

# SEALS

TECHNOLOGY



0209

客户杂志 *Magazine for customers and partners*

## turning the tides



SML Simulation

Go 4 Quality

Customer Training





# How to keep up with the times



亲爱的读者们：

金融界依旧波涛汹涌。各国领袖和财政部长为了拯救各国金融业和工业投入上亿资金。这场全球性的经济危机中，密封行业亦未能避免影响。

## Seal Maker 一个稳固的合作伙伴！

市场的动荡，对于OEM的影响最为强烈。虽然 Seal Maker 的重心并不在OEM，但是，期望业绩的增长能如往年一般迅猛，并不现实。所以，我们利用这段特殊的时间，巩固企业，蓄势待发。

近日，很多企业进入经济危机，必须靠裁员、节能来保持运作。Seal Maker 仍然根基牢固。这完全归功于一如既往的稳扎工作。可靠、坚持、公平，在动荡时期，更加凸显我们是一个稳固的客户和供货商。

每个危机都藏着一个机会！

面对此次经济危机，Seal Maker 装备完善，利用现在的趋势，创造机会。近几年，我们注重于扩展。这是我们企业不管是对内或是对外，都拥有丰富的资源。好好利用这些宝贵的资源，在接下来的几个月里，我们将会推出我们新研发的产品和产品革新。

## 乐观面对将来！

Seal Maker 参加今年四月的汉诺威展，成绩卓越。我们有机会和我们的客户，以及同行者进行深入的对话。通过这些谈话，让我们对整个市场预测有了一个大概的概况。

当前的经济危机不会简单的自动消失，但是，我们坚信它是一个可以被克服的挑战。

所以，此时此刻Seal Maker 更加注重于新产品的推动，为我们的客户和合作伙伴贡献有用的建设性方案。

Dear readers,

The rough swell in the troubled financial sector is still creating a stir. Finance ministers and Prime ministers pump billions into the financial sector and into industry in order to avoid that the vessel of economy capsizes. The seal sector did not remain untouched by the global crisis either.

## Seal Maker – a solid partner!

Original equipment manufacturers (OEM) are the most seriously affected by the shaky development of their market.

Seal Maker's core business is not in the OEM sector, nevertheless it would be a wrong signal if we intended to force a further increment of the boom we had during the past years. Instead, we have decided to use the sign of the times as an occasion to consolidate our company.

Unlike others who got into a financial disorder and need to set restrictive measures, Seal Maker can still rely on an excellent and stable basis. This is the consequence of our past work, with a strong focus on reliability, continuity and fairness, and this makes us a reliable partner for our suppliers and clients, even in times of crisis.

## Every crisis offers opportunities!

Seal Maker is well prepared to counter the present economic crisis, and can even see it as an advantage. The past years brought us significant expansion.

Therefore we now have a high capacity at our disposal – this is a valuable potential which allows us to draw on considerable resources.

Thus we are already looking forward to presenting you in the near future some new products, as well as some innovative developments.

## Heading towards future with optimism!

Our participation at the Hannover Fair in April 2009 offered me the opportunity to personally communicate, and to have an open word, with many customers and insiders in the seal business. I noticed that – overall – the upcoming market development is being judged with quite a lot of confidence.

Of course the economical crisis will not pass by just by itself – but this is a challenge we can master with optimism.

Especially in times such as these it is important for us at Seal Maker to set new goals, and to make valuable contributions for our customers by means of new design solutions.

