

SEALS

TECHNOLOGY



0216

客户杂志 Magazine for customers and partners



Welding connects

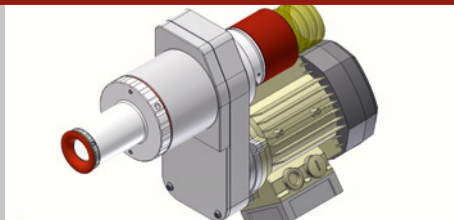
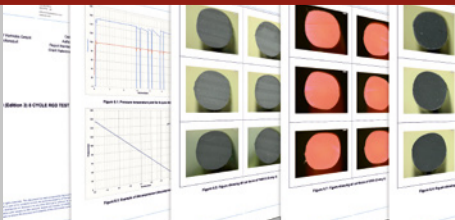
Mediaresitance Guide

RGD successfully passed

Chip Cutter NEW

Seal Maker - Material Resistance - Chemical Overview

Material	Acid	Alkali	Oil	Water	Other
EPDM	Good	Good	Good	Good	Good
NBR	Good	Good	Good	Good	Good
FKM	Good	Good	Good	Good	Good
PTFE	Good	Good	Good	Good	Good





亲爱的读者，

自从上一期的“密封科技”出版以来，几个月过去了，夏季已经达到了顶峰，我们的许多同事都享受了他们应得的假期。

然而，在过去的几个月里，我们并没有松懈，这里有一些有趣的消息给你：

最重要的是，在今年年初美国采购的第一台 SML1800e 交货后，我很高兴的告诉你另一个车床的巨人将被运到世界的另一边，在上海，在几周内，也就是在九月完成。我们的客户对这种大型号的机床的浓厚兴趣，证实了我们正在正确的轨道上，肯定了我们在大型机械领域的深入发展工作。

在过去的几个月里，我们进一步的努力扩大和提高服务范围：经过多年的探索，数据收集和分析，我们会很快推出在线数据库。因此，材料的选择将更为简化，使我们的客户能够更快地得到反馈，并能更快捷的服务他们的客户。

几年来，Seal Maker一直给石油和天然气行业的客户提供具有RGD认证的密封材料。我们进一步扩大在这一领域的产品种类：我们的 U520-OR95 材已通过 NORSOK M710 检测，该材料性能优良，可用于石油和天然气工业中的许多高温敏感领域。此外，我们的 F800 也同样获得 RGD 认证，而且材料规格可以到直径 200mm，更加适合再加工和库存管理。

我们 Seal Maker 的另一个技术亮点是焊接密封服务，如果有必要的话也可以现场完成。通过使用最新的焊接技术，在生产大直径密封产品方面不再有限制，焊接后的密封件的机械性能与原密封件几乎相同。在这期刊物中您可以了解到更多的信息。

在本期刊中，你也会了解我们的技术服务团队关于培训的简报和今年六月我们的夏季节日狂欢。

我很高兴，如果期刊中的文章能让您感兴趣，希望您能喜欢阅读我们的夏季刊“密封科技”。

您的
Johann Glocknitzer

Dear readers,

a few months have passed since the last issue of "Seals Technology", the summer has already reached its peak, and many of our colleagues are already enjoying their well-deserved holidays.

However, we were not idle during these last months, and therefore we have again some interesting news for you:

Most particularly, I am very pleased that after the delivery of our first SML1800e to the USA in the beginning of this year, another lathe giant will be shipped to the other side of the world, to Shanghai, in a few weeks, to be commissioned in September. The keen interest of our customers in these vertical lathes confirms that we are on the right track with our intensive development work in the field of large machines.

During these last months, we have made further efforts to expand and improve the service range to our customers: The results of years of research, data collection and analysis concerning media resistance of our materials will soon be available in our online-database. Therefore, the selection of materials will be significantly simplified for our customers, so that they can act much faster in turn, in direct contact with their own customers.

