Seal Maker
The system for flexible seal production

TECHNOLOGY



SML1800e – Ready for dispatch



SML System Software 4 – Professional Upgrade We proudly present: Finance & Administration







各位读者朋友们:

虽然这个冬天(至少就降雪量和温度而言)没有达到我们的预期,整个冬天也因此没有多少乐趣可言,但我们仍有足够的理由来相信今年其实有个良好的开端。

2016 年伊始,成功交付的 SML1800e plus 着实让我们眼前一亮。我们多年来坚持不懈的努力、诚信的经营实践和创新的精神终于也在大型机械领域得到了回报。当然,"一燕不成夏"(奥地利谚语)这句话不无道理。不过,我们仍然很高兴收到大家就车床系统领域提出的大量积极的反馈。

然而,除非获得事实验证,否则最好的反馈也毫无用处。值得 庆幸的是,我们所掌握的数据充分反映了获得的反馈。自成立以 来,Seal Maker 已经能够在世界各地安装 300 多款车床系统。而 通过引入公司的研发成果,我们能够更好地满足客户需求,并为 其提供与待制造产品完美契合的系统。虽然机器最初的投资机会 十分有限,不过 Seal Maker 随后可通过增添额外选项,进军新的 业务领域。这个过程是通过对 SML 系统软件进行持续地进一步开 发和优化而得以实现。公司预期将于 2016 年中以 4.0 版本替代 3.5 版本。届时将有两个可用版本(基础版和专业版),除了操作 更加简便之外,我们还会提供多个功能选项和优化加工周期。有 经验的用户还可单独视自身情况进行个性化设置,根据公司的特 殊使用环境和要求对软件进行调整。欲了解更多详情,请查看内 页的表格。

一家公司的最大资本就是员工!在各种信息传单上和开展活动期间都会强调这一口号。而Seal Maker 管理层十分重视员工们在公司里的工作环境,确保员工们满意并获得激励,以便他们同心协力地提供高水平的服务。通常情况下,繁忙的日常业务操作使人容易忘记这一关键目标。因此,Seal Maker 每两年会开展一次广泛的调查,并进行为数不多的即兴问卷调查。截至 2015 年底的调查结果将于 2016 年初呈现给所有员工。我很高兴看到员工们给出的反馈大多都是积极的。感谢大家为公司进一步发展提出的所有创造性和建设性建议。调查结果清楚地表明,Seal Maker 是一家令人向往的公司,并且已经取得了如此多的成就,但也还存在改进的空间。

在这层意义上来说,我希望大家喜欢阅读我们的杂志!

祝好!

Johann Glocknitzer

附言: 您知道我们每天会在主页上多次更新主要产品的当前销售数据吗?

Dear readers,

even if this winter did not meet our expectations (at least in regards to the amount of snow and the temperatures), and even though our winter pleasure was limited as a result, there were enough reasons to speak of a positive start to the year.

The year 2016 started off with a special highlight for us with the delivery of the SML1800e plus. The consistent efforts, honest business practices and innovative spirit, which have characterised our organisation for several years, finally also paid off in the area of large machinery. Admittedly, "one swallow does not automatically mean summer" (Austrian saying), but we are very happy about the positive feedback we are receiving again and again in the area of lathe systems.

But even the best feedback does not help, if the facts speak a different language. Luckily, we are also encouraged by the figures in our case, which support the feedback received. Since founding Seal Maker, we have been able to install more than 300 lathe systems around the world. With the introduction of own developments, we have been able to meet the requirements of our clients even more, and have been able to offer systems, which are perfectly harmonised with the product to be manufactured. Even if the investment opportunities are limited in the beginning, Seal Maker systems may be enhanced with a few options at a later point of time, which allows to access new business areas. This is also supported by continued further development and optimisation of the SML system software. In the middle of 2016, it is planned to finally replace version 3.5 with version 4.x. It will be available in two versions (basic and professional) and it will offer a number of functions and optimised machining cycles in addition to an easier operability. Optionally, experienced users may also carry out individual settings additionally in order to adjust the software to the special environment and requirements of the respective company. More details on this may be found in the table on the inside pages.

