1.00					
1.01					
1.02					
1.03					
1.04					
1.05					
1.06					
1.07					
1.08					
1.09					
1.10					
1.11	12.00	38.00	3.00		
1.12					
1.13					
1.14					
1.15					
1.16					
1.17					
1.18					
1.19					
1.20					
1.21					

ød	l	L	ØD h6	Prices €				
				Coated	Uncoated			
1.22	12.00	38.00	3.00					
1.23								
1.24								
1.25								
1.26								
1.27								
1.28								
1.29								
1.30				14.00	45.00	3.00		
1.31								
1.32								
1.33								
1.34								
1.35								
1.36								
1.37								
1.38								
1.39								
1.40								
1.41								
1.42								
1.43								
1.44								
1.45								
1.46								
1.47								
1.48								
1.49								
1.50	16.00	45.00	3.00					
1.51								
1.52								
1.53								
1.54								
1.55								
1.56								
1.57								
1.58								
1.59								
1.60								
1.61								
1.62								
1.63								
1.64								
1.65								
1.66								
1.67								
1.68								
1.69								
1.70	18.00	45.00	3.00					
1.71								
1.72								
1.73								
1.74								
1.75								
1.76								
1.77								
1.78								
1.79								
1.80								
1.81								
1.82								
1.83								
1.84								
1.85								
1.86								
1.87								
1.88								
1.89								
1.90								

T303

Ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
1.91	18.00	45.00	3.00		
1.92					
1.93					
1.94					
1.95					
1.96					
1.97					
1.98					
1.99					
2.00					
2.01	20.00	50.00	3.00		
2.02					
2.03					
2.04					
2.05					
2.06					
2.07					
2.08					
2.09					
2.10					
2.11					
2.12					
2.13					
2.14					
2.15					
2.16					
2.17					
2.18					
2.19					
2.20					
2.21					
2.22					
2.23					
2.24					
2.25					
2.26	22.00	50.00	3.00		
2.27					
2.28					
2.29					
2.30					
2.31					
2.32					
2.33					
2.34					
2.35					
2.36					
2.37					
2.38					
2.39					
2.40					
2.41					
2.42					
2.43					
2.44					
2.45					

Ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
2.46	22.00	50.00	3.00		
2.47					
2.48					
2.49					
2.50					
2.51	24.00	50.00	3.00		
2.52					
2.53					
2.54					
2.55					
2.56					
2.57					
2.58					
2.59					
2.60					
2.61					
2.62					
2.63					
2.64					
2.65					
2.66					
2.67					
2.68					
2.69					
2.70					
2.71	26.00	50.00	3.00		
2.72					
2.73					
2.74					
2.75					
2.76					
2.77					
2.78					
2.79					
2.80					
2.81					
2.82					
2.83					
2.84					
2.85					
2.86					
2.87					
2.88					
2.89					
2.90					
2.91					
2.92					
2.93					
2.94					
2.95					
2.96					
2.97					
2.98					
2.99					
3.00					

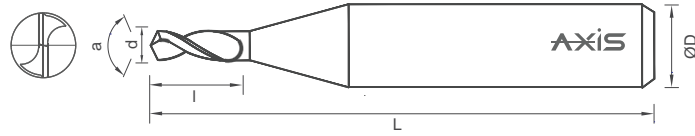


NC Pointing Drills

T580
T581



Dia Tolerance
 $\varnothing d$ 0.050 - 0.090mm - 0.005 / - 0.010
 $\varnothing d \geq 0.10$ mm - 0.010 / - 0.015

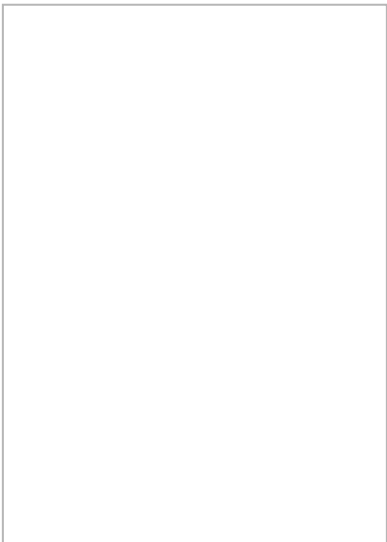


Stub flute length and thinner web ensures better positional accuracy

Provides accurate guide for subsequent drilling

Helps in drilling on angular surfaces without drill walking


Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

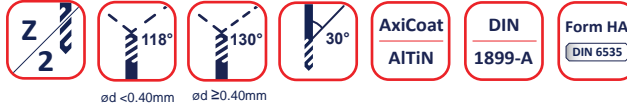
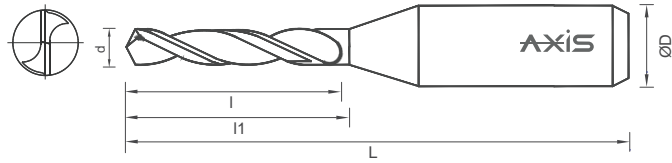


Ød	l	L	ØD h6	T580 a	T581 a	Prices €	
						Coated	Uncoated
0.05	0.10	38.00	3.00	120°	90°		
0.06							
0.07							
0.08							
0.09	0.20	38.00	3.00	120°	90°		
0.10							
0.15							
0.20							
0.25	0.40	38.00	3.00	120°	90°		
0.30							
0.35							
0.40							
0.45	0.60	38.00	3.00	120°	90°		
0.50							
0.55							
0.60							
0.65	1.00	38.00	3.00	120°	90°		
0.70							
0.75							
0.80							
0.85	1.20	38.00	3.00	120°	90°		
0.90							
0.95							
1.00							
1.50	1.80	38.00	3.00	120°	90°		
2.00							
2.50							
3.00							
4.00	5.50	38.00	3.00	120°	90°		
5.00							
6.00							
6.00							

* Non Stockable

World of mICRO Tools



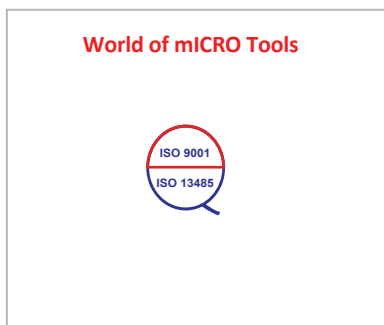
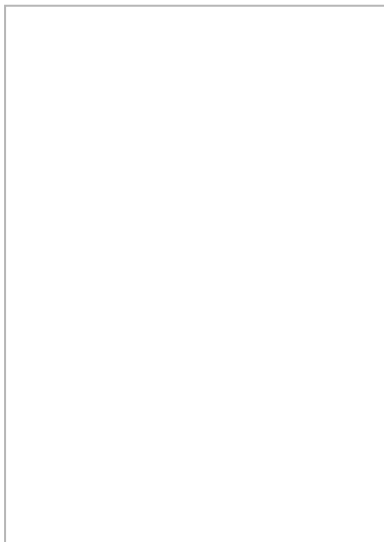



