

ph HORN ph



NEW

## 新硬质合金材质 IG6\_

在普通钢和不锈钢的加工中具有更多的性能

## NEW CARBIDE GRADE IG6\_

More performance in the machining of ordinary and stainless steels



HORN

# 不同之处： 更多可能

## THE DIFFERENCE: MORE POSSIBILITIES

- **提高生产效率得益于耐高温材质**  
Increased productivity thanks to heat resistant grade
- **高效加工不锈钢材料**  
Efficient machining of stainless materials
- **内部涂层, 交货时间快**  
Fast delivery times due to in-house coating

# 槽型和进给率

## Geometries and Feed Rates



槽型 Geometry	材料 Material	进给率 f [mm/U] Feed rate f [mm/rev]	应用 Machining						
.10	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.05-0.15</p>	
P	M	K							
N	S	H							
.3	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.15-0.20 ↔ 0.03-0.40</p>	
P	M	K							
N	S	H							
.5	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.10-0.45 ↔ 0.15-0.60</p>	
P	M	K							
N	S	H							
.D	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.03-0.15 ↔ 0.05-0.20</p>	
P	M	K							
N	S	H							
.EN	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.10-0.40</p>	
P	M	K							
N	S	H							

# 槽型和进给率

## Geometries and Feed Rates



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	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.20-0.30</p> <p>↔</p>	
P	M	K							
N	S	H							
	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.05-0.25</p> <p>↔ 0.05-0.40</p>	
P	M	K							
N	S	H							
	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.05-0.25</p> <p>↔ 0.05-0.40</p>	
P	M	K							
N	S	H							
	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.10-0.22</p> <p>↔ 0.05-0.22</p>	
P	M	K							
N	S	H							
	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.10-0.22</p> <p>↔ 0.05-0.20</p>	
P	M	K							
N	S	H							

# 槽型和进给率

## Geometries and Feed Rates



槽型 Geometry	材料 Material	进给率 f [mm/U] Feed rate f [mm/rev]	应用 Machining						
<b>.20</b>	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.07-0.25</p>	
P	M	K							
N	S	H							
<b>.FB</b>	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.02-0.10 ↔ 0.0015-0.07</p>	
P	M	K							
N	S	H							
<b>.N</b>	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.05-0.25 ↔ 0.05-0.25</p>	
P	M	K							
N	S	H							
<b>.A</b>	<table border="1"> <tr> <td>P</td> <td>M</td> <td>K</td> </tr> <tr> <td>N</td> <td>S</td> <td>H</td> </tr> </table>	P	M	K	N	S	H	<p>↓ 0.05-0.30 ↔ 0.10-0.30</p>	
P	M	K							
N	S	H							

# 切槽和侧车削

## Grooving and Side Turning

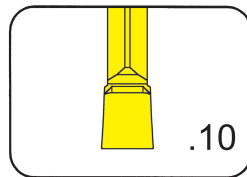


### 可转位刀片

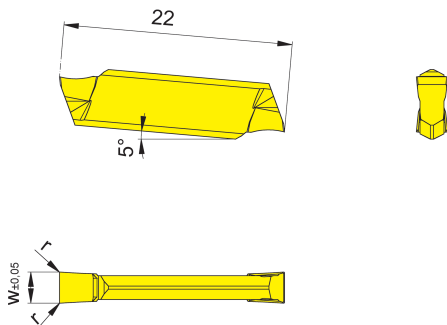
#### Indexable insert

## 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	IG66
<b>S224.0200.10</b>	2.0	0.05	02	Δ
<b>S224.0250.10</b>	2.5	0.10	02	Δ
<b>S224.0300.10</b>	3.0	0.10	03	Δ

▲ 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

# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

## S224

带卷屑器  
with chip former

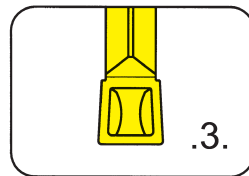
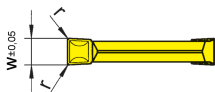
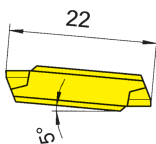
槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
3-6 mm

精密烧结

precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S224.0300.32	3	0.2	03	▲
S224.0300.34	3	0.4	03	▲
S224.0400.32	4	0.2	04	▲
S224.0400.34	4	0.4	04	▲
S224.0500.34	5	0.4	05	▲
S224.0500.38	5	0.8	05	▲
S224.0600.34	6	0.4	06	▲
S224.0600.38	6	0.8	06	▲

▲ 库存 / on stock  $\Delta$  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



# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

## S224

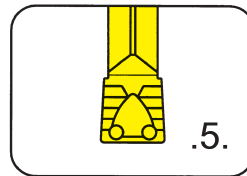
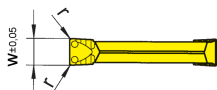
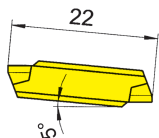
带卷屑器  
with chip forming

槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
2-6 mm

精密烧结  
precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
±0.06 mm  
Indexability length ± 0,06 mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S224.0200.52	2.0	0.2	01	▲
S224.0250.52	2.5	0.2	02	▲
S224.0300.52	3.0	0.2	03	▲
S224.0300.54	3.0	0.4	03	▲
S224.0400.52	4.0	0.2	04	▲
S224.0400.54	4.0	0.4	04	▲
S224.0500.54	5.0	0.4	05	▲
S224.0500.58	5.0	0.8	05	▲
S224.0600.54	6.0	0.4	06	▲
S224.0600.58	6.0	0.8	06	▲

▲ 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	o
H	-

硬质合金牌号  
Carbide grades

# 切槽和侧车削

## Grooving and Side Turning

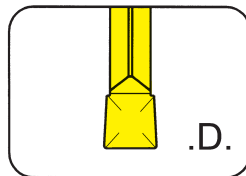


### 可转位刀片

#### Indexable insert

## S224

带卷屑器  
with chip forming

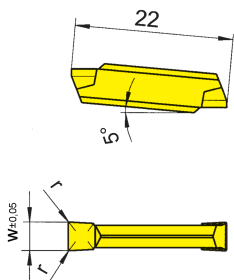


槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
2-4 mm

D2精密烧结 / \*D2.G精密磨削  
D2 precision sintered / \*D2.G precision ground



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

\*刀片长度重复定位精度  
 $\pm 0.06$  mm  
\*Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S224.0200.D2	2.0	0.2	01	▲
S224.0200.D2.G	2.0	0.2	01	▲
S224.0250.D2	2.5	0.2	02	▲
S224.0250.D2.G	2.5	0.2	02	▲
S224.0300.D2	3.0	0.2	03	▲
S224.0300.D2.G	3.0	0.2	03	▲
S224.0400.D2	4.0	0.2	04	▲
S224.0400.D2.G	4.0	0.2	04	▲

▲ 库存 / on stock  $\Delta$  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

# 切槽和切断

## Grooving and Parting Off



### 可转位刀片

#### Indexable insert

## S224

带卷屑器  
with chip former

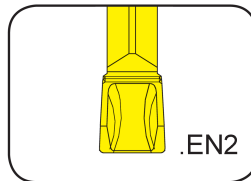
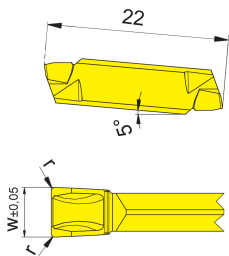
槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
3 mm

精密烧结

precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
<b>S224.0300.EN2</b>	3	0.2	03	▲
▲ 库存 / on stock				P ●
● 推荐 / recommended				M ○
○ 次推荐 / alternative recommendation				K ◐
- 不合适 / not suitable				N -
■ 非涂层 / uncoated grades				S -
■ 涂层 / coated grades				H -
■ 钎焊/金属陶瓷 / brazed/Cermet				

尺寸单位：mm

Dimensions in mm

按需提供更多尺寸

Further sizes upon request

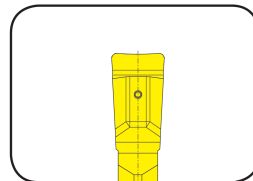
此可转位刀片可用于右手和左手型刀杆

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

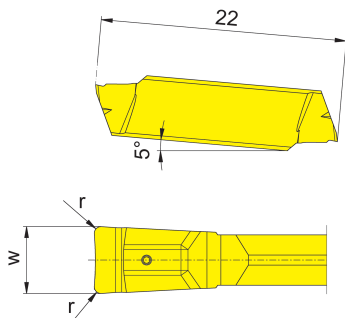
硬质合金牌号  
Carbide grades

可转位刀片  
Indexable insert

# S224



槽宽	Width of groove	2-3 mm
----	-----------------	--------



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	IG6T
<b>S224.FB20.02</b>	2	0.2	01	Δ
<b>S224.FB30.02</b>	3	0.2	03	Δ

▲ 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

# 切槽和侧车削

## Grooving and Side Turning

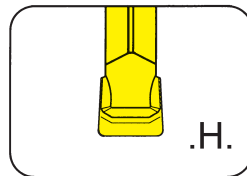


### 可转位刀片

#### Indexable insert

## S224

带断屑槽  
with chip breaker

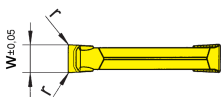
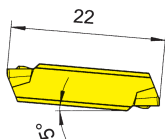


槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
3-5 mm

精密烧结  
precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S224.0300.H4	3	0.4	03	Δ
S224.0400.H4	4	0.4	04	Δ
S224.0500.H6	5	0.6	05	Δ
S224.0500.H8	5	0.8	05	Δ

