

technews

CHINA BREW & BEVERAGE 2012

INSPECTION IN PERFECTION 完美的检测

HEUFT *spotter SF*

A CONTINUOUS COMPLETE INSPECTION

We have significantly extended the range of functions of the HEUFT *spotter SF* full container inspector in order to fully meet the special requirements of the Chinese brewing and beverage industry.

Reliably detecting contaminants, damage and low density foreign objects which are floating about in the product or have sunk to the base of the bottle, checking the fill level, the closure and the density as well as the presence of labels and rejecting faulty drinks packaging according to specific faults before they can reach the market: the latest version of the HEUFT *spotter SF* now carries out a continuous, complete in-line inspection of filled transparent bottles!

The compact full container inspector is equipped with an in-house developed technology for the

specific detection of contaminants and foreign objects such as foil remnants, bits of paper, insects, cigarette ends, wood shavings or mould in the product as well as the reliable identification of scratches, cracks, inclusions, chips and breaks on the container itself: inspection modules in the infeed and the outfeed, comprising LED strobes, specially arranged mirror cabinets and Gigabit Ethernet cameras, create several optimally illuminated views of the complete base area. The conveyor chain is so narrow that the bottom of the bottle juts out to the left and right of it in order to provide an unrestricted view. ▶

... discover more on page 2

更多内容详见第2页



成品全方位的检测设备

HEUFT 为了能够充分满足中国啤酒及饮料行业的实际要求，对于 HEUFT *spotter SF* 成品异物检测设备做出了检测功能的扩展。

对于产品有污物、瓶身破损、悬浮的低密度异物及沉底的异物、灌装液位、封盖是否漏气及标签有无这些检测内容 HEUFT *spotter SF* 就可以全部实现，并将错误产品挡在市场之外，确保产品的安全性。HEUFT *spotter SF*

对透明玻璃瓶产品在线检测提供了连续、全面的解决方案。成品检测设备 HEUFT *spotter SF* 为 HEUFT 公司自主研发，对于成品中含有的异物例如：铝箔、纸片、昆虫、▶

HEUFT *canLine*

EFFECTIVE PROTECTION

The new HEUFT *canLine* removes empty cans which are contaminated, damaged and cannot be reliably sealed before they can impair the quality of the final product and the productivity of the complete filling line.

The HEUFT *canLine* identifies empty cans which are contaminated with foreign objects, dented, misshapen or cannot be reliably sealed with the highest precision. The containers in question are consistently rejected. The compact

new development examines the base, the inner sidewalls and the flanged edge in the finish area of the empty cans which are still unsealed from above with only a single camera. The optics system has such a depth of

field that faults in all these areas become clearly visible in the high-resolution images. Specially arranged LED strobes carry out the illumination of the containers without reflections or shadows. ▶

... discover more on page 3

更多内容详见第3页

有效保护-空罐检测

易拉罐检测新技术 HEUFT *canLine* 使得易拉罐在灌装前远离污染及破损影响，使易拉罐产品免受封盖不严等情况而影响到产品质量。

HEUFT *canLine* 对于封盖前易拉罐进行精准的分析，尤其是对罐子内有异物、罐身有凹陷及罐子形状进行准确判断。有以上错误的罐子将被剔除出来。同时，对于罐子的底部、内壁及罐口形状进行检测，此相机系统可以将这些地方的错误清晰的照出并记录传递至系统，特殊设定的 LED 闪光

灯可以将罐身整体照亮却不产生任何反光或者阴影。HEUFT *canLine* 可以检测出罐口变形甚至破损的罐子并直接将他们剔除出生产线，因为这种罐子在实际生产中是没有办法封口或者是封口不严实的。▶



A CONTINUOUS COMPLETE INSPECTION

► A servo-controlled belt, which adapts to the most varied bottle shapes at the push of a button, aligns the bottles on their way to the second base inspection in the outfeed in such a way that they can be examined there again from another angle. Even faults covered by the dome and other structures are reliably identified in this way. Additional optical detection modules carry out an all-around sidewall inspection in the infeed and outfeed, parallel to the base inspection, in order to uncover foreign objects floating in the product as well as material defects in the body and neck area of the bottles. The new HEUFT *reflexx*² high-performance image processing system reaches a new dimension in detection reliability even in the high-speed section of up to 72,000 bottles per hour.