A universal drill rendered with self centering & keen cutting abilities for use across different materials and applications

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

MMP Superfinishing process to ensure better coating adhesion, better chip evacuation and reduced friction of the chips

Dimensions as per DIN 1899-A



Ød	l	l1	L	ØD h6	Prices €	
					Coated	Uncoated
0.05	0.50	0.70	25.00	1.00		
0.08						
0.09						
0.10						
0.11						
0.12						
0.13	0.80	1.00	25.00	1.00		
0.14						
0.15						
0.16	1.10	1.40	25.00	1.00		
0.17						
0.18						
0.19						
0.20	1.50	1.80	25.00	1.00		
0.21						
0.22						
0.23						
0.24						
0.25	1.90	2.20	25.00	1.00		
0.26						
0.27						
0.28						
0.29						
0.30						
0.31	2.40	2.80	25.00	1.00		
0.32						
0.33						
0.34						
0.35						
0.36						
0.37						
0.38						



T698

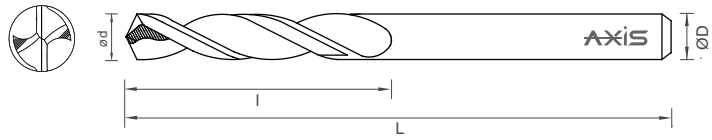
ød	l	l1	L	ØD h6	Prices €	
					Coated	Uncoated
0.39	2.70	3.60	25.00	1.00		
0.40						
0.41						
0.42						
0.43						
0.44						
0.45						
0.46						
0.47						
0.48						
0.49	3.20	4.00	25.00	1.00		
0.50						
0.51						
0.52						
0.53						
0.54	3.60	4.50	25.00	1.00		
0.55						
0.56						
0.57						
0.58						
0.59						
0.60						
0.61	3.90	4.50	25.00	1.00		
0.62	3.90	5.00	25.00	1.00		
0.63						
0.64						
0.65						
0.66						
0.67						
0.68						
0.69	4.50	5.60	25.00	1.00		
0.70						
0.71						
0.72						
0.73						
0.74						

ød	l	l1	L	ØD h6	Prices €	
					Coated	Uncoated
0.75	4.50	5.60	25.00	1.00		
0.76	5.00	6.30	25.00	1.00		
0.77						
0.78						
0.79						
0.80					5.00	6.30
0.81						
0.82						
0.83						
0.84						
0.85						
0.86	5.70	7.10	25.00	1.50		
0.87						
0.88						
0.89						
0.90						
0.91						
0.92						
0.93						
0.94						
0.95						
0.96	6.50	8.00	25.00	1.50		
0.97						
0.98						
0.99						
1.00						
1.05	7.30	9.00	25.00	1.50		
1.10						
1.15						
1.20	8.20	10.00	25.00	1.50		
1.25						
1.30						
1.35	9.20	11.20	25.00	1.50		
1.40						
1.45						
1.50						

* Non Stockable



- Steel
- SS
- Cast Iron
- Non-Ferrous



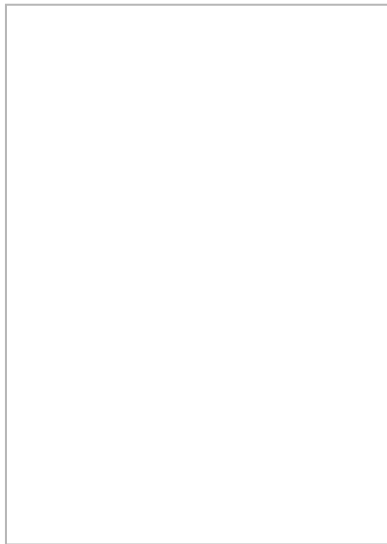
- Z
2
 - 140°
 - 30°
 - AxiCoat
AlTiN
 - DIN
6539
 - Form HA
DIN 6535
- ød ≥ 1.50mm

A universal drill rendered with self centering & keen cutting abilities for use across different materials and applications

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

MMP Superfinishing process to ensure better coating adhesion, better chip evacuation and reduced friction of the chips

Dimensions as per DIN 338



World of mICRO Tools

ød	l	L	Prices €	
			Coated	Uncoated
0.60	3.50	21.00		
0.65	4.00	22.00		
0.70				
0.75	4.50	23.00		
0.80				
0.85	5.00	24.00		
0.90				
0.95	5.50	25.00		
1.00				
1.05	6.00	26.00		
1.10				
1.15	7.00	28.00		
1.20				
1.25	8.00	30.00		
1.30				
1.35				
1.40				
1.45	9.00	32.00		
1.50				
1.55				
1.60	10.00	34.00		
1.65				
1.70				
1.75				
1.80	11.00	36.00		
1.85				
1.90				
1.95				
2.00	12.00	38.00		
2.05				
2.10				
2.15				
2.20				
2.25	13.00	40.00		
2.30				
2.35				
2.40				
2.45				
2.50	14.00	43.00		
2.55				
2.60				
2.65				
2.70				
2.75				
2.80				
2.85	16.00	46.00		
2.90				
2.95				
3.00				
3.05				
3.10	18.00	49.00		
3.15				