▲ 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	o
H	-

硬质合金牌号  
Carbide grades

# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

## S224

带卷屑器  
with chip forming

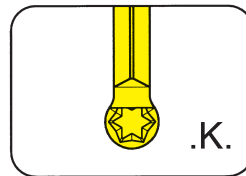
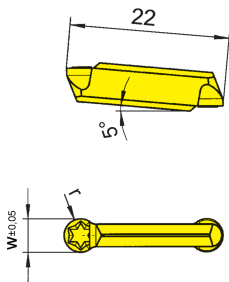
槽深可达  
槽宽  
圆头

Depth of groove up to  
Width of groove  
Full radius

18 mm  
2-6 mm  
1-3 mm

精密烧结

precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	TC66
S224.0010.K2	2	1.0	01	▲
S224.0015.K3	3	1.5	03	▲
S224.0020.K4	4	2.0	04	▲
S224.0025.K5	5	2.5	05	▲
S224.0030.K6	6	3.0	06	▲

▲ 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	o
H	-

硬质合金牌号  
Carbide grades

# 切槽和侧车削

## Grooving and Side Turning

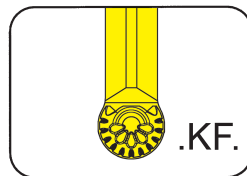


### 可转位刀片

#### Indexable insert

## S224

带卷屑器  
with chip forming

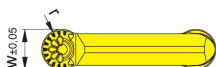
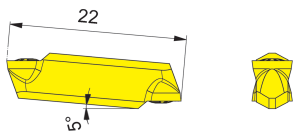


槽深可达  
圆头

Depth of groove up to  
Full radius

18 mm  
1.5-3 mm

精密烧结  
precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	TC66
S224.0015.KF3	3	1.5	03	▲
S224.0020.KF4	4	2.0	04	▲
S224.0025.KF5	5	2.5	05	▲
S224.0030.KF6	6	3.0	06	▲

▲ 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	o
H	-

硬质合金牌号  
Carbide grades

# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

## S224

带卷屑器  
with chip forming

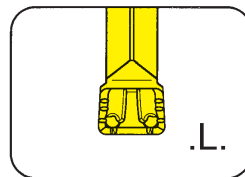
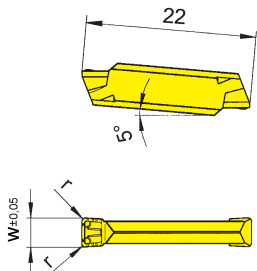
槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
3-6 mm

精密烧结

precision sintered



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S224.0300.L4	3	0.4	03	▲
S224.0400.L4	4	0.4	04	▲
S224.0500.L4	5	0.4	05	▲
S224.0500.L6	5	0.6	05	▲
S224.0600.L4	6	0.4	06	▲
S224.0600.L6	6	0.6	06	▲

▲ 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



# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

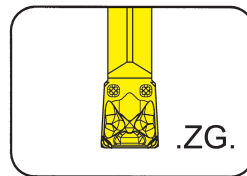
# S224

带卷屑器  
with chip forming

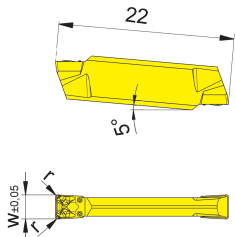
槽深可达  
槽宽

Depth of groove up to  
Width of groove

18 mm  
3-4 mm



ZG精密磨削  
ZG precision ground



配合刀杆  
for Toolholder

型号 H224  
Type B224  
BK224

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG6T
<b>S224.0300.ZG2</b>	3	0.2	03	▲
<b>S224.0400.ZG4</b>	4	0.4	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

# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

## S229

带卷屑器  
with chip former

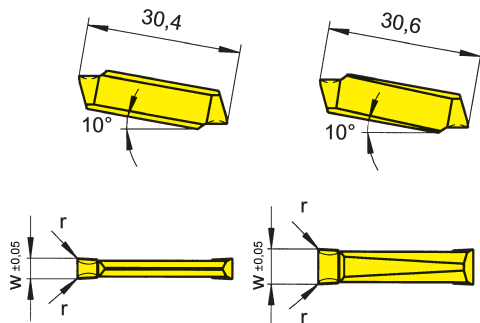
槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
3-10 mm

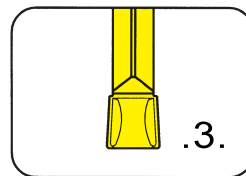
精密烧结

precision sintered



宽度 3 - 5 mm  
Width 3 - 5 mm

宽度 6 - 10 mm  
Width 6 - 10 mm



配合刀杆

for Toolholder

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

刀片长度重复定位精度  
±0.06 mm  
Indexability length ± 0,06 mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0300.32	3	0.2	03	▲
S229.0300.34	3	0.4	03	▲
S229.0400.32	4	0.2	03/04	▲
S229.0400.34	4	0.4	03/04	▲
S229.0500.34	5	0.4	04	▲
S229.0500.36	5	0.6	04	▲
S229.0600.34	6	0.4	05	▲
S229.0600.38	6	0.8	05	▲
S229.0700.36	7	0.6	07	▲
S229.0800.36	8	0.6	07/08	▲
S229.0800.38	8	0.8	07/08	▲
S229.0800.3K	8	1.2	07/08	▲
S229.1000.36	10	0.6	09	▲

