

REINE NORIS



航空航天

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## 欢迎鉴赏REIME NORIS的航空航天-样册 - 适用于航空航天产品的螺纹工具

航空航天工业是现代制造业中最严苛的领域之一，对工具、工艺及质量标准要求极高。通过我们的最新的样册，您将获得精心甄选的攻丝工具系列，这些工具专为满足该行业的严格要求、特殊材料及技术挑战而设计。

无论您需要MJ、UNJ还是EG螺纹，都能找到专为航空航天标准螺纹要求设计与验证的专用工具。我们不仅严格遵循行业规范，更着重于工艺可靠性、优化几何结构、高性能涂层以及延长刀具寿命——确保在钛合金、Inconel合金、高强度铝合金及碳纤维增强塑料等难加工材料上取得卓越成效。

本样册是航空航天解决方案的简明参考指南，重点关注实际方案应用、可靠性和安全性。它旨在帮助您快速找到合适的工具，以便您可以将更多精力专注于您产品的生产制造中。

REIME NORIS - 我之精工，您之成功





## WELCOME TO THE **AERO BROCHURE** OF REIME NORIS – **THREADING TOOLS** FOR THE **AEROSPACE INDUSTRY**

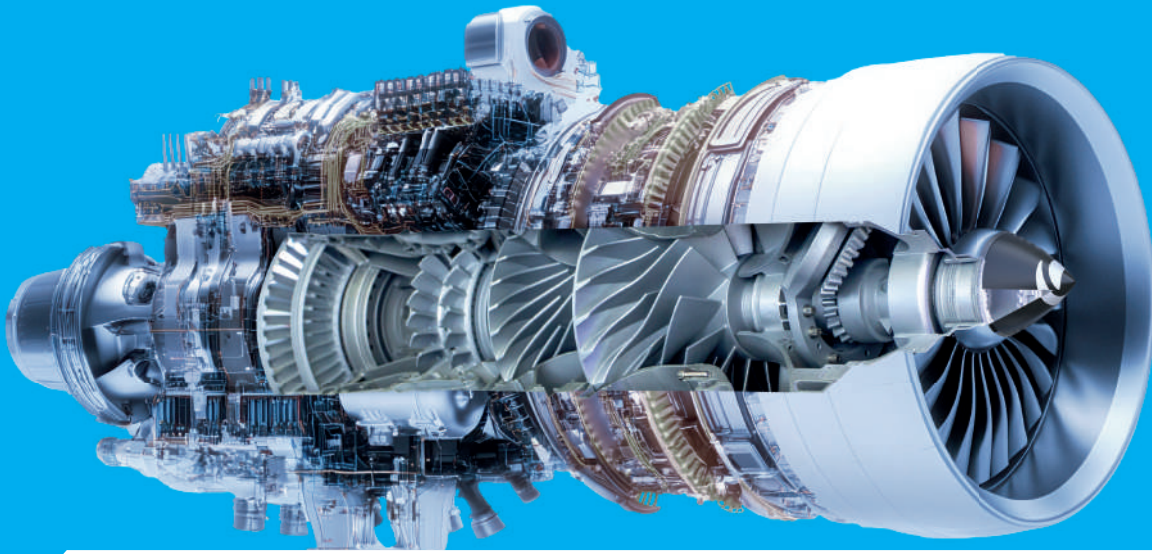
The aerospace industry is one of the most demanding sectors in modern manufacturing, setting the highest standards for tools, processes, and quality. With our new AERO brochure, you gain access to a carefully curated selection of threading tools specifically designed to meet the stringent requirements, materials, and challenges of this industry.

Whether you need **MJ**, **UNJ**, or **EG threads**, you will find exclusively tools that are engineered and proven for machining aerospace-standard thread profiles. Beyond strict compliance with industry norms, we place a strong emphasis on process reliability, optimized geometries, high-performance coatings, and extended tool life—ensuring outstanding results in challenging materials such as **titanium**, **Inconel**, **high-strength aluminum alloys**, and **CFRP composites**.

This brochure is your compact reference **guide for aerospace solutions**, with a clear focus on **application, reliability, and safety**. It is designed to help you quickly find the right tool so you can stay focused on your manufacturing process.

REIME NORIS – OUR PRECISION IS YOUR SUCCESS





## 资深的汽轮机产品的专家

### STRONG SPECIALIST FOR TURBINE COMPONENTS

一家行业领先的汽轮机部件制造商使用我们的 NORIS SL15 NI 的丝锥应用于航空航天中加工具有挑战性的材料。该丝锥用于为安装在飞机发动机压缩仓附近的 "Inconel 718 制成的零件中的螺纹加工。"

Inconel 718 是航空航天工业中使用的最坚硬的材料之一，极端耐温度和高强度的结合对刀具提出了最高要求。这正是 NORIS SL15 NI 证明了它的价值：一种专门开发的 NI 几何槽型、坚固的切削刃和 TiCN 涂层可提供具有长刀具寿命的工艺稳定解决方案。

阶梯式螺纹形式和优化的排屑槽磨削减少了摩擦和铁屑堆积，确保了切屑的顺利排出 — 而这正是生产难加工材料取得高精度的关键所在。

结论：一致的螺纹质量、稳定的工艺和即使在最恶劣的操作条件下，也能让客户满意。

A leading manufacturer of turbine components relies on our NORIS SL15 NI tap for machining challenging materials in aerospace applications. The tool is used to create threads for wire thread inserts in a part made of Inconel 718, installed near the compression chamber of an aircraft engine.

Inconel 718 is one of the toughest materials used in aerospace — it's combination of extreme heat resistance and high strength places exceptional demands on any tool. This is exactly where the NORIS SL15 NI proves its value: a specially developed NI geometry, robust cutting edges, and a TiCN coating deliver a process-stable solution with long tool life.

The stepped thread form and optimized flute grinding reduce friction and chip buildup, ensuring smooth chip evacuation — a key advantage when producing precise threads for wire inserts in difficult-to-machine materials.

The result: Consistent thread quality, stable processes, and satisfied customers — even under the harshest operating conditions.

# SPECIALIZED RELIABLE POWERFUL

## X-公差

更大的生产尺寸保证了更长的使用时间，特别是在研磨和粘性材料中。

The larger production dimension guarantees longer use, especially in abrasive and clamping materials.

## HSSE-PM

高硬度和均匀的微观结构导致高耐磨性和出色的韧性。

High hardness and a homogeneous micro-structure result in high wear resistance and exceptional toughness.

## TiCN

超过3000 HV的高硬度和低摩擦值可防止丝锥切削刃磨损

A high hardness of more than 3000 HV and low friction values protect against abrasive wear

## 优势

- 优化的NI几何槽型，用于加工Inconel 718等坚韧高性能材料
- 得益于TiCN涂层—即使在极端条件下用于防止切削刃磨损和冷焊
- 可靠的加工过程和延长刀具寿命—防止切削刃磨损和冷焊

## YOUR BENEFITS

- Optimized NI geometry for machining tough high-performance materials such as Inconel 718
- Protected against wear and cold welding thanks to TiCN coating – even under extreme conditions
- Reliable operation and extended tool life – resistant to wear and cold welding

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UNJC | 请看第19页 | go to page 19

UNJF | 请看第19页 | go to page 19



## 加工起落架部件的多面手

### A VERSATILE **ALL-ROUNDER** FOR **LANDING GEAR COMPONENTS**

在航空航天起落架制造中，精度和工艺可靠性至关重要。不锈钢材料带来了重大挑战，特别是在根据ISO 3161生产UNJC和UNJF螺纹时。

我们的NORIS SALOREX UNI CNC采用ALTINHD涂层，是理想的解决方案。它结合了通用几何槽型以及纳米结构的高性能涂层确保了即使是最苛刻的材料也能可靠地加工——盲孔深度可达 $3 \times D$ 。

45°螺旋槽可有效排屑，同时涂层的卓越硬度和耐磨性保证即使在困难的切削条件下也能延长刀具寿命。

最大的灵活性和一致的质量——使其非常适合现代航空航天起落架生产的严格要求。

In aerospace landing gear manufacturing, precision and process reliability are essential. The machining of high-performance stainless steels poses significant challenges—especially when producing UNJC and UNJF threads in accordance with ISO 3161.

Our NORIS SALOREX UNI CNC, featuring the ALTINHD coating, is the ideal solution. Its combination of a universal geometry and a nanostructured high-performance coating ensures reliable machining of even the most demanding materials — including blind holes up to  $3 \times D$  depth.

The 45° spiral flutes provide efficient chip evacuation, while the coating's exceptional hardness and wear resistance guarantee extended tool life, even under difficult cutting conditions.

Maximum flexibility with consistent quality — making it a perfect fit for the strict demands of modern aerospace landing gear production.

