S E A L S TECHNOLOGY



0211

客户杂志 Magazine for customers and partners



coming up soon
The lathe giant: SML 1800e



Check it out!

NEW!!! PU - really cool

The lathe giant

www.seal-maker.com





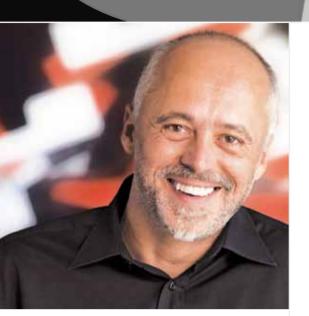








We'll be there!



亲爱的读者们,

在过去的数个月里,一股强烈的上升气流刮过密封行业: 销售额 的提高,订单明显增多……这本该是个让人非常欣喜的原因。但 哪里光多的地方,那里往往阴影也多。也就是说,这片欣欣向荣 的景象同时也让我们面临更多的挑战并有待于我们去征服。一 正 值繁荣兴旺之际,却因交货周期较长和各类塑性工料价格不稳定 的负面因素蒙上了一层阴影。

我们自问:"当务之急,该从哪里入手,才能尽快为我们的客户开 拓出路?"过去 Seal Maker 在遇订单高峰期时,采取增加班次应 急。但鉴于过去几个月里订单量的庞大,显然该措施已经是杯水 车薪了,事不宜迟,我司决定把生产工料及密封成品件的制度调

由此以来,您的利益也是显而易见的:提高了生产能力和规划的灵 活性,包括全面提高了各类产品的供应能力之后,便相应地有了 更多的时间,能更好地迎合您的各种需求。

近几个月, 我们曾向您报道了有关于工料及设备领域新产品的研 发动向, 在此公布, 现在我们已达到了能批量生产的水平。在未 来的几周内将向市场推出。详细地说,是涉及新型聚氨酯工料的 投入使用。不管是在应用领域或加工领域,它们都以出色的性能

同时我们的"车削巨头"SML 1800e也已临近竣工之际,该款机 床能满足最大外直径达1.850mm(>70英寸)的密封件的生产需求。 不久,此款机床也将会在我们自己的厂房投入使用。此外,它将 作为我们成功的e-系列中一款独立的模式向机械行业的市场推出。

新研发的软件激活中心也即将投入使用。该入口网允许"机床客 户"随时激活已安装好的SML软件(在协议好的使用许可范围内) ,一 **1**天**24**小时 ,**1**年**365** 天,非常方便。

关于我们企业组织方面,也有一个大新闻向大家报道。为更好地 实施服务理念, 我司决定融广告部门与通讯部门为一体, 并将它 们扩建成为一个全方位服务机构,命名为: C-more 广告有限公 司。它涵盖了广告及市场通讯领域的一切事务。有关市场营销方 面的事宜,如广告宣传业务或查询等,我们的 C-more 广告有限 公司从即日起为您竭诚服务。

最后,但并非最不重要,在此我谨请诸位关注一下我们将在俄罗 斯和中国举行的秋季展览会。届时我将恭候于我们新设计的展 台, 热诚地欢迎您的到来!

您的Johann Glocknitzer

Dear readers,

the sealing domain has lately witnessed a strong uplift: increases in orders and sales... This should actually be a reason to be happy. But the brighter the light, the deeper the shadow. Thus, this boom also carries some challenges with it, which must be overcome. For instance, longer delivery times and unstable prices for some plastics have dampened the overall positive atmosphere in the in-

The primary question in such a case is always: "What can we do, to quickly solve problems faced by our customers?" In the past, Seal Maker could simply compensate peaks of high demand by working additional shifts temporarily. However, due to the overall increase in demand, this has become insufficient over the course of the last few months. As a result, we had to introduce a third shift for both the semi-finished products and the seal production on a

The advantages are obvious: higher capacity, more flexibility in production planning, improved product availability and more time, to respond to your wishes without haste.

Our new products in the area of semi-finished materials and machines, announced over the course of the last few months, have now reached series-production readiness. These will be introduced to the market within the next few weeks. More specifically, these products are new polyurethanes, characterized by a wider application spectrum and excellent machinability.

Our lathe giant SML 1800e, for the production of seals with an outer diameter of up to 1.850mm (>70in) is also nearing completion. This machine will be put to use in our own seal production facilities. However, it will also be available for sale as part of our successful e-series of machines.

Our newly developed Software Activation Center is also due to be introduced very soon. This portal will allow machine customers to activate any installed SML software, depending on the number of accorded licenses, with great ease, 24 hours per day and 365 days a year.