The HEUFT *spotter SF* checks that the fill level is correct and at the same time that the bottles have been sealed. The newly integrated HEUFT sonic module verifies the tightness and

integrity of the crown corks and other metal closures. It makes the lid oscillate by means of an electromagnetic pulse. A highly sensitive microphone records the noise which occurs there. The tension of the closure also changes and with that its characteristic sound when the internal pressure of the bottle deviates from the standard. A special HEUFT analysis method records such deviations. Incorrectly positioned, leaking closures are reliably identified in this way. Monitoring each individual closer head with the locator function also makes it possible to identify the causes of such faults in good time.

Even though the typical place of installation of the HEUFT *spotter SF* is directly after the filler / closer system but before the labelling machine it is nevertheless able to take over the label check. Because as a standardised unit from the HEUFT SPECTRUM TX modular system it is so flexible that it can link two separate inspection areas without a problem. Consequently it obtains

information from a photocell sensor, to be integrated in the labeller, for checking the presence of labels and controls the rejection system for removing incorrectly equipped containers after the machine.

In addition the perfected full container inspector offers the possibility of a strictly fault-specific rejection: bottles which are contaminated, incorrectly filled, not sealed, with leaks or unlabelled can each be removed separately at different positions along the filling line if required. Consistent monitoring, including a reject verification, ensures that each container is inspected completely and each faulty one is really removed.

The latest version of the HEUFT *spotter SF* meets the requirements of the Chinese brewing and beverage industry for a highly efficient system for an extensive complete in-line inspection of filled transparent bottles to the greatest extent due to all these advantages. ■

HEUFT *reflexx*²

An extremely powerful image processing system is required in order to obtain optimal inspection results even at high production outputs. Therefore we have developed our own which is specifically designed for HEUFT systems. HEUFT *reflexx*² is the name of the latest generation of this hardware and software for the real-time combination and analysis of a wide range of detection pictures. Integrated filter and evaluation masks clearly distinguish between cosmetic defects and real risks to the product quality. The HEUFT *reflexx*² reaches a new dimension in detection reliability with a false rejection rate which is 10 times better than before due to a faster image transmission and greatly increased computing power, resolution, colour depth and contrast. Furthermore the specific teaching in of good and faulty objects is considerably faster and easier without affecting the sensitivity. The function for automatically saving all the detection pictures is completely new. The power consumption of the high-performance image processing system has also been dramatically reduced.

连续全面的检测

► 烟蒂、木条片及霉斑等有精确的检测效果；同时可以检测瓶身的划痕、裂纹、破口及结石物等。进口及出口处的瓶底检测模块包括LED 闪光灯、特殊设置的镜片箱、高分辨率的相机组，通过这些装置将瓶底情况全部取相下来并做全面检测。此段的链条非常狭窄，使得瓶底检测没有任何的盲点。伺服控制的加紧皮带系统可以满足绝大多数瓶型的正常使用，加紧皮带将瓶子以速度差的方式传送，使瓶子在出口处进行第二次瓶底检测。因此，即使是在进口处被遮挡的异物在第二次瓶底检测时也能被检测出来。进口及出口处有两个侧壁检测单元，两者结合使整个瓶子侧壁被彻底地检测。新的图像处理技术 HEUFT *reflexx*² 对于达到72,000 瓶/小时的生产线依然能够提供高精度的检测效果。

HEUFT *spotter SF* 同时可以检查产品灌装液位是否正确及瓶盖是否密封。只要集成 HEUFT *sonic* 模块就能检测皇冠盖或者其他金属盖是否漏气，检测模块对于瓶盖发出超声波电磁脉冲打击瓶盖，同时高敏度传感器将记录脉冲打击瓶盖时产生的噪音。当瓶子内部的压力出现偏差时，传感器所记录下的

数据将与标准不符，并由HEUFT 程序分析记录下来。瓶盖位置歪斜、漏气的瓶盖就可以通过这种方法可靠的被检测出来。对于压盖头的实时监控可以判断出经常压出漏气瓶盖的位置，有效减少漏气瓶盖的产生。

