



NEW

超精槽加工

新外圓及內孔槽型

ULTRA-FINE MACHINING OF GROOVES

New geometry for external and internal machining



不同之处： 更多可能

THE DIFFERENCE: MORE POSSIBILITIES

- **精密磨削槽型,可达高表面质量**
High surface quality through precision ground geometry
- **多系列的内孔及外圆槽型**
Multi-System geometry for internal and external machining
- **通用适用于不同宽度和材料的槽**
Universally suitable for different groove widths and materials

车削精加工(外圆)

Fine Turning (external)



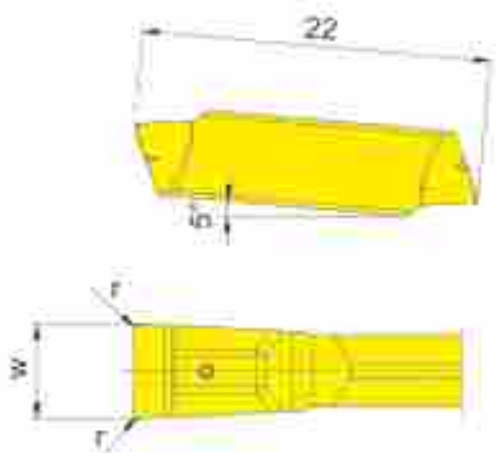
刀片
Insert

S224

带卷屑器
with chip forming



槽宽	Width of groove	2-3 mm
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配合刀杆
for Toolholder

型号 H224
Type B224
BK224

产品型号 Part number	w	r	尺寸规格 Size	H20
S224.FB20.02	2	0.2	01	▲
S224.FB30.02	3	0.2	03	▲
				P ●
				M ○
				K -
				N -
				S -
				H -

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

● 推荐 / recommended

○ 次推荐 / alternative recommendation

- 不合适 / not suitable

非涂层 / uncoated grades

涂层 / coated grades

钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

此可转位刀片可用于右手和左手型刀杆

Indexable inserts can be used in right and left hand toolholders.

硬质合金牌号
Carbide grades

车削精加工(外圆)

Fine Turning (external)



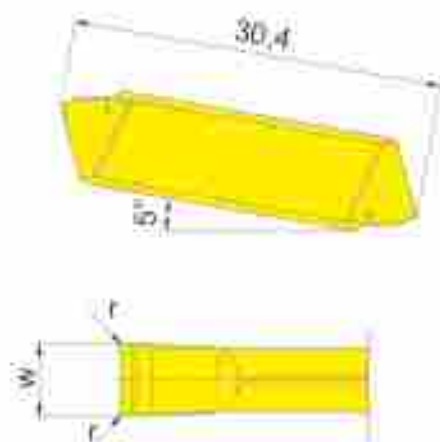
刀片
Insert

229

带卷屑器
with chip forming



槽宽	Width of groove	3-4 mm
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配合刀杆
for Tollholder

- 型号 210
Type 213
214
218
219
225
226
257
R/LA210
R/LA226

产品型号 Part number	w	r	尺寸规格 Size	H20
229.FB30.02	3	0.2	03	▲
229.FB40.02	4	0.2	04	▲

- ▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request
- 推荐 / recommended
- 次推荐 / alternative recommendation
- 不合适 / not suitable
- 非涂层 / uncoated grades
- 涂层 / coated grades
- 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm
Dimensions in mm

此可转位刀片可用于右手和左手型刀杆
Indexable inserts can be used in right and left hand toolholders.

P	•
M	○
K	-
N	-
S	-
H	-

硬质合金牌号
Carbide grades

车削精加工(外圆)

Fine Turning (external)



刀片
Insert

S34T

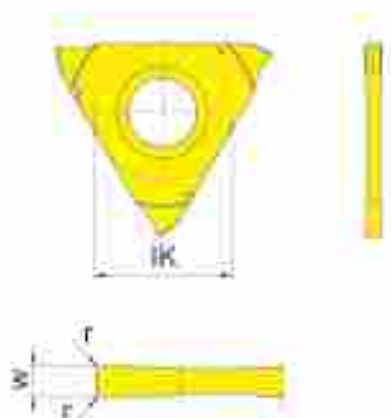
带卷屑器
with chip forming



槽宽	Width of groove	1-1.5 mm
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配合刀杆
for Toolholder