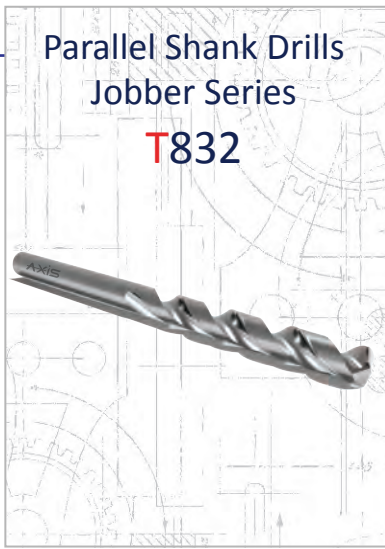


T732

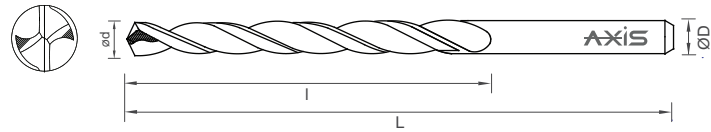
ød	l	L	Prices €	
			Coated	Uncoated
3.20	18.00	49.00		
3.25				
3.30				
3.35				
3.40				
3.45	20.00	52.00		
3.50				
3.55				
3.60				
3.65				
3.70				
3.75				
3.80	22.00	55.00		
3.85				
3.90				
3.95				
4.00				
4.05				
4.10				
4.15				
4.20				
4.25				
4.30	24.00	58.00		
4.35				
4.40				
4.45				
4.50				
4.55				
4.60				
4.65				
4.70				
4.75				
4.80	26.00	62.00		
4.85				
4.90				
4.95				
5.00				
5.05				
5.10				
5.15				
5.20				
5.25				
5.30	28.00	66.00		
5.35				
5.40				
5.45				
5.50				
5.55				
5.60				
5.65				
5.70				
5.75				
5.80	31.00	70.00		
5.85				
5.90				
5.95				
6.00				
6.10				
6.20				
6.30				
6.40				
6.50				
6.60				

ød	l	L	Prices €	
			Coated	Uncoated
6.70	31.00	70.00		
6.80	34.00	74.00		
6.90				
7.00				
7.10				
7.20				
7.30				
7.40				
7.50	37.00	79.00		
7.60				
7.70				
7.80				
7.90				
8.00				
8.10				
8.20				
8.30				
8.40				
8.50	40.00	84.00		
8.60				
8.70				
8.80				
8.90				
9.00				
9.10				
9.20				
9.30				
9.40				
9.50	43.00	89.00		
9.60				
9.70				
9.80				
9.90				
10.00				
10.10				
10.20				
10.30				
10.40				
10.50	47.00	95.00		
10.60				
10.70				
10.80				
10.90				
11.00				
11.10				
11.20				
11.30				
11.40				
11.50	51.00	102.0		
11.60				
11.70				
11.80				
11.90				
12.00				
12.50				
13.00	54.00	107.0		
13.50				
14.00				
14.50	56.00	111.0		
15.00	58.00	115.0		
15.50				
16.00				

* Non Stockable



- Steel
- SS
- Cast Iron
- Non-Ferrous



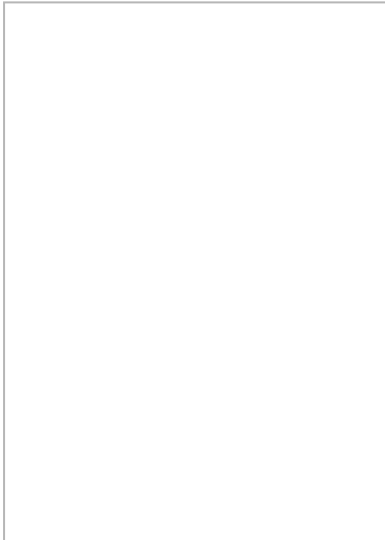
- Z
2
 - 140°
 - 30°
 - AxiCoat
AlTiN
 - DIN
6539
 - FORM HA
DIN 6535
- ød ≥ 1.50mm

A universal drill rendered with self centering & keen cutting abilities for use across different materials and applications

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

MMP Superfinishing process to ensure better coating adhesion, better chip evacuation and reduced friction of the chips

Dimensions as per DIN 338



World of mICRO Tools

ød	l	L	Prices €	
			Coated	Uncoated
0.50	6.00	22.00		
0.55	7.00	24.00		
0.60				
0.65	8.00	26.00		
0.70				
0.75	9.00	28.00		
0.80				
0.85	10.00	30.00		
0.90				
0.95	11.00	32.00		
1.00				
1.05	12.00	34.00		
1.10				
1.15	14.00	36.00		
1.20				
1.25	16.00	38.00		
1.30				
1.35				
1.40	18.00	40.00		
1.45				
1.50				
1.55				
1.60	20.00	43.00		
1.65				
1.70				
1.75				
1.80	22.00	46.00		
1.85				
1.90				
1.95				
2.00	24.00	49.00		
2.05				
2.10				
2.15				
2.20				
2.25	27.00	53.00		
2.30				
2.35				
2.40				
2.45				
2.50	30.00	57.00		
2.55				
2.60				
2.65				
2.70				
2.75				
2.80				
2.85	33.00	61.00		
2.90				
2.95				
3.00				
3.05	36.00	65.00		



T832

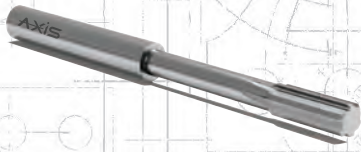
ød	l	L	Prices €	
			Coated	Uncoated
3.10	36.00	65.00		
3.15				
3.20				
3.25				
3.30				
3.35				
3.40			39.00	70.00
3.45				
3.50				
3.55				
3.60				
3.65				
3.70				
3.75	43.00	75.00		
3.80				
3.85				
3.90				
3.95				
4.00				
4.05				
4.10	47.00	80.00		
4.15				
4.20				
4.25				
4.30				
4.35				
4.40				
4.45	52.00	86.00		
4.50				
4.55				
4.60				
4.65				
4.70				
4.75				
4.80	57.00	93.00		
4.85				
4.90				
4.95				
5.00				
5.05				
5.10				
5.15	63.00	101.0		
5.20				
5.25				
5.30				
5.35				
5.40				
5.45				
5.50				
5.55				
5.60				
5.65				
5.70				
5.75				
5.80				
5.85				
5.90				
5.95				
6.00				
6.10	63.00	101.0		
6.20				
6.30				
6.40				
6.50				

ød	l	L	Prices €			
			Coated	Uncoated		
6.60	63.00	101.0				
6.70						
6.80			69.00	109.0		
6.90						
7.00						
7.10						
7.20						
7.30						
7.40	75.00	117.0				
7.50						
7.60						
7.70						
7.80						
7.90						
8.00			81.00	125.0		
8.10						
8.20						
8.30						
8.40						
8.50						
8.60	87.00	133.0				
8.70						
8.80						
8.90						
9.00						
9.10						
9.20			94.00	142.0		
9.30						
9.40						
9.50						
9.60						
9.70						
9.80	101.0	151.0				
9.90						
10.00						
10.10						
10.20						
10.30						
10.40			108.0	160.0		
10.50						
10.60						
10.70						
10.80						
10.90						
11.00	114.0	169.0				
11.10						
11.20						
11.30						
11.40						
11.50						
11.60			120.0	178.0		
11.70						
11.80						
11.90						
12.00						
12.50						
13.00						
13.50						
14.00						
14.50						
15.00						
15.50						
16.00						