您的 / sincerely yours

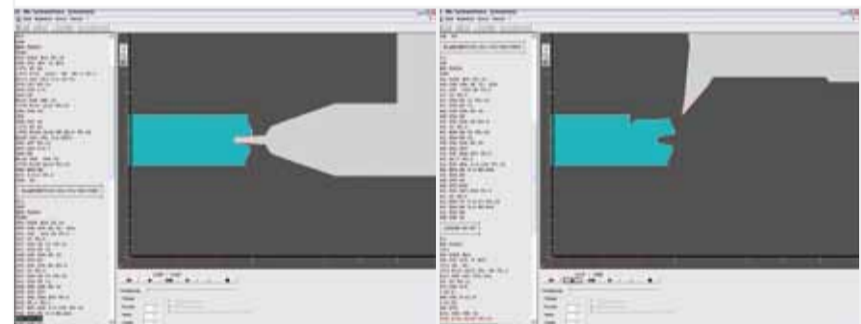
Johann Glocknitzer  
总经理

## 使用演示软件，加工更有把握！

即日起SML系统软件3.5版正式公布。这次的升级版不仅为数控车床操作新手所喜爱，数控行家们也颇有获益。

从工料到成品，所有的加工步骤都能通过视频动画演示。为用户带来很多便利：通过预览加工成品和效果，可以在无材料消耗的前提下对加工程序进行修改和完善。可以检查加工程序的安全性。加工程序中出现碰撞，将有警报提示。

演示功能使用简便：打开所需截面后，选择“Extras”菜单里面的“Simulation”选项便可。



## Let's play it safe by simulation!

With the SML System Software Version 3.5 we are providing a very useful feature, which will be appreciated not only by young CNC-turners, but also by professional seal technologists with substantial experience.

Every step of machining, from the billet up to the finished seal, can be seen in an on-screen simulation.

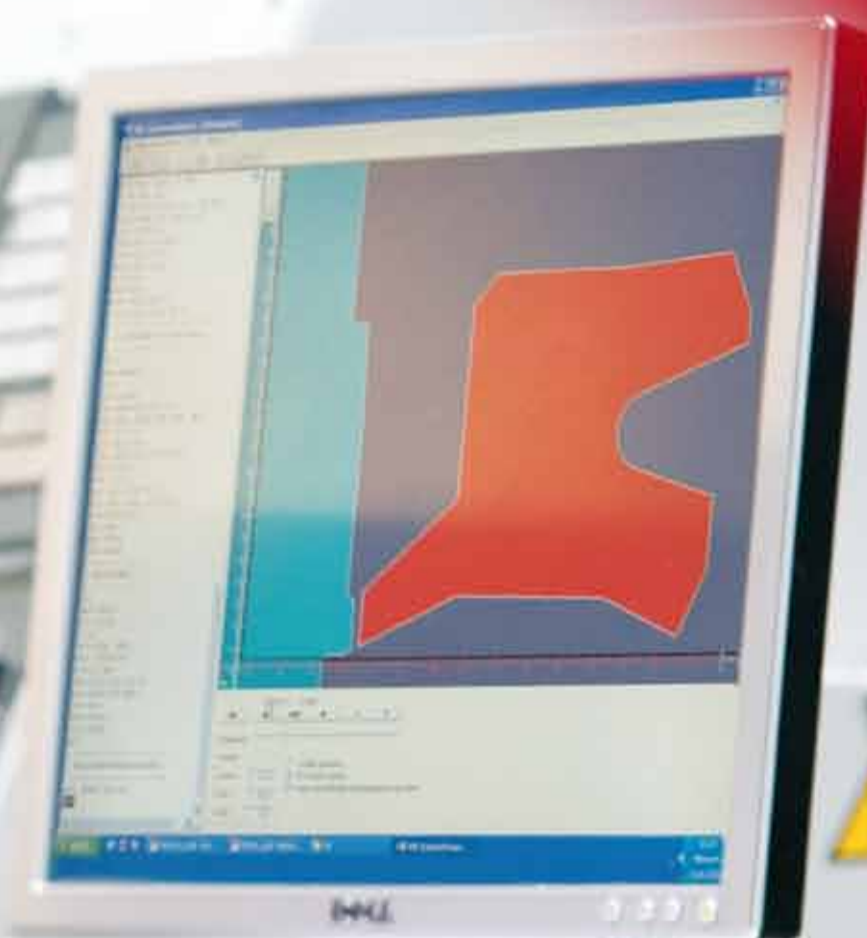
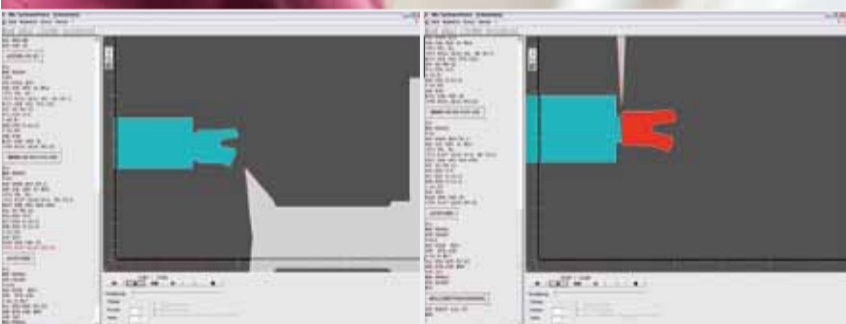
This offers the user a variety of advantages: The end result of the machining process can be seen in advance, which allows adaptations and corrections without loss of material.