# UNIVERSAL FLEXIBLE SAFE

## 3xD

45°螺旋槽可有效排屑  
Reliable chip removal due  
to 45° twisted flutes

## HSSE

硬度高  
卓越的韧性  
优异的耐磨性  
High hardness  
Exceptional toughness  
Excellent wear resistance

## ALTINHD

纳米结构PVD涂层  
普遍适用于钢件和铸造材料所有  
类型

Nanostructured PVD coating  
Universally suitable for all types  
of steel and cast materials

## 优势

- 通用性的槽型减少了库存需求
- 纳米结构ALTINHD涂层  
可靠的加工—即使在充满挑战的情况下进行攻丝
- 高度灵活性和加工安全性

## YOUR BENEFITS

- Universal geometry to reduce inventory requirements
- Nano-structured ALTINHD coating for reliable machining – even under challenging cutting conditions
- High flexibility and process security

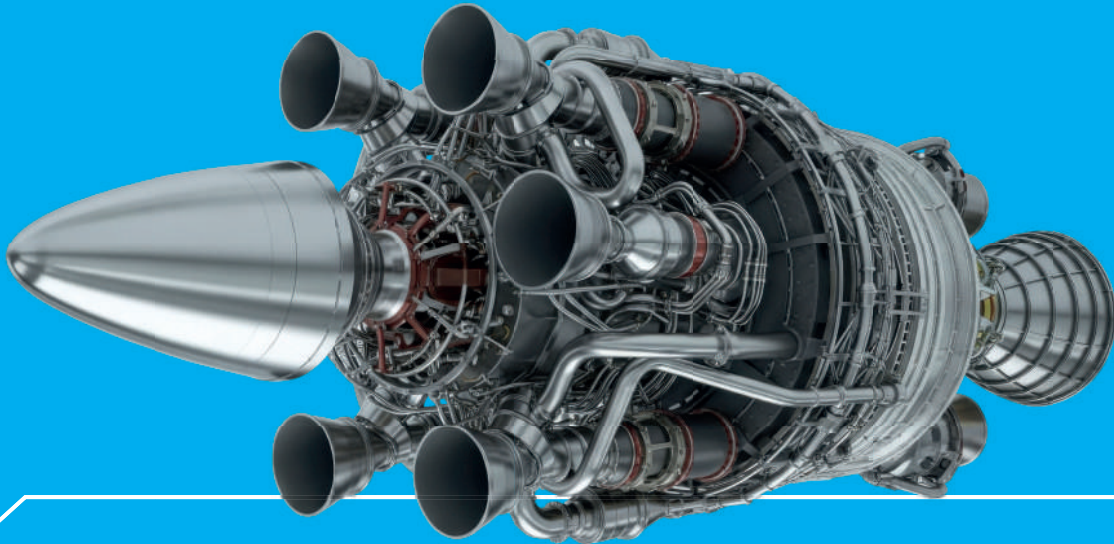
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UNJF | 请看第19页 | go to page 19

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## 在卫星推进器生产上的可靠性

## RELIABILITY IN SATELLITE PROPULSION

卫星推进器部件的生产要求达到最高标准的精度和工艺可靠性。诸如钛合金和奥氏体不锈钢等材料必须承受太空中的极端温度、振动和辐射暴露。任何误差或返工都是不可接受的——每个部件都必须从一开始就完美无瑕。

为了在高度集成的外壳和结构部件中生产细牙和非标的螺纹，使用了带有ACR涂层的NORIS EIR HR螺纹铣刀。该刀具因其正向切削几何形状、精确的同轴度和极高刃口稳定性而脱颖而出，这是在难切削材料中加工小螺纹时的关键特性。

得益于可控的铁屑形成和低热量输入，可以生产出具有出色尺寸精度和卓越表面质量的螺纹。即使有复杂的轮廓和盲孔，该加工过程仍然稳定且可重复。

结论：高应力部件中的精确螺纹是可靠卫星推进系统的基本前提。

The production of propulsion components for satellites requires the highest standards of precision and process reliability. Materials such as titanium alloys and austenitic stainless steels must withstand extreme temperatures, vibrations, and radiation exposure in space. Errors or rework are not an option – every component must be perfect from the very beginning.

For the production of fine and special threads in highly integrated housings and structural components, the NORIS EIR HR thread mill with ACR coating is used. The tool stands out through its positive cutting geometry, precise concentricity, and high cutting-edge stability – key properties when machining small threads in difficult-to-cut materials.

Thanks to controlled chip formation and low heat input, threads can be produced with excellent dimensional accuracy and superior surface quality. Even with complex contours and blind holes, the process remains stable and reproducible.

Result: precise threads in high-stress components – a fundamental prerequisite for reliable satellite propulsion systems.

# EFFICIENT WIDE-RANGING SUBSTANTIAL

## HM-K30

坚韧、超细颗粒一致性，成就卓越性能  
Tough, ultra-fine consistency for impressive performance

## 3xD

在硬质和难加工材料中使用时径向变形小

Low radial deflection when used in hard and difficult materials

## ACR

纳米结构多层涂层  
铝铬氮化物

Nanostructured multilayer coating  
Aluminium chromium nitride

## 优势

- 适用于高强度与耐热材料的几何结构
- ACR涂层具备优异附着力与极致光滑表面，确保工具寿命持久且工艺可靠性高
- 避免工件损伤并提升生产效率

## YOUR BENEFITS

- Geometry for highly resistant and heat resistant materials
- ACR coating with optimal adhesion and extremely smooth surface to ensure long tool life and high process reliability
- Avoid work piece damage and increase productivity

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## 符号说明

### SYMBOL EXPLANATION


#### 通用

##### GENERAL

	订货号 Order number
	细柄 Reduced shank
	粗柄 Reinforced shank
	有效长度 2xD Usable length 2xD
	有效长度 3xD Usable length 3xD
	有效长度 4xD Usable length 4xD
	用于同步CNC机床加工的优化刀具 Optimized tools for the synchronous CNC machining

#### 机用丝锥

##### MACHINE TAPS

	通孔 Through hole
	通孔&盲孔 Through hole & Blind hole
	盲孔 Blind hole
	用于中心出水冷却的MKB刀具 MKB Tools with internal coolant bore
	攻丝预钻孔直径 Tap drill diameter

## 攻丝刀柄

### TAP HOLDERS

	密封盘 Sealing disks
	最大冷却压力50 bar Max. Coolant pressure 50 bar
	最小长度补偿 Minimal length compensation
	夹紧螺母 Clamping nut
	夹套 Collet
	用于沿着刀柄供应冷却液的的MKBA刀具 MKBA Coolant supply along the tool shank

## 螺纹铣刀

### THREAD MILLS

	外螺纹 External threads
	内螺纹 Internal threads
	左旋 Left hand rotation
	只需一把刀具即可钻孔，沉孔倒角和攻丝 Just one tool for core hole, countersink and thread
	只需一把刀具即可沉孔倒角和攻丝 Just one tool for countersink and thread
	用于中心出水冷却的MKB刀具 MKB Tools with internal coolant bore
	仅用于攻丝的刀具 The tool only produces the thread



章节概述  
CHAPTER OVERVIEW



机用丝锥  
MACHINE TAPS

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攻丝刀柄  
TAP HOLDERS

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螺纹铣刀  
THREAD MILLS

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01

机用丝锥  
MACHINE TAPS



## 分类汇总

列出的切削速度 (Vc, 单位为M/MIN) 为标准值.  
该值必须根据实际加工情况进行调整  
\* 对于锥形螺纹和梯形螺纹, 切削速度必须减少50%

## SUMMARY OF ASSORTMENT

THE LISTED CUTTING DATA ARE STANDARD VALUES.  
THIS VALUES HAVE TO BE ADJUSTED TO INDIVIDUAL WORK  
CONDITIONS.