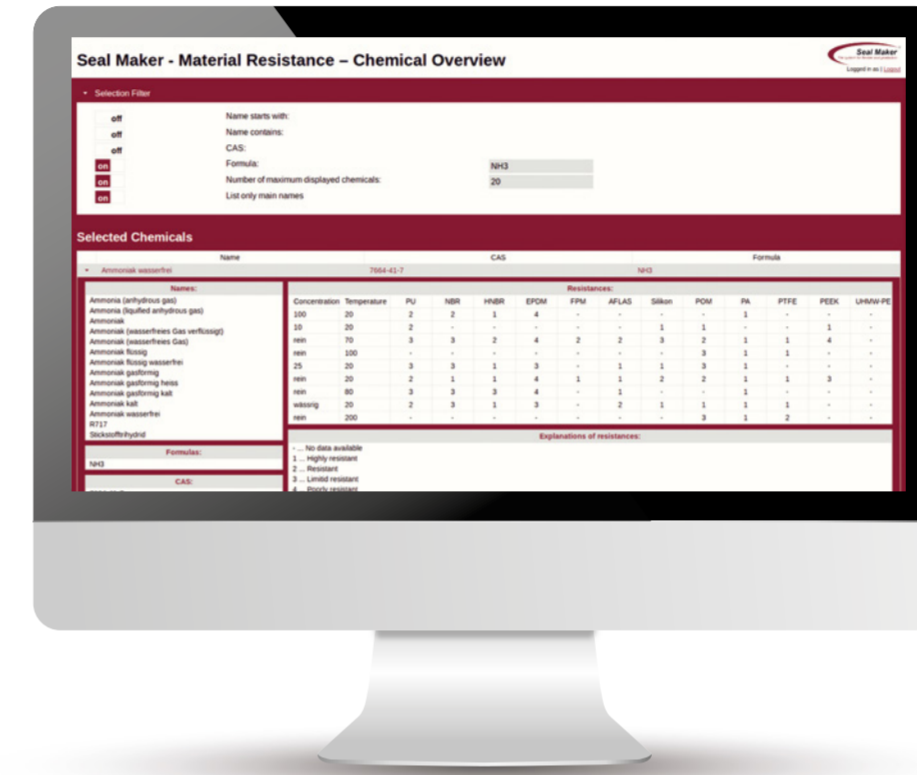
For several years, Seal Maker has offered certified RGD-resistant materials for optimal use in the oil and gas industry. We further expanded our range of products in this field: Our U520-OR95 material has been tested according to NORSOK M710 and can be delivered with the appropriate certificate. The material with its excellent properties especially at high temperatures can be used in many sensitive fields of the oil and gas industry. Furthermore, the RGD material F800 with a diameter of up to 200 mm is available for our customers on short notice, due to an optimised production process and better stock management.

Also new at Seal Maker is the service of welding seals, if necessary also on-site. Through the use of latest welding technology, there are no more limits concerning seal diameter, and the mechanical properties of welded seals remain almost the same compared to endless seals. Please find more information in the article.

In this issue you will also find a detailed report on the CNC service training and a short summary about this year's summer festival which took place in June.

I'm pleased if one or another article can catch your interest, and I hope you enjoy reading our "Seals Technology" summer issue.

Yours,
Johann Glocknitzer



Go 4 Quality

特别是关于密封技术极限区域或是生产过程中的质保，检测设备和分析手段就显得格外重要。我司的实验室提供了多种检测方式，各种物理性能如拉伸测试，抗压变形测试，以及在不同温度环境下密封产品的能力都会频繁进行。

正因如此我们能够准确的解答客户的各种问题而且质检准确的监控整个生产过程。在多年以前我司就通过人员的培训和设备的改进来不断提高自身的 Know-How 和服务质量以满足客户提出的要求。具体相关服务内容请来信咨询：sales@seal-maker.com。

Mediaresistance Guide

Seal Maker 进一步的改善了线上服务。经过多年的探索，我们归纳了数据库结果并给客户如下可能，客户可以在线咨询相关密封材料的信息。这样我们可以及时回答您的提问，而且您也可以给您自己的客户合适的反馈。除了传统的搜索模式，还可以根据化学结构或者 CAS 编号检索。这样不但提高了检索的数量，而且也提高了检索出数据的准确性，使得材料的选择更加简单。

Soon a new online tool will improve the Seal Maker service package in a further step. After years of research, we have summarised the results in a database and we now offer our customers the possibility to check the media resistance of materials online at any time. Thus, we will be able to answer your questions more quickly in the future. In contact with your own customer you will immediately have the right answer available. In addition to the usual search criteria of the medium itself, there is also the possibility to conduct searches using chemical structural formulas or CAS numbers. Therefore, both the hit rate and the quality of the results will be high and reliable. The result: an easy selection of materials.

Especially in terms of limits in sealing technology, but also when it comes to ongoing quality assurance of the production, appropriate testing and analysis equipment is of great importance. Our in-house lab provides many opportunities to conduct these tests and studies. Determination of the mechanical properties by tensile tests, compression set and long-term tests to identify the chemical resistance, even at different operating temperatures, are performed regularly. Thereby our customers receive clear answers to occurring problems and our production is monitored effectively.