▲ 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	o
H	-

硬质合金牌号  
Carbide grades

# 切槽和侧车削

## Grooving and Side Turning

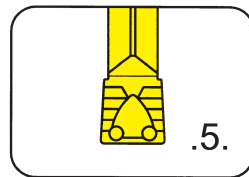


### 可转位刀片

#### Indexable insert

## S229

带卷屑器  
with chip forming



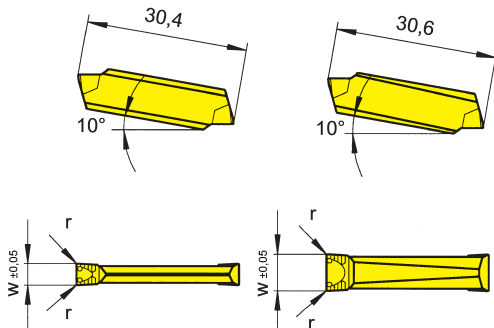
槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
3-8 mm

精密烧结

precision sintered



宽度 3 - 5 mm  
Width 3 - 5 mm

宽度 6 - 8 mm  
Width 6 - 8 mm

配合刀杆  
for Toolholder

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

刀片长度重复定位精度  
±0.06 mm  
Indexability length ± 0,06 mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0300.52	3	0.2	03	▲
S229.0300.54	3	0.4	03	▲
S229.0400.52	4	0.2	03/04	▲
S229.0400.54	4	0.4	03/04	▲
S229.0500.54	5	0.4	04	▲
S229.0500.56	5	0.6	06	▲
S229.0600.54	6	0.4	05	▲
S229.0600.56	6	0.6	05	▲
S229.0600.58	6	0.8	05	▲
S229.0800.56	8	0.6	07/08	△
S229.0800.58	8	0.8	07/08	△

▲ 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

# 切槽和侧车削

## Grooving and Side Turning

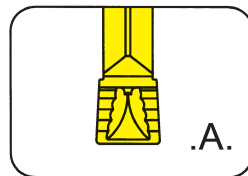


### 可转位刀片

#### Indexable insert

## S229

带卷屑器  
with chip forming



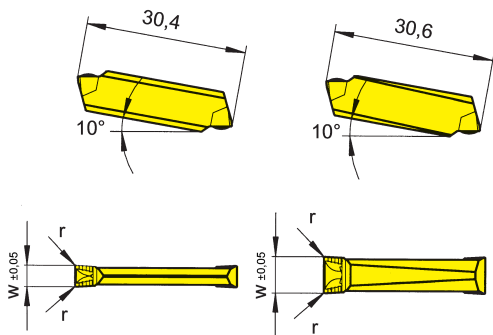
槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
5-10 mm

精密烧结

precision sintered



宽度 5 mm  
Width 5 mm

宽度 8 - 10 mm  
Width 8 - 10 mm

配合刀杆  
for Toolholder

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

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0500.A4	5	0.4	04	▲
S229.0500.A6	5	0.6	04	▲
S229.0800.A6	8	0.6	07/08	▲
S229.0800.A8	8	0.8	07/08	▲
S229.1000.A6	10	0.6	09	▲

▲ 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

# 切槽和侧车削

## Grooving and Side Turning

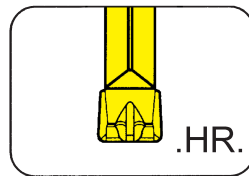


### 可转位刀片

#### Indexable insert

## S229

带卷屑器  
with chip forming



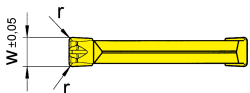
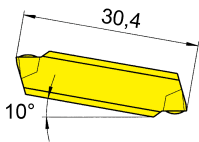
槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
3-8 mm

精密烧结

precision sintered



配合刀杆  
for Toolholder

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

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0300.HR4	3	0.4	03	▲
S229.0400.HR4	4	0.4	03/04	▲
S229.0500.HR4	5	0.4	03	▲
S229.0500.HR6	5	0.6	04	▲
S229.0500.HR8	5	0.8	04	▲
S229.0600.HR4	6	0.4	05	▲
S229.0600.HR6	6	0.6	05	▲
S229.0600.HR8	6	0.8	05	▲
S229.0800.HR8.PG	8	0.8	08	▲