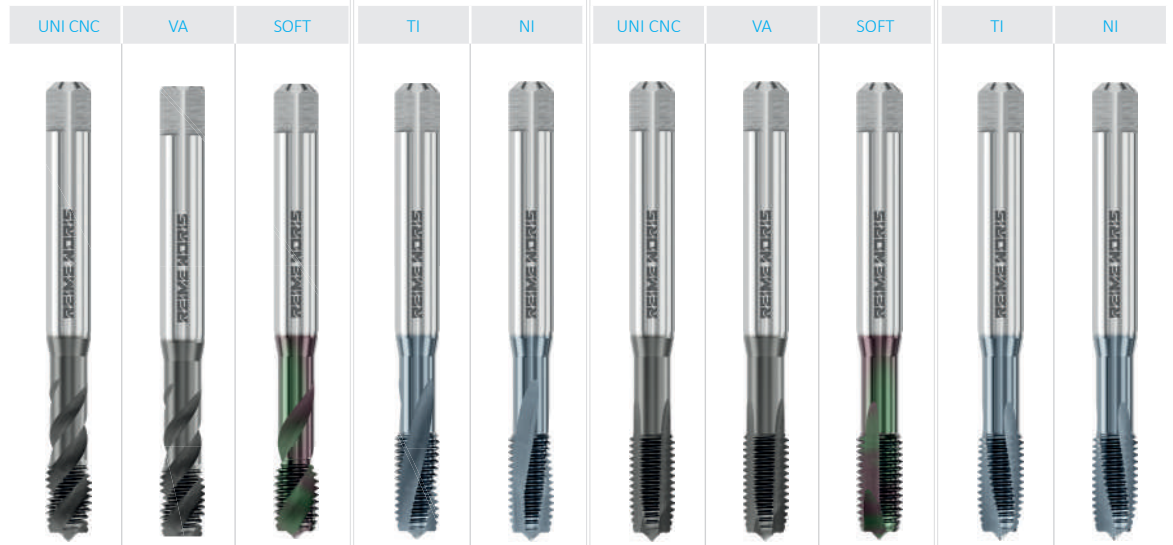
P	钢件材料	STEEL MATERIALS
	非合金钢和低合金钢	Unalloyed and low-alloy steels
	高合金钢	High alloy steels
M	耐腐蚀和耐酸钢	CORROSION AND ACID PROOF STEELS
	奥氏体不锈钢和双相不锈钢	Stainless austenitic steels + DUPLEX steels
K	铸件材料	CAST MATERIALS
	铸铁、球墨铸铁、蠕墨铸铁、可锻铸铁	Cast iron, nodular cast iron, Vermicular graphite cast iron, malleable cast iron
	奥铁素体铸铁 (ADI) + 硬质铸件	Ausferritic cast iron (ADI) + Hard casting
N	有色金属材料	NON FERROUS MATERIALS
	锻铝合金	Aluminium wrought alloys
	铸铝合金	Aluminium cast alloys
	黄铜+铜合金 (长屑)	Copper + Copper alloys (long-chip.)
	铜合金 (短屑)	Copper alloys (short-chip.)
	高强度铜合金	High-strength copper alloys
	锌合金	Zinc alloys
	锻镁合金	Magnesium wrought alloys
	热塑性塑料	Thermoplastics
	纤维强化合成材料+硬体塑料	Fibre-reinforced synthetics + Duroplastics
S	特殊材料	SPECIAL MATERIALS
	镍基/铁基/钴基合金	Ni-, Fe- or Co-based superalloys
	钛+钛合金	Titanium + Titanium alloys
H	淬硬钢	HARDENED STEELS
	淬硬钢	Hardened steels

# SALOREX

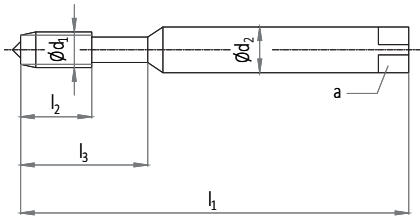
# SL15

# STABIL

# DL15



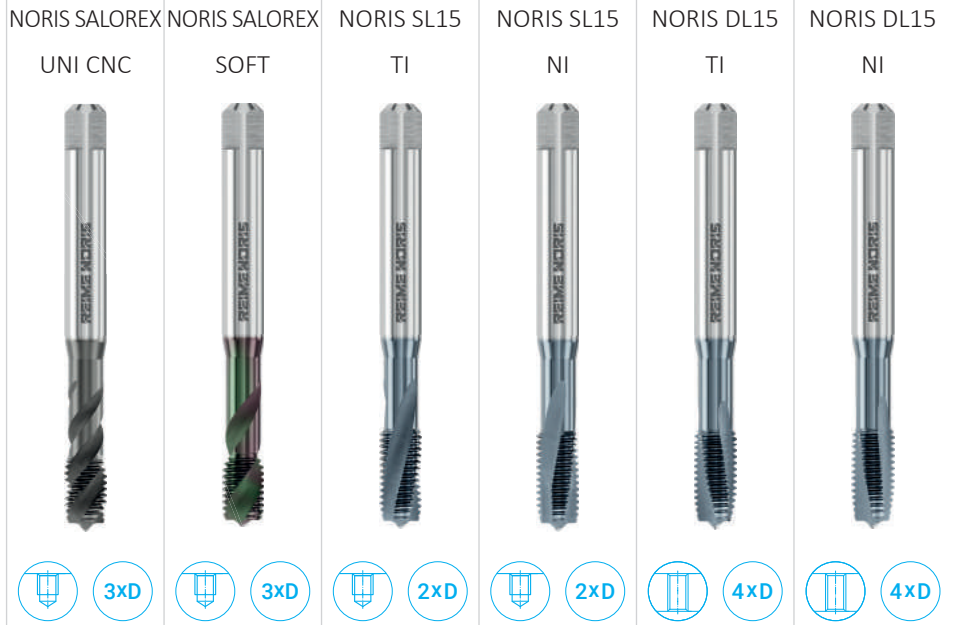
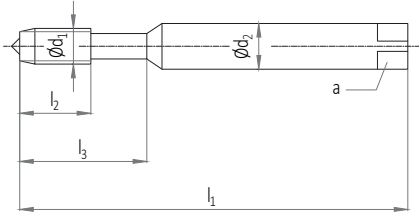
表面处理和涂层 · SURFACE	ALTiNHD	ALTiNHD	DLC	TiCN	TiCN	ALTiNHD	ALTiNHD	DLC	TiCN	TiCN
材料 · MATERIAL	HSSE	HSSE	HSSE	HSSE	HSSE-PM	HSSE	HSSE	HSSE	HSSE	HSSE-PM
MJ			18	18	18				18	18
UNJC	19		19	19	19				19	19
UNJF	19		19	19	19				19	19
EG-M	20	20	20			21	21	21		
EG-UNC	22		22			22				
EG-UNF	22		23			23				
MAT.	Vc [m/min]			Vc [m/min]		Vc [m/min]			Vc [m/min]	
≤ 800N/mm <sup>2</sup>	P1.1	10 - 18	10 - 18			10 - 18	10 - 18			
≤ 1200N/mm <sup>2</sup>	P1.2	6 - 10	6 - 10			6 - 10	6 - 10			
≤ 1400N/mm <sup>2</sup>	P1.3	4 - 8				4 - 8			4 - 8	
≤ 1400N/mm <sup>2</sup>	P2.1	2 - 10	2 - 10			2 - 10	2 - 10			
Vc [m/min]			Vc [m/min]		Vc [m/min]			Vc [m/min]		
≤ 800N/mm <sup>2</sup>	M1.1	6 - 10	6 - 10			6 - 10	6 - 10			
≤ 1300N/mm <sup>2</sup>	M1.2	2 - 6	2 - 6			2 - 6	2 - 6		4 - 8	
Vc [m/min]			Vc [m/min]		Vc [m/min]			Vc [m/min]		
≤ 800N/mm <sup>2</sup>	K1.1	10 - 20				10 - 20				
≤ 1400N/mm <sup>2</sup>	K2.1									
Vc [m/min]			Vc [m/min]		Vc [m/min]			Vc [m/min]		
	N1.1		20 - 30					20 - 30		
≤ 12%Si	N1.2	15 - 20	20 - 30			15 - 20		20 - 30		
≥ 12%Si	N1.3									
	N2.1	15 - 20	15 - 20			15 - 20	15 - 20			
	N2.2	20 - 30				20 - 30				
≥ 800N/mm <sup>2</sup>	N2.3									
	N3.1	20 - 30				20 - 30				
	N4.1	15 - 20				15 - 20				
	N5.1		15 - 20					15 - 20		
	N5.2									
Vc [m/min]			Vc [m/min]		Vc [m/min]			Vc [m/min]		
≤ 800N/mm <sup>2</sup>	S1.1			4 - 8					4 - 8	
≤ 1600N/mm <sup>2</sup>	S1.2				1 - 4					1 - 4
≤ 800N/mm <sup>2</sup>	S2.1			4 - 8					4 - 8	
≤ 1300N/mm <sup>2</sup>	S2.2			1 - 4					1 - 4	
Vc [m/min]			Vc [m/min]		Vc [m/min]			Vc [m/min]		
≤ 55HRc	H1.1									
≤ 63HRc	H1.2									
≤ 65HRc	H1.3									