即使 HEUFT *spotter SF* 最典型的安装位置是放置于灌装封盖机之后，通常在贴标机之前，但它仍然能够进行标签检查。因为作为 HEUFT SPECTRUM TX 模块化检测系统的一个标准单元，它可以有效地将两个独立的检测区域连接起来。因此，HEUFT *spotter SF* 可以获取贴标机里的光电传感器对于标签有无检测的信息，并控制剔除系统，以便把标签错误的容器剔除出来。

此外，对于因为产品中含有异物、不合格液位、漏气瓶盖及标签错误的情况，HEUFT *spotter SF* 检测设备可以控制多个剔除系统，将以上错误情况分开剔除至不同的区域。对于检测情况的实时监控包括剔除确认系统，确保了每个容器受到全方位的检查并且不放过任何一个不合格产品。

HEUFT *spotter SF* 鉴于以上的这些优点，具有特别适用中国啤酒及饮料行业中透明玻璃瓶产品的高效检测系统，并且为功能可扩充的在线检测设备。 ■



为了能够即使在高速的生产输出的时候获取最佳的检测结果，一个非常强大的图像处理系统是必须的，因此我们开发了我们自己独有的，属于海富的系统，HEUFT *reflexx*² 是目前最新一代的硬件和软件系统的名字，是实时地对大批量检测照片的组合和分析，集成过滤器和区域评估能够清晰的区分容器本身的结构和对产品质量造成的正真有风险的东西。HEUFT *reflexx*² 达到了一个新的检测可靠性的高水准，由于更加高速的图像处理以及增强的计算机能力、分析能力、颜色深度和对比度使得误剔除率比原来好十倍以上。此外对好的和错误的物体的特别记忆能力将是更加快速更容易地发现同时也不会影响检测的灵敏度，所有检测的图像储存起来也是完全新的功能，对高性能的图像处理系统的电能消耗也是大幅下降的。

EFFECTIVE PROTECTION

- The HEUFT *canLine* detects deformations and damage which could result in the empty cans not being sealed at all or not being tightly sealed during the flanged edge inspection and removes the containers in question from the production flow. This protects the microbiological purity of the drink and at the same time prevents obstructions in the filler / closer system which thwart the productivity of the complete installation. The base and inner wall inspection identifies dents, bumps, dirt and foreign objects which are potentially dangerous to health.

The new HEUFT *reflexx*² high-performance image processing system not only ensures a new level of quality with regard to the detection reliability when inspecting up to 132,000 empty cans per hour but also a very high degree of user friendliness and flexibility: the operator can specifically select identified objects on the HEUFT *PILOT* graphical user interface and can permanently define whether these are tolerable deviations or serious threats to product safety and line efficiency. Even critical fault sizes can be specially taught in. Faulty cans are only rejected if they do not meet the particular quality criteria of the respective canning company due to this individual classification. Of course such

adjustments can be adapted or revised at any time without a problem.

Brand and format changes can be carried out with the HEUFT *canLine* within a very short time without any mechanical changeover work: the height and position of the detection unit as well as the passage width of the guide rails in the inspection area automatically adapt themselves to the changed production program at the touch of a button. Consistent monitoring ensures that each empty can is inspected and each can identified as being faulty is also really rejected. ■

有效保护-空罐检测

► 这样可确保罐中酒的微生物纯度不受影响，同时也能防止灌装、压盖机因为工作效率而影响整条生产线。对于罐底及内壁检测中出现的罐身凹陷、罐身隆起及罐身内含有异物等情况将是人体健康的潜在威胁。最新版图像处理技术 HEUFT *reflexx*² 不仅可确保在生产线达到 132,000 / 罐/小时的情况下同样可以具有高精度的检测精度；而且操作简单方便灵活，操作人员可以通过人机界

面查看设备工作情况，同时可以自己定义检测精度以确保检测后的产品可以满足安全及生产效率的需要。系统中预设的检测精度严格按照客户需要设定，任何产品达不到客户需要的标准的话将被直接剔除出来。当然，设备的检测精度可以在适当的时间由客户确认后作出调整。

