

车槽

切断

铣槽

插削

仿形铣削

铰削

新产品

NEW

带内部冷却孔的刀片
S100

车槽宽度 = 2.5 mm

**Insert S100 with
internal coolant**

Width of groove = 2,5 mm

HORN-卓越于技术
HORN - EXCELLENCE IN TECHNOLOGY





带内部冷却孔的刀片

S100

带内部冷却功能的S100 系列切削刀片经过扩展，针对 AS45 和 HP65 涂层等级增加了一种W= 2.5 mm (0.0984") 的 EN 几何槽型新刀片。

此外还新增了以下产品：适用于带内部冷却液供应的 S100 系列的 16 x 16 mm (0.6299" x 0.6299")

和 20 x 20 mm (0.7874" x 0.7874") 方刀杆，其采用螺钉夹紧和通过 VDI 刀杆的直接冷却，以及配有内冷却的刀夹和螺钉夹紧方式的842 接口。

在各种情况下都提供左手和右手刀具。

对于带内部冷却功能的现有 S100 切削刀片，冷却液喷口直接作用在切削区域，确保该处实现刀片保持最佳加工切削状态。

漏斗形喷嘴形成冷却液喷口，可促进切屑形成并能够降低切屑堆积的可能性。

此外，此类型的内部冷却主要用于防止积屑瘤的形成和刀刃断裂。

与传统冷却方法不同，此系统因此可实现更高的切削参数，从而有助于更经济高效地使用刀具。

尤其是涉及到难以切削的材料时，AS45 硬质合金等级和带卷屑器的 EN 几何形状可形成良好的切屑流，并延长刀具寿命和提高可靠性，即使在高温下长时间接触也是如此。

使用适合切削刀片的螺钉夹或自夹紧装置（带挡块），可以保持高的重复定位精度，轻松更换切削刀片。

Insert S100 with internal coolant

The current range of internally cooled S100 cutting inserts is being expanded to include a new cutting edge of 2.5 mm (0.0984") and an EN geometry for grades AS45 and HP65. Other new additions are the 16 x 16 mm (0.6299" x 0.6299") and 20 x 20 mm (0.7874" x 0.7874") square shank holders for the S100 range with an internal coolant supply, a screw clamp and direct coolant transfer via the VDI holder, plus cartridges with internal cooling and a screw clamp with an 842 interface. A left-hand and right-hand design is available in each case.

As with the existing S100 cutting inserts with internal cooling, the coolant jet acts directly on the cutting zone, ensuring the best possible machining conditions there. The funnel-shaped nozzle creates a coolant jet, which supports chip forming and thus reduces the chance of chip build-up. Furthermore, this type of internal cooling largely prevents the formation of build-up edges and break-outs on the cutting edge. Unlike conventional cooling methods, this system therefore achieves higher cutting parameters, which allow the tool to be used more economically and effectively. Where hard-to-cut materials in particular are concerned, the AS45 carbide grade and the EN geometry shape with chip former also permit good chip flow with long tool lives and reliability, even with long engagement times and at high temperatures. The screw clamp or self-clamping device for the cutting inserts, with a stop, allow the cutting inserts to be replaced easily with a high level of repeat accuracy.