表面处理和涂层 · SURFACE										DLC	TICN	TICN	TICN	TICN		
材料 · MATERIAL										HSSE	HSSE	HSSE-PM	HSSE	HSSE-PM		
切削锥类型 · CHAMFER FORM										C / 2-3	C / 2-3	C / 2-3	D / 4-5	D / 4-5		
公差 · TOLERANCE										ISO1	ISO1X	ISO1X	ISO1X	ISO1X		
										RH	RH	RH	RH	RH		
DIN 371	d <sub>1</sub>	x	P		l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	∅ d <sub>2</sub>	a							
	[mm]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]							
	MJ	3	x	0,5		2,6	56	6	18	3,5	2,7	664S.02101229				
	MJ	3	x	0,5		2,6	56	11	18	3,5	2,7		6604.02051229	66A7.02051229	6504.03051229	6507.03051229
	MJ	4	x	0,7		3,4	63	7	21	4,5	3,4	664S.02101231				
	MJ	4	x	0,7		3,4	63	13	21	4,5	3,4		6604.02051231	66A7.02051231	6504.03051231	6507.03051231
	MJ	5	x	0,8		4,3	70	8	25	6	4,9	664S.02101232				
	MJ	5	x	0,8		4,3	70	15	25	6	4,9		6604.02051232	66A7.02051232	6504.03051232	6507.03051232
	MJ	6	x	1		5,1	80	10	30	6	4,9	664S.02101233				
	MJ	6	x	1		5,1	80	17	30	6	4,9		6604.02051233	66A7.02051233	6504.03051233	6507.03051233
	MJ	8	x	1		7,1	90	10	35	8	6,2	664S.02101235				
	MJ	8	x	1		7,1	90	17	35	8	6,2		6604.02051235	66A7.02051235	6504.03051235	6507.03051235
	MJ	8	x	1,25		6,9	90	14	35	8	6,2	664S.02102026				
MJ	8	x	1,25		6,9	90	20	35	8	6,2		6604.02052026	66A7.02052026	6504.03052026	6507.03052026	
MJ	10	x	1,25		8,9	100	16	39	10	8	664S.02101236					
MJ	10	x	1,25		8,9	100	18	39	10	8		6604.02051236	66A7.02051236	6504.03051236	6507.03051236	
MJ	10	x	1,5		8,6	100	16	39	10	8	664S.02102308					
MJ	10	x	1,5		8,6	100	22	39	10	8		6604.02052308	66A7.02052308	6504.03052308	6507.03052308	

# UNJC ASME B1.1 (ASME B1-15)

# UNJF ASME B1.1 (ASME B1-15)

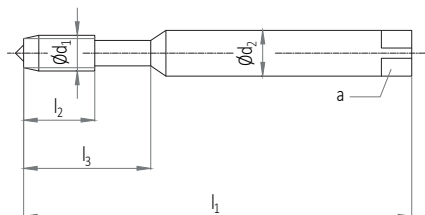


表面处理 and 涂层 · SURFACE		ALTiNHD	DLC	TiCN	TiCN	TiCN	TiCN						
材料 · MATERIAL		HSSE	HSSE	HSSE	HSSE-PM	HSSE	HSSE-PM						
切削锥类型 · CHAMFER FORM		C / 2-3	C / 2-3	C / 2-3	C / 2-3	D / 4-5	D / 4-5						
公差 · TOLERANCE		3B	3B	3BX	3BX	3BX	3BX						
		RH	RH	RH	RH	RH	RH						
≈ DIN 371	$d_1$ - P		$l_1$	$l_2$	$l_3$	$\varnothing d_2$	a						
	[inch]	Gg/1"	[mm]	[mm]	[mm]	[mm]	[mm]						
	UNJC Nr. 4 - 40	2,3	56	6	18	3,5	2,7	6470.02095479	664S.02105479				
	UNJC Nr. 4 - 40	2,3	56	11	18	3,5	2,7			6604.02055479	66A7.02055479	6504.03055479	6507.03055479
	UNJC Nr. 6 - 32	2,85	56	7	20	4	3	6470.02095481	664S.02105481				
	UNJC Nr. 6 - 32	2,85	56	12	20	4	3			6604.02055481	66A7.02055481	6504.03055481	6507.03055481
	UNJC Nr. 8 - 32	3,5	63	8	21	4,5	3,4	6470.02095482	664S.02105482				
	UNJC Nr. 8 - 32	3,5	63	13	21	4,5	3,4			6604.02055482	66A7.02055482	6504.03055482	6507.03055482
	UNJC Nr. 10 - 24	3,9	70	10	25	6	4,9	6470.02095483	664S.02105483				
	UNJC Nr. 10 - 24	3,9	70	15	25	6	4,9			6604.02055483	66A7.02055483	6504.03055483	6507.03055483
	UNJC 1/4 - 20	5,25	80	13	30	7	5,5	6470.02095485	664S.02105485				
	UNJC 1/4 - 20	5,25	80	17	30	7	5,5			6604.02055485	66A7.02055485	6504.03055485	6507.03055485
	UNJC 5/16 - 18	6,7	90	14	35	8	6,2	6470.02095486	664S.02105486				
	UNJC 5/16 - 18	6,7	90	20	35	8	6,2			6604.02055486	66A7.02055486	6504.03055486	6507.03055486
	UNJC 3/8 - 16	8,1	100	16	39	10	8	6470.02095487	664S.02105487				
	UNJC 3/8 - 16	8,1	100	22	39	10	8			6604.02055487	66A7.02055487	6504.03055487	6507.03055487
≈ DIN 371	$d_1$ - P		$l_1$	$l_2$	$l_3$	$\varnothing d_2$	a						
	[inch]	Gg/1"	[mm]	[mm]	[mm]	[mm]	[mm]						
	UNJF Nr. 4 - 48	2,4	56	6	18	3,5	2,7	6470.02095505	664S.02105505				
	UNJF Nr. 4 - 48	2,4	56	11	18	3,5	2,7			6604.02055505	66A7.02055505	6504.03055505	6507.03055505
	UNJF Nr. 6 - 40	3	56	7	20	4	3	6470.02095507	664S.02105507				
	UNJF Nr. 6 - 40	3	56	12	20	4	3			6604.02055507	66A7.02055507	6504.03055507	6507.03055507
	UNJF Nr. 8 - 36	3,55	63	8	21	4,5	3,4	6470.02095508	664S.02105508				
	UNJF Nr. 8 - 36	3,55	63	13	21	4,5	3,4			6604.02055508	66A7.02055508	6504.03055508	6507.03055508
	UNJF Nr. 10 - 32	4,15	70	10	25	6	4,9	6470.02095509	664S.02105509				
	UNJF Nr. 10 - 32	4,15	70	15	25	6	4,9			6604.02055509	66A7.02055509	6504.03055509	6507.03055509
	UNJF 1/4 - 28	5,55	80	10	30	7	5,5	6470.02095511	664S.02105511				
	UNJF 1/4 - 28	5,55	80	17	30	7	5,5			6604.02055511	66A7.02055511	6504.03055511	6507.03055511
	UNJF 5/16 - 24	7	90	10	35	8	6,2	6470.02095512	664S.02105512				
	UNJF 5/16 - 24	7	90	17	35	8	6,2			6604.02055512	66A7.02055512	6504.03055512	6507.03055512
	UNJF 3/8 - 24	8,6	90	10	35	10	8	6470.02095513	664S.02105513				
	UNJF 3/8 - 24	8,6	90	18	35	10	8			6604.02055513	66A7.02055513	6504.03055513	6507.03055513

# EG-M (STI) DIN 8140-2



3xD



NORIS SALOREX

UNI CNC



CNC

NORIS SALOREX

VA



NORIS SALOREX

SOFT



表面处理和涂层 · SURFACE

ALTiNHD

ALTiNHD

DLC

材料 · MATERIAL

HSSE

HSSE

HSSE

切削锥类型 · CHAMFER FORM

E / 1,5-2

E / 1,5-2

C / 2-3

公差 · TOLERANCE

6H MOD

6H MOD

6H MOD

RH

RH

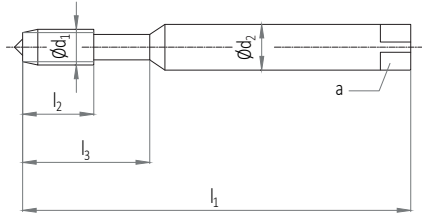
RH



DIN 40435

$d_1$	P		$l_1$	$l_2$	$l_3$	$\varnothing d_2$	a			
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			
EG-M 2,5	0,45	2,65	56	5	18	3,5	2,7	6470.0D090965		664S.0B100965
EG-M 3	0,5	3,15	63	5	21	4,5	3,4	6470.0D090966	6645.0D090966	664S.0B100966
EG-M 4	0,7	4,2	70	8	25	6	4,9	6470.0D090968	6645.0D090968	664S.0B100968
EG-M 5	0,8	5,25	80	8	30	6	4,9	6470.0D090970	6645.0D090970	664S.0B100970
EG-M 6	1	6,3	90	10	35	8	6,2	6470.0D090971	6645.0D090971	664S.0B100971
EG-M 8	1,25	8,4	100	16	39	10	8	6470.0D090973	6645.0D090973	664S.0B100973
EG-M 10	1,5	10,5	100	15	-	9	7	7470.0D090975	7645.0D090975	764S.0B100975
EG-M 12	1,75	12,5	110	20	-	11	9	7470.0D090977		764S.0B100977
EG-M 16	2	16,5	125	20	-	14	11	7470.0D090979		
EG-M 20	2,5	20,75	160	30	-	18	14,5	7470.0D090981		