A few years ago, the development department's staff was expanded and the lab furnished with additional equipment in order to continue to meet the ongoing requirements in the field of Know-how and service. Please receive more information about our service packages as usual from our Export Managers: sales@seal-maker.com.

RGD successfully passed

差不多在每个领域对各种行业证书的需求都在不断的增加,尤其是在石油和天然气行业对材料特殊要求,相关证书就显得很重要。RGD 也就是大家熟知的突然的压力降低现象。该问题的产生主要因为在高压下天然气分子分散在橡胶制品里,然而在压力突然降低的情况下又要分离出。而对于那些没有RGD特性的材料在短时间内是无法无损完成的。为了准确的模拟在 RGD 测试中的破坏过程和对密封材质的准确检测, NORSOK M710 检测标准诞生了。

材料的化学准成决定了其本身的物理特性。为了满足客户对品质的追求, 多年以来 Seal Maker 一直提供具有 RGD-Zertifikaten 证书的产品。现在又增加了新的一款产品 U520-OR95-HT。这款优质材料特别是在高温的条件下(最高135摄氏度)的卓越性能,很好的满足了石油和天然气行业。另外 F800 性能也有所提高。为了这些具有 RGD特性的产品整个生产流程被改进和优化。优化后的生产过程更加灵活,也降低了最小生产需求。为了满足客户的需求和适合仓储,产品直径可以到 Ø200mm。更加适合石油和天然气领域的需求。

下列产品具有 NORSOK M710 检测证书:

- HNBR HN900-B85-RGD
- HNBR HN901-B85-RGD-LT
- FPM F800-B85-RGD
- U520-OR95-HT

具体相关内容您可以在我网站查询或请来信咨询: sales@seal-maker.com

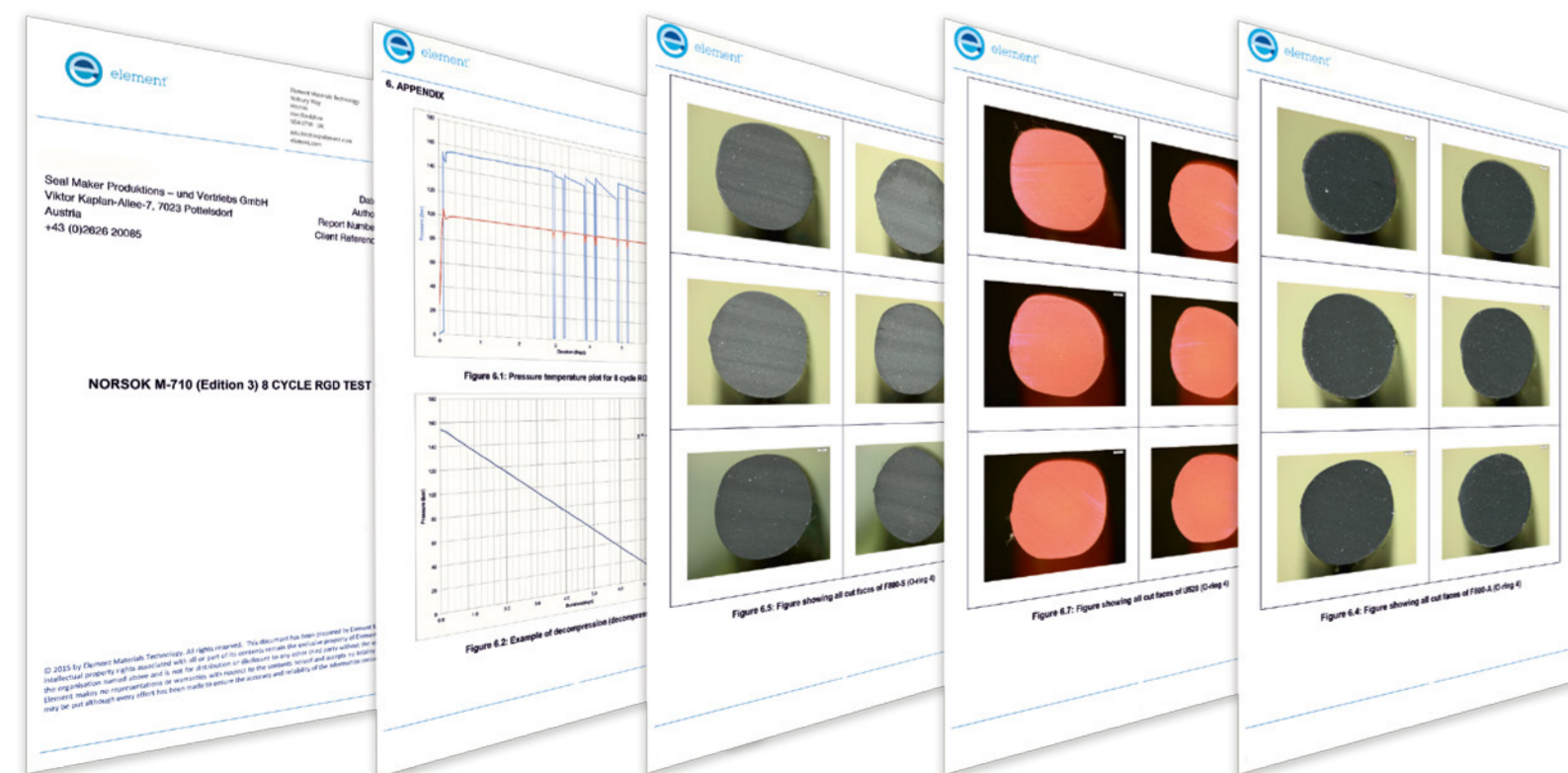
In nearly each industry, the needs and requirements for varied types of certificate are increasing. In order to meet the conditions of the oil and gas industry, usually specially matched materials are used in this field. Sudden pressure release known as RGD (Rapid Gas Decompression) are a well-known phenomenon. The problem is that under high pressure, gas molecules diffuse into the elastomer and try to escape from the material in case of sudden pressure release. Since this is not possible in such a short time, non-RGD-resistant materials are damaged. The NORSOK M710 test standard was developed to simulate the RGD damage mechanism and more accurately examine its effects on sealing materials.