HEUFT *canLine* 在生产中罐型调整时是非常方便的，不需要做任何的机械调整工作。客户只需在触摸屏上点击新的罐型的程序按钮，整个设备测量桥的高度、检测单元位置及检测区域护栏宽度都将自动调整到合适的位置。对于检测设备的实时监控确保每个空罐都被设备检测到并不放过一个有问题的空罐。■



HEUFT *TORNADO flex*

FLEXIBILITY IS TRUMPS

Servo technology makes it possible: the machines of the HEUFT *TORNADO flex* series achieve first-class labelling results with a high-precision container alignment. Brand and format changes are possible without replacing mechanical parts at the bottle carrier.

Applying wet glue, self-adhesive or wrap-around labels exactly where they belong: the HEUFT *TORNADO flex* labelling machines can manage this! The alignment of up to 72,000 bottles per hour to the millimetre is servo-controlled. For this typical characteristics such as embossing, orientation marks or mould seams are detected by means of powerful optical methods and used as alignment marks. As a result all types of labels are placed exactly in the correct position with high precision.

Furthermore the integrated servo technology makes particularly easy and fast brand and program changes possible. The rotating cams of the labeller can be programmed depending on the brand because they are not mechanically but electronically controlled.

The time-consuming replacement of change parts is not necessary in this area. The servo control has a positive effect, among other things, on the wear and tear as well as the maintenance of the HEUFT *TORNADO flex* labelling machines.

灵活性是王牌

伺服技术使之变成可能：HEUFT *TORNADO flex* 系列机器通过高精度的容器校准实现了一流的贴标结果。无需更换托平台处的机械零件也可以实现瓶型和形状的更换。

将胶水、不干胶或环绕标签精确地贴在相应位置：HEUFT *TORNADO flex* 贴标机可以管理这些！最高达 72000 瓶子每小时，毫米级的校准也是伺服控制的。对于典型的特征：如压花、定位标志或模具接缝都可以用这种强大的光学方法检测，同时它也可作为校准标记。因此，所有类型的标签都非常精确地贴在正确的位置。

此外，集成的伺服技术也可以使变换瓶型和程序变得特别方便和快捷。贴标机的旋转凸轮可以根据瓶型进行编程，因为他们不是被机械部分控制，而是由电子部件控制的。在这个区域，费时的零件更换是没有必要的。除此之外，伺服控制在 HEUFT *TORNADO flex* 贴标机的磨损以及维护方面起着积极的作用。



THE CORRECT SOLUTION FOR EACH CASE

We will be showcasing other highly efficient in-line systems, for an extensive product and packaging inspection when filling drinks, live and in action at the China Brew & Beverage 2012 exhibition in addition to the latest versions of the HEUFT *spotter SF* and the HEUFT *canLine*:

- the HEUFT *InLine* carries out a complete all-around inspection of all types of bottles in order to detect contamination and defects before the filling process
- the HEUFT *VX* checks the fill level and the closure, monitors the complete filling process which includes detecting serial faults and issuing exact production statistics as well as sampling under production conditions

- the HEUFT *squeezer QA* detects leaks in plastic containers made of PET or HDPE which threaten the microbiological purity of milk, dairy products, liquid food or sensitive drinks
- the HEUFT *FinalView FX* checks the presence, the position, the alignment, the brand affiliation and the integrity of all types of labels and closures

These powerful solutions from the HEUFT *SPECTRUM TX* modular system make a valuable contribution to excluding recalls and product liability cases and to increasing the profitability of complete lines.

HEUFT 的其它产品

对每一种情况的正确解决方案

在2012中国国际啤酒、饮料工业展的现场，除了最新版本的 HEUFT *spotter SF* 和 HEUFT *canLine*，我们还将展示其它的一些广泛用于灌装时检测产品和包装的高效在线系统：

- HEUFT *InLine* 可以对所有类型的瓶子做完整全方位的检测，以便在灌装之前检测污染物或缺陷
- HEUFT *VX* 检测液位和封盖，监控整个灌装过程，其中包括监控连续故障、并发送确切的生产统计数据以及在正常生产条件下进行取样

- HEUFT *squeezer QA* 检测由 PET 或 HDPE 材料制成的塑料容器是否泄漏，不会影响到牛奶、乳制品、液体食物、敏感饮料中微生物的纯度
- HEUFT *FinalView FX* 检查所有类型标签和封盖是否存在、位置、商标正确性和外观完整度。

来自 HEUFT *SPECTRUM TX* 强大的模块化系统解决方案为避免产品召回和产品责任案件以及增加整条生产线的盈利能力做出了宝贵贡献。

HEUFT *SPECTRUM TX*

ONE STANDARD DEVICE WITH A WHOLE HOST OF POSSIBILITIES!