# EG-M (STI) DIN 8140-2



NORIS STABIL  
UNI CNC



CNC

NORIS STABIL  
VA

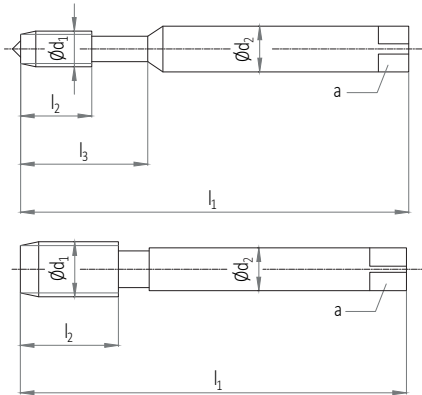


NORIS STABIL  
SOFT



表面处理和涂层 · SURFACE									ALTINHD	ALTINHD	DLC
材料 · MATERIAL									HSSE	HSSE	HSSE
切削锥类型 · CHAMFER FORM									B / 4-5	B / 4-5	B / 4-5
公差 · TOLERANCE									6H MOD	6H MOD	6H MOD
									RH	RH	RH
DIN 40435	d <sub>1</sub>	P		l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	∅ d <sub>2</sub>	a			
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			
	EG-M 2,5	0,45	2,65	56	11	18	3,5	2,7	65C0.0A090965		657S.0A100965
	EG-M 3	0,5	3,15	63	10	21	4,5	3,4	65C0.0A090966	6535.0A090966	657S.0A100966
	EG-M 4	0,7	4,2	70	12	25	6	4,9	65C0.0A090968	6535.0A090968	657S.0A100968
	EG-M 5	0,8	5,25	80	13	30	6	4,9	65C0.0A090970	6535.0A090970	657S.0A100970
	EG-M 6	1	6,3	90	17	35	8	6,2	65C0.0A090971	6535.0A090971	657S.0A100971
	EG-M 8	1,25	8,4	100	18	39	10	8	65C0.0A090973	6535.0A090973	657S.0A100973
	EG-M 10	1,5	10,5	100	22	-	9	7	75C0.0A090975	7535.0A090975	
	EG-M 12	1,75	12,5	110	26	-	11	9	75C0.0A090977		
	EG-M 16	2	16,5	125	27	-	14	11	75C0.0A090979		
	EG-M 20	2,5	20,75	160	34	-	18	14,5	75C0.0A090981		

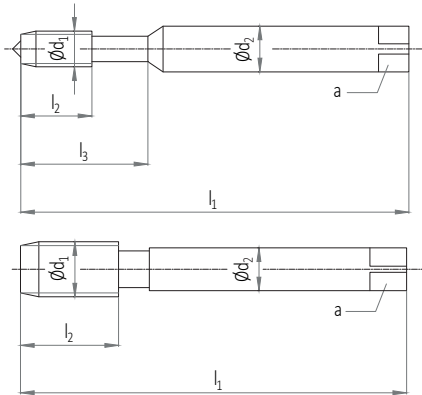
# EG-UNC (STI) ASME B18.29.1



表面处理和涂层 · SURFACE	ALTINHD	DLC	ALTINHD
材料 · MATERIAL	HSSE	HSSE	HSSE
切削锥类型 · CHAMFER FORM	E / 1,5-2	C / 2-3	B / 4-5
公差 · TOLERANCE	2B	2B	2B

	d <sub>1</sub>	- P		l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	∅ d <sub>2</sub>	a				
									[inch]	Gg/1" [tpi]	[mm]	[mm]
≈ DIN 371	EG-UNC Nr. 4	- 40		3,1	63	7	21	4,5	3,4			
	EG-UNC Nr. 4	- 40		3,1	63	13	21	4,5	3,4			65C0.0A095611
	EG-UNC Nr. 6	- 32		3,8	70	8	25	6	4,9	6470.0D095613	664S.0B105613	
	EG-UNC Nr. 6	- 32		3,8	70	14	25	6	4,9			65C0.0A095613
	EG-UNC Nr. 8	- 32		4,4	80	8	30	6	4,9	6470.0D095614	664S.0B105614	
	EG-UNC Nr. 8	- 32		4,4	80	16	30	6	4,9			65C0.0A095614
	EG-UNC Nr. 10	- 24		5,2	80	10	30	7	5,5	6470.0D095615	664S.0B105615	
	EG-UNC Nr. 10	- 24		5,2	80	17	30	7	5,5			65C0.0A095615
	EG-UNC 1/4	- 20		6,7	90	14	35	8	6,2	6470.0D095617	664S.0B105617	
	EG-UNC 1/4	- 20		6,7	90	20	35	8	6,2			65C0.0A095617
EG-UNC 5/16	- 18		8,4	100	16	39	10	8	6470.0D095618	664S.0B105618		
EG-UNC 5/16	- 18		8,4	100	22	39	10	8			65C0.0A095618	
≈ DIN 376	EG-UNC 3/8	- 16		10	100	15	-	9	7			
	EG-UNC 3/8	- 16		10	100	22	-	9	7			75C0.0A095619
	EG-UNC 7/16	- 14		11,6	110	20	-	11	9			75C0.0A095620
	EG-UNC 7/16	- 14		11,6	110	26	-	11	9			75C0.0A095620
	EG-UNC 1/2	- 13		13,3	110	22	-	12	9	7470.0D095621		
	EG-UNC 1/2	- 13		13,3	110	27	-	12	9			75C0.0A095621
	EG-UNC 9/16	- 12		14,9	110	22	-	12	9			75C0.0A095622
	EG-UNC 9/16	- 12		14,9	110	27	-	12	9			75C0.0A095622
	EG-UNC 5/8	- 11		16,5	125	25	-	14	11	7470.0D095623		
	EG-UNC 5/8	- 11		16,5	125	30	-	14	11			75C0.0A095623
EG-UNC 3/4	- 10		19,75	140	27	-	18	14,5	7470.0D095624			
EG-UNC 3/4	- 10		19,75	140	32	-	18	14,5			75C0.0A095624	

# EG-UNF (STI) ASME B18.29.1



NORIS SALOREX  
UNI CNC



NORIS SALOREX  
UNI CNC



NORIS STABIL  
UNI CNC



表面处理和涂层 · SURFACE

ALTINHD

DLC

ALTINHD

材料 · MATERIAL

HSSE

HSSE

HSSE

切削锥类型 · CHAMFER FORM

E / 1,5-2

C / 2-3

C / 2-3

B / 4-5

公差 · TOLERANCE

2B

2B

2B

2B

RH

RH

RH

RH

≈ DIN 371

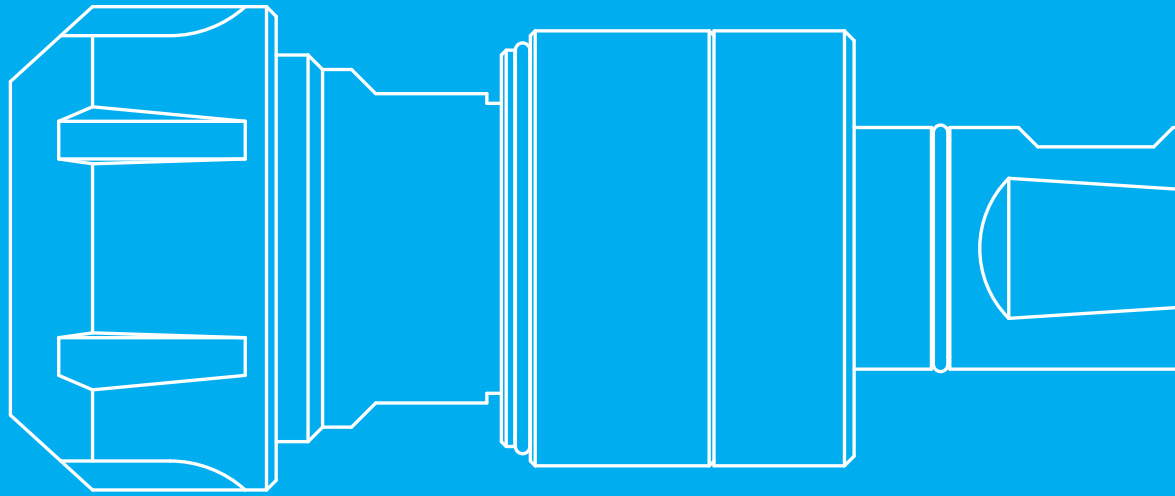
$d_1$	-	P		$l_1$	$l_2$	$l_3$	$\varnothing d_2$	a				
[inch]		Gg/1" [tpi]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]				
EG-UNF Nr. 4	-	48		3	56	7	20	4	3	6470.0D095633	664S.0B105633	
EG-UNF Nr. 4	-	48		3	56	9	20	4	3			65C0.0A095633
EG-UNF Nr. 6	-	40		3,7	70	8	25	6	4,9	6470.0D095635	664S.0B105635	
EG-UNF Nr. 6	-	40		3,7	70	11	25	6	4,9			65C0.0A095635
EG-UNF Nr. 8	-	36		4,4	80	8	30	6	4,9	6470.0D095636	664S.0B105636	
EG-UNF Nr. 8	-	36		4,4	80	13	30	6	4,9			65C0.0A095636
EG-UNF Nr. 10	-	32		5,1	80	8	30	6	4,9	6470.0D095637	664S.0B105637	
EG-UNF Nr. 10	-	32		5,1	80	13	30	6	4,9			65C0.0A095637
EG-UNF 1/4	-	28		6,6	90	10	35	8	6,2	6470.0D095639	664S.0B105639	
EG-UNF 1/4	-	28		6,6	90	17	35	8	6,2			65C0.0A095639
EG-UNF 5/16	-	24		8,25	90	10	35	10	8	6470.0D095640	664S.0B105640	
EG-UNF 5/16	-	24		8,25	90	18	35	10	8			65C0.0A095640