型号 H34T...00.IK
Type



R=右手型-如图
R = right hand version shown

L=左手型
L = left hand version

产品型号 Part number	w	r	尺寸规格 Size	EG35
R/LS34T.FB10.01	1.0	0.1	01	▲/▲
R/LS34T.FB15.01	1.5	0.1	01	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

● 推荐 / recommended

○ 次推荐 / alternative recommendation

- 不合适 / not suitable

■ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

注明R或L型

State R or L version

右手刀片配右手刀杆,左手刀片配左手刀杆.

Use right hand inserts in right hand toolholders and left hand inserts in left hand toolholders.

按需提供更多尺寸

Further sizes upon request

EG35	
P	●
M	●
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

车削精加工(外圆)

Fine Turning (external)



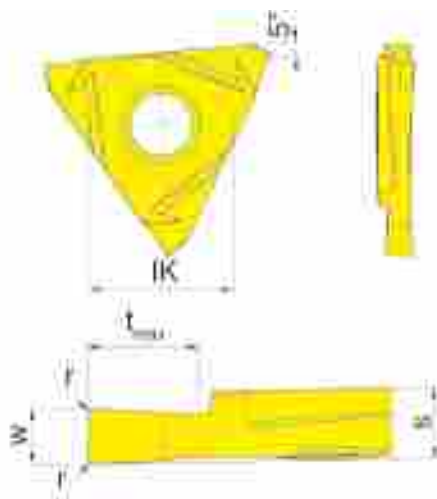
刀片
Insert

315

带卷屑器
with chip forming



槽宽	Width of groove	2.5-3 mm
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配合刀杆
for Tollholder

型号 356
Type

R=右手型-如图
R = right hand version shown

L=左手型
L = left hand version

产品型号 Part number	w	r	t _{max}	s	尺寸规格 Size	H20
R/L315.FB25.02	2.5	0.2	5	3.2	03	▲/▲
R/L315.FB30.02	3.0	0.2	5	3.2	03	▲/▲

- ▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request
- 推荐 / recommended
- 次推荐 / alternative recommendation
- 不合适 / not suitable
- 非涂层 / uncoated grades
- 涂层 / coated grades
- 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm
Dimensions in mm

注明R或L型

State R or L version

右手刀片配右手刀杆,左手刀片配左手刀杆.

Use right hand inserts in right hand toolholders and left hand inserts in left hand toolholders.

按需提供更多尺寸

Further sizes upon request

P	•
M	○
K	-
N	-
S	-
H	-

硬质合金牌号
Carbide grades

车削精加工(外圆)

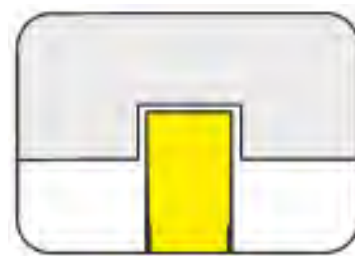
Fine Turning (external)



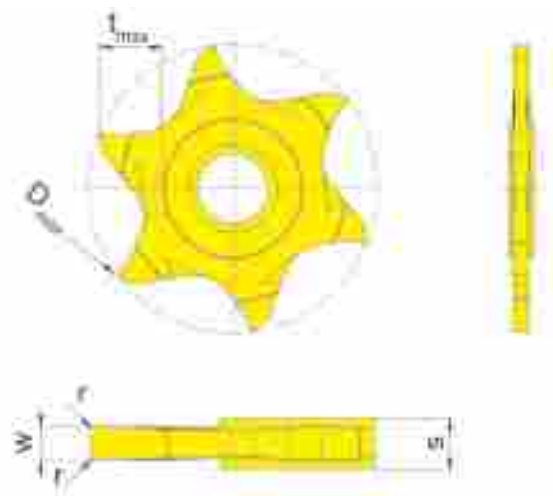
刀片
Insert

S64T

带卷屑器
with chip forming



槽宽	Width of groove	1-1.5 mm
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配合刀杆
for Tollholder

型号 H64T
Type

D _{max}	f _{max}
40	5.5
45	5.0
50	4.5
55	4.0
60	3.5
65	3.5
70	3.5
80	3.0
100	2.5

产品型号 Part number	w	r	s	尺寸规格 Size	EG35
S64T.FB10.01	1.0	0.1	2.2	01	▲
S64T.FB15.01	1.5	0.1	2.2	01	▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

● 推荐 / recommended

○ 次推荐 / alternative recommendation

- 不合适 / not suitable

□ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

此可转位刀片可用于右手和左手型刀杆

Indexable inserts can be used in right and left hand toolholders.