The ideal chemical composition of materials is essential for their suitability. In order to meet the quality requirements of our as well as your customers, Seal Maker has been offering materials with RGD (Rapid Gas Decompression or ED explosive decompression) certificates for several years. The range of these materials has now been extended by U520-OR95-HT. The outstanding features of U520-OR95-HT, especially at higher temperatures (up to a maximum of 135°C), allow the application in many fields of the oil and gas industry. F800 has also been improved. The manufacturing process for this RGD material has been completely revised and optimised. Due to the new manufacturing process, its production is more flexible and minimum quantities have been greatly reduced. To improve short-term availability, this material will now be held on stock with a diameter of up to 200mm. As a result customers benefit immediately from an expanded range of products for use in the oil and gas industry.

The following materials can be supplied with a NORSOK M710 certificate:

- HNBR HN900-B85-RGD
- HNBR HN901-B85-RGD-LT
- FPM F800-B85-RGD
- U520-OR95-HT

You can find further information as usual on the website or with our Export Managers: sales@seal-maker.com



Better service at the POINT of sales

为了更好的扎根亚洲,我们正在建设我们在上海的子公司。目前各方面的准备都在如火如荼的进行中,以便我们能在 2017 年取得成功。这样我们能够和我们在中国的伙伴更好的合作和支持他们取得成功。

In order to increase our presence in the Asian area still further, the Seal Maker family will be extended by a subsidiary in Shanghai. Final preparations are currently in full swing in order to launch successfully in 2017. The new location shall give opportunities to intensify cooperation with our Chinese partners and to better serve their needs in the future.

To the other end of the world

在今年年初 Seal Maker 在美国销售了第一台 SML1800e。另一台巨型车削设备将要出发了 - 这次是去世界的另一边,上海。在接下来的几周 SML1800e 的旅行就会开始。按照计划这台设备将在九月开始生产。

SML1800e - 巨型车削设备:

- 强大的生产功能CNC-系统
- 最大密封件直径1.850 mm (70英寸)
- 操作简单方便的SML软件系统
- 工具齐全
- 碎末抽吸装置和碎削机
- 各种配件
- 详尽的安装,使用,维护说明
- 通过C轴还可以完成铣加工
- 舒适,准确
- 功能强大的抽吸装置和200l 废料收集桶,使其更适应生产

Early this year, Seal Maker delivered their first SML1800e machine in the U.S. Another lathe giant is going on a journey now, this time to the other side of the world, to Shanghai. Our SML1800e will be delivered in just a few weeks. Commissioning is scheduled for September.

