

刀具系列 优化工艺 在铣加工上的咨询服务
TOOLING SYSTEMS PROCESS OPTIMIZATION CONSULTING IN MILLING STRATEGIES



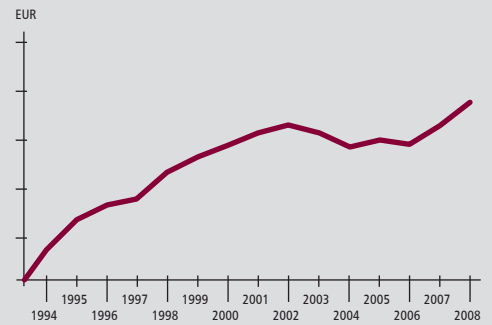
PREMIUMTOOLS. WE KNOW HOW.



cpokoIm[®]
PREMIUMTOOLS. WE KNOW HOW

提供获胜的技术知识

Our know-how for your success



为了能在残酷的竞争中获胜，你就需要能提供产品开发能力及其它服务的协作方。Pokolm就具有这样的能力。我们正在为2D和3D的加工提供革新的刀具。有着超过15年的技术经验，提供实用的，同质的刀具是我们的宗旨。仔细分析客户需求，精确定义客户疑问是我们解决方案的关键。我们本着公开，真诚的合作态度，由资深的员工来提供全方位的服务。

我们讨论相同的事，积极主动地参与客户的项目。最后，我们为客户量身定制解决方案，提高工作效率，降低生产成本，也提高了利润。这正是战胜市场，赢得绝对竞争力的关键。

In order to be successful in severe competition, you need partners, who are on your side with professionally developed products and extensive service. Pokolm has this capability.

We are supporting your process-chain with innovative tooling-technology in the range of 2D- and 3D-milling operations. With our know-how of over 15 years experience, we are among the leading companies of this range and offer practice-oriented homogeneous tooling systems. Our solutions are the result of extensive analysing of your needs and a particular job definition of your problems.

Offering a full-service-philosophy is based on an open and trustful partnership, which is also admitted by our high qualified employees.

We talk the same language and we come involved into your projects, highly motivated. Finally, we create an individual solution, which is increasing your efficiency in milling operations as well as cutting your costs and is improving your profitability. This is the key to your success and your decisive competitive advantage.

保证工艺的稳定可靠

Opening up a new dimension in process reliability

最新刀具系统Spinworx在Hermesmeier & Greweling的应用

1982以来，这个靠近Gütersloh的Marienfeld镇的Hermesmeier & Greweling公司就因为他们在铣加工上超凡的能力和非常专业的知识而著称。

Hermesmeier&Greweling是最先试用我们新品SPINWORX®的

时间因素是关键

我们的目标是用尽可能短的时间将一个1.7131材料的钢块加工成一个罐盖的模芯成品，最好是无人看管的条件下进行。为了达到这个测试目的，Pokolm推荐使用Spinworx®的6 52 310/7DR Ø 52 r6铣刀。

Spinworx®有可靠的铣加工工艺

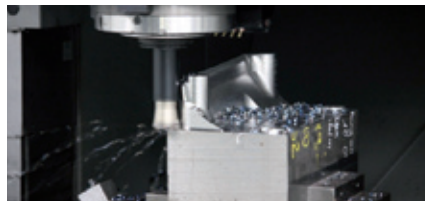
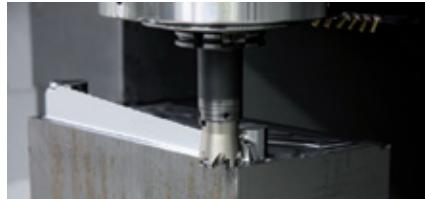
采用4500 mm/min的进给率和1.25 mm的切削深度来加工这个工件花了172分钟。加工完成后就可以立刻装到这个修边模上使用了。确实，SPINWORX®刀具最大的特点就是通过避免刀片的重新定位来节约加工时间，但是，更重要的是它的加工工艺超乎想象的稳定。对这加工了172分钟的刀片在30倍放大镜下进行检查，没有发现任何特别明显的裂纹，实际显示这些刀片还能继续使用更长时间。