Even the safety of the machining process can be controlled in advance, because a warning signal indicates an impending collision.

The handling of the simulation is pretty simple: You open the selected profile, and in the menu bar you click „Extras“, then „Simulation...“ - ready.



# Virtual sealing



## Update

SML 系统软件3.5 版  
最新的SML系统软件3.5版包含所有演示功能  
的光盘已经寄给各设备用户。我们的客服很  
乐意为您提供相关咨询：+43 2626 20085。

## SML System Software 3.5

The newest SML Software Version 3.5 with all the  
simulation features has already been sent out to our  
machine customers on a CD.  
Our service personnel will be happy to give you  
advices on our service line +43 2626 20085

**HOT!**





Go 4  
quality!

### Feedback

我们的研发团队感谢您的反馈。请把您的经验、需要和想法告诉我们：  
[office@seal-maker.com](mailto:office@seal-maker.com)

Our R&D team would appreciate your feedback pertaining to our products. Please let us know your experiences, suggestions and wishes:  
[office@seal-maker.com](mailto:office@seal-maker.com)

### Downloads

新的安全数据  
最新的材料安全数据可以通过  
[office@sealmaker.com](mailto:office@sealmaker.com)索取。所有材料和设备  
客户可登陆我们的官方网站加密区下载。

### New Safety Data Sheets

The updated safety data sheets of our materials are available at  
[office@sealmaker.com](mailto:office@sealmaker.com) and ready for  
download in the log-in area of our website for  
all our machine- and material customers.

NEW!

# Pushing the frontiers

## 密封技术的巅峰仍未巅峰

在 Seal Maker 实验室，我们无时无刻不在研究开发具有新功能的密封材料。

优化现有的密封材质，研发具有更广应用范围的或特殊性能的新材料

Markus Gossmann，Seal Maker 的化学技师知道，“每种密封材料都有源自其化学合成的性能局限。最终目的是为所需的应用找到完美的配方。”

与客户的频繁交流中我们获得关于密封行业的有用讯息，其发展趋势，哪些发明受到关注，哪些应用范围仍未得到满足。

为了满足客户需求，Seal Maker 去年扩展其研发部门，增加研发人员和仪器设备

完备的实验设备使研发人员具备等同生产部门的试验条件。

和原料供货商的紧密合作非常重要。共同调配所需的要求，原料样品将在我们的试验室再次被检测、评估。

我们的工作不止于研发新材料。在研发过程中所赢得的数据，对后续的生产技术调整至关重要。直到大型生产设备能够做出和实验室同样质量的产品，这时的材料才算满足要求，能够出产。

## Seal Technology is still far from reaching its limits.

In the Seal Maker laboratory we work permanently on the development of new solutions for innovative applications.