SML1800e - The Lathe Giant:

- powerful complete CNC system
- for seals up to 1,850 mm (70 inches) in diameter
- user-friendly SML System software on an integrated PC module
- complete tool set
- chip cutter and chip suction
- wide range of accessories
- includes detailed documentation on maintenance, installation and operation
- with power-driven tools and full C-axis for milling applications
- comfortable and precise clamping system
- powerful suction with 2 side channel blowers and 200 l chips barrel for optimal production processes

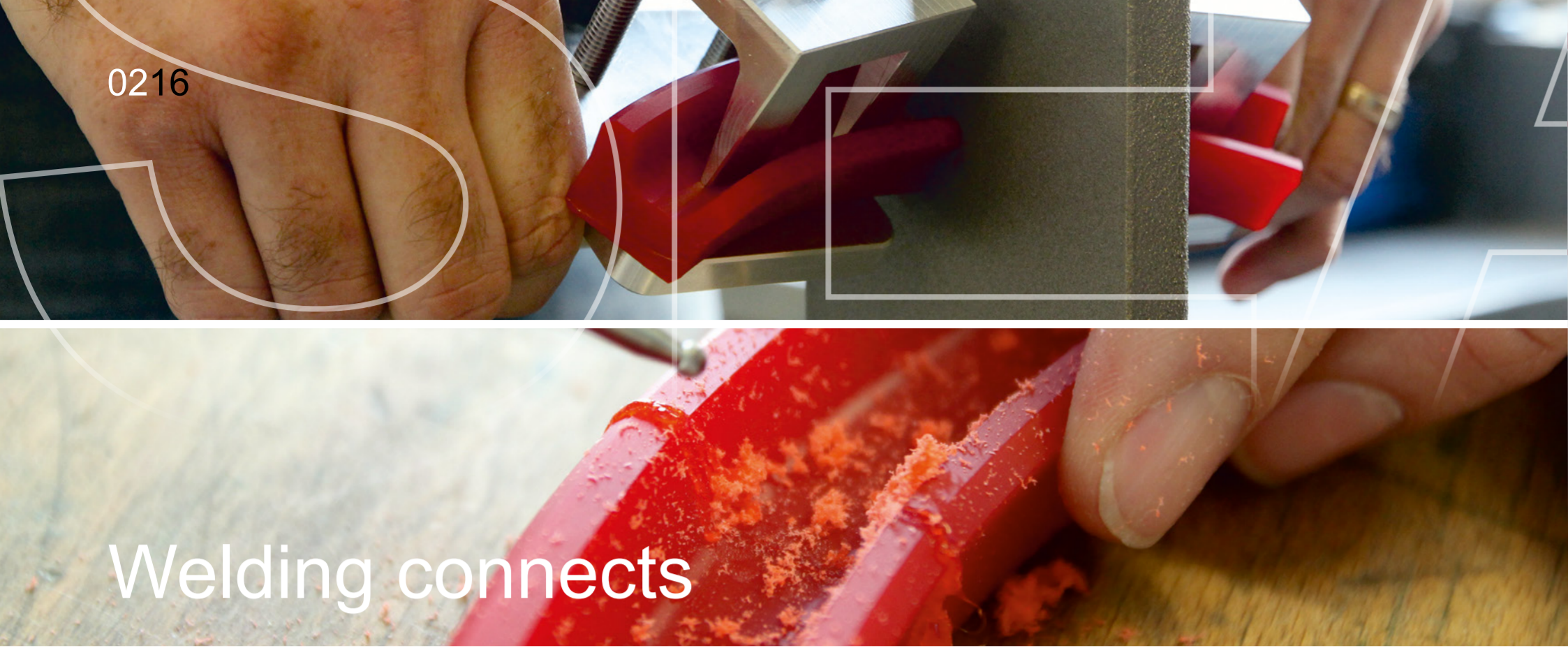


SALE

销售信息: 可提供 SML1000e 二手设备!
具体相关内容您可以在我网站查询或请来信咨询
www.seal-maker.com

Used SML1000e machine available!
Please find more information about our lathe giants and all other machines by visiting www.seal-maker.com

SALE



Welding connects

聚氨酯密封圈的精密焊接是 Seal Maker 非常注重的品质要求。通过使用最先进的焊接技术密封圈的直径不在是束缚。经验丰富的Seal Maker 工程师可以为您提供焊接服务也可以去客户处提供焊接服务。这样可以省去拆装相关设备和停产所致的耗费和时间，也可以使客户更加准确的计划自己的生产过程，节约成本。

和粘接联合相比焊接联合有如下优点：

- 焊接联合的密封件的物理性能可以和无缝密封件的物理性能基本相同。
- 不需要像黏胶那样添加额外的化学材料，也就不会由于黏胶产生诸如使材料变脆，以及与原密封材料不符的不足。
- 产品的其他耐受力也不会受到任何影响。

如果您对相关技术感兴趣，并且希望得到技术培训，您可以在我司网站查询或请来信咨询：sales@seal-maker.com.