▲ 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

# 切槽和侧车削

## Grooving and Side Turning



### 可转位刀片

#### Indexable insert

## S229

带卷屑器  
with chip forming

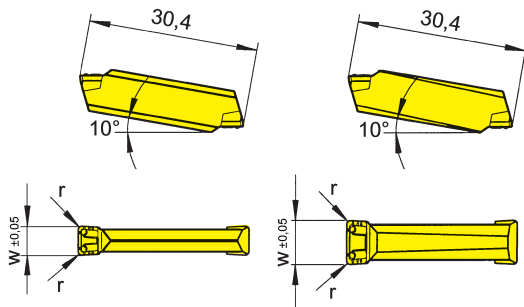
槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
4-8 mm

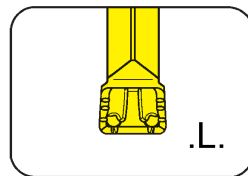
精密烧结

precision sintered



宽度 4 - 5 mm  
Width 4 - 5 mm

宽度 6 - 8 mm  
Width 6 - 8 mm



配合刀杆  
for Toolholder

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

刀片长度重复定位精度  
±0.06 mm  
Indexability length ± 0,06 mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0400.L4	4	0.4	03/04	▲
S229.0400.L6	4	0.6	03/04	▲
S229.0500.L4	5	0.4	04	▲
S229.0500.L6	5	0.6	04	▲
S229.0500.L8	5	0.8	04	▲
S229.0600.L4	6	0.4	05	▲
S229.0600.L6	6	0.6	05	▲
S229.0800.L6	8	0.6	07/08	▲
S229.0600.L4.PG	6	0.4	05	▲
S229.0800.L8.PG	8	0.8	07/08	▲

▲ 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

# 切槽和侧车削

## Grooving and Side Turning

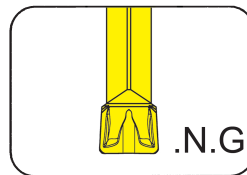


### 可转位刀片

#### Indexable insert

## S229

带卷屑器  
with chip forming



槽深可达  
槽宽

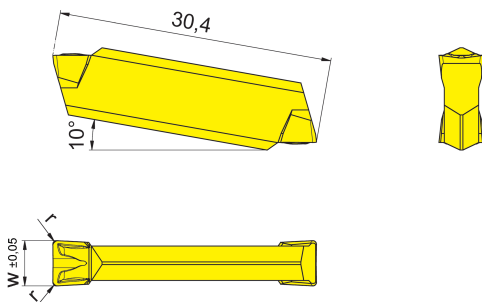
Depth of groove up to  
Width of groove

25 mm  
3-6 mm

精密烧结  
precision sintered

配合刀杆  
for Toolholder

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



刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0300.N2.G	3	0.2	03	▲
S229.0300.N4.G	3	0.4	03	▲
S229.0400.N2.G	4	0.2	03/04	▲
S229.0400.N4.G	4	0.4	03/04	▲
S229.0500.N2.G	5	0.2	04	▲
S229.0500.N4.G	5	0.4	04	▲
S229.0500.N6.G	5	0.6	04	▲
S229.0500.N8.G	5	0.8	04	▲
S229.0600.N4.G	6	0.4	05	▲
S229.0600.N6.G	6	0.6	05	▲

▲ 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

# 切槽和侧车削

## Grooving and Side Turning

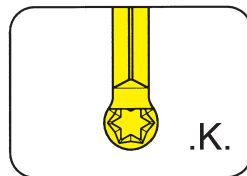


### 可转位刀片

#### Indexable insert

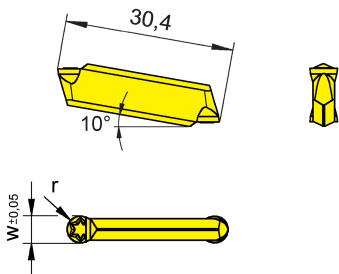
## S229

带卷屑器  
with chip forming



槽深可达	Depth of groove up to	25 mm
槽宽	Width of groove	3-8 mm
圆头	Full radius	1.5-4 mm

精密烧结  
precision sintered



配合刀杆  
for Toolholder

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

刀片长度重复定位精度  
±0.06 mm  
Indexability length ± 0,06 mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0015.K3	3	1.5	02/03	▲
S229.0020.K4	4	2.0	03/04	▲
S229.0025.K5	5	2.5	04	▲
S229.0030.K6	6	3.0	05	▲
S229.0040.K8	8	4.0	07/08	▲

▲ 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.