The biggest capital of an organisation is their staff! This sentence is highlighted again and again on various information leaflets and during events. The Seal Maker management places great importance to the fact that their employees work under such conditions in the company, that they are personally satisfied, motivated and enabled at the same time to provide above-average services. Often, there is a risk to forget about this in the rush of daily business operations, therefore Seal Maker carries out an extensive employee survey every 2 years, next to a smaller number of impulse questionnaires. At the end of 2015, it was time and the results were presented to all employees at the beginning of 2016. I am of course delighted that the feedback was once again mainly positive and I am thankful for all of the creative and constructive suggestions in terms of further development. The results clearly demonstrate that Seal Maker is not only an attractive employer, but is also able to further improve, even when taking into account the high standards achieved already

In this sense, I hope you enjoy reading our magazine!

Yours, Johann Glocknitzer

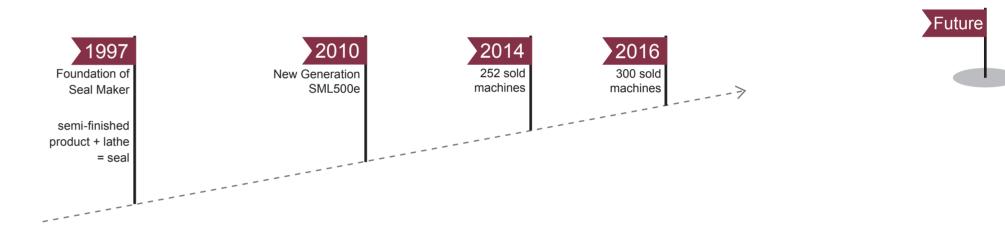
P.S.: Did you know that we update the current sales figures for our main products several times a day on our homepage?

# 如何卖出 300 多台机器?

Seal Maker 的成功故事始于 1997 年,归功于下面这个革命性的计算公式: "半成品+车床=密封件"。全世界对密封件的广泛需求使我们建立了这一有效的系统、该系统通过加工生产市场上的密封件。而随专门用于生产、储存和配送的新建部分建成之后,以及是在推出全新的新一代机床 SML500e 后,Seal Maker 于 2010 年便写下了公司历史的新篇章。从装配商到机械生产商的转变可谓是一步险棋,但事实证明了这样做不仅是正确的,而且结果也非常成功。卖出的 300 多台机器便足以证明这一点: 如今,Seal Maker 已向遍及5 大洲的超过65个国家提供了数控车床系统。我们的一个主要优势是个性化的各种选项和定制化服务。持续优良的品质是另一个成功因素:除了优质服务和灵活性,我们善于进行自我反思的态度以及客户和合作伙伴所提供的反馈全都不断地激励着我们。

## How to sell more than 300 machines

The success story of Seal Maker started in 1997 with a revolutionary formula: "semi-finished product + lathe = seal" The worldwide demand for seals enabled us to establish this efficient system, which produced seals by means of machining, on the market. Upon completing the extention for the production, storage and distribution, and especially with the introduction of the new lathe generation SML500e, Seal Maker started a new era in 2010. The step from assembler to lathe producer was a risk, which turned out to be the right step and also a very successful one. More than 300 sold machines speak for themselves: Today, Seal Maker can look back on CNC lathe systems on all 5 continents in more than 65 countries. One of our major strengths is the possibility of individualisation through various options as well as customisation. The continually excellent quality is another success factor: In addition to service and flexibility, self-reflection and an open mind in regards to feedback received from our clients and partners also motivate us.



## 对作为 Seal Maker 员工而感到自豪

2015 年 11 月,我们开展了一次员工调查。此次调查的员工参加比例达到了75%,高于平均水平。而调查的主要目的是为了了解员工们所重视的事项以及他们如何评估各个项目的满意度。为此,我们将特定部门的调查结果与其2013 年的调查结果进行了对比。结果显示员工的动机是工作本身,工作乐趣以及积极地工作环境等。调查中,我们采用了一个评分 (1-6分) 计算。结果所有类别都得到了5分以上的正面评价。此外,我们了解到许多员工都为自己是 Seal Maker 的一员而感到骄傲。今后,计划要求所有部门更加紧密地合作,并利用积极的工作环境来实现协同效应。

### Proud to work for Seal Maker

In November 2015, an employee survey was carried out – we are very happy to report that the participation was above average with 75%. The main aim was to find out what is important for our employees and how the various areas are being evaluated. Here, the results for specific departments were compared with the results from 2013. The motivators for the employees were the work itself, enjoying work, as well as a positive working environment. Here, a scale (1-6) was used, whereby all categories very much received positive evaluations above 5. Furthermore, many employees are proud of being employed by Seal Maker. In future, it is planned for all departments to work together even closer and to benefit from the positive working environment in order to achieve synergy effects.