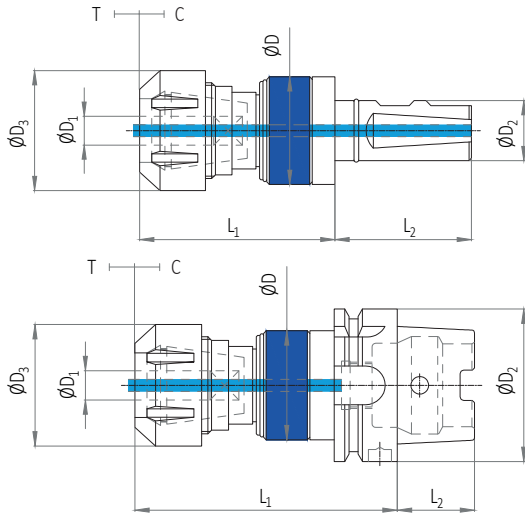
≈ DIN 374

$d_1$	-	P		$l_1$	$l_2$	$l_3$	$\varnothing d_2$	a				
[inch]		Gg/1" [tpi]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]				
EG-UNF 3/8	-	24		9,8	90	11	-	8	6,2	7470.0D095641		
EG-UNF 3/8	-	24		9,8	90	18	-	8	6,2			75C0.0A095641
EG-UNF 7/16	-	20		11,5	100	13	-	9	7			75C0.0A095642
EG-UNF 7/16	-	20		11,5	100	22	-	9	7			75C0.0A095642
EG-UNF 1/2	-	20		13,1	100	15	-	11	9	7470.0D095643		
EG-UNF 1/2	-	20		13,1	100	22	-	11	9			75C0.0A095643
EG-UNF 9/16	-	18		14,7	100	15	-	12	9			75C0.0A095644
EG-UNF 9/16	-	18		14,7	100	22	-	12	9			75C0.0A095644
EG-UNF 5/8	-	18		16,25	110	17	-	14	11	7470.0D095645		
EG-UNF 5/8	-	18		16,25	110	25	-	14	11			75C0.0A095645
EG-UNF 3/4	-	16		19,5	125	17	-	16	12	7470.0D095646		
EG-UNF 3/4	-	16		19,5	125	25	-	16	12			75C0.0A095646

02

攻丝刀柄  
TAP HOLDERS





### NORIS HELIXPRO

### NORIS HELIXPRO



Nr.				$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D$	$L_1$ ER	$L_1$ ERGB	$L_2$	$C$	$T$	
				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
0	M2- M8 (Nr.2- 5/16)	ER 11	-	2,5- 7	$\varnothing$ 16	16	34	72,7	71	49	0,5	0,5	A770Z1116
				2,5- 7	$\varnothing$ 20	16	34	72,7	71	51	0,5	0,5	A770Z1120
				2,5- 7	$\varnothing$ 25	16	34	72,7	71	57	0,5	0,5	A770Z1125
1	M4- M12 (Nr.8- 7/16)	ER 20	DS	4,5- 10	$\varnothing$ 20	34	34	-	73	51	0,5	0,5	A770Z2020
				4,5- 10	$\varnothing$ 25	34	34	-	73	57	0,5	0,5	A770Z2025
3	M4- M20 (Nr.8- 3/4)	ER 32	DS	4,5- 16	$\varnothing$ 25	50	45	-	87,3	57	0,5	0,5	A770Z3225
4	M12- M30 (7/16- 1 1/8)	ER 40	DS	9- 22	$\varnothing$ 32	63	63	-	113,5	61	0,7	0,7	A770Z4032

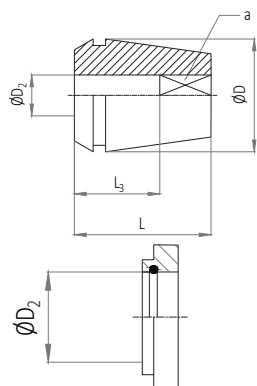
  

Nr.				$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D$	$L_1$ ER	$L_1$ ERGB	$L_2$	$C$	$T$	
				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
0	M2- M8 (Nr.2- 5/16)	ER 11	-	2,5- 7	HSK-A40	16	34	89,2	87,5	20	0,5	0,5	A790Z1140
				2,5- 7	HSK-A63	16	34	95,2	93,5	32	0,5	0,5	A790Z1163
				4,5- 10	HSK-A40	34	34	-	89,5	20	0,5	0,5	A790Z2040
1	M4- M12 (Nr.8- 7/16)	ER 20	DS	4,5- 10	HSK-A50	34	34	-	93,5	25	0,5	0,5	A790Z2050
				4,5- 10	HSK-A63	34	34	-	95,5	32	0,5	0,5	A790Z2063
				4,5- 10	HSK-A80	34	34	-	100	40	0,5	0,5	A790Z2080
				4,5- 10	HSK-A100	34	34	-	102	50	0,5	0,5	A790Z2000
				4,5- 16	HSK-A50	50	45	-	116,3	25	0,5	0,5	A790Z3250
3	M4- M20 (Nr.8- 3/4)	ER 32	DS	4,5- 16	HSK-A63	50	45	-	108,8	32	0,5	0,5	A790Z3263
				4,5- 16	HSK-A80	50	45	-	113,3	40	0,5	0,5	A790Z3280
				4,5- 16	HSK-A100	50	45	-	115,3	50	0,5	0,5	A790Z3200
4	M12- M30 (7/16- 1 1/8)	ER 40	DS	9- 22	HSK-A63	63	63	-	146,5	32	0,7	0,7	A790Z4063
				9- 22	HSK-A80	63	63	-	136	40	0,7	0,7	A790Z4080
				9- 22	HSK-A100	63	63	-	138	50	0,7	0,7	A790Z4000

根据需求可提供更多的配件  
Further accessories on request



交付时包含夹紧螺母  
Clamping nut is included in the delivery



NORIS ER | DS



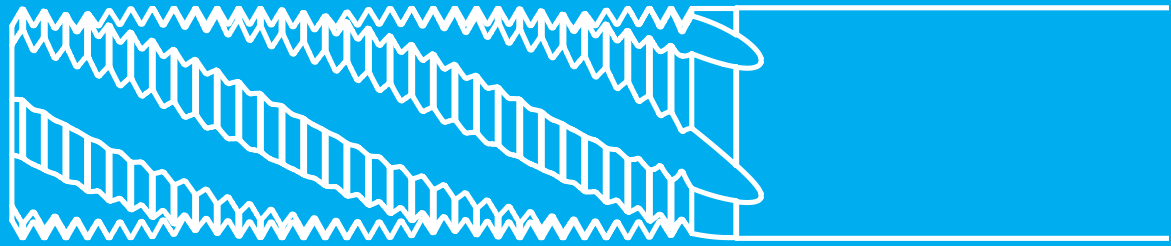
NR.	11	20	32	40
	ER 11 GB	ER 20 GB	ER 32 GB	ER 40 GB
	-	DS 20	DS 32	DS 40
	M2 - M8	M4 - M12	M4 - M20	M 10 - M30
$\phi D$ [mm]	11	20	32	40
L [mm]	18	31,5	40	46