使用45° 刀杆加工退刀槽时各尺寸刀片要求的Dmin

D<sub>min</sub> for corner reliefs with toolholder 45°

t <sub>max</sub>	S229.0015.K3	S229.0020.K4	S229.0025.K5	S229.0030.K6
0.5	∅ 26	∅ 26	∅ 32	∅ 32
1.0	∅ 76	∅ 55	∅ 42	∅ 37
1.5	∅ 78	∅ 58	∅ 45	∅ 41
2.0	∅ 80	∅ 59	∅ 46	∅ 42
2.5	∅ 82	∅ 60	∅ 47	∅ 43
3.0	∅ 84	∅ 62	∅ 48	∅ 44
3.5	∅ 87	∅ 63	∅ 49	∅ 46
4.0	∅ 89	∅ 65	∅ 50	∅ 47

P	●
M	●
K	-
N	-
S	○
H	-

硬质合金牌号  
Carbide grades



# 切槽和侧车削

## Grooving and Side Turning

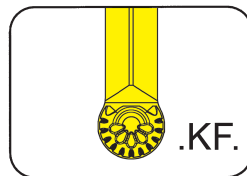


### 可转位刀片

#### Indexable insert

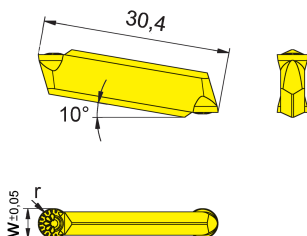
## S229

带卷屑器  
with chip forming



槽深可达	Depth of groove up to	25 mm
槽宽	Width of groove	3-8 mm
圆头	Full radius	1.5-4 mm

精密烧结  
precision sintered



配合刀杆  
for Toolholder

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

刀片长度重复定位精度  
 $\pm 0.06$  mm  
Indexability length  $\pm 0,06$  mm

产品型号 Part number	w	r	尺寸规格 Size	IG66
S229.0015.KF3	3	1.5	02/03	▲
S229.0020.KF4	4	2.0	03/04	▲
S229.0025.KF5	5	2.5	04	▲
S229.0030.KF6	6	3.0	05	▲
S229.0040.KF8	8	4.0	07/08	▲

▲ 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.

使用45° 刀杆加工退刀槽时各尺寸刀片要求的Dmin

D<sub>min</sub> for corner reliefs with toolholder 45°

t <sub>max</sub>	S229.0015.KF3	S229.0020.KF4	S229.0025.KF5	S229.0030.KF6
0.5	∅ 26	∅ 26	∅ 32	∅ 32
1.0	∅ 76	∅ 55	∅ 42	∅ 37
1.5	∅ 78	∅ 58	∅ 45	∅ 41
2.0	∅ 80	∅ 59	∅ 46	∅ 42
2.5	∅ 82	∅ 60	∅ 47	∅ 43
3.0	∅ 84	∅ 62	∅ 48	∅ 44
3.5	∅ 87	∅ 63	∅ 49	∅ 46
4.0	∅ 89	∅ 65	∅ 50	∅ 47

P	●
M	●
K	-
N	-
S	○
H	-

硬质合金牌号  
Carbide grades

# 切槽和侧车削

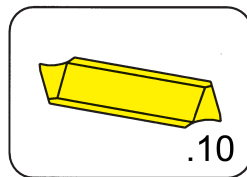
## Grooving and Side Turning



### 可转位刀片

### Indexable insert

# 229

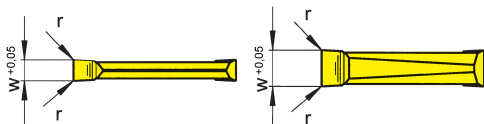
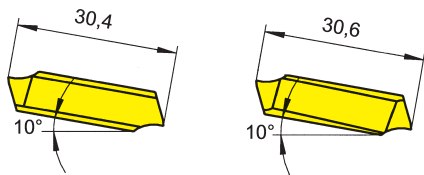


槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
2.5-10 mm

精密磨削  
precision ground



槽宽2.5-5.0 mm  
Width of groove 2,5 - 5,0 mm

宽度5.1-10.4 mm  
Width 5,1 - 10,4 mm

配合刀杆  
for Toolholder

型号 210  
Type 213  
214  
218  
219  
225  
226  
257

刀片长度重复定位精度  
 $\pm 0.025\text{mm}$   
Indexability length  $\pm 0,025\text{ mm}$

产品型号 Part number	w	r	尺寸规格 Size	IG66
229.0250.10	2.5	0.2	02	▲
229.0300.10	3.0	0.2	02/03	▲
229.0400.10	4.0	0.2	03/04	▲
229.0500.10	5.0	0.2	04	△
229.0600.10	6.0	0.4	05	△
229.0700.10	7.0	0.4	07	△
229.0800.10	8.0	0.4	07/08	△
229.0900.10	9.0	0.4	09	△
229.1000.10	10.0	0.4	09	△

▲ 库存 / on stock △ 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

# 切槽和侧车削

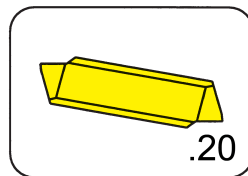
## Grooving and Side Turning



### 可转位刀片

### Indexable insert

# 229

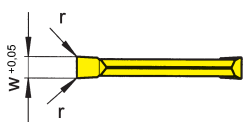
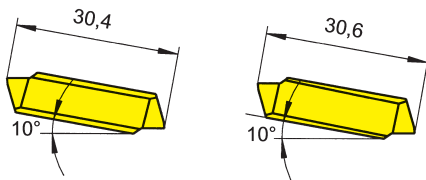