* Non Stockable

High Precision Reamers

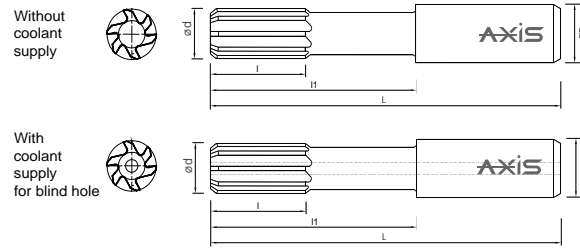
R90X
H90X



Dia Tolerance

Standard ±0.002mm
On Request ±0.001mm

- Steel
- SS
- Cast Iron
- Non-Ferrous
- Titanium Alloy
- Nickel Alloy



- AxiCoat
AITiN
- FORM HA
DIN 6535

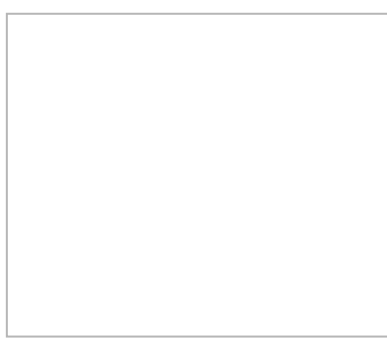
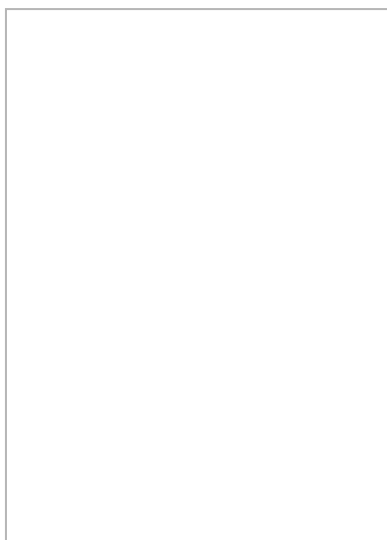
A versatile reamer crafted to ream high Alloy Steels, Stainless Steels, Aluminium and other Non-ferrous material

Precisely controlled diameter and runout to meet high precision hole making requirements

For blind holes, availability of centre coolant holes ensures sufficient coolant pressure and volume. Thereby ensuring faster chip evacuation, heat dissipation leading to longer tool life with better dimensional control

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

MMP Superfinishing to ensure better coating adhesion, better chip evacuation, reduced chip friction and better hole surface

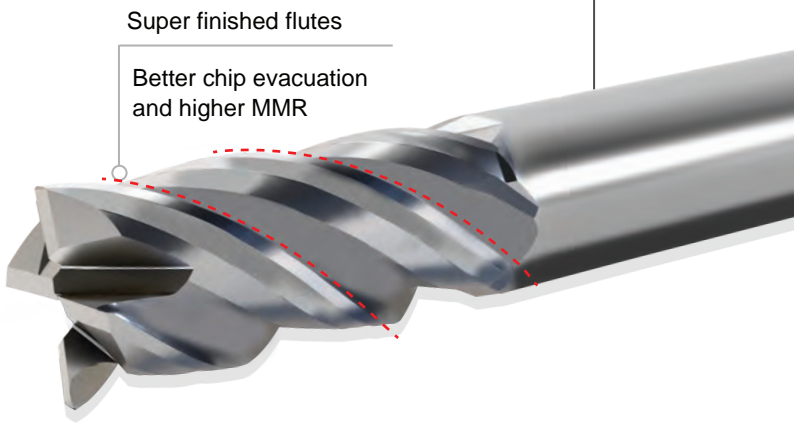
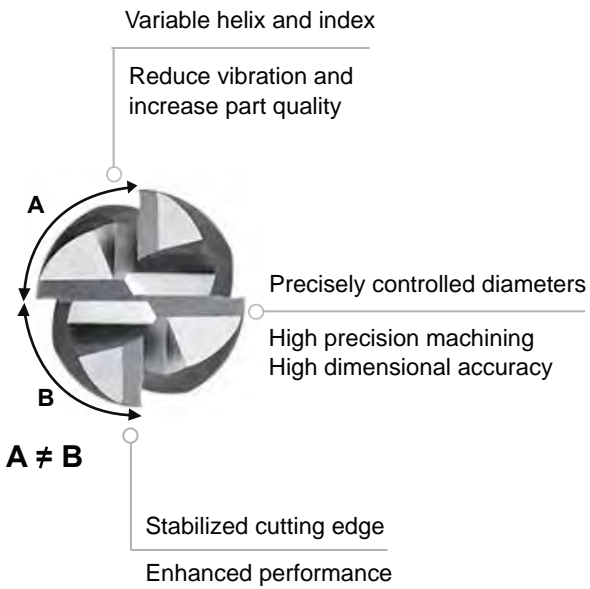


Article		ød	l	l1	L	ØD h6	Flute Z	Prices €	
								Coated	Uncoated
R9011	N.A	0.900 - 1.069	6.0	20.0	48	3.0	3		
R9011	N.A	1.070 - 1.569	6.0	20.0	48	3.0	3		
R9011	N.A	1.570 - 2.069	6.0	20.0	48	3.0	3		
R9011	N.A	2.070 - 2.569	6.0	20.0	48	3.0	6		
R9001	N.A	2.570 - 3.069	6.0	20.0	48	3.0	3		
R9001	H9001	3.070 - 3.569	8.0	26.0	54	4.0	4		
R9001	H9001	3.570 - 4.069	8.0	26.0	54	4.0	4		
R9041	H9041	4.070 - 4.569	12.0	38.0	74	6.0	4		
R9041	H9041	4.570 - 5.069	12.0	38.0	74	6.0	6		
R9041	H9041	5.070 - 6.150	12.0	38.0	74	6.0	6		
R9041	H9041	6.160 - 6.790	12.0	55.0	91	8.0	6		
R9041	H9041	6.800 - 7.150	16.0	55.0	91	8.0	6		
R9041	H9041	7.160 - 8.150	16.0	55.0	91	8.0	6		
R9041	H9041	8.160 - 8.690	16.0	63.0	103	10.0	6		
R9041	H9041	8.700 - 10.15	20.0	63.0	103	10.0	6		
R9041	H9041	10.16 - 10.59	20.0	73.0	118	12.0	6		
R9041	H9041	10.60 - 12.15	24.0	73.0	118	12.0	6		
without coolant supply	with coolant supply								