This work is targeted at the optimization of the quality of already existing materials, and also at the development of new, alternative materials for specific applications.

“Due to its chemical compositions every seal material can be modified within certain limits only. The art is to develop the ideal composition for the specific seal application,” states Markus Gossmann, analytical chemist at Seal Maker. The extensive knowledge transfer with customers gives us an additional and helpful insight into the required changes and the new and modified trends in the seal market, as well as the requirements for new seal applications.

In order to keep up with these customer requirements, Seal Maker has expanded the capacity of its R&D department, and invested into additional laboratory equipment. This substantial lab equipment enables the R&D personnel to carry out tests under conditions close to the working conditions in material production.

The closest possible co-operation with the suppliers of raw materials is of utmost importance in this respect. All the functional requirement specifications are coordinated in co-operation with the suppliers – the resulting material samples are then submitted to tests and evaluations in the laboratory.

But, of course, the work is not yet accomplished with the development of new materials – it has to be followed by a thorough process engineering in relation to all the attained findings.

The materials are qualified for a performance in line with the originally set goals only when the large-scale production confirms the previously obtained laboratory results.



PROFILE

### Markus Gossmann / 研发部

出生于：维也纳，1977年7月26日  
自2008年8月加入Seal Maker  
爱好：和他的两个女儿Rhea和Maya玩，烹饪、跑步、摄影  
语言：德语、英语  
联系方式：m.gossmann@seal-maker.com

Markus Gossmann在完成他的化学课程后，曾在维也纳医科大学肿瘤研究组和维也纳自然资源大学纳诺生物技术中心就职。目前他正继续在技术大学的课程：加工工程。

自2008年8月开始他在Seal Maker挑起材料研发的担子。另外，他还监控着材料生产过程中需要严格遵守的安全规定 (EG) Nr. 1907/2006 (REACH)。

Born on 26th July 1977 in Vienna  
Team member since August 2008  
Hobbies: Playing and having fun with his two daughters Rhea and Maya, cooking, jogging, photography.  
Language skills: German, English  
Contact: m.gossmann@seal-maker.com

After completing his chemistry studies, Markus Gossmann first worked in cancer research at the University for Medicine in Vienna, and at the Center of Nano-Biotechnology at the University for Agriculture. At present he continues his studies, now for process engineering, at the Technical University in Vienna.

Since August 2008 the caring father of two daughters is in charge of the Research and Development of materials. In addition, he supervises the stringent compliance with regulation (EC) No. 1907/2006 (REACH) of all materials.



# Aker H-6e: The world's biggest drilling rig



为极度条件如深海、北极水域这类远离基础设施的地方而设计。

轰动一时的新船下水仪式中也有Seal Maker的特殊密封件的一份子。

Martinus Brandal, Aker Solutions 的副主席为我们介绍说：“Aker H-6e专门为远洋水域的极度条件而设计。他的构造非常特殊，是整个钻井行业最独特的。他的配套设施使他成为石油公司在开发艰难水域时和全球性石油开发的首选。

## 3.6万吨钢材，33层楼高

世界上最大的钻台的规模惊人。

这个庞然大物由挪威的 Aker Solutions 公司设计建造。

基础架构在迪拜港口建造。单单新船下水这项就是一个技术和组织双方面的千人大工程。

## Seal Maker 参与新船下水

36个液压举台，犹如“气垫”，将几吨重的钢铁架构推入港口水域。难题处在，怎样才能完全避免举台和地轨的接触摩擦。Seal Maker 的特殊密封件被用于滑动层。密封件成功承载起几吨的重量和极高的压力，为成功完成这项棘手的任务，出了一分力。

成功下水后，这个史上最大的钻台将按计划开始从迪拜穿越苏伊士运河驶向挪威的旅程。

*It has been designed for drilling under extreme conditions, at greatest depths, in arctic waters, far from any infrastructure. Special seals by Seal Maker were used in its launch.*

„The Aker H-6e has been designed specifically for use in the world's roughest seas. Its design is highly unconventional and unique in the whole of the drilling industry. Its configuration makes it first choice for oil companies drilling trial bores in harsh environments and for the development of worldwide drilling programs,” explains Martinus Brandal, Executive Vice President for Aker Solutions.