结论：

Pokolm的SPINWORX®刀具系统赢了这个测试，它用的时间是最短的，花费的刀具费用也是最低的。其它优点：使工艺稳定性最优化，降低停顿时间和无效工时。

铣削测试

The milling test in technical survey



机械 machine	DMU
型号 type	200P
设备输出功率 machine output	42 kW
主轴系统 arbor system	SK50
材料 material	1.7131
主轴 arbor	100 22 710 Ø 22; SK 50 DIN 69 871 A
切削工具 cutting tool	6 52 310/7DR Ø 52 r6
刀片 inserts	03 12 8A0 DR Ø 12
悬臂 overhang	55 mm
冷却 coolant	气冷 air through spindle
V_c (速度 speed)	250 m/min
S (变革 revolutions)	1530 U/min
f_z (每齿进给 feed per tooth)	0,49 mm
V_f (进给率 feed rate)	4500 mm/min
a_c (切削宽度 cutting width)	38 mm
a_p (切削深度 depth of cut)	1,25 mm
加工时间 machining time	1. Seite 114 min 2. Seite 58 min

Latest tooling system Spinworx®

operating at Hermesmeier & Greweling

The company Hermesmeier & Greweling from the town of Marienfeld near Gütersloh is well known for their capability and professional knowing in milling operations at the highest stage since 1982.

As one of the first, Hermesmeier & Greweling were trying our new system SPINWORX®.

The factor time is most important

Target was, to machine a steel blank from material 1.7131 for a tank cap insert up to the finishing process in as few time as possible, preferably unattended.

For the test run, Pokolm recommended a SPINWORX® milling cutter 6 52 310/7DR r6.

Process reliable milling with SPINWORX®

Machining of the blank geometry took 172 minutes, using a feed rate of 4500 mm/min and a cutting depth of 1.25 mm. The finished part could be integrated into the trimming tool immediately. Certainly, the time saving through avoiding re-locating of inserts was a strong argument for SPINWORX®. But, more significant was the unbelievable process reliability.

The following quantification of the SPINWORX®-inserts, using a 30 times magnification, resulted in practically no wear at all after a total machining time of 172 minutes. These inserts could have been used for further operations easily.

Conclusion:

With the tool system SPINWORX® from Pokolm, extremely short machining times and at the same time, minimized tool costs can be achieved.

Further advantages are: optimized process reliability and reducing of downtimes and non-productive times. This results in extensive reduced component costs and a distinct time saving.