You know best which tasks have to be performed along your packaging line. The modular construction of the HEUFT *SPECTRUM TX* series allows you to decide for yourself with which functions you wish to equip your systems for the in-line inspection of drinks packaging.

A universal standard device forms the basis for tailor-made solutions which meet your specific requirements exactly. All the cross-system technologies are accommodated in this compact,

network-compatible control unit. This includes among other things:

- the multilingual HEUFT *PILOT* graphical user interface with user-related and pass word-protected access rights
- the interface for an online connection to database and MES systems for archiving batch and production data
- the interface for remote service using the HEUFT *TeleService*

- extensive product monitoring including reject verification
- integrated self test functions for regularly checking the detection reliability

With that the HEUFT *SPECTRUM TX* systems provide maximum operational reliability and at the same time carry out fundamental archiving and documenting obligations.

可能成为整线配置一台标准设备！

您最了解您的包装线上需要。HEUFT *SPECTRUM TX* 系列的模块化结构允许您自行决定在您的饮料包装在线检测系统上安装哪些功能。

一台多种功能的标准设备，以替客户量身定制解决方案为基础，能够准确满足您的特殊要求。不仅具有结构紧凑、网络兼容的控制单元还包含所有的跨系统技术。除此之外还包括：

- 多种语言的HEUFT *PILOT* 图形用户界面带有用户关联和密码保护的访问权限

- 用于在线连接到数据库和 MES 系统存档批处理和生产数据的接口
- 使用HEUFT *TeleService* 进行远程服务的接口
- 包含剔除确认的大规模产品监控
- 集成的自我测试功能，定期检查检测精度

使用 HEUFT *SPECTRUM TX* 系统能够提供最大的操作精度，同时能够进行基本的存档和记录工作。



“SPEED DATING” WITH CHINA’S EDUCATED ELITE

HEUFT SYSTEMS TECHNOLOGY (Shanghai) CO. LTD. as a supplier of high technology needs highly skilled employees. Therefore the company took part in a type of “speed dating” in search of suitable candidates.

Approximately 100 students from the Chinese-German University of Applied Sciences, the Chinese-German College of Higher Education and the Shanghai-Hamburg College at the University of Shanghai for Science and Technology recently used a “speed dating” event organised

by the German Academic Exchange Service (Deutscher Akademischen Austauschdienst - DAAD) at the Tongji University in Shanghai in order to show the representatives from 40 German companies from the Yangzi Delta what they are capable of. The unusual event was a good springboard for future careers for the up-and-coming talents and an ideal platform for HEUFT SYSTEMS TECHNOLOGY (Shanghai) CO. LTD. to introduce itself as a competitive supplier of high technology and an attractive employer. Because the rapidly growing company of the

HEUFT group is constantly looking for new, technology-minded, highly skilled and motivated employees. The participants who will rate among China’s educated elite after they have graduated meet the required conditions for this. “There were definitely interesting candidates amongst them who fit in well with us”, weighed up Jürgen Kurz, Managing Director, who represented HEUFT China together with Xiaxia Zhang, HR Manager. He was therefore pleased with the proceedings and the results of his first “speed dating”.