## 36,000 tons of steel, 33 storeys high

The dimensions of the world's biggest drilling rig are truly gigantic. This colossus was designed and built by the Norwegian company Aker Solutions. Drydocks World's Dubai yard was chosen as the ideal place for constructing the hull. The launching represents a major technical and organisational feat in itself, with more than 1,000 workers having participated in it.

## Seal Maker's contribution to the faultless launch

36 hydraulic lifts pushed the massive steel construction to the inner harbour like on hover cushions. Preventing any form of friction between the lifting pads and the ground rails was seen as the biggest challenge. Custom made seals by Seal Maker were used as glide pads. Even under the enormous forces and pressure exerted on them, our seals withstood this load successfully and have thus contributed an important part to the success of this delicate mission. After its successful launch, the world's biggest drilling rig could continue its journey from Dubai via the Suez Canal to Stord in Norway as planned.



## Fact Sheet

### Aker H-6e

钻台所有：Aker Drilling  
钻台设计、建造：Aker Solutions  
建造费用：约38亿挪威克朗  
[www.akersolutions.com](http://www.akersolutions.com)

### Aker H-6e

Rig owner: Aker Drilling  
Rig design, engineering and construction: Aker Solutions AS  
Cost per rig: Approx NOK 3.8 billion  
[www.akersolutions.com](http://www.akersolutions.com)



# Customer Training



对客户来说设备培训也可以是贴近实用的，这一点在 Seal Maker 培训中心最近一次的 Fanuc 培训中得到充分证明。

2009年2月24到26号所有参加Fanuc培训的人获得关于SML700plus的最新讯息，并用他们在数控车床方面的问题和经验进行交流。

Fanuc公司的Ralph Bicko和 Seal Maker 的Marek Skalski一起引导这次内容广泛的培训。详细讲解了控制软件、设备手册中的应用和循环功能的使用。

在练习中提出实际应用的重点，使参加这次活动的Seal Concept、NT K+D AG、Vestpak A/S以及PDT密封技术的工作人员获益匪浅。

工作后的聚会已成为传统，让我们的客人在轻松的环境中结束培训。晚上的聚会，氛围愉快，高潮迭起。

所有参加人员在培训成功后将获得 Seal Maker 颁发的毕业证书。

我们开始接受下一次CNC设备训练的报名：请来信office@seal-maker.com 或拨打服务电话 +43 2626 20085

*The practical approach of training on the machine for customers was proven by the latest Fanuc seminar in the Seal Maker training center.*

From 24th through 26th February 2009 the participants of the Fanuc seminar could update their knowledge of the SML 700 PLUS machine, and also contribute their experience of every day's work with the CNC system.

Ralph Bicko from Fanuc and Marek Skalski from Seal Maker guided the participants through the extensive training course, in which the control program and the various applications of cycles in the "Manual Guide" were explained in great detail.

The training seminar laid particularly focused on applications in form of practical examples of use. This was of high personal value for the participants coming from Seal Concept, NT K+D AG, Vestpak A/S and PDT Dichtungstechnik.

What has by now become a tradition is the closing round-table, allowing the seminar participants to end the day in a cozy atmosphere. The evening program provided good humor and spread the best mood.

All the participants received the Seal Maker Certificate after successful completion of the seminar.

You are welcome to sign up for the next CNC machine training via office@seal-maker.com , or at our service line +43 2626 20085.