But there are also some news regarding the structure of our organization. In line with our service-centered philosophy, we have decided to upgrade our advertising and communications department to a separate full service agency. The company founded to this end, the C-more Werbeagentur GmbH, will cover all areas of advertising and market communications for you. In terms of marketing, C-more will gladly answer any enquiries and advertising demands you may have.

Last but not least I would also like to draw your attention to the trade shows taking place this fall in Russia and China. I would gladly welcome you to our newly designed show booths!

Yours, Johann Glocknitzer

信服SML全套系统有力的理由

Good reasons for deciding on an SML system



通过质量审核

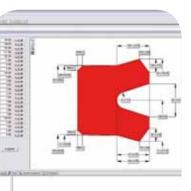
Seal Maker的数控车床都经过非常严格的质量检测。

每一个微小的偏差都会在测量仪上精确地显示。由此,反向 误差, Stick-Slip-效应, 螺距误差, 及尺寸几何误差都被纳

Certified Quality

Seal Maker CNC-lathes undergo stringent quality tests.

Every single aberration is precisely indicated by measuring instruments. Contouring errors, stick-slip effects, reversal backlash, dimensional as well as geometric errors thus be-





不仅仅是标准件

依据个人的要求,您可在最短的时间内设计出密封件 — 超 过150个标准截面图供您轻松选择,或者您也可以根据应用 要求,自己设计全新的密封件。

More than just standard

Create your individual seal instantly - with more than 150 standard profiles, which can be easily modified to suit your needs. Or design a completely new seal to your specifica-





一次购买 - 天长地久

Seal Maker的机床有着令人难以置信的耐用性,即使在经过 高强度的工作之后,它仍然能保持高性能的特征,提供可靠 服务。从莫斯科经过上海再到拉斯韦加斯,在集装箱里穿越 浩瀚的海洋,经过了33000公里的远途跋涉, 一 开箱、安 装、启动。

Bought once – lasts forever

Seal Maker machines are extremely robust and fulfil their duties even after substantial strain. From Moscow via Shanghai to Las Vegas, 33.000 km in a container across the ocean unpack, install, and it runs



高性能又极具吸引力

Seal Maker的产品以无与伦比的性价比令人信服:奥地利一 流的质量,设计严密。由此,使操作数控机床成为一种真正

Efficient and attractive

Seal Maker products convince with their unbeatable priceperformance ratio: efficiency meets Austrian top quality and compact design. That's what brings fun into operating your





全球服务

SML System Software Activision-Center

信息: sml-service@seal-maker.com

为客户提供当地服务也是我们理所当然的事。我们的工程师 将耐心诚恳地为您解答各种有关使用方面的技术疑难问题。

World-wide service

On-site service is a matter of course for us. Our technicians aid you in all aspects of application.





www.seal-maker.com

研究+发展

Seal Maker实验室团队根据您的需求不断地、持续地深入研 究和发展我们的设备和工料产品。

Research & Development

In the Seal Maker labs, we do extensive research and constantly improve and develop our products and materials to always suit your requirements.





coming up soon

车削巨头 / The lathe giant: SML 1800e

通过不断研发,e系列诞生了后起之秀,一 技术成熟的立式车床SML1500的后继者 一 SML 1800e。凭借多年经验并结合了高超的工艺技术,促 使了我们成就了这款高效率的数控车床,密封件加工最大外直径可达1850毫米。

With the SML 1800e, our successful e-series obtains a more than dignified successor to the well-proven carousel lathe SML 1500. Many years' worth of experience and technology proven all over the world turn this model into the most efficient CNC machining system for seals with an outer diameter of up to 1.850mm.

HIGHLIGHTS

- 高功效的数控机床整套系统能完成外直径高达1850毫米(70英寸)的密 封件加工作业
- 内置PC机模块的SML系统软件操作简易
- 完整的工具套件
- 屑片抽吸和切割装置
- 广泛的配件
- •详细的维护、安装及操作文档。

- powerful CNC machining system for seal with an outer diameter up to 1.850 mm (70")
- user-friendly SML System Software on an integrated PC-module
- full set of tools
- chip cutter and suction unit
- extensive set of accessories
- detailed documentation for installation, operation and maintenance

旋转臂 符合人类工程学

excellent ergonomics through 高效率的12工位刀塔 efficient 12 position tool turret inclusion of a swivel arm





LED-照明 **LED** lighting

ML 1800e



自动夹紧系统

automatic clamping system

技术参数

FANUC 0iTD*操控系统

生产能力 最大车削外径: 1.850 mm (70 Inch) 最小车削外径: 700 mm (27,5 Inch) 最大车削长度: 250 mm 卡头直径: 2.050 mm