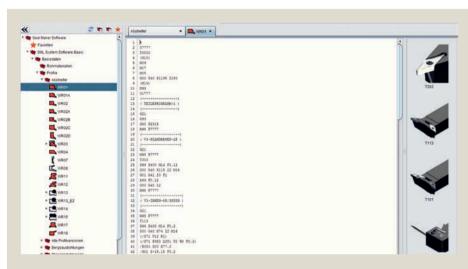
<sup>2</sup>|3 www.seal-maker.com

# SML4

Seal Maker 时刻谨记未来的挑战,并正在积极投资新技术。因此,研发和创新是重要的成功标准,它们不仅影响着半成品和密封件的生产,还影响着软件领域。在2015 年2 月版的 Seals Technology 中,我们曾介绍并详细描述了最新的 SML 系统软件4.0。各种综合工艺的改进使得生产过程更加高效,同时还进一步缩短了加工时间,给客户创造出更多的利益。装了新软件后,我们的客户现在可以使用2个程序配套:除了取代 SML 3.5 软件的基础版,还有一个自带创新功能的专业解决方案。

Keeping the challenges of tomorrow in mind, Seal Maker is making intensive investments into new technologies. Therefore, research, development and innovation are important success criteria, which not only affect the production of semi-finished products and seals, but also the area of software. In the Seals Technology edition 02/2015, we introduced and described the new SML System Software 4 in detail. Various integrated process improvements enable a more efficient production process and furthermore reduce the machining time, which results in additional benefits to the client. By implementing the new software, our clients now have access to 2 packages: next to the basic version, which replaces the software SML 3.5, there is also a professional solution with innovative features.

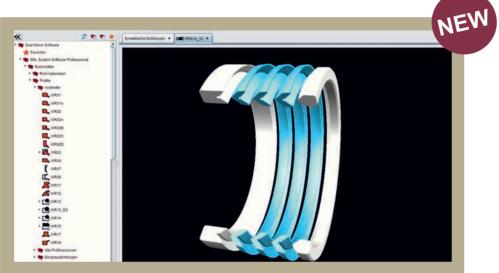
## SML 4 Basic



SML 系统软件4.0 基础版取代了 SML 系统软件 3.5,并将自动提供给所有机器的客户端。该系统包含所有既定功能,如统制计汇编和定制文档。此外,基础版还包括语言更新:有中文和俄文两个版本。此外,用户可以简便地开启和关闭冲突条件。SML 系统软件4.0 基础版运用先进技术进行了调整,能够与现代的操作系统(例如Windows 10)兼容。注册过程中的用户标识确保对个人用户的配置文件进行存储。基础版还支持所有综合配置文件的更新,因此出现专业的新解决方案时可以轻松实现升级。

The SML System Software 4 Basic replaces SML System Software 3.5 and will be made available to all machine clients automatically. It includes all of the established functions so far, such as the compilation of statistics, as well as the possibility to customise documents. In addition, the basic version also includes a language update: This version is available in Chinese and Russian. Collision conditions may also simply be turned on and off. The SML System Software 4 Basic has been adjusted to technological advances and is compatible with modern operational systems (for example Windows 10). A user identification during registration ensures the storage of individual user profiles. The basic version furthermore supports the update of all integrated profiles and may therefore be upgraded easily in terms of the new professional solution.