P	●
M	●
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

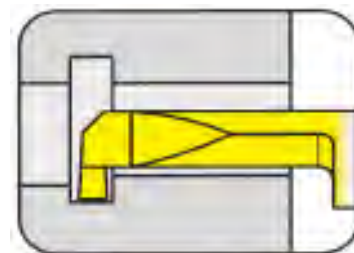
车削精加工(内孔)

Fine Turning (internal)

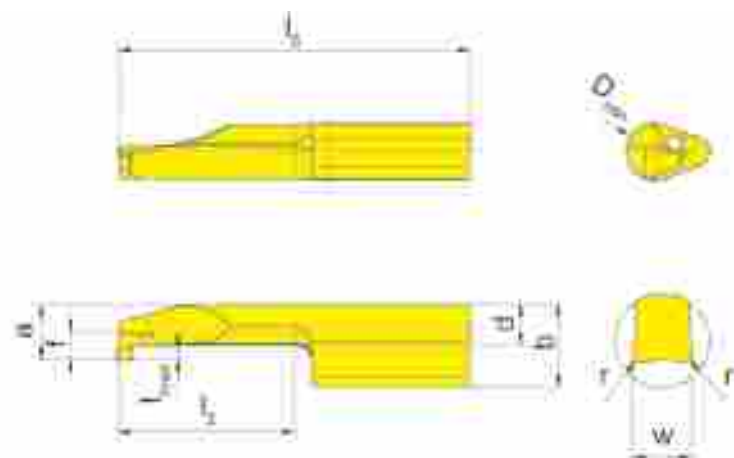


刀片
Insert

105



孔径Ø 自	Bore Ø from	5 mm
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配合刀杆
for Tollholder

- 型号 H105
Type HC105
B/BU105
VDI
B105C
B105TS
IR105
962
AIH
963
N

R=右手型-如图
R = right hand version shown

L=左手型
L = left hand version

产品型号 Part number	w	r	f	a	d	b	l_2	l_5	t_{max}	D_{min}	EG35
R/L105.FB15.1.01	1.5	0.1	2.3	4.7	3.5	7	10	25	1	5	▲/▲
R/L105.FB15.2.01	1.5	0.1	2.3	4.7	3.5	7	15	30	1	5	▲/▲

- ▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request
- 推荐 / recommended
- 次推荐 / alternative recommendation
- 不合适 / not suitable
- 非涂层 / uncoated grades
- 涂层 / coated grades
- 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm
Dimensions in mm

注明R或L型
State R or L version
按需提供更多尺寸
Further sizes upon request

P	●
M	●
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

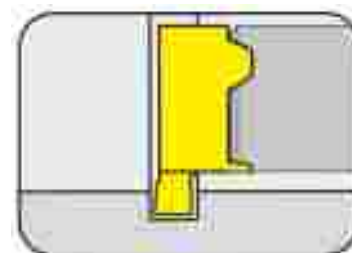
车削精加工(内孔)

Fine Turning (internal)



刀片
Insert

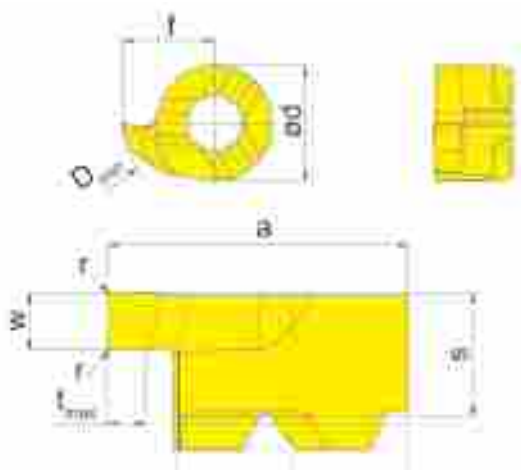
108/111/114



孔径Ø 自	Bore Ø from	8-14 mm
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配合刀杆
for Tollholder