主轴箱

主轴发动机功率: 2 x 5,5 kW 主轴转速范围: 30 - 250 rpm 最大主轴马达扭矩: 1.800 Nm

该系列机床是专门针对塑性材质加工而设计的。 为了安全起见,请勿对金属工件进行加工。

Z轴快速档: 15.000 mm/min

刀把: 25 x 25 mm

总尺寸: L x B x H 2.900 x 2.900 x 2.700 mm 设备重量: 8.000 kg 冷却液缸容量: 130 l

* 当前最新型号,以FANUC技术水平为基础 技术参数于2011年08月发布。保留变更



Technical Data

Total power installed: 25 kVA Power supply voltage: 3x400V +6% -10%, 50Hz Control system voltage: 24V

Capacity

ning diameter: 1.850 mm (70 Inch) Minimal turning diameter: 700 mm (27,5 Inch)

Maximal turning length: 250 mm Diameter of face chuck: 2.050 mm

Headstock

Main spindle motor power: 2 x 5,5 kW Spindle speed range: 30 - 250 rpm Maximal spindle torque: 1.800 Nm

This machine tool is designed for cutting plastics only. For saftey reasons, it is not allowed to machine metal workpiece.

Z axis travel: 350 mm

Tool turret

No. of stations: 12 OD turning tool shank: 25 x 25 mm

Miscellaneous

Overall dimensions: L x W x H 2.900 x 2.900 x 2.700 mm Machine weight: 8.000 kg Coolant tank capacity: 130 I

* Numeric control in its current version as available through FANUC. Status: 08/2011. Errors and omissions excepted

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PU Low Temperature - FDA

每个密封方案都需考虑具体的高温或低温应用环境,以便选择合适的 密封材料。最理想的是,即使在恶劣的环境下,它们也能保持各自的 功能。

如果温度过高,通常情况下聚合物基体会发生化学变化,致使材料受到不可逆转的损坏。相反,低温会促使材料失去弹性性质,变得更硬并随之日益失去动态应用所必要的复原行为。

利用流体对抗低温

假如温度下降得过低,材料亦将脆化。随着运动和机械应力有可能导致材料断裂。与高温应用不同的是,在低温应用下,材料发生的是物理变化,而不是化学变化。因此,这个变化过程是可逆转的。当温度回升到适宜范围,密封材料就恢复了原有的性能.

借助流体可降低材料脆化的风险。在应用时,让流体和密封件相接触,流体渗透到工料里,从而达到了一个额外的柔韧效果。通过这个"绝招"可降低脆化温度。也就是说,由此,密封件就有可能在低于规定工作温度的情况下,正常使用。

新工料能承受低温

现在我们Seal Maker的实验室又呈献了一种最新研发的新工料,该工料在低温环境下,本身就具有足够的柔韧性。提供优化的基础橡胶是曾受到多方认可的蓝色聚氨酯 PU U203 blue-FDA。这种材料因它的化学组成结构,事实上,在很大一部分就已经满足了必要的要求了。再通过适当的改进,低温应用的机械性能再次得以提升,其他好的特性被继续保留。

在空气中的应用温度达零下50摄氏度。如果是静态应用,可达零下53 摄氏度。假如再与合适的流体配合,应用温度可再次向下刷新。和以 往一样,该工料具有耐化学性,其耐水解性能当然也不会受影响。

此外,该种工料可适用与食品接触的密封应用。当然也是符合当前有效的相关法规和准则。

这种抗冷的工料全称: PU U203-LT FDA95. 为了避免与目前使用的 FDA工料混淆,该工料配上了一种亮丽的颜色。

详细的技术参数请参阅 www.seal-maker.com 的登录区域。

Every application requires suitable materials, depending on its use in high or low temperatures. Ideally, those materials ought to maintain their functionality even under highly adverse conditions.

At too high a temperature, some chemical deterioration normally happens within the polymer matrix, which irreversibly damages the material. Low temperatures on the other hand lead to a loss of elasticity. The material becomes harder and increasingly loses its resilience, necessary for dynamic applications, at ever lower temperatures.

Fluids against the cold

If the temperature drops too much, the material becomes brittle. In case of movement and mechanical stress, this can lead to it breaking. The difference to overheating is however that the change in material properties are of physical, rather than chemical, nature at low temperatures. The process is therefore reversible. The seal regains its original properties once more moderate temperatures are reached.

With the aid of fluids, the risk of embrittlement can be reduced. If these get in contact with the seal in the application, they can penetrate the material and act as an additional flexibilizing agent. With this "trick", the embrittling temperature can be further reduced – thus enabling using the material below the indicated operating temperature.