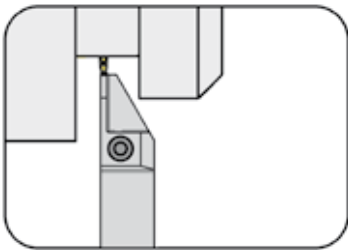
切槽和切断

GROOVING and PARTING OFF

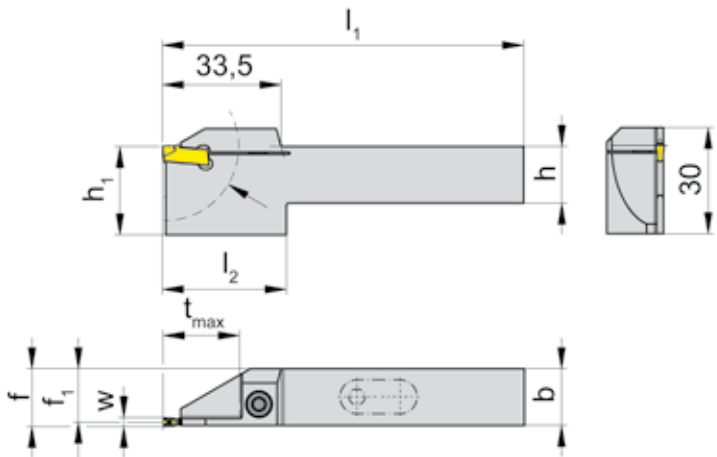


刀杆 型号
TOOLHOLDER Type

H100
螺钉锁紧
with screwed clamping



槽深可达	Depth of groove up to	21.5 mm
槽宽	Width of groove	2,5 mm



R=右手型-如图
R = right hand version shown

L=左手型
L = left hand version

配合 刀片
for use with Insert

型号 S100...IK
Type

通过刀片供应冷却液
Coolant supply through insert

产品型号 Part number	h	b	l ₁	l ₂	h ₁	f ₁	f	t _{max}	尺寸规格 Size
R/LH100.1616.3.22.IK	16	16	89	35	25	15.05	f ₁ +w/2	21.5	02
R/LH100.2020.3.22.IK	20	20	102	35	25	19.05	f ₁ +w/2	21.5	02

注明R或L型
State R or L version

w见刀片
w see inserts

尺寸单位：mm
Dimensions in mm

按需提供更多尺寸
Further sizes upon request

螺钉5.17T20P 的扭矩规格 = 6.5 Nm。
Torque specification of the screw 5.17T20P = 6,5 Nm.

附件
Spare parts

刀杆 Toolholder	螺钉 Clamping screw	TORX PLUS® 扳手 TORX PLUS® Wrench
R/LH100....	5.17T20P	T20PQ

切槽和切断 (外圆)

GROOVING and PARTING OFF (external)



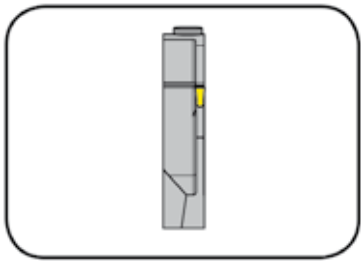
刀夹 型号

CASSETTE Type

NK100

接口 842

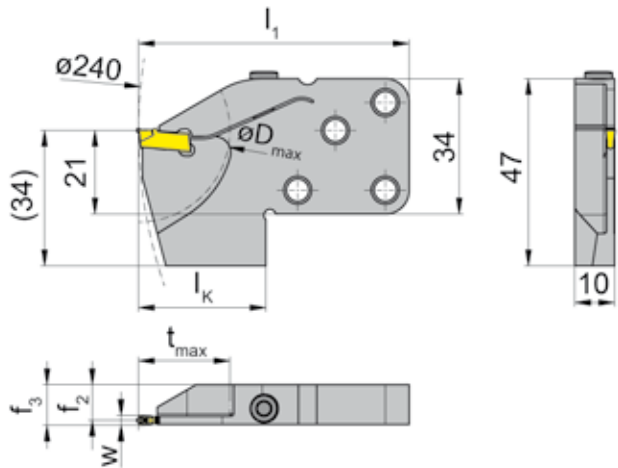
Interface 842



槽深
槽宽

Depth of groove
Width of groove

23.0 mm
2.5 mm



R=右手型-如图

R = right hand version shown

L=左手型

L = left hand version

配合 刀片

for use with Insert

型号

S100...IK

Type

通过刀片供应冷却液
Coolant supply through insert

产品型号 Part number	l_1	t_{max}	w	D_{max}	f_2	f_3	l_K
R/LNK100.0842.23.3.72.IK	68	23	2.5	46	8.95	$f_2+w/2$	32

注明R或L型

State R or L version

w见刀片

w see inserts

尺寸单位 : mm

Dimensions in mm

订货须知 :

锁紧螺钉包含在刀杆内,不需要单独订购

Ordering note:

The fastening screw is combined with the basic toolholder - no separate order required.