## SML 4 Professional



相比之下,SML系统软件4.0 专业版的适用性则有了显著扩展。其突破性设计主要体现在直观的菜单管理和用户友好性上。3D 插图和模拟功能、逼真的材料色彩显示以及 NC 编码的语法突出显示不仅优化了软件设计,也使用户更容易理解。经过优化和可调节的切削刀具可以提高生产效率。专业版提供了更多的个性化选项,从它所采用的各种测量系统便能看出来。此外,配置文件可以完整地获得保存,包括各种变更以及依赖于材料和单独调节的 .pro 格式生产参数。此外,还可以嵌入附加文档。可自动调整生产参数(例如切割速度、粗加工深度)并为最大值和最小值添加一套框架来加强操作安全性。

SML System Software 4 Professional significantly extends the applicability for our clients. The ground-breaking design has been enhanced by intuitive menu management and user friendliness. 3D illustrations and simulations, a realistic colour display in terms of materials as well as syntax highlights in regards to NC coding not only improve the software design, but it is also more comprehensible. Optimised and adjustable tool turning points increase the effectiveness of production. The professional version is much more individual, as demonstrated by the utilisation of different measuring systems. Furthermore, profiles may be saved in full, including various changes and material-dependant as well as individually adjustable production parameters in .pro formats. In addition, it is possible to embed additional documents. Production parameters may be adjusted automatically (such as cutting speed, roughing depth) and include a set framework in regards to maximum and minimum values, which increase operational safety.

# Basic vs. PROfessional

	SML 3.5	SML 4 Basic	SML 4 Professional
简单生成数控编程	✓	<b>√</b>	<b>√</b>
simple generation of CNC programming		·	
简单编辑数控编程 simple editing of CNC programming	$\checkmark$	✓	$\checkmark$
冲突警报		,	
Collision warning	✓	✓	✓
集成 200 多个配置文件		,	
Integration of more than 200 profiles	✓	✓	<b>✓</b>
模拟车削过程			
Simulation of turning processes	V	V	V
各种语言的全球支持	<b>✓</b>	<b>✓</b>	/
Worldwide support in various languages	•	•	•
用于个别密封设计的 "VARIO" 模块	✓	<b>✓</b>	<b>✓</b>
"VARIO" module for individual seal designs		·	
综合公差表	✓	✓	✓
Integrated tolerance sheets			
直接发送电子邮件和打印文件 Direct sending of emails and printing of documents	✓	$\checkmark$	$\checkmark$
统计数据汇编			
Compilation of statistics	✓	<b>√</b>	<b>√</b>
详细的配置文件数据表			
Detailed profile data sheets	✓	✓	✓
文档的个性化设计(公司标识和地址)	/	,	,
Individual design of documents (company logo and address)	✓	✓	<b>✓</b>
优化加工周期		/	/
Optimised machining cycles		<b>V</b>	<b>V</b>
语言更新: 俄语和汉语		<b>✓</b>	./
Language update: Russian and Chinese		V	<b>V</b>
简化的冲突条件关闭流程		<b>✓</b>	<b>✓</b>
Simplified turning-off of collision conditions		•	•
技术变革 - Java		<b>✓</b>	$\checkmark$
Changes in technology - Java			
兼容所有现代操作系统(Windows 10) Compatible with all modern operating systems (Windows 10)		✓	$\checkmark$
注册时的用户标识实现个人用户配置文件的存储			
性而可的用户标识实现个人用户配直文件的存储 Individual user profiles by means of user identification during registration		✓	$\checkmark$
简化的更新处理			
Simplified update processing		<b>√</b>	<b>√</b>
支持超过 204 种标准化配置文件		,	
Supports more than 200 standardised profiles		✓	<b>✓</b>
专业版的升级可能性(额外收费)		<b>√</b>	INCLUDED
Upgrade possibility in regards to Professional (extra charge)		V	INCLUDED
经过优化和可调整的换刀点使得生产更加高效			<b>✓</b>
Optimised and adjustable tool change points for a more effective production			<b>Y</b>
密封型材的 3D 显示器和模拟			<b>✓</b>
3D displays and simulations of the seal profiles			,
选材时倾向于逼真的色彩取向			$\checkmark$
Realistic colour orientation when selecting material			
NC 编码中的语法突出显示 Syntax highlight during NC coding			$\checkmark$
使用不同的测量系统(英寸/毫米)			
Utilising different measuring systems (inches/mm)			<b>√</b>
定义最大值和最小值,加强操作安全性			,
Definition of maximum and minimum values, which increase operational safety			<b>✓</b>
依赖于材料和单独调节的生产参数			/
material-dependant or individually adjustable production parameters			<b>V</b>
可以保存完整的配置文件,包括 VARIO 以及生产参数变更			
Entire storage of individual profiles, including VARIO changes, as well as production parameters			<b>✓</b>



## Info

该软件将很快上市。如需了解更多信息,请访问我们的网站上客户登录区。如果您有关于产品和成本的问题,请随时联系我们的技术服务人员: service@seal-maker.