Seal Maker combines quality with precision, but in respect of the welding process, also all kinds of our polyurethanes (PUs). Through the use of latest welding technology, there are no limits in the range of seal diameters any more. Experienced Seal Maker technicians perform seal welding also on-site, if required. This avoids time-consuming dismantling of equipment and downtimes can be reduced, which has a positive effect on costs: the entire revision process can thus be made more efficient for our customers.

The qualitative benefits of welding instead of glueing are obvious:

- The mechanical properties of welded seals remain almost the same compared to endless seals.
- Since no chemical additives (adhesives) are required for the bonding process, there are no problems with brittling or different hardness of the joint compared to the rest of the seal.
- Standard tolerances can easily be kept even with welded seals.

Should you be interested in our professional welding tools and/or our training for their use, please contact our Export Managers: sales@seal-maker.com.

School of Seal Maker

Seal Maker 的技术服务人员时刻准备着,解决生产中的任何问题。目前我们共有六名技术工程师，他们主要的工作是生产维护，设备检修，培训，以及回答您在设备和软件方面的任何需求。为了让每一个年轻的技术工人更好的适应将来的任务我们量身定制的两年的培训计划：

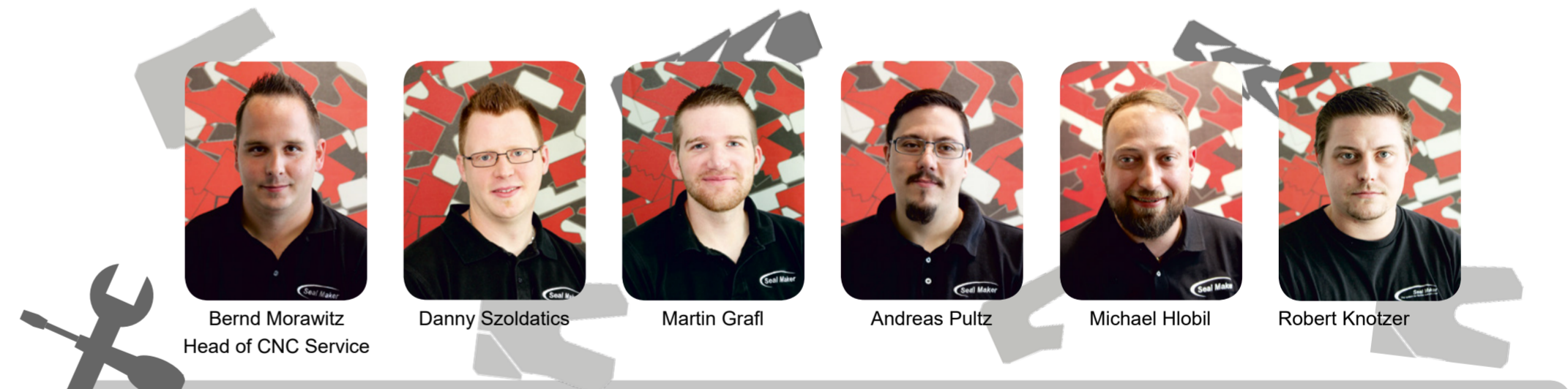
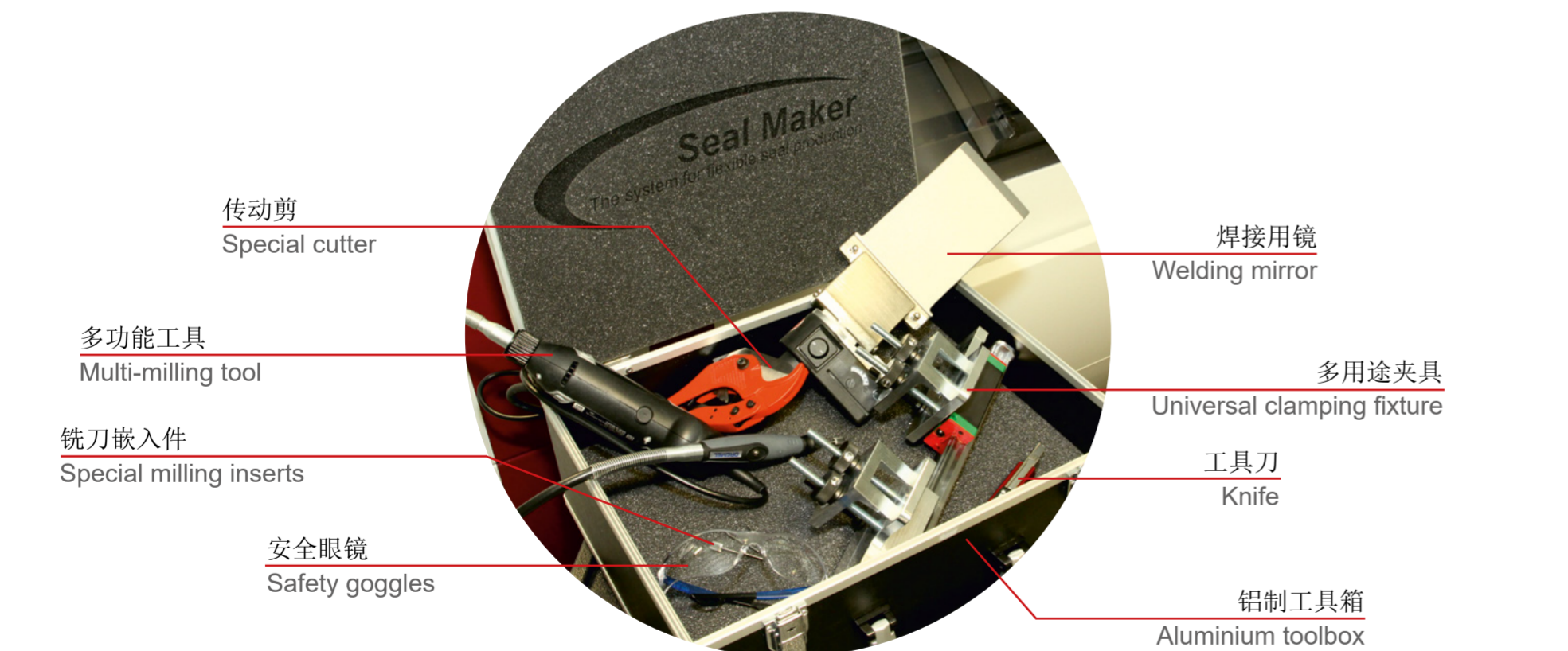
- 6 个月：制造密封件, Seal Maker 总部
- 1 个月：在 Seal Maker 公司实习, Kapfenberg
- 6 个月：机械设备安装 Seal Maker 总部
- 1 个月：Seal Maker 新加坡培训
- 2 个月：在办公室实习Seal Maker 总部