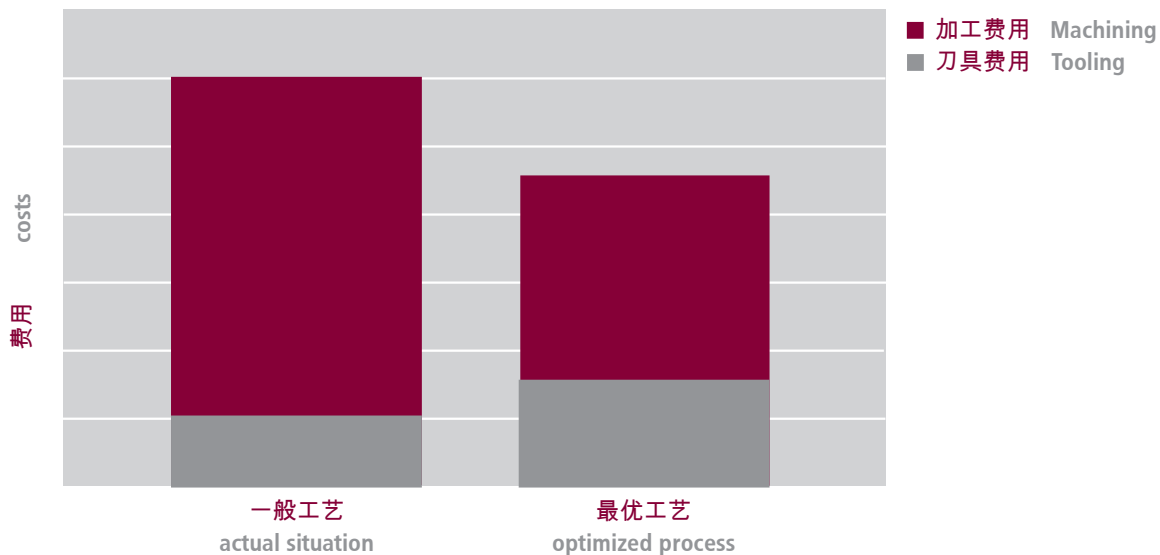


更经济有效

Efficiency for more economics

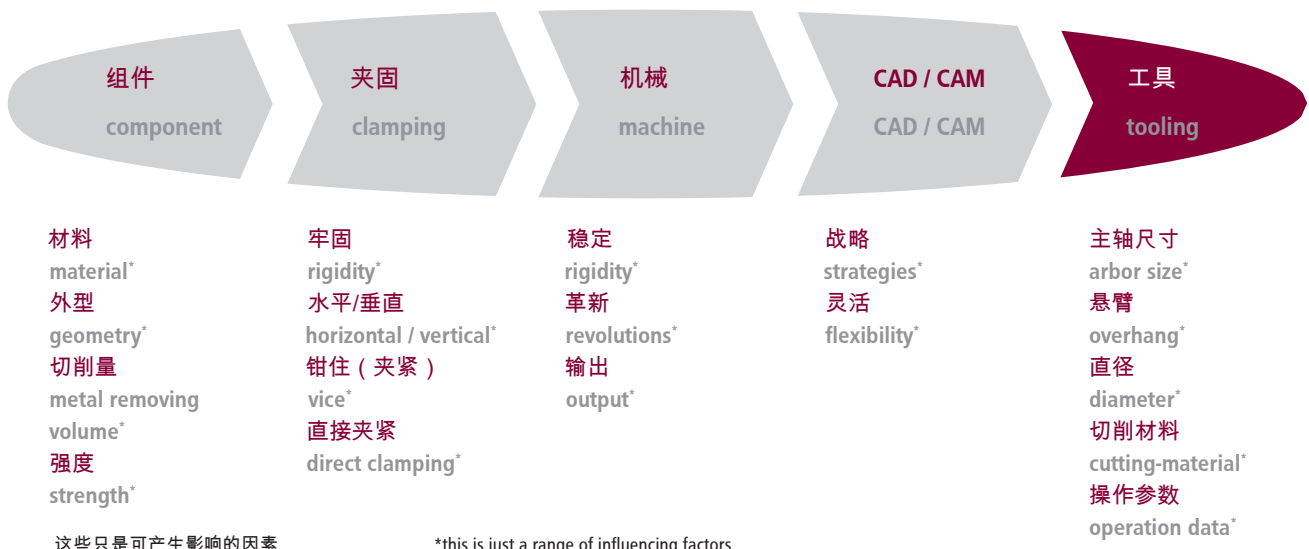
针对专门的生产工艺，我们提供综合的分析和咨询，目的只有一个，就是帮助客户降低生产成本，提高生产效率。

Our integrated analysis and consulting is focussed on your specified production-process, only with one goal: to cut costs and, at the same time, to increase productivity.



方法：优化程序

Our approach: process optimization



品种多，质量优

Large variety with quality

我们智能刀具系统为每一个可能的应用方案建议最优的刀具--从刀柄，刀杆到刀头，在各方面进行对比。我们整个的服务包括销售服务，提供配件和人员培训。

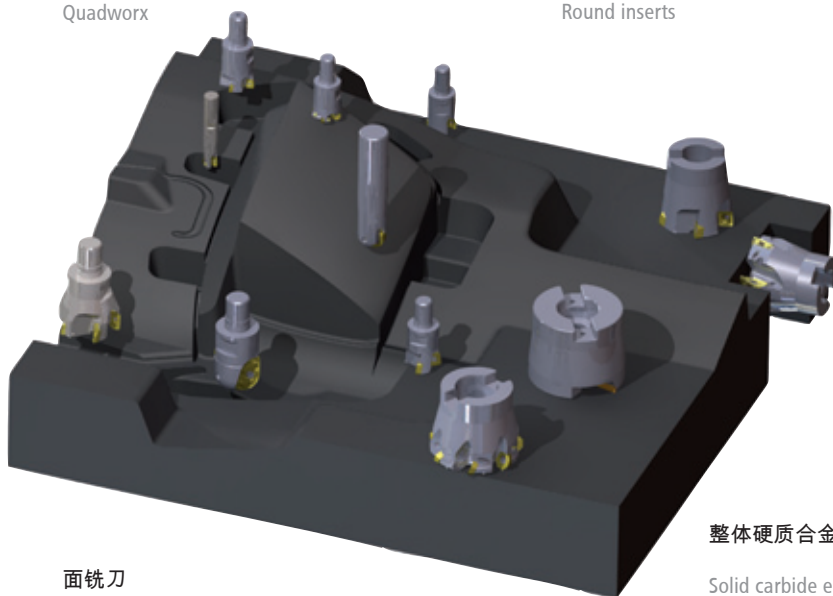
Our intelligent tooling system offers optimized tools for every possible application - from arbors and adapters up to cutting edges in many ways. Service, accessories, education and training are completing our full-service-concept.