型号 B108
Type B111
B114



R=右手型-如图
R = right hand version shown

L=左手型
L = left hand version

产品型号 Part number	w	s	f	a	r	d	t _{max}	D _{min}	EG35
R/L108.FB10.01	1.0	3.20	4.8	7.8	0.1	6	1.0	8	▲/▲
R/L108.FB15.01	1.5	3.20	4.8	7.8	0.1	6	1.0	8	▲/▲
R/L111.FB10.01	1.0	3.95	6.7	10.7	0.1	8	2.3	11	▲/▲
R/L111.FB15.01	1.5	3.95	6.7	10.7	0.1	8	2.3	11	▲/▲
R/L114.FB10.01	1.0	5.30	9.0	13.5	0.1	9	4.0	14	▲/▲
R/L114.FB15.01	1.5	5.30	9.0	13.5	0.1	9	4.0	14	▲/▲

▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request

● 推荐 / recommended

○ 次推荐 / alternative recommendation

- 不合适 / not suitable

■ 非涂层 / uncoated grades

■ 涂层 / coated grades

■ 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm

Dimensions in mm

注明R或L型

State R or L version

按需提供更多尺寸

Further sizes upon request

P	●
M	●
K	○
N	-
S	-
H	-

硬质合金牌号
Carbide grades

Feindrehen (innen)

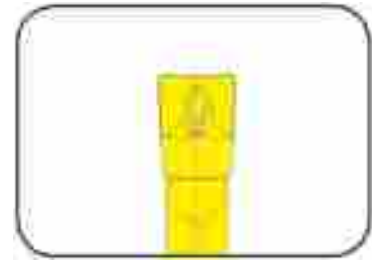
Fine Turning (external)



刀片
Insert

S216

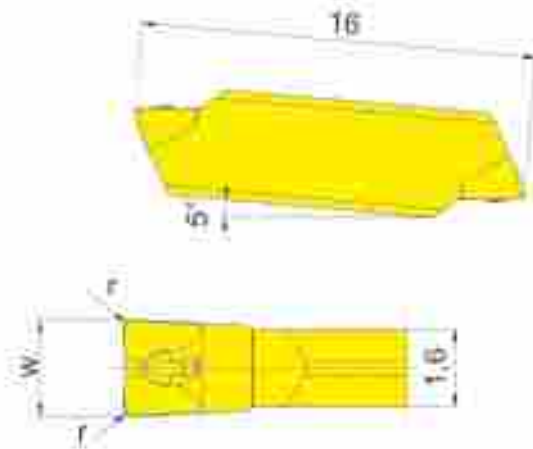
带卷屑器
with chip forming



槽宽	Width of groove	2 mm
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配合刀杆
for Tollholder

型号 B216
Type



产品型号 Part number	w	r	尺寸规格 Size	EG35
S216.FB20.02	2	0.2	20	▲
				P ●
				M ●
				K ○
				N -
				S -
				H -

- ▲ 库存 / on stock Δ 4周 / 4 weeks x 根据要求 / upon request
- 推荐 / recommended
- 次推荐 / alternative recommendation
- 不合适 / not suitable
- 非涂层 / uncoated grades
- 涂层 / coated grades
- 钎焊/金属陶瓷 / brazed/Cermet

尺寸单位 : mm
Dimensions in mm

此可转位刀片可用于右手和左手型刀杆
Indexable inserts can be used in right and left hand toolholders.