槽深可达  
槽宽

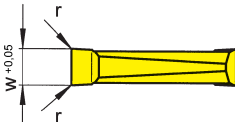
Depth of groove up to  
Width of groove

25 mm  
3-10 mm

精密磨削  
precision ground



宽度 3 - 5 mm  
Width 3 - 5 mm



宽度 5.1 - 10.4 mm  
Width 5.1 - 10.4 mm

配合刀杆  
for Toolholder

型号 210  
Type 213  
214  
218  
219  
225  
226  
257

刀片长度重复定位精度  
 $\pm 0.025\text{mm}$   
Indexability length  $\pm 0,025\text{ mm}$

产品型号 Part number	w	r	尺寸规格 Size	IG66
229.0300.20	3	0.2	02/03	△
229.0400.20	4	0.2	03/04	△
229.0500.20	5	0.2	04	△
229.0600.20	6	0.4	05	△
229.0700.20	7	0.4	07	△
229.0800.20	8	0.4	07/08	△
229.0900.20	9	0.4	09	△
229.1000.20	10	0.4	09	△

▲ 库存 / on stock △ 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

# 切槽和侧车削

## Grooving and Side Turning

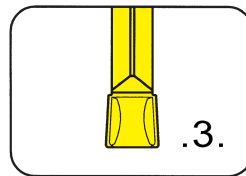


### 可转位刀片

#### Indexable insert

## 229

带卷屑器  
with chip former

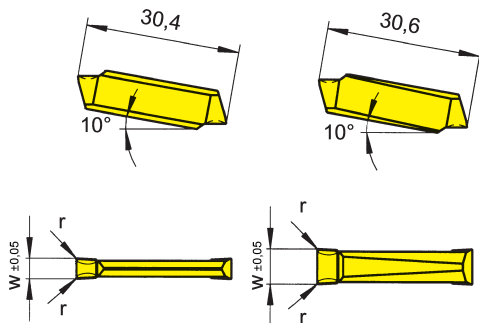


槽深可达  
槽宽

Depth of groove up to  
Width of groove

25 mm  
3-10 mm

精密磨削  
precision ground



宽度 3 - 5 mm  
Width 3 - 5 mm

宽度 5.1-10.4 mm  
Width 5.1 - 10.4 mm

配合刀杆  
for Toolholder

型号 210  
Type 213  
214  
218  
219  
225  
226  
257

刀片长度重复定位精度  
 $\pm 0.025\text{mm}$   
Indexability length  $\pm 0,025\text{ mm}$

产品型号 Part number	w	r	尺寸规格 Size	IG66
229.0300.31	3.0	0.2	02/03	▲
229.0300.34	3.0	0.4	02/03	▲
229.0350.31	3.5	0.2	03	▲
229.0400.31	4.0	0.2	03/04	▲
229.0400.34	4.0	0.4	03/04	▲
229.0500.31	5.0	0.2	04	▲
229.0500.34	5.0	0.4	04	▲
229.0500.36	5.0	0.6	04	▲
229.0600.31	6.0	0.4	05	▲
229.0600.38	6.0	0.8	05	▲
229.0700.31	7.0	0.4	07	▲
229.0800.31	8.0	0.4	07/08	▲
229.0900.31	9.0	0.4	09	▲
229.1000.31	10.0	0.4	09	▲

▲ 库存 / on stock    △ 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.

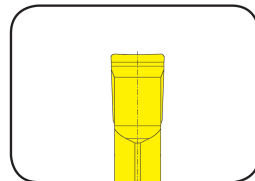
P	•
M	•
K	-
N	-
S	o
H	-

硬质合金牌号  
Carbide grades

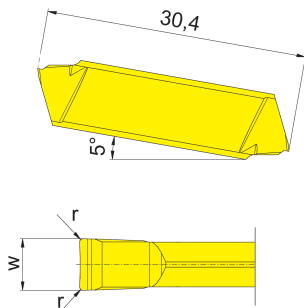
### 可转位刀片

### Indexable insert

# 229



槽宽	Width of groove	3-4 mm
----	-----------------	--------



配合刀杆  
for Toolholder

型号	210
Type	213
	214
	218
	219
	225
	226
	257

产品型号 Part number	w	r	尺寸规格 Size	IG6T
229.FB30.02	3	0.2	03	Δ
229.FB40.02	4	0.2	04	Δ