* Non Stockable



High Performance Endmills



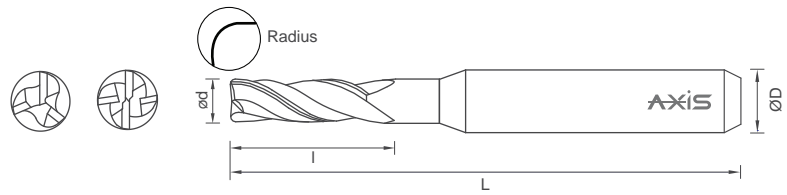
High Performance Endmills E305



Dia Tolerance

$\varnothing d \leq 6.00$ - 0.020mm
 $\varnothing d > 6.00$ - 0.030mm

- Steel High Alloyed
- Steel Low/Unalloyed
- SS
- Titanium Alloy
- Nickel Alloy



- Z 3,4
- 42°
- 38°/40°
- AxiCoat AITiN
- AXIS+
- Edge Prep

Geometry designed for milling of Steel, Stainless Steel, Titanium and Nickle Alloys

Precisely controlled tool features for high precision machining requirements

Variable helix and indexing ensure vibration free machining and smooth surface at higher feed

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

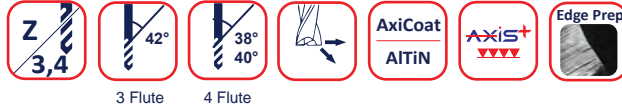
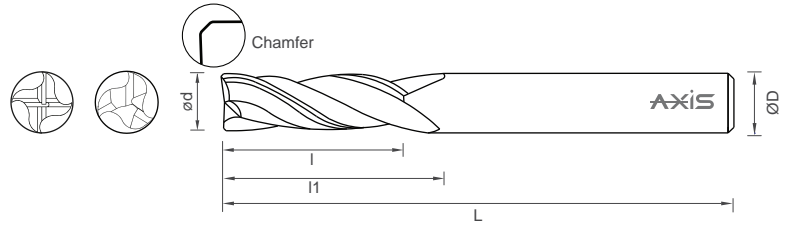
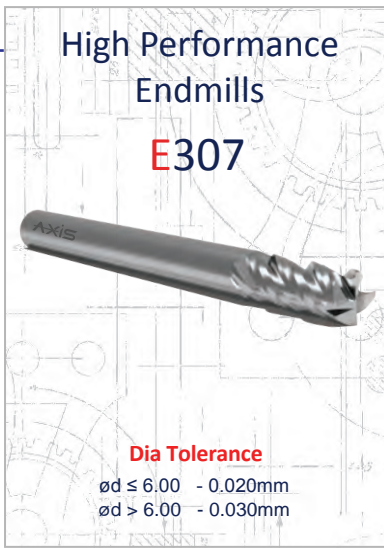
Finely honed cutting edge and highly polished flutes by *MMP Superfinishing* process for superior edge strength, chip evacuation, better coating adhesion and longer tool life

ød	l	l1	L	ØD h6	Z	R	Prices €
							Coated
1.00	3.00	-	45.00	6.00	3	0.20	
2.00	5.00	-					
3.00	8.00	-	50.00	6.00	4	0.20	
3.00						0.30	
4.00	10.00	-	50.00	6.00	4	0.20	
4.00						0.30	
5.00	13.00	-	60.00	6.00	4	0.50	
5.00						1.00	
6.00	15.00	-	60.00	6.00	4	0.50	
6.00						1.00	
8.00	19.00	22.00	65.00	8.00	4	0.50	
8.00						1.00	
8.00						2.00	
10.00	24.00	27.00	72.00	10.00	4	0.50	
10.00						1.00	
10.00						2.00	
12.00	28.00	33.00	83.00	12.00	4	0.50	
12.00						1.00	
12.00						2.00	

* Non Stockable

World of mICRO Tools





Geometry designed for milling of Stainless Steel, Titanium and Exotic materials

Precisely controlled tool features for high precision machining requirements

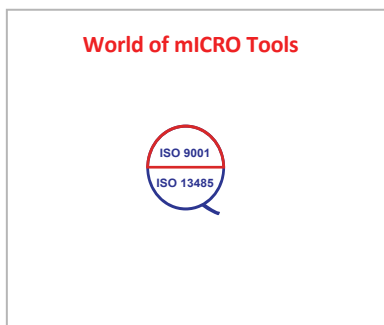
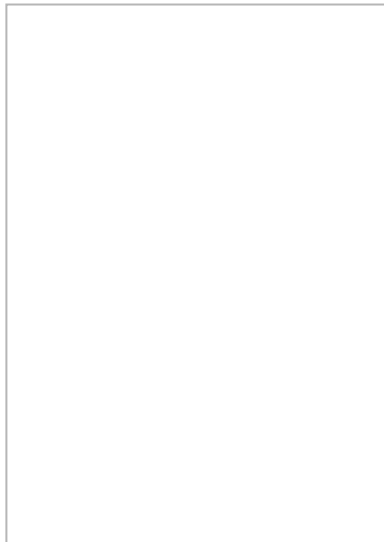
Variable helix and indexing ensure vibration free machining and smooth surface at higher feed

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Finely honed cutting edge and highly polished flutes by *MMP Superfinishing* process for superior edge strength, chip evacuation, better coating adhesion and longer tool life

Ød	l	l1	L	ØD h5	Z	Chamfer	Prices €
							Coated
1.00	3.00						
1.50	4.00						
2.00	5.00	-	45.00	6.00	3	0.02	
2.50	7.00						
3.00	8.00						
4.00	10.00	-	50.00	6.00	4	0.03	
5.00	13.00						
6.00	15.00	-	60.00	6.00	4	0.05	
8.00	19.00	22.00	65.00	8.00		0.10	
10.00	24.00	27.00	72.00	10.00	4	0.10	
12.00	28.00	33.00	83.00	12.00			