在六个月期间，密封件的生产 and 机器设备的安装都是非常重要的培训内容，对设备的培训包括各个机械组件的技术参数和电子原件的参数。另外英语学习及第二外语的学习也是培训的内容的一部分。为了更好的了解我们子公司的日常业务，我们还会给培训人员提供在新加坡和 Kapfenberg 一个月的实习机会。在新加坡的培训期间员工的技术外语有机会进一步加强，而且员工还有机会了解不同的文化。最后一阶段的培训师在技术服务部完成，这样可以获得更多的经验。此时作为一名合格的初级技术人员 已经可以为欧洲客户独立完成一些小型作业经过 4-6 个月的机械设备养护和修理培训，实习人员已经可以为任何国家客户，出色的完成各项任务。

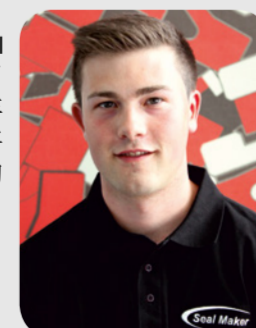
Our Seal Maker CNC service team is always ready to ensure trouble-free operation. Six service technicians are currently employed, responsible for commissioning, training, machine service, maintenance and repair, but they are also in charge of providing support for all engineering and programming requests. A comprehensive, almost 2-year long training programme is available in order to optimally prepare young service technicians for their future tasks:

- 6 months: Seal manufacturing, Seal Maker Headquarters
- 1 month: Working at Seal Maker Dichtungstechnik GmbH, Kapfenberg
- 6 months: Machine assembly at Seal Maker Headquarters
- 1 month: Seal Maker Pacific Asia Ltd. in Singapore
- 2 months: Office work at Seal Maker Headquarters

During the 6 months in seal manufacturing and machine assembly, it is especially important to get to know the manufacturing of seals and to become familiar with the machines and their mechanical and electronic components. Individual language lessons in English and a second foreign language are offered as part of the training programme. In order to learn and understand our daily business even better, one-month practices are scheduled at each subsidiary in Kapfenberg as well as in Singapore. Particularly the stay in Singapore shall strengthen the language skills of our prospective service technicians. In addition, they initially get in contact with customers and people from different cultures. The training is completed at the CNC service office, to gain further experience. As "Service Technicians Juniors", they are now optimally prepared for smaller missions in the local area, such as FSP service for European customers. After another 4-6 months in maintenance and repair operations, there are no restrictions any more: as "Service Technicians Advanced", they are ready to serve any customer needs, no matter which country.