与中国的大学生精英“闪约”

作为高科技产品的供应商，位于上海的海富检测包装系统技术（上海）有限公司需要训练有素的员工。因此，为了寻找合适的人选，该公司参加了由德意志学术交流中心 (DAAD) 主办的大学生 企业闪速约会活动。

来自同济大学中德工程学院、同济大学中德学院和上海理工大学的上海 汉堡国际工程学院的100名在读大学生做足了充分的准备前来参加这个由德意志学术交流中心(DAAD)主办的大学生 企业闪速约会活动。在上海同济大学，学生们向来自长江三角洲的40家德国企业代表展示自己的特长和才能。对于这些年轻的新一代人才，这次非同寻常的活动是一个很好的职业生涯的起跳板。对于海富检测包装系统技术有限公司，这里也是一个理想的平台，增强企业本身作为强大的

高科技供应商和有吸引力的雇主在校园中的知名度。由于公司的快速成长，HEUFT 团队不断地在寻找具有科技头脑、技术熟练、积极进取的新员工。与会者谁率先在毕业后跻身于中国教育的精英行列将满足这些必须的条件。“这里一定有合适我们企业的人选”，海富中国的董事总经理段乔治 (Jürgen Kurz) 先生说，他同人事经理张夏夏一起代表本企业前去参加活动。他对于闪速约会活动的过程和结果都是非常满意。



Interview with Bernhard Heuft

THREE QUESTIONS FOR ...

... Bernhard Heuft,

founder and managing director of HEUFT SYSTEMTECHNIK GMBH, Burgbrohl, Germany.



HEUFT has had its own operation in China for almost ten years. What is the importance of HEUFT SYSTEMS TECHNOLOGY (Shanghai) CO. LTD, with regard to your global company?

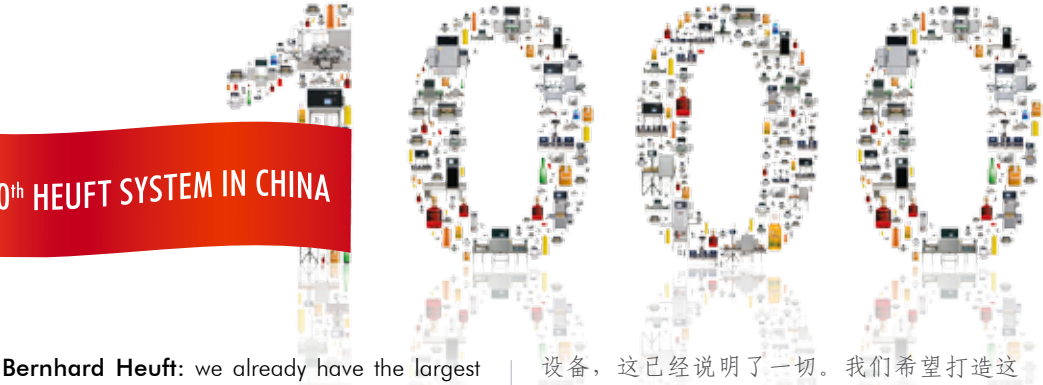
Bernhard Heuft: China is the largest beer market in the world. The industrial production and filling of other drinks, dairy products and food also show a pleasing, dynamic growth. At the same time a rapid increase in quality awareness is noticeable. The keyword “food safety” is gaining in importance. The same can be said for solutions which optimise efficiency and increase the productivity of filling and packaging systems. Accordingly the role which China plays is of significance to us as the

technological leader in these sectors. The fact that we have now already installed over 1,000 HEUFT systems there speaks for itself. We want to build on this success – with innovations which are tailored to meet the special requirements of the Chinese food and drink industry.

What does that mean in practical terms - which HEUFT products have been most in demand in China until now and which will be most in demand in the future?

Bernhard Heuft: traditionally the linear HEUFT InLine empty bottle inspectors rank among the top sellers of our modular product range. The thousandth HEUFT system sold in China, which we recently integrated into a line at the Tsingtao Shanghai Songjiang Brewery, was also a device of this type. Furthermore the demand for solutions for the complete inspection of filled bottles has increased enormously recently. Therefore we have extended the range of functions of the HEUFT spotter SF considerably. This further development now also carries out a fill level, closure, leakage and label check in addition to the reliable detection of foreign objects. We see great market potential in China for this all-round system. The same applies to the new HEUFT canLine empty can inspector. Furthermore solutions for a robust, efficient and energy saving filling and packaging process and for guaranteeing the highest possible productivity are in demand. We also have suitable products available in this sector with the HEUFT PROFILER PDA line analysis tool and the HEUFT synchron conveyor control system for optimising the container flow.