* Non Stockable



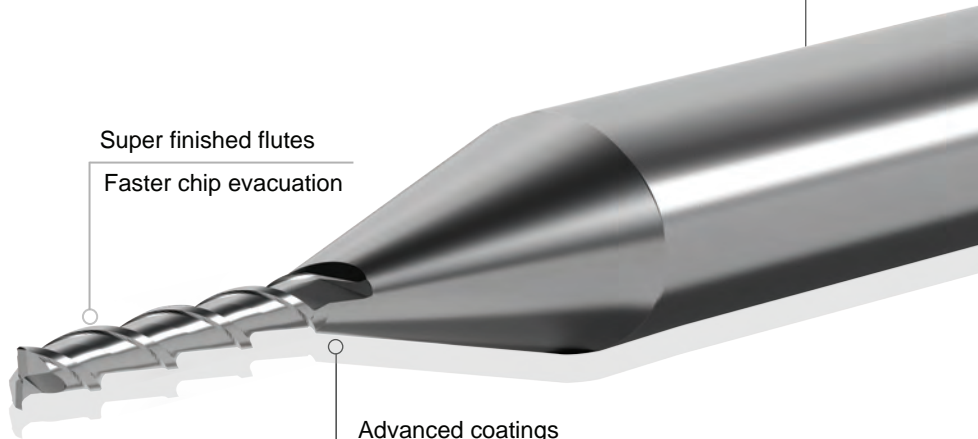
High Performance Endmills



Versatile geometry
Universal use / application



Super finished flutes
Faster chip evacuation



Advanced coatings
Enhanced coating
productivity
and better tool life

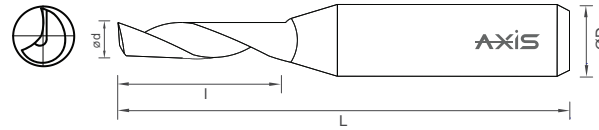
Advanced tool features

- Reduce chatter
- increase part quality



Single Flute Endmills

E923



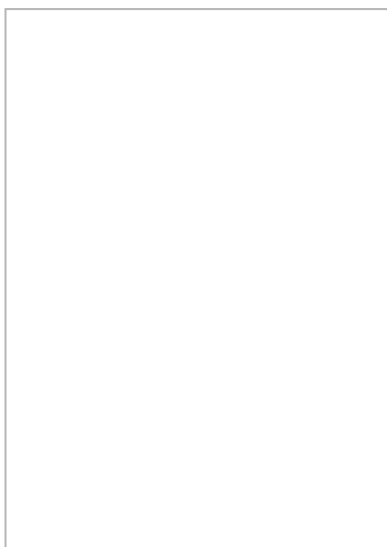
Design and geometry tailored for Non ferrous materials such as Aluminium and Plastic

High rake angles with sharp cutting edges for better and smooth cutting

Highly polished flutes for better and faster chip evacuation

Design to enable wider flute space for improved chip evacuation

High performance ultra fine carbide substrate developed specifically for mICRO machining applications



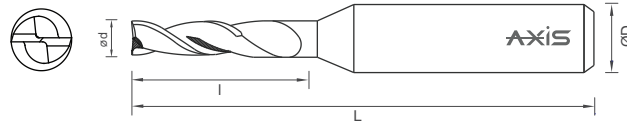
World of mICRO Tools

ød	l	L	ØD h6	Prices €
0.10	0.30			
0.20	0.60			
0.30	1.00			
0.40	1.00	38.00	3.00	
0.50	1.50			
0.60	3.00			
0.70	4.00			
0.80				
1.00	5.00	38.00	3.00	
1.00	5.00	40.00	6.00	
1.20				
1.50	5.00	38.00	3.00	
1.50	5.00	40.00	6.00	
2.00	5.00	40.00	3.00	
2.00	6.00	38.00	4.00	
		50.00	6.00	
2.00	10.00	38.00	3.00	
	11.00			
3.00	5.00	38.00	3.00	
3.00	10.00	38.00	3.00	
	11.00			
3.00	11.00		6.00	
	12.00	50.00		
	22.00		3.00	
4.00	6.00	40.00	4.00	
			6.00	
4.00	12.00	50.00	6.00	
4.00	14.00	50.00	4.00	
			6.00	
4.00	22.00	50.00	6.00	
4.00	22.00			
	25.00	60.00	4.00	
4.00	32.00	64.00	4.00	
5.00	16.00	60.00	5.00	
5.00	22.00	50.00	6.00	
6.00	12.00	50.00	6.00	
6.00	16.00			
	20.00	60.00	6.00	
6.00	22.00	50.00	6.00	
6.00	25.00	60.00	6.00	
6.00	32.00	64.00	6.00	

* Non Stockable

2 Flute Endmills

E966



Versatile geometry for side, slot and surface milling of variety of materials such as Cast Iron, Steel, Non-ferrous and Titanium

Centre cutting geometry with advanced features for extended tool life, reduced chatter and improved part quality

Broad portfolio starting from Ø0.050mm and available in 2D and 3D cutting lengths

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Next Gen coatings suitable for the application material

Proprietary pre and post coating *MMP Superfinishing* for enhanced coating productivity

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.05	0.10	38.00	3.00		
	0.15				
0.08	0.15	38.00	3.00		
	0.25				
0.10	0.20	38.00	3.00		
	0.30				
0.20	0.40	38.00	3.00		
	0.60				
0.30	0.60	38.00	3.00		
	0.90				
0.40	0.80	38.00	3.00		
	1.20				
0.50	1.00	38.00	3.00		
	1.50				
0.60	1.20	38.00	3.00		
	1.80				
0.70	1.40	38.00	3.00		
	2.10				
0.80	1.60	38.00	3.00		
	2.40				
0.90	1.80	38.00	3.00		
	2.70				
1.00	2.00	38.00	3.00		
	3.00				
1.20	2.40	38.00	3.00		
	3.60				
1.40	2.80	38.00	3.00		
	4.20				
1.50	3.00	38.00	3.00		
	4.50				
1.60	3.20	38.00	3.00		
	4.80				
1.80	3.60	38.00	3.00		
	5.40				
2.00	4.00	38.00	3.00		
	6.00				
2.50	5.00	38.00	3.00		
	7.50				
3.00	6.00	50.00	6.00		
	9.00				
4.00	8.00	50.00	6.00		
	12.00				
5.00	10.00	50.00	6.00		
	15.00				
6.00	12.00	50.00	6.00		
	18.00				

World of mICRO Tools



4 Flute Endmill

E967



- Steel Low/Unalloyed
- Steel High Alloyed
- SS
- Cast Iron
- Titanium Alloy
- Nickel Alloy



- Z 4
- 30°
- 
- AxiCoat
AlTiN
- AXIS+
- Edge Prep
- Form HA
DIN 6535

Versatile geometry for side, slot and surface milling of variety of materials such as Stainless Steel, Titanium and its Alloys

Centre cutting geometry with advanced features for extended tool life, reduced chatter and improved part quality

Broad portfolio starting from Ø0.20mm and available in 2D to 5D Cutting lengths

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Next Gen PVD coatings suitable for the application material

Proprietary pre and post coating *MMP Superfinishing* for enhanced coating productivity