DIN			$\phi D_2$ [mm]	$K_2$ [mm]	$L_3$ [mm]		$L_3$ [mm]		$L_3$ [mm]		$L_3$ [mm]	
		M2- M2,6	M4	2,8	2,1	ER 12	AD411Z1120					
	-	-	-	-	DS	-						
	M3	M4,5- M5	3,5	2,7	ER 14	AD411Z1130						
	-	-	-	-	DS	-						
	M3,5	M5,5	4	3	ER 14	AD411Z1140						
	-	-	-	-	DS	-						
	M4	M6	4,5	3,4	ER 14	AD411Z1145	15	AD420Z2045				
	-	-	-	-	DS	-		AK7Z0Z2045				
	M4,5- M6	M8	6	4,9	ER 14	AD411Z1160	18	AD420Z2060	18	AD432Z3260		
	-	-	-	-	DS	-		AK7Z0Z2060		AK7Z0Z3260		
	M7	M9- M10	7	5,5	ER		18	AD420Z2070	18	AD432Z3270	18	AD440Z4070
	-	-	-	-	DS			AK7Z0Z2070		AK7Z0Z3270		AK7Z0Z4070
	M8	M11	8	6,2	ER		22	AD420Z2080	22	AD432Z3280	22	AD440Z4080
	-	-	-	-	DS			AK7Z0Z2080		AK7Z0Z3280		AK7Z0Z4080
	M9	M12	9	7	ER		22	AD420Z2090	22	AD432Z3290	22	AD440Z4090
	-	-	-	-	DS			AK7Z0Z2090		AK7Z0Z3290		AK7Z0Z4090
	M10	-	10	8	ER		25	AD420Z2010	25	AD432Z32A0	25	AD440Z40A0
	-	-	-	-	DS			AK7Z0Z20A0		AK7Z0Z32A0		AK7Z0Z40A0
	-	M14	11	9	ER				25	AD432Z32B0	25	AD440Z40B0
	-	-	-	-	DS					AK7Z0Z32B0		AK7Z0Z40B0
	-	M16	12	9	ER				25	AD432Z32C0	25	AD440Z40C2
	-	-	-	-	DS					AK7Z0Z32C0		AK7Z0Z40C0
	-	M18	14	11	ER				25	AD432Z32E0	25	AD440Z40E4
	-	-	-	-	DS					AK7Z0Z32E0		AK7Z0Z40E0
	-	M20	16	12	ER				25	AD432Z32G0	25	AD440Z40G6
	-	-	-	-	DS					AK7Z0Z32G0		AK7Z0Z40G0
	-	M22- M24	18	14,5	ER						25	AD440Z40J8
	-	-	-	-	DS							AK7Z0Z40J0
	-	M27	20	16	ER						28	AD440Z40L0
	-	-	-	-	DS							AK7Z0Z40L0
	-	M30	22	18	ER						28	AD440Z40N0
	-	-	-	-	DS							AK7Z0Z40Z2
	-	M33	25	20	ER						41	AD450Z50B5



03

螺纹铣刀  
THREAD MILLS



## 分类汇总

列出的切削速度 (Vc, 单位为M/MIN) 为标准值.  
该值必须根据实际加工情况进行调整

## SUMMARY OF ASSORTMENT

THE LISTED CUTTING DATA ARE STANDARD VALUES.  
THIS VALUES HAVE TO BE ADJUSTED TO INDIVIDUAL WORK  
CONDITIONS.



P	钢件材料	STEEL MATERIALS
	非合金钢和低合金钢	Unalloyed and low-alloy steels
	高合金钢	High alloy steels
M	耐腐蚀和耐酸钢	CORROSION AND ACID PROOF STEELS
	奥氏体不锈钢和双相不锈钢	Stainless austenitic steels + DUPLEX steels
K	铸件材料	CAST MATERIALS
	铸铁、球墨铸铁、蠕墨铸铁、可锻铸铁	Cast iron, nodular cast iron, Vermicular graphite cast iron, malleable cast iron
	奥铁素体铸铁 (ADI) + 硬质铸件	Ausferritic cast iron (ADI) + Hard casting
N	有色金属材料	NON FERROUS MATERIALS
	锻铝合金	Aluminium wrought alloys
	铸铝合金	Aluminium cast alloys
	黄铜+铜合金 (长屑)	Copper + Copper alloys (long-chip.)
	铜合金 (短屑)	Copper alloys (short-chip.)
	高强度铜合金	High-strength copper alloys
	锌合金	Zinc alloys
	锻镁合金	Magnesium wrought alloys
	热塑性塑料	Thermoplastics
	纤维强化合成材料+硬质体塑料	Fibre-reinforced synthetics + Duroplastics
S	特殊材料	SPECIAL MATERIALS
	镍基/铁基/钴基合金	Ni-, Fe- or Co-based superalloys
	钛+钛合金	Titanium + Titanium alloys
H	淬硬钢	HARDENED STEELS
	淬硬钢	Hardened steels

# NORIS EIR

# NORIS ZTF

HR

HT

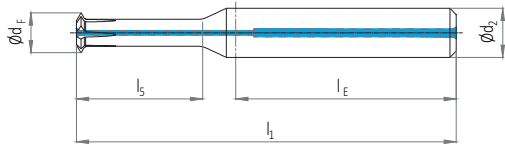
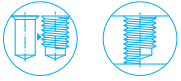


最大攻丝深度-倍径 · USABLE LENGTH	2XD	3XD	2XD
表面处理和涂层 · SURFACE	ACR	ACR	ALTIN
材料 · MATERIAL	K30	K30	K20
MJ	32	33	35
UNJC		34	
UNJF		34	
EG-M	32	33	
EG-UNC		34	
EG-UNF		34	

MAT.		Vc [m/min]	fz [mm]		Vc [m/min]	fz [mm]
≤ 800N/mm <sup>2</sup>	P1.1	100- 200	<b>0,045xP</b>	<b>0,040xP</b>		
≤ 1200N/mm <sup>2</sup>	P1.2	60- 140	<b>0,035xP</b>	<b>0,030xP</b>		
≤ 1400N/mm <sup>2</sup>	P1.3	40- 80	<b>0,030xP</b>	<b>0,025xP</b>		
≤ 1400N/mm <sup>2</sup>	P2.1	40- 140	<b>0,030xP</b>	<b>0,025xP</b>		
		Vc [m/min]	fz [mm]		Vc [m/min]	fz [mm]
≤ 800N/mm <sup>2</sup>	M1.1	60- 120	<b>0,030xP</b>	<b>0,025xP</b>		
≤ 1300N/mm <sup>2</sup>	M1.2	30- 80	<b>0,020xP</b>	<b>0,015xP</b>		
		Vc [m/min]	fz [mm]		Vc [m/min]	fz [mm]
≤ 800N/mm <sup>2</sup>	K1.1	100- 200	0,050xP	0,050xP		
≤ 1400N/mm <sup>2</sup>	K2.1	60- 140	<b>0,035xP</b>	<b>0,030xP</b>		
		Vc [m/min]	fz [mm]		Vc [m/min]	fz [mm]
	N1.1	200- 400	0,060xP	0,060xP		
≤ 12%Si	N1.2	200- 400	0,060xP	0,060xP		
≥ 12%Si	N1.3	150- 300	0,060xP	0,060xP		
	N2.1	200- 400	0,060xP	0,060xP		
	N2.2	200- 400	0,060xP	0,060xP		
≥ 800N/mm <sup>2</sup>	N2.3	40- 120	0,030xP	0,025xP		
	N3.1	200- 400	0,060xP	0,060xP		
	N4.1	200- 400	0,060xP	0,060xP		
	N5.1	200- 400	0,060xP	0,060xP		
	N5.2	150- 300	0,060xP	0,060xP		
		Vc [m/min]	fz [mm]		Vc [m/min]	fz [mm]
≤ 800N/mm <sup>2</sup>	S1.1	30- 80	<b>0,020xP</b>	<b>0,015xP</b>	40- 80	<b>0,020xP</b>
≤ 1600N/mm <sup>2</sup>	S1.2	20- 60	0,010xP		30- 60	<b>0,015xP</b>
≤ 800N/mm <sup>2</sup>	S2.1	40- 120	<b>0,025xP</b>	<b>0,020xP</b>		
≤ 1300N/mm <sup>2</sup>	S2.2	30- 80	0,020xP	0,015xP	40- 80	<b>0,015xP</b>
		Vc [m/min]	fz [mm]		Vc [m/min]	fz [mm]
≤ 55HRc	H1.1				80- 120	<b>0,020xP</b>
≤ 63HRc	H1.2				60- 100	<b>0,015xP</b>
≤ 65HRc	H1.3				30- 60	<b>0,010xP</b>