螺钉5.13T20P 的扭矩规格 = 4 Nm。

Torque specification of the screw 5.13T20P is 4 Nm.

附件

Spare parts

刀夹 Cassette	螺钉 Clamping screw	TORX PLUS® 扳手 TORX PLUS® Wrench
R/LNK100.0842.23.3.72.IK	5.13T20P	T20PQ

切槽和切断

GROOVING and PARTING OFF

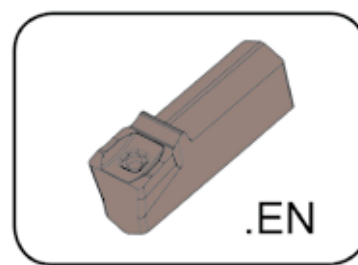


刀片 型号

INSERT Type

S100

带断屑槽
with chip former



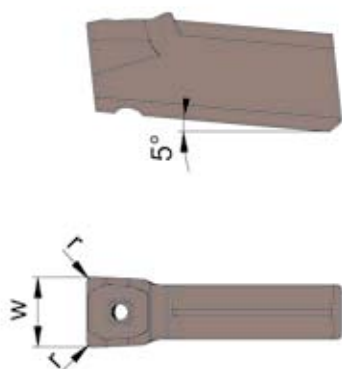
槽宽

Width of groove

2.5 mm

适合与刀杆/刀夹配合使用
for use with Toolholder / Cassette

型号 H100
Type NK100



通过刀片供应冷却液
Coolant supply through insert

产品型号 Part number	w	r	尺寸规格 Size		MG12	AS45	HP65
S100.0250.EN2.IK	2.5	0.2	02			▲	▲
▲ 库存 / on stock Δ 4周 / 4 weeks				P	●	●	●
● 主要应用 / main recommendation				M	●	●	●
○ 可选推荐 / alternative recommendation				K	●	●	●
■ 无涂层牌号 / uncoated grades				N	○	○	○
■ 涂层牌号 / coated grades				S	●	●	●
■ 钎焊/金属陶瓷 / brazed/Cermet				H			

尺寸单位 : mm
Dimensions in mm

硬质合金牌号
Carbide grades

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.

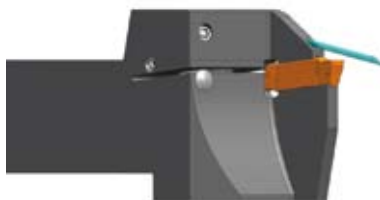
可能供应冷却液。
Possible coolant supply.



冷却液出口喷嘴位于刀片侧面。
Coolant outlet through spray nozzle at the side of the insert.

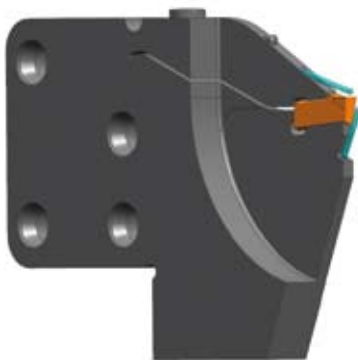


冷却液出口喷嘴位于刀片的侧面和下方。
Coolant outlet through spray nozzle at the side of the insert.



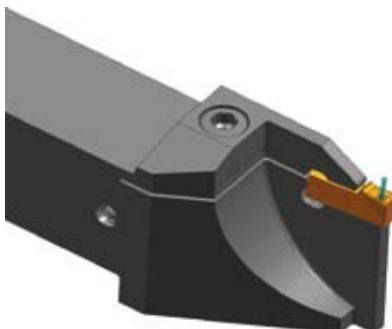
S100
S224
S229

冷却液出口通过刀片的上夹爪。
Coolant outlet through clamping finger.



S100
S224
S229

冷却液出口通过刀片的上夹爪和刀片底部支撑部分。
Coolant outlet through clamping finger and insert support.



S100
S224

冷却液出口通过刀片。
Coolant outlet through insert.

车槽

切断

铣槽

插削

仿形铣削

铰削

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