ød	l	L	ØD h6	Prices €	
				Coated	Uncoated
0.20	0.40	38.00	3.00		
	0.60				
0.30	0.60	38.00	3.00		
	0.90				
0.40	0.80	38.00	3.00		
	1.20				
0.50	1.00	38.00	3.00		
	1.50				
0.60	1.20	38.00	3.00		
	1.80				
0.70	1.40	38.00	3.00		
	2.10				
0.80	1.60	38.00	3.00		
	2.40				
0.90	1.80	38.00	3.00		
	2.70				
1.00	3.00	38.00	3.00		
	5.00				
1.20	3.60	38.00	3.00		
	6.00				
1.40	4.20	38.00	3.00		
	7.00				
1.50	4.50	38.00	3.00		
	7.50				
1.60	4.80	38.00	3.00		
	8.00				
1.80	5.40	38.00	3.00		
	9.00				
2.00	6.00	38.00	3.00		
	10.00				
2.50	7.50	38.00	3.00		
	10.00				
3.00	9.00	50.00	6.00		
	12.00				
4.00	12.00	50.00	6.00		
	16.00				
5.00	10.00	50.00	6.00		
	15.00				
6.00	12.00	50.00	6.00		
	18.00				

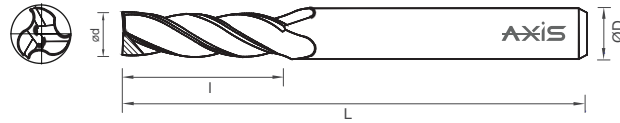
* Non Stockable

World of mICRO Tools



3 Flute Endmills

E968



Versatile geometry for side, slot and surface milling of variety of materials such as Cast Iron, Steel, Non-ferrous and Titanium

Centre cutting geometry with advanced features for extended tool life, reduced chatter and improved part quality

Broad portfolio starting from Ø1.00mm and available in 2D to 5D cutting lengths

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Next Gen coatings suitable for the application material

Proprietary pre and post coating MMP Superfinishing for enhanced coating productivity

ød h10	l	L	ØD h6	Prices €	
				Coated	Uncoated
1.00	3.00	38.00	3.00		
	5.00				
1.20	3.60	38.00	3.00		
	6.00				
1.40	4.20	38.00	3.00		
	7.00				
1.50	4.50	38.00	3.00		
	7.50				
1.60	4.80	38.00	3.00		
	8.00				
1.80	5.40	38.00	3.00		
	9.00				
2.00	6.00	38.00	3.00		
	10.00				
2.50	7.50	38.00	3.00		
	10.00				
3.00	9.00	50.00	6.00		
	12.00				
4.00	12.00	50.00	6.00		
	16.00				
5.00	10.00	50.00	6.00		
	15.00				
6.00	12.00	50.00	6.00		
	18.00				

* Non Stockable

World of mICRO Tools



High Precision Ballnose Endmills



Precise Ball Radii
and
Line form

Profile and
dimensional accuracy



Super finished flutes

Efficient chip evacuation
and higher MMR

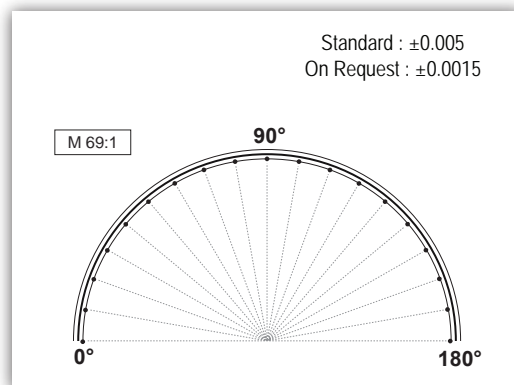


Contemporary Coatings

Enhanced Coating productivity

Advanced tool features

- Reduce chatter
- increase part quality



**2 Flute
Ballnose Endmills**

B970
B870

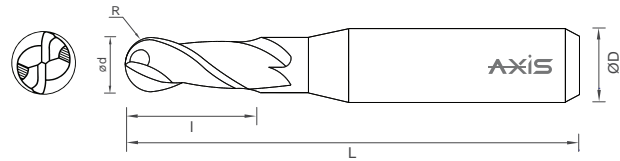


Ball Radius Tolerance

B970 : ± 0.005 (R 0.10 - R 1.50)
± 0.010 (R 2.00 - R 3.00)

B870 : ± 0.003 (R 0.10 - R 1.50)
± 0.005 (R 2.00 - R 3.00)

- STEEL
- SS
- CAST IRON
- Non-Ferrous
- Titanium Alloy
- Nickel Alloy



-
-
-
- Polished Flute
- FORM HA
DIN 6535

B870

Geometry suitable for profile milling of variety of materials like Cast Iron, Steel, Stainless Steel, Non-ferrous, Titanium and Nickel Alloys

Precisely controlled tool features for high precision machining requirements

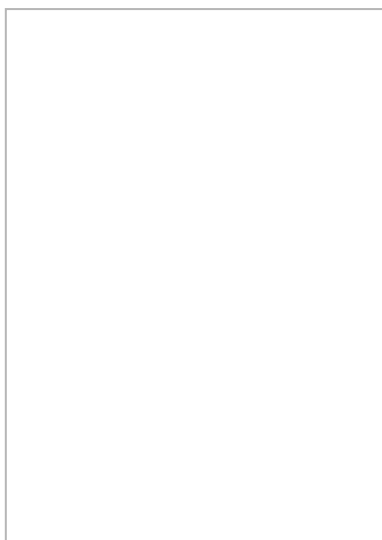
Centre cutting geometry with advanced features for extended tool life, reduced chatter and improved part quality

Precisely controlled ball radii and line form

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Next Gen coatings suitable for the application material


Proprietary pre and post coating *MMP Superfinishing* for enhanced coating productivity



R	ød h10	l	L	ØD h6	Prices €	
					Coated	Uncoated
0.10	0.20	0.20 0.40	38.00	3.00		
0.15	0.30	0.30 0.60	38.00	3.00		
0.20	0.40	0.40 0.80	38.00	3.00		
0.25	0.50	0.50 1.00	38.00	3.00		
0.30	0.60	0.60 1.20	38.00	3.00		
0.35	0.70	0.70 1.40	38.00	3.00		
0.40	0.80	0.80 1.60	38.00	3.00		
0.45	0.90	0.90 1.80	38.00	3.00		
0.50	1.00	1.00 2.00	38.00	3.00		
0.60	1.20	2.40 3.60	38.00	3.00		
0.70	1.40	2.80 4.20	38.00	3.00		
0.75	1.50	3.00 4.50	38.00	3.00		
0.80	1.60	3.20 4.80	38.00	3.00		
0.90	1.80	3.60 5.40	38.00	3.00		
1.00	2.00	4.00 6.00	38.00	3.00		
1.25	2.50	5.00 7.50	38.00	3.00		
1.50	3.00	6.00 9.00	50.00	6.00		
2.00	4.00	8.00 12.00	50.00	6.00		
2.50	5.00	10.00 15.00	50.00	6.00		
3.00	6.00	12.00 18.00	50.00	6.00		