Entire storage of individual profiles, including VARIO changes, as well as production parameters

The software will be available shortly. Further information may be found in our client login area on our website. Should you have questions regarding the product and costs, our service technicians would be happy to assist: service@seal-maker.com

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# Faro & Renishaw: Precision is Priority

Seal Maker 是服务和质量的代表,主要体现在个人工作步骤的准确和安全执行上。关于机械装配,精密是需要考虑的最优先事项。机械生产期间和生产完成后都需要用到相应的辅助工具,以确保组装过程的安全性。为了确保机器的各个部件都进行了最佳设置,需要用到"Faro" 牌的6 轴三维传感器。Faro 测量臂是一款便携式的协调测量工具(CMT),完美地结合了接触式和非接触式协调测量工具。小基准球能够确保μ-区域(0.001 毫米)的精确测量。组装前,需用一根控制杆来协助测试各个车床部件,如在机床、车削零件和成型零件(X和Z滑行架)。

在组装过程中,可以用一根三维控制杆来轻松、快速、准确地调节机器指令。一方面,控制杆能够提高组装的效率;另一方面,它能够实现更快的控制。所有数据都会被自动协议化并存储在自己的系统中。由此获得的协议可以用于质量保证和归档在每个机器中。Faro 控制杆是我们的 Renishaw "球杆仪系统"(一个测量工具)的附加设备,用于机器的最终测试和检查轴的精度。它也可以检查和记录测量尺寸,如圆形的圆度、侧隙和重复精度等质量要素。这意味着,机器已经按照 ISO230-4 进行了测试。这种广泛的测试过程可以确保每台机器都符合规定的质量标准。

Seal Maker stands for service and quality, which is reflected in the exact and secure execution of individual working steps. Especially in regards to the assembly of machinery, precision takes utmost priority. Both during and after the production of machinery, respective auxiliary tools are being utilised, which ensure the assembly process. In order to guarantee that the individual components of the machine are set up in an optimum way, a 6-axis 3D sensor by "Faro" is being used. The Faro arm is a portable coordination measuring tool (CMT) and offers the perfect combination of a tactile and contactless coordination measuring tool. With a small reference ball, exact measurements in the  $\mu$ -area (0.001mm) can be achieved. A lever assists in the testing of the individual lathe components before the assembly, such as the machine bed or the turning as well as milling parts (X and Z skid).

During assembly, the machine components can be adjusted easily, quickly and accurately by using a 3D lever. On the one hand, this increases the efficiency of the assembly, and on the other hand it enables quicker controlling. All data are automatically stored and protocoled in an own system. The gained protocols may be used for quality assurance purposes and are being archived per machine. The Faro lever is the ultimate addition to our Renishaw "ballbar system" – a measuring tool, which is used for the final test of a machine, and it is used for the checking of the accuracy of the axes. Measurements, such as the roundness of circles, backlash and repeat accuracy may also be checked as quality factors, as well as documented. This means the machine has been tested in accordance with ISO 230-4. This extensive testing process ensures that each machine meets the defined quality criteria.





# SML1800e - Ready for dispatch

继最后的装运准备工作后,一切已准备就绪: Seal Maker 现已将第一台大型车床 SM-L1800e 运送至美国。这是一款最大的数控车床系统,结合多年的经验和技术制作而成,并且已通过世界各地的测试。该机器适合用在直径长达1.850 毫米(70 英寸)的密封件上,也可以与其他设备一起用于生产工程塑料件(EPP)。如需了解更多信息,请联系我们的出口经理: sales@seal-maker.com。

强大的加工机器 SML1800e:

- · 配备功能强大的成套 CNC 系统
- 用于加工直径最大可达 1850 mm (70 英寸) 的密封件
- 在集成式 PC 模块上配备用户友好型 SML 系统软件
- 配备整套工具
- 配备切片机和吸屑装置
- 配备各种不同的配件
- 包括详细的维护、安装和操作文件
- 可选用驱动工具
- 配备舒适、精确的夹紧系统