How will HEUFT China develop over the next ten years in your opinion?



Bernhard Heuft: we already have the largest service and maintenance team for inspection, quality and efficiency protection systems in the whole of China. We will continue to expand the number of employees at HEUFT SYSTEMS TECHNOLOGY (Shanghai) CO. LTD. in order to meet the requirements of our customers as quickly and flexibly as ever in the future too. The same applies to our selection of seminars, workshops and training courses for the numerous users of the HEUFT systems. Furthermore the whole industry can look forward to many other innovations which will advance the state of the art with regard to quality, safety, efficiency and productivity when filling food and drinks.

Bernhard Heuft 先生专访

对 Bernhard Heuft 先生的三个问题

来自德国 Burgbrohl 的 HEUFT SYSTEMTECHNIK GMBH 公司的创始人和董事长。

海富在中国已经独立运作将近十年。海富检测包装系统技术（上海）有限公司对于海富全球的企业来说有怎样的重要性？

Bernhard Heuft: 中国是全球最大的啤酒市场。工业化的生产和其他饮品的灌装，乳制品和食品工业同样显示出一个可喜的动态的增长。同时，也能注意到，质量意识也在快速增长。“食品安全”这个关键词变得越来越重要。同样对于灌装生产线优化生产线效率和提高生产力的综合解决方案也一样在快速增长。因此，中国所扮演的角色对于我们这些领域的技术领导者具有重要的意义。事实上，我们已经安装了超过 1000 个海富

设备，这已经说明了一切。我们希望打造这样一种成功——通过创新，量身定做地满足中国食品和饮料行业的特殊需求。

在实践中意味着什么？-到现在为止，哪些海富的产品在中国的需求量最大？将来最需要哪些产品？

Bernhard Heuft: 传统而言，HEUFT InLine 空瓶检测机在我们的产品组合系列中最为畅销。在中国卖出的第一千台 HEUFT 设备，最近我们安装在上海松江青岛啤酒的一条生产线上，也是这种类型的设备。此外，对满瓶全方位检测的解决方案的需求量最近也大大增加了。因此我们也大大扩展了 HEUFT spotter SF 的功能。除了可靠地异物检测外，现在这种进一步的发展还可以进行液位、封盖、泄漏和标签的检测。我们能看到这种全方位系统在中国具有很大的市场潜力。同样地，全新的 HEUFT canLine 空罐检测机也是如此。除此以外需求量也很大的还有，强大、高效、节能的灌装和包装过程的解决方案，以保证最高的产能。我们在本行业也提供合适的设备，配有 HEUFT PROFILER PDA、生产线分析工具，用于优化瓶流的 HEUFT synchron 输送带控制系统。

在您看来，未来十年海富中国将如何发展呢？

Bernhard Heuft: 我们已经针对检测、质量以及线效率保障系统在全中国拥有最大的服务和维修团队。我们会继续增加海富检测包装系统技术（上海）有限公司员工的数量，从而在将来更加快捷和灵活的满足我们客户的需求。同样地，我们会为海富设备的众多用户进行研讨会，实习和培训课程。此外，整个行业可以期待许多其它的创新，这将会推动灌装的食品和饮料过程的质量、安全、效率、和产量的水平。

The new HEUFT building

MORE ROOM FOR INNOVATIONS

The head office of HEUFT in Germany has more than doubled in size with three new production halls and new spacious service, training and exhibition areas. The outcome: even better conditions for an optimal development and production process as well as an exceptional service to the customer.

The new Customer Center is the heart of the 12,000 square metre extension in Burgbrohl which houses an attractive showroom among other things. The visitors to HEUFT can examine systems from all the device families in action and in detail there and see for themselves the high precision with which they identify and reject faulty products and packaging whilst still on the line. The new premises equipped with modern facilities also provide ideal conditions for workshops, training courses and seminars.

In addition production areas which had been relocated because of a shortage of space could be concentrated in one place again

due to the new building. Thus employees and customers benefit from shorter distances, faster response times, smooth processes and the highest level of production quality.