▲ 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

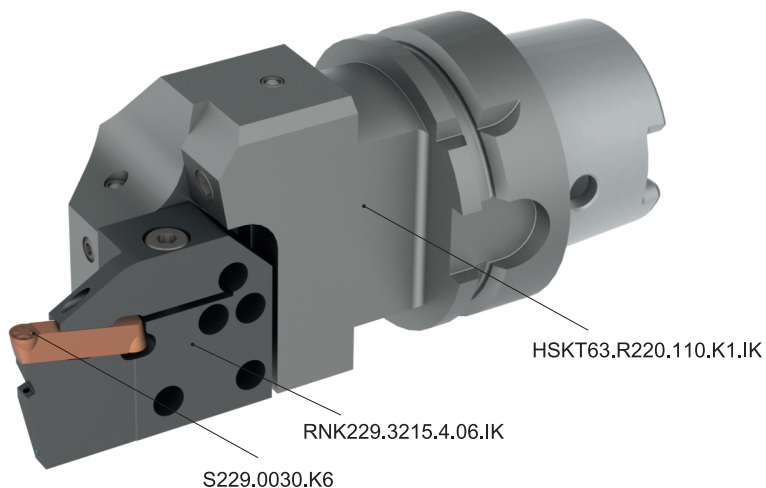
此可转位刀片可用于右手和左手型刀杆

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

目标:	动态车削	Machining:	Trochoidal turning
工件:	轮	Component:	Wheel
材料:	20MnCrS5	Material:	20MnCrS5
刀具:	HSKT63.R220.110.K1.IK RNK229.3215.4.06.IK S229.0030.K6	Tool:	HSKT63.R220.110.K1.IK RNK229.3215.4.06.IK S229.0030.K6
冷却:	乳化液	Cooling lubricant:	Emulsion
$v_c$ (m/min)	270	$v_c$ (m/min)	270
$f$ (mm/U)	0,9	$f$ (mm/rev)	0,9
$a_p$ (mm)	0,5 - 0,9	$a_p$ (mm)	0,5 - 0,9
刀具寿命:	117 分钟	Tool life:	117 minutes



# 切削参数

## Cutting Data



材料 Material	硬度 Hardness Brinell (HB)	切削速度 $v_c$ (m/min) Cutting speed $v_c$ (m/min)											
		K10	EG35 EG55	HP66	IG36*	IG66	TH35 AS65	DD26	HS36	H20	H54		
<b>P</b> 碳钢 Carbon steel	0,2% C	140		300-180	200-160		340-220	280-180			230-170	200-140	
	0,4% C	180		270-150	180-150		320-200	250-140			220-160	180-120	
	0,6% C	200		250-120	180-140		300-180	230-120			210-150	160-100	
	退火 annealed	180		250-100	180-140		300-180	230-100			210-150	180-120	
	合金钢 Alloyed steel (<5%)	调质 quenched	280		220-90	160-110		280-150	190-90			170-120	160-100
		调质 quenched	350		200-80	140-90		250-140	170-80			140-80	120-80
	高合金钢 high alloyed steel (>5%)	退火 annealed	200		220-140	120-90		280-200	200-140			120-100	100-90
		硬化 hardened	-										
	铸钢 Cast steel	非合金 unalloyed	180		200-150	200-150		250-200	200-150			180-120	
合金 alloyed		220		160-100	150-90		220-160	160-100			140-90		
<b>M</b> 不锈钢 Stainless steel	马氏体, 铁素体 martensitic, ferritic	200		130-100	180-120	190-140	190 - 140			180-120	190-120		
	奥氏体 austenitic	180			140-110	140-110	140 - 110			140-110	170-120		
<b>K</b> 灰铸铁 Grey cast iron	低拉伸强度 low tensile strength	180	90-60	200-120			250-140	200-120					
	高拉伸强度 high tensile strength	250	90-60	160-120			220-150	160-120					
	球墨铸铁 Spheroidal graphite cast iron	铁素体 ferritic	160		180-130			240-160	180-130				
		珠光体 pearlitic	250		160-120			200-160	160-120				
	可锻铸铁 Malleable cast iron	铁素体 ferritic	125		220-120			280-180	220-120				
		珠光体 pearlitic	225		190-100			250-160	190-100				
<b>N</b> 铝合金 Al-alloys	无热处理 not heat treatable	30-80	1000-600						1000-600				
	热处理 heat treatable	80-120	400-220						400-220				
	铸造铝 Al-cast-alloy	无热处理 not heat treatable	80	1000-600						1000-600			
		热处理 heat treatable	100	600-300						600-300			
	铜合金 Copper-alloys	无热处理 not heat treatable	90	200-120						210-130			
		热处理 heat treatable	100	150-90						160-90			
<b>S</b> 耐热合金(铁基) Heat resistant alloy (Fe)	退火 annealed	200								50-30			
	硬化 hardened	275								40-20			
	耐热合金 (镍基, 钴基) Heat resistant alloy (Ni, Co)	退火 annealed	250								30-20		
		硬化 hardened	350								20-10		

注意事项: / Note:

\* 替代方案: TI25 或 TI26 / \* Alternative: TI25 or TI26



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