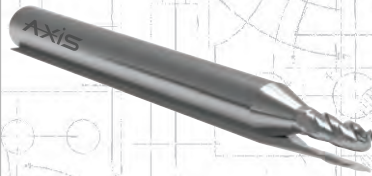
* Non Stockable

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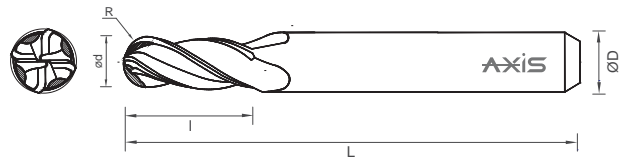

4 Flute Ballnose Endmills

B972



Ball Radius Tolerance

± 0.005 (R 0.10 - R 1.50)
± 0.010 (R 2.00 - R 6.00)



Geometry suitable for profile milling of variety of materials like Non-ferrous, Cast Iron, Steel and Stainless Steel

Centre cutting geometry with advanced features for extended tool life, reduced chatter and improved part quality

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Broad portfolio starting from Ø0.10mm and available in 2D to 3D cutting lengths

Next Gen coatings suitable for the application material

Proprietary pre and post coating *MMP Superfinishing* for enhanced coating productivity

R	ød h10	l	L	ØD h6	Prices €	
					Coated	Uncoated
0.10	0.20	0.20	38.00	3.00		
		0.60				
0.15	0.30	0.30	38.00	3.00		
		0.90				
0.20	0.40	0.80	38.00	3.00		
		1.20				
0.25	0.50	1.00	38.00	3.00		
		1.50				
0.30	0.60	1.20	38.00	3.00		
		1.80				
0.35	0.70	1.40	38.00	3.00		
		2.10				
0.40	0.80	1.60	38.00	3.00		
		2.40				
0.45	0.90	1.80	38.00	3.00		
		2.70				
0.50	1.00	3.00	38.00	3.00		
		5.00				
0.60	1.20	3.60	38.00	3.00		
		6.00				
0.70	1.40	4.20	38.00	3.00		
		7.00				
0.75	1.50	4.50	38.00	3.00		
		7.50				
0.80	1.60	4.80	38.00	3.00		
		8.00				
0.90	1.80	5.40	38.00	3.00		
		9.00				
1.00	2.00	6.00	38.00	3.00		
		10.00				
1.25	2.50	7.50	38.00	3.00		
		10.00				
1.50	3.00	9.00	50.00	6.00		
		12.00				
2.00	4.00	12.00	50.00	6.00		
		16.00				
2.50	5.00	10.00	50.00	6.00		
		15.00				
3.00	6.00	12.00	50.00	6.00		
		18.00				

* Non Stockable

World of mICRO Tools



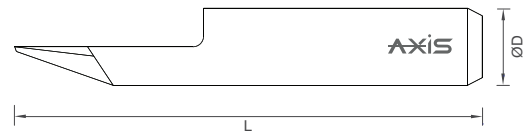
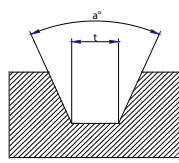
Engravers

G847



On Request

ultra mICRO tip dia $\geq 0.020\text{mm}$
Customised tip radius



Precisely controlled tip angles and tip diameters for high precision machining requirements

Sharp cutting edges to ensure burr free engraving

High performance ultra fine carbide substrate developed specifically for mICRO tooling applications

Next Gen coatings suitable for the application material

Ød	L	ØD h6	Angle a				Prices €	
			30°	45°	60°	90°	Coated	Uncoated
0.05	38.00	2.00	30°	45°	60°	90°		
0.10								
0.20								
0.05	38.00	3.00	30°	45°	60°	90°		
0.10								
0.20								
0.05	38.00	3.175	30°	45°	60°	90°		
0.10								
0.20								
0.05	50.00	4.00	30°	45°	60°	90°		
0.10								
0.20								
0.05	50.00	5.00	30°	45°	60°	90°		
0.10								
0.20								
0.05	50.00	6.00	30°	45°	60°	90°		
0.10								
0.20								
0.05	50.00	8.00	30°	45°	60°	90°		
0.10								
0.20								

* Non Stockable

Chamfering Cutter

C676



- Steel
- SS
- Cast Iron
- Non-Ferrous
- Plastics
- Titanium Alloy
- Nickel Alloy



- AxiCoat
AlTiN
- FORM HA
DIN 6535

Precisely crafted tool for chamfering, deburring and counter-sinking application on variety of material like Cast Iron, Alloy Steels, Stainless Steels, Aluminium and Super Alloys

Made from ultra fine grade carbide with a balanced mix of high toughness and excellent hardness

MMP Superfinishing to ensure better coating adhesion, better chip evacuation, reduced chip friction and better chamfered surface

ød	Angle a	L	Flutes Z	Prices €	
				Coated	Uncoated
3.00	60°	38.00	4		
	90°				
	120°				
3.175	60°	38.00	4		
	90°				
	120°				
4.00	60°	50.00	4		
	90°				
	120°				
6.00	60°	50.00	4		
	90°				
	120°				
6.35	60°	63.00	4		
	90°				
	120°				
8.00	60°	63.00	6		
	90°				
	120°				
10.00	60°	72.00	6		
	90°				
	120°				
12.00	60°	83.00	6		
	90°				
	120°				

Other diameter and angles on request

Application

Application



Each product page contains our machining guide providing you with information on the materials for which our respective product is suitable. In case of any questions refer to our website or contact our application experts.



Each product page contains our machining guide providing you with information on the materials for which our respective product is suitable. In case of any questions refer to our website or contact our application experts.



● Optimal

◐ Suitable

Icons

Icons

No of Flutes
No of Flutes



Coating
Coating



Point Angle
Point Angle



Polished Flute
Polished Flute



Helix Angle
Helix Angle



AXIS+ / Edge Prep
AXIS+ / Edge Prep



Machining Direction
Machining Direction



DIN Norm
DIN Norm



Web Thinning
Web Thinning



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