„Seal Maker 参加汉诺维汇展获得全面成功”。

„Simply put: Seal Maker's participation at the HANNOVER FAIR was a full success.“

Johann Glocknitzer / CEO

## In the right place at the right time

21万访客、6100个参展商和14000多个全球最新创新：  
2009汉诺威展超出所望。

今年的汉诺威展证明了工业不断创新的能力。令人高兴的是，经济危机并未成为众所瞩目，大家更关心如何解决这个问题。展会的熙攘中 Seal Maker 展台作为休闲交流中心为您展放。我们的客人互相交流最新动态、发展趋势和产品。在用十多种语言交谈的客户对话中我们获得不少关于需求转移的讯息。

和我们的客户、潜在客户互相交换经验，谈话开放、充满信任。现在，轮到我们回馈新的想法、正确的方案和服务。

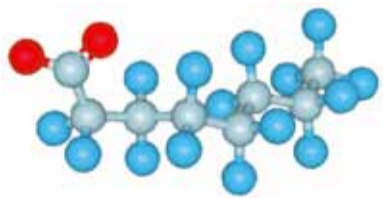
在这里我们特此感谢各位的来访，以及极具意义的谈话。这次能够顺利完成展会，我们的工作人员功不可没。他们用友好、专业的态度，全力以赴的完成了任务。

210.000 visitors, 6.100 exhibitors and more than 4.000 world novelties:  
The HANNOVER FAIR 2009 has exceeded all the expectations.

This year's Hannover fair gave proof that the innovative power of industry is still unbroken. It was especially pleasant to see that not cause and effects of the crisis, but rather approaches to overcome it were the central focal point. Located at the center of the fair's frenzy, the Seal Maker lounge was the ideal place to see for oneself that the general mood is still fairly positive.

The communicative atmosphere offered our guests the ideal opportunity to exchange their opinions about current trends, developments and products. The many discussions with our clients, conducted in a total of 10 languages, brought us a lot of information about the current ongoing changes in our customers' requirements and wishes. This exchange of experience with customers and prospects was characterized by an impressive openness and confidence. Now it is up to us to react to this feedback in form of adequate ideas, solutions and services.

We take this opportunity to thank all our guests for their visit, and also for the interesting, constructive, and enjoyable discussions. Our staff at the booth, who contributed to the huge success of the exhibition by showing a lot of friendliness and competence, keenness on their job, and helped with the flawless organization, deserve praise for their commitment.



## We say NO to toxic materials!

Seal Maker 拒绝使用全氟辛酸

全氟辛酸 - 英文缩写PFOA - 是一种无机化学物质。它用于很多工业生产，特别是作为氟化塑料，比如聚四氟乙烯的乳化添加剂。

最新的调查表明，全氟辛酸有毒，并可能会致癌。为了防止全氟辛酸无限制地污染环境，美国环保组织EPA和各大氟化塑料生产商达成协议，到2015全面降低全氟辛酸的排放量。Seal Maker 完全放弃使用全氟辛酸。

所有 Seal Maker 的聚四氟乙烯工料，以及氟化橡胶 (FPM, \*AFLAS®, \*VITON®)全部为无全氟辛酸材料。

\*AFLAS® is a reg. Trademark of Asahi Glass Company  
\*VITON® is a reg. Trademark of DuPont Performance Elastomers

Seal Maker abstains from using Perfluorooctanoic acid

Perfluorooctanoic acid – better known under the abbreviation PFOA – is an inorganic chemical agent. It is used for various industrial applications, mainly as an emulsion additive for the production of fluorinated plastic materials such as Polytetrafluoroethylene (PTFE).

Recent studies indicate toxic, and possibly carcinogenic, effects of PFOA. In order to counter an uncontrolled contamination of the environment, the US Environment Agency EPA has come to an agreement with the major manufacturers of fluorinated polymers with the aim of substantially reducing PFOA emissions up to 2015.

Seal Maker abstains totally from using PFOA. All PTFE materials, as well as the Fluoro-rubber materials (FPM, AFLAS®, and VITON®), as offered by Seal Maker are totally free of PFOA.