为了挑选适合人员，以适应这份高要求岗位，公司开发了一个评估中心。以确保所挑选的人才适合岗位要求。我们的年轻的学员 - Mathias Kienzi - 成功的完成了他的培训计划。这份完整的培训计划给参训人员提供了一个在 Seal Maker 的世界里各方面成长的机会。“这位年仅20岁的青年毕业于HTL 在Eisenstadt，自从 2016 年五月加入 Seal Maker，对于将在新加坡的实习格外高兴：‘我喜欢旅行，特别是对亚洲文化，及那里的同事和客户感兴趣，在几个月后他会有机会实现这个梦想。



Mathias Kienzi

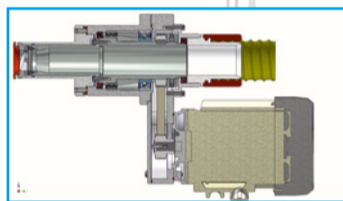
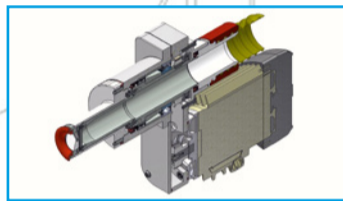
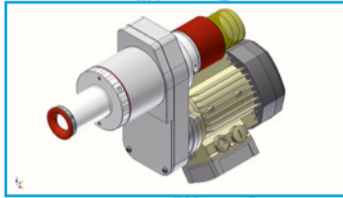
The staff selection for this demanding job is handled via an assessment centre. This is necessary to ensure that appropriate staff can be found. Our youngest service technician - Mathias Kienzi is just completing his basic training. "The programme provides the ability to familiarize with all areas, so I literally get insights into the entire Seal Maker world." The 20-year-old service technician has graduated from the Technical College in Eisenstadt. Since May 2016 he is part of the Seal Maker Team, looking forward to his stay in Singapore: "I like travelling a lot and therefore I am keen to meet my Asian colleagues, the culture and of course also the customers." In a few months, you may also have the pleasure to meet our youngest CNC service technician.



Testing limits: Chip Cutter NEW

灵活，准确，创新 - 为了使我们的系列产品更加精确的符合客户需求，我们不断测试突破极限。自从我们的SML系统生成以来，切碎机从未被改变过。我们的技术研发人员在过去的几周里，一直在提高现有的切碎机的效率，维修性和可靠性。

我们的目标就是要优化切碎过程，以确保更加合理的生产流程。这次技术挑战在于一方面是特别是切割工具的所在位置，另一方面是切碎机的切刀几何断面。通过不断的多次的试验和改进，最终我们成功的改进了切碎机使其更加适应系列生产。具体相关内容您可以在我司网站查询或请来信咨询：sales@seal-maker.com



More flexibility, efficiency, innovation: limits have to be tested in order to increase the efficiency in serial production for our customers. Apart from minor adaptations our chip cutter has remained unchanged since the SML system exists. For some weeks our engineers were engaged with improvements of our chip cutter regarding performance and maintainability, as well as reliability.

The primary aim was to optimise chip cutting in order to ensure an ideal production process. The technical challenge was on the one hand the position (especially in case of the power-driven tools of the Plus versions), on the other hand the cutting geometry of the cutting blades. Both factors were improved in several development steps, and after extensive testing, the new chip cutter is ready for serial production now. Please obtain further information from our Export Managers, as usual: sales@seal-maker.com



Summer Event 2016: „European Traditions“ ...

... 今年 Seal Maker 夏季节日的座右铭是：奥地利的„销钉“，„大杯啤酒“ 巴伐利亚 或是„射击“法国 - 大约150 客人（员工家属和朋友）可以尝试自己的运气。虽然下雨但是场内气氛没有受到影响：当地的演唱团体活跃气氛。各种欧洲传统烹饪美食。活动的高潮是观看2016年欧洲足球锦标赛的奥地利对夺标大热门葡萄牙的小组赛，并以平局结局。

...was the slogan of this year's Seal Maker summer festival. Whether "Nailing" in Austria, "Beer mug pushing" in Bavaria or "Target shooting" in France, the approximately 150 guests (employees, family and friends) were able to try their luck at various games stations. Despite the rain, the mood was great: entertainment was provided by a young regional music band. Many culinary European specialities helped to keep the strength up during the evening. The highlight was the public viewing of the European Soccer Championship 2016: Austria was able to obtain a deserved draw at the group match against the European champion Portugal.