# M DIN 13 | MF DIN 13



NORIS EIR  
HR



NORIS EIR  
HR



NORIS EIR  
HR MKB



最大攻丝深度-倍径 · USABLE LENGTH

2 X D

2 X D

2 X D

表面处理 and 涂层 · SURFACE

ACR

ACR

ACR

材料 · MATERIAL

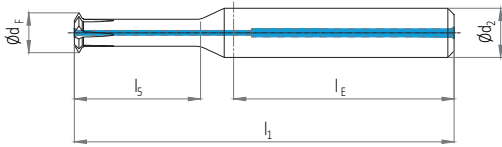
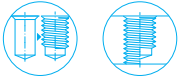
K30

K30

K30

DIN 13	$\varnothing d_{1 \min}$	P	$\varnothing d_f$	$l_1$	$l_s$	$l_e$	$\varnothing d_2$	z			
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]				
≥ M 1	0,1	0,25	0,7	39	3,3	28	3	1	F50ES0522368		
≥ M 1,2	0,1	0,25	0,7	39	3,3	28	3	1	F50ES0522368		
≥ M 1,4	0,12	0,35	1,04	39	3,7	28	3	2	F50ES0522369		
≥ M 1,6	0,12	0,35	1,04	39	3,7	28	3	2	F50ES0522369		
≥ M 1,7	0,12	0,35	1,04	39	3,7	28	3	2	F50ES0522369		
≥ M 1,8	0,12	0,35	1,04	39	3,7	28	3	2	F50ES0522369		
≥ M 2	0,15	0,45	1,52	39	5	28	3	3	F50ES0522370		
≥ M 2,2	0,15	0,45	1,52	39	5	28	3	3	F50ES0522370		
≥ M 2,5	0,17	0,5	1,95	39	6,3	28	3	3	F50ES0522371		
≥ M 3	0,17	0,5	1,95	39	6,3	28	3	3	F50ES0522371		
≥ M 3,5	0,22	0,75	2,78	42	9,4	28	4	3	F50ES0522372		
≥ M 4	0,22	0,75	2,78	42	9,4	28	4	3	F50ES0522372		
≥ M 5	0,3	1	4	55	14,5	36	6	4		F50EHBf000509	
≥ M 6	0,3	1	4	55	14,5	36	6	4		F50EHBf000509	
≥ M 7	0,3	1	4	55	14,5	36	6	4		F50EHBf000509	
≥ M 8	0,43	1,5	6,5	62	20,6	36	8	5			F50EHBf000809
≥ M 10	0,43	1,5	6,5	62	20,6	36	8	5			F50EHBf000809
≥ M 12	0,5	2	9,9	78	32,8	40	10	5			F50EHBf001129
≥ M 14	0,5	2	9,9	78	32,8	40	10	5			F50EHBf001129
≥ M 16	0,5	2	9,9	78	32,8	40	10	5			F50EHBf001129

兼容EG螺纹和J螺纹  
Compatible with EG- and J-threads



NORIS EIR  
HR



NORIS EIR  
HR



NORIS EIR  
HR MKB

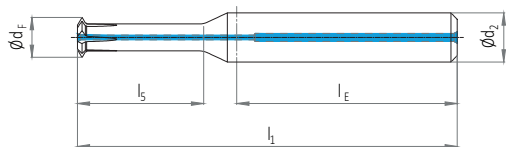
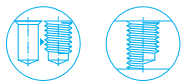


最大攻丝深度·倍径·USABLE LENGTH									3 X D	3 X D	3 X D
表面处理和涂层·SURFACE									ACR	ACR	ACR
材料·MATERIAL									K30	K30	K30
$\phi d_{1 \min}$	P	$\phi d_F$	$l_1$	$l_5$	$l_E$	$\phi d_2$	z				
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]					
$\geq M 1$	0,1 - 0,25	0,7	39	3,3	28	3	1	F51EHAF00105			
$\geq M 1,6$	0,14 - 0,35	1,18	39	5,2	28	3	2	F51EHAF00165			
$\geq M 2$	0,15 - 0,4	1,52	39	6,4	28	3	3	F51EHAF00205			
$\geq M 2,5$	0,17 - 0,45	1,96	39	8	28	3	3	F51EHAF00255			
$\geq M 3$	0,18 - 0,5	2,4	41	9,5	28	3	3	F51EHAF00305			
$\geq M 4$	0,26 - 0,7	3,15	44	12,7	28	4	3	F51EHAF00405			
$\geq M 5$	0,28 - 0,8	4,04	56	15,8	36	6	4		F51EHBFB000509		
$\geq M 6$	0,35 - 1	4,8	59	19	36	6	4		F51EHBFB000609		
$\geq M 8$	0,43 - 1,25	6,5	65	25,3	36	8	5			F51EHBFB000809	
$\geq M 10$	0,51 - 1,5	8,2	77	31,5	40	10	5			F51EHBFB001009	
$\geq M 12$	0,6 - 1,75	9,9	82	37,8	40	10	5			F51EHBFB001129	
$\geq M 14$	0,68 - 2	11,6	94	44	45	12	5			F51EHBFB001149	
$\geq M 16$	0,68 - 2	13,6	100	50	45	14	5			F51EHBFB001169	

DIN 13

兼容EG螺纹和螺紋  
Compatible with EG- and J-threads

# UNC ASME B1.1 | UNF ASME B1.1



NORIS EIR  
HR



NORIS EIR  
HR

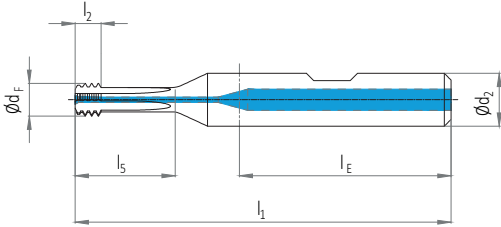
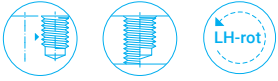


NORIS EIR  
HR MKB



最大攻丝深度-倍径 · USABLE LENGTH									3 X D	3 X D	3 X D
表面处理和涂层 · SURFACE									ACR	ACR	ACR
材料 · MATERIAL									K30	K30	K30
ASME B1.1	$\varnothing d_{1 \min}$	P	$\varnothing d_F$	$l_1$	$l_S$	$l_E$	$\varnothing d_2$	Z			
	[inch]	Gg/1" [tpi]	[mm]	[mm]	[mm]	[mm]	[mm]				
	≥ UNC Nr.2	80 - 56	1,7	39	7	28	3	3	F51EHAF050019		
	≥ UNC Nr.4	80 - 40	2,15	40	9,2	28	3	3	F51EHAF050039		
	≥ UNC Nr.6	80 - 32	2,7	42	11,3	28	3	3	F51EHAF050059		
	≥ UNC Nr.10	72 - 24	3,7	46	15,5	28	4	3	F51EHAF050079		
	≥ UNC 1/4	56 - 20	4,95	59	20,3	36	6	4		F51EHBFO50099	
	≥ UNC 5/16	48 - 18	6,3	65	25,2	36	8	4			F51EHBFO50109
≥ UNC 3/8	48 - 16	7,7	68	30,2	36	8	5			F51EHBFO50119	
ASME B1.1	$\varnothing d_{1 \min}$	P	$\varnothing d_F$	$l_1$	$l_S$	$l_E$	$\varnothing d_2$	Z			
	[inch]	Gg/1" [tpi]	[mm]	[mm]	[mm]	[mm]	[mm]				
	≥ UNF Nr.10	80 - 32	3,9	46	15,3	28	4	4	F51EHAF050419		
	≥ UNF 1/4	80 - 28	5,25	59	20	36	6	4		F51EHBFO50439	
	≥ UNF 5/16	64 - 24	6,6	65	24,9	36	8	5			F51EHBFO50449
≥ UNF 7/16	56 - 20	9,55	77	34,6	40	10	5			F51EHBFO50469	

兼容EG螺纹和J螺纹  
Compatible with EG- and J-threads



NORIS ZTF  
HT



NORIS ZTF  
HT MKB



最大攻丝深度·倍径·USABLE LENGTH	2 X D	2 X D
表面处理和涂层·SURFACE	ALTIN	ALTIN
材料·MATERIAL	K20	K20
$\varnothing d_{1 \min}$ [mm]		
P		
$\varnothing d_f$		
$l_1$		
$l_2$		
$l_5$		
$l_E$		
$\varnothing d_2$		
Z		
M 3 -- -	F154HBF00306	
M 4 -- -	F154HBF00406	
M 5 -- -	F154HBF00506	
M 6 - M 7	F154HBF00606	
M 8 - MF 10		F154HBF00806
M 10 - MF 12		F154HBF01006
M 12 - MF 14		F154HBF01126
M 14 - M 16		F154HBF01146

DIN 13

兼容MJ螺纹  
Compatible with MJ-threads



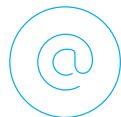
REIME NORIS  
诺瑞思螺纹工具（上海）有限公司



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