硬质合金牌号
Carbide grades

切削材料组 P, M, N, S

Cutting Data Material P, M, N and S



材料 Material		硬度 Hardness Brinell (HB)	Rm (N/mm ²)	切削速度 v _c (m/min) Cutting speed v _c (m/min)			切深 Cutting depth	进给率 Feed rate	
				EG35	H20	IG35			
P	碳钢 Steel	0.2% C	140	380 - 420	180 - 200	300 - 450	---	0.03 - 0.05	0.02 - 0.04
		0.4% C	180	600 - 800	180 - 200	300 - 450	---	0.03 - 0.05	0.02 - 0.04
		0.6% C	200	800 - 950	170 - 190	300 - 400	---	0.03 - 0.05	0.02 - 0.04
	硬化钢 Case-hardened steel	非合金 unalloyed	90 - 130	500 - 780	180 - 220	300 - 450	---	0.03 - 0.06	0.02 - 0.04
		合金 alloyed	140 - 180	700 - 850	180 - 220	350 - 450	---	0.03 - 0.06	0.02 - 0.04
		高合金 high-alloyed	180 - 220	810 - 1250	180 - 200	300 - 400	---	0.03 - 0.06	0.02 - 0.04
	热处理钢 Heat treatable steel	非合金 unalloyed	150 - 230	470 - 750	180 - 220	200 - 250	---	0.03 - 0.05	0.015 - 0.035
		合金 alloyed	200 - 250	700 - 850	180 - 220	200 - 250	---	0.03 - 0.05	0.015 - 0.035
		高合金 high-alloyed	230 - 270	820 - 1250	180 - 200	200 - 250	---	0.03 - 0.05	0.015 - 0.035
M	不锈钢 Stainless steel	马氏体 martensitic	200	650 - 1000	150 - 200	180 - 220	---	0.03 - 0.05	0.015 - 0.035
		铁素体 ferritic	180	400 - 660	180 - 220	200 - 250	---	0.03 - 0.05	0.015 - 0.035
		奥氏体 austenitic	190	500 - 750	180 - 250	200 - 250	---	0.03 - 0.05	0.015 - 0.035
N	铝合金 Al-alloys	无热处理 not heat treatable	30 - 80		300 - 350	350 - 500	---	0.05 - 0.07	0.02 - 0.05
		热处理 heat treatable	80 - 120		300 - 350	350 - 450	---	0.05 - 0.07	0.02 - 0.05
	铜合金 Copper-alloys	无热处理 not heat treatable	90		300 - 350	350 - 500	---	0.05 - 0.07	0.02 - 0.05
		热处理 heat treatable	100		300 - 350	350 - 450	---	0.05 - 0.07	0.02 - 0.05
S	高温合金(铁基) Heat resistant (Fe)	退火 annealed	---	---	---	---	---	---	---
	高温合金(镍,钴基) Heat resistant (Ni, Co)	退火 annealed	---	---	---	---	---	---	---
	钛合金 Titanium alloys	---	---	---	---	---	---	---	---

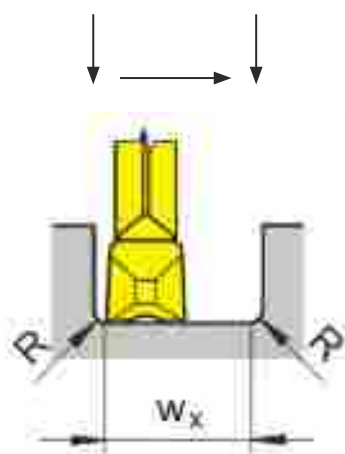
应用示例

Application Example



切削参数 Cutting Data	机床 / Machine Traub TNA 400	
	R108.FB10.01 EG35	S34T.FB15.01 EG35
Vc	100	200
f	0.015	0.03
ap	0.05	0.03

槽底部 Groove Bottom	材料 Material	16MnCr5	16MnCr5
	Rz / Ra	3.65 / 0.618	1.41 / 0.221
	材料 Material	1.4305	1.4305
	Rz / Ra	1.57 / 0.249	1.16 / 0.198
	材料 Material	ETG 88	ETG88
	Rz / Ra	2.55 / 0.359	1.64 / 0.242
	材料 Material	42CrMo4	42CrMo4
	Rz / Ra	1.77 / 0.317	1.84 / 0.309



$$w_x = \text{槽宽} - R_{(\text{right})} - R_{(\text{left})}$$

$$w_x = \text{Width of groove} - R_{(\text{right})} - R_{(\text{left})}$$