New material resists low temperatures

The Seal Maker laboratories now present a newly developed polymer, which exhibits sufficient flexibility even at low temperatures. The basic elastomer for this optimization was our well-proven PU U203 blue-FDA. This material fulfilled already a wide range of required attributes due to its chemical composition. Through well-designed modifications, improved mechanical properties at low temperatures could be attained. The proven characteristics could be maintained.

In air, use of the material is possible down to temperatures of -50°C. This value can be lowered further for static applications (-53°C) or through the use of appropriate fluids. The material still presents the usual chemical resistance – its stability against hydrolysis has not been affected either.

Its usability with foodstuffs also remains unaltered. The requirements in terms of current rules and regulations have of course also been met.

The low-temperature resistant material bears the designation PU U203-LT95. To prevent any mix-up with the current FDA material, it will get a nice new color.

Data sheets are available in the login-section at www.seal-maker.com.



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Go Cart!

"激烈的卡丁车赛" 醒目地列在今年公司安排的集体郊游日程表上。糟糕的是,天公不作美,上苍偏偏赐予了一场倾盆大雨。作为替代节目我们选择了主题为: Lockenhaus城堡、文化、古老的历史及浪漫的石工的观光项目。不是典型的男子汉的兴趣所在,而我们Seal Maker的女士们视乎也更热衷于激昂一些的动作项目。终于,太阳露了脸,我们就刻不容缓地涌向赛车场。

Martin Suess 遥遥领先飞驶在快道上, Johann Glocknitzer,Reinhard Glocknitzer,Thomas Bader 和 Georg Peschl紧追Karl Schmidt·······之后全体 团员轻松愉快地走向Rust港口登上游船,驶向美丽的Neusiedlersee湖泊 一欧洲最大的平原湖泊之一。在浓浓地烧烤气氛中,赛车获奖者在这高高的湖面上荣幸地接受颁奖······在日落胭脂红的衬映下,郊游圆满的落下了帷幕。









A cart race was planned for this year's works outing – unfortunately the weather gods seemed more inclined to give us rain. As an alternative, Burg Lockenhaus would have been available. Culture. History. Romantic ruins. Nothing for real men, that is. But even the ladies at Seal Maker are more inclined towards power and action. Soon the sun showed again, and off to the race track it was.

Martin Suess and Karl Schmidt did the fastest laps, followed by Johann Glocknitzer, Reinhard Glocknitzer, Thomas Bader and Georg Peschl. In a much more relaxed state, the team then boarded a ship at the port of Rust and enjoyed a cruise on one of Europe's largest prairie lakes, the beautiful Neusiedlersee. The award ceremony for the winners of the cart race were held on board, aided by barbecue and a happy atmosphere, as the day ended with a beautiful sunset. Perfect.

不要错过!

不言而知,我们会在2011全球的重大的展览会上恭候您。欢迎您光临我们在莫斯科或上海的新建的展台,届时您可亲自见证我们的机床设备和相关产品。 我们掌握多国语言的展览团队将致力为您解答各种有关疑难问题及提供建议。关于莫斯科MDA动力展览和上海PTC国际亚洲动力展的详情请在以下网页查阅。有关登记事宜,门票预定及其他相关事项请直接联系我们的营销市场部。邮箱: marketing@seal-maker.com



俄罗斯MDA,莫斯科

时间: 2011年09月27日-30日 地点: Crocus Expo, 莫斯科 信息: www.mda-russia.com

门票预定和详细信息

» marketing@seal-maker.com

MDA Russia in Moskau

When: 27.09. - 30.09.2011
Where: Crocus Expo, Moscow
Info: www.mda-russia.com

Ticket reservation & more info » marketing@seal-maker.com

Don't miss it!

Of course we will also take part in the most important trade shows of 2011 all over the world. Come visit our new show stalls in Moscow and Shanghai, and see our new machines and products for yourself. Our multilingual expo team will gladly answer any queries you may have and also give you suggestions. Infos about the MDA Russia and PTC Asia can be found on the websites indicated below. For registration, ticket reservation and further information, please contact our marketing department at marketing@seal-maker.com



PTC 亚洲国际动力传动博览会(上海)

时间: 2011年10月25日-28日 地点: 上海新国际博览中心(SNIEC)

信息: www.ptc-asia.com

门票预定和详细信息 » marketing@seal-maker.com

PTC Asia in Shanghai

When: 25.10. - 28.10.2011

Where: Shanghai New International Expo Centre (SNIEC)

nfo: www.ptc-asia.com

Ticket reservation & more info » marketing@seal-maker.com