Following the last preparations for shipment, time has now come: Our first lathe giant SML1800e has left Seal Maker on a long journey to the USA. The largest of the CNC lathe systems combines years of experience and technology worldwide approved. The machine is suitable for seals with a diameter of up to 1.850mm (70 inches) and may also be utilised for the production of so-called EPPs (engineered/plastic parts) using the plus option. For more information please contact our export managers; sales@seal-maker.com

SML1800e - The lathe giant:

- A powerful complete CNC system
- Used for seals of up to 1850 mm (70 inches) diameter
- Features user-friendly SML system software on an integrated PC module
   A complete tool set
- Chip cutter and chip suction
- A wide range of accessories
- Includes detailed documentation on maintenance, installation and operation
- Optionally available with driven tools
- A comfortable & precise clamping system

是 我们的网站现正销售一款二手SML1000e。如需了解更多信息,请登陆www.seal-maker.com。

We are also currently offering a used machine SML1000e for sale on our website. You may find additional information on www.seal-maker.com

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# **Update: Datasheets Elastomers**

全新:合成橡胶数据表现已更新,并以包含了长期以来所作出的众多发展和变更在内。根据PU 数据表的设计进行布局调整,以促进标准化和可比性。此外,各项数值还获得测试并以更新。这些更新数值一方面源于实验室所测得的结果,另一方面则是来自于批量监视数据,而此类更新都定期为合成橡胶原材料定期进行。获得的新数值则从统计平均值计算而得来。除非另有标注,以上数值均允许 25% 的公差。

Brand new: The data sheets for the elastomers have been updated. The many developments and changes over time have led to the data sheets of the elastomer raw materials being renewed. The layout was adjusted in line with the design of the PU data sheets, in order to promote standardisation and comparability. The values were also tested and changed. The basis for the changed data sheet values are laboratory results on the one hand and batch monitoring data on the other hand. It is carried out for all elastomer raw materials on a regular basis. The new values are statistical intermediate values calculated thereof. The stated values, unless marked otherwise, are subject to a tolerance of



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# our Finance and Administration department

任何一家公司的财务行政部都十分重要,它为公司的经济发展和安全做出了宝贵贡献。在 Irene Aigner 的管理下,该部门已分成财务、会计、人事会计、接待和商业清洁六个分部,目前成员为6 人。除了 Irene,Katarzyna、Angelika、Gabriele和 Renate 也都是团队成员,同样需要处理每天的基本工作任务。

所有部门都要准确、灵活地工作。身为部门经理的 Irene 为此树立了一个好榜样: "我在 Seal Maker 已经工作了10 多年,在此期间也经历了各种变化。尽管如此,或者也许正是因为这一点,我很高兴成为团队的一员,因为这份工作很有挑战性,时刻充满着变化。"Katarzyna 和 Angelika 也已经在 Seal Maker 工作了很长一段时间: "在国际环境中工作总是有很多学习的新知识和完善自我的机遇。" Gabriele 的日常工作内容也十分丰富多样: "接待时,我有机会见到很多同行。我也有机会见到来自世界各地的客户,这一点非常难得。"清洁团队也会确保 Seal Maker 的每位员工都有一个舒适的环境,让一切都井井有条。

The finance/ administration department is an essential component in any organisation and provides a valuable contribution towards the development and securing of economic success. Under the supervision of Irene Aigner, the department has been divided into finance, accounting, payroll accounting, reception as well as cleaning and currently consists of 6 persons. In addition to Irene, Katarzyna, Angelika, Gabriele and Renate are also part of the team and tackle the various tasks on a daily basis.

All departments are required to work accurately and flexibly. As the department's manager, Irene sets a good example: "I have been working for Seal Maker for over 10 years. In this time I have experienced various changes. Despite that, or perhaps because of that, I am happy to be part of the team, as it is challenging and offers great variety." Katarzyna and Angelika have also been with Seal Maker for quite some time now: "Working in an international environment always provides opportunities to acquire new knowledge and to develop further." Gabriele's daily tasks are also very much versatile: "By working in reception, I have the opportunity to get in touch with many colleagues in person. I also meet clients from all over the world – that is pretty unique for our region." The cleaning team also makes sure that everyone is comfortable here at Seal Maker and that everything is in best order.



# Digital Newsletter "in new letters"

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