Quadworx

Quadworx

圆刀片

Round inserts



面铣刀

Surface milling cutters

方肩及槽铣刀

Square shoulder and slotting cutters

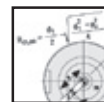
整体硬质合金铣刀

Solid carbide end mills



服务

Service



应用知识

Know-how



安装刀片的铣刀头

Milling cutter bodies for indexable inserts



可转位刀片

Indexable inserts



整体硬质合金铣刀

Solid carbide end mills



刀柄和刀杆

Arbors and adapters



高速主轴/热缩系统

High speed spindle/shrinking systems



配件

Accessories



定制产品

Customized products



操作参数

Operation data

满足各种工业需求

Customized concepts for every industrial sector

我们正在研究掌握每种金属切削的要求，这样我们就能满足高效率，寿命长，高精密，多灵活和配合精确的需求。

We are knowing about the requirements of every metal removing sector. That way, we can fulfill your high demands for productivity, tool-life and accuracy, flexible and precisely fitted.



保证工艺最优化

Guaranteed process optimization



DuoPlug, Spinworx及其它专利
DuoPlug, Spinworx and other patents.

不进则退！因为明白这个道理，所以我们不断地开发新产品来壮大供应范围。这也是确保我们在这个领域技术领导地位的唯一方法，同时也是客户从我们技术革新和专利中提升竞争力的唯一途径。

If you don't go forward, you go backwards! For this reason, we continuously develop new products for our range of tooling. This is the only way to meet the requirements as technological leader in this field. And this is the only way for you, having a lasting effect from our innovations and patents, which are able to promote your competitive advantage.

知识把握未来：Pokolm研究室

Knowledge secures future: the Pokolm academy

为了把握市场机遇，对员工的不断培训是至关重要的。我们专业的讲习班，研讨会及培训课程提供这方面的优势，让客户更了解和掌握我们的产品知识。这是做好企业和生意的基本。

In order to master the challenges of the markets, a continuous education of your employees is of vital importance. Our professional workshops, seminars and trainings provide advantages in understanding and competent knowledge about our products. This is the basis for doing good business and outtrade others.

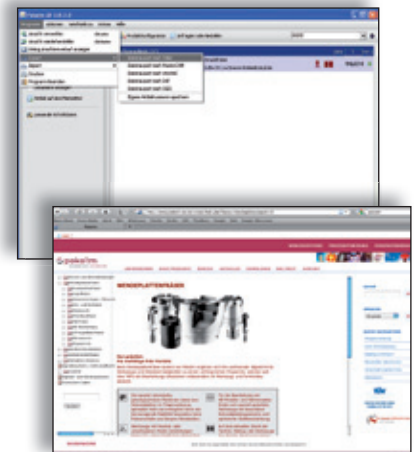


持续服务

Ongoing services

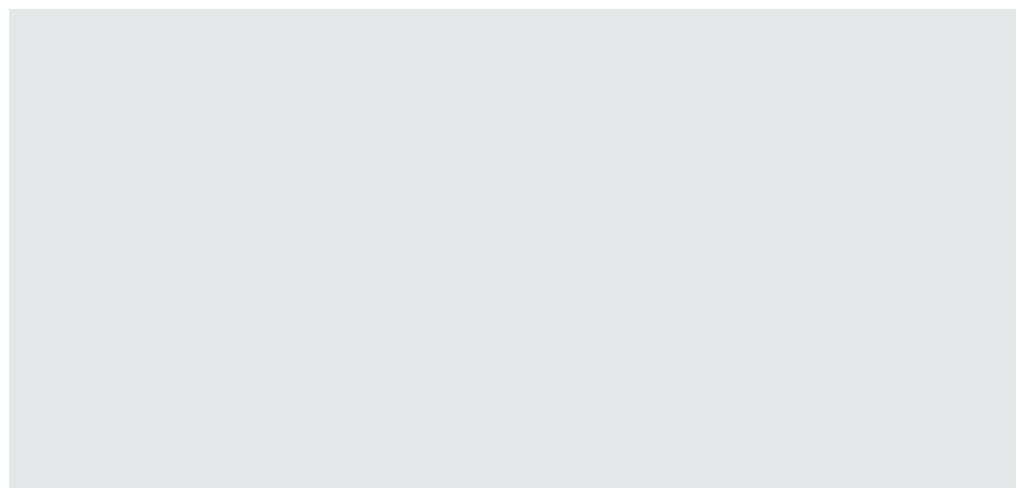
高科技不单单是对我们产品的认可，同时也是对我们客户的支持。我们最先进的产品配置有CAD-CAM兼容的3D文件，方便的媒体载体，如因特网，CD盘及印刷品就是最好的例证。这些可以方便客户对我们产品进行挑选和订购。

High-tech is not only a seal of approval for our products but at the same time for our customer support. Best examples are our most modern product-configurator with CAD/CAM-compatible 3D-data files and well-structured media, like internet, CD- as well as print-catalogues. Use these services for a comfortable selection of products and a convenient order processing.



合伙人

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