Consolidating the R&D, production, service and quality assurance departments under one roof ensures that the experiences gained at the customer's today are already implemented in innovative solutions designed to meet customer demands tomorrow. A new control centre for the Customer Care & Technical Service department and the HEUFT TeleService provides the best conditions for a proactive customer service.



HEUFT 的新办公楼

有更多的空间用于创新

HEUFT 德国总部规模扩大了超过两倍，拥有三个新的生产车间和宽敞的新服务、培训和展示区域。这样的话：可以创造出最佳的发展和良好的生产流程，尤其是能够更好的服务于客户。

新的客户中心是位于Burgbrohl 新的 12,000 平方米总部延伸区域的核心，非常吸引人的展示室位于其中。所有的去 HEUFT 的参观者都可以查看 HEUFT 各种产品系列的设备的运行和细节，他们也可以看到在线的对错误容器非常高的精确度以及提出能力。新的客户中心，同时也配备了很现代化的设施，为相关的实习、培训以及研讨会提供了理想的条件。此外，以前由于空间的限制，现在可以搬迁到新的宽趟的区域，这样很多生产可以集中

在一个新的地方。由此，员工和客户都因此受益，距离更加缩短，响应时间更快捷，顺畅的生产流程以及高水准的生产质量。

将研发、生产、服务和质量保障部门整合在一个屋檐下，确保了今天从客户处得到的经验可以马上执行创新的解决方案和设计，从而满足客户明天的需求。一个新的客户关爱和技术部门以及 HEUFT 的 TeleService 将是一个新的控制中心，提供了更加前瞻性的客户服务。



FINDING AND STOPPING CAUSES OF DISTURBANCES

HEUFT systems are well-known for their outstanding operational reliability. Online remote maintenance by means of the HEUFT TeleService provides fast and immediate help for self-help should a malfunction nevertheless occur.

Identifying, analysing and in many cases directly rectifying device malfunctions from a

distance using a protected Internet connection: this is possible with the HEUFT TeleService! Our service technicians can access all the inspection and quality assurance systems of the HEUFT SPECTRUM TX series and carry out diagnostic work, repairs and maintenance via a protected Internet connection regardless of the location. This reduces expensive downtimes and saves travelling costs. However should an on-site

visit from a HEUFT service technician nevertheless be required then this is effectively reduced due to the information already obtained via the online connection. Regardless of what happens: the HEUFT TeleService and our dynamic Service Team will not abandon you. Causes of disturbances are identified and eliminated before they result in long standstills and costly production stops.



发现并阻止干扰源

HEUFT 系统突出的操作精度众所周知。如果发生故障时，HEUFT TeleService 在线远程维护能够提供快速和及时的自助帮助。

从远距离使用受保护的网络连接识别，分析及在大多数情况下直接纠正设备故障：这些可能都可以通过 HEUFT TeleService 实现！我们的服务工程师可以访问 HEUFT SPECTRUM TX 系列的所有检测和质量保证体系，并且无论身处何地都能够通过一个受保护的网络连接进行诊断，维修和维护。这样能够减少代价昂贵的停机和节省差旅费。然而，如果仍需 HEUFT 服务工程师的现场服务，那么，这也将有效的减少成本，因为所有信息已经通过在线获得。无论发生什么：HEUFT TeleService 和我们强大的服务团队会一直支持您。在这

些干扰源造成长时间停机和代价昂贵的停产前就会被识别和消除。



INCREASED EFFICIENCY, INCREASED ADDED VALUE

Optimising the profitability of drink filling lines and noticeably increasing the output: this is definitely possible with the HEUFT PROFILER for the specific acquisition of production data (PDA) and precise line analysis.

The best possible comparability is a basic prerequisite for sustainable operative controlling and maximum productivity when filling beer, soft drinks etc. The server-based HEUFT PROFILER with integrated SQL database for automatically storing data establishes this and implements a standard efficiency calculation free of subjective impressions.

The perfected PDA and line analysis tool, which can be integrated into existing ERP systems without a problem, makes real-time information about the operating state of all the machines and devices of an installation, linked in a network, available and provides, among other things, important production and consumption statistics, freely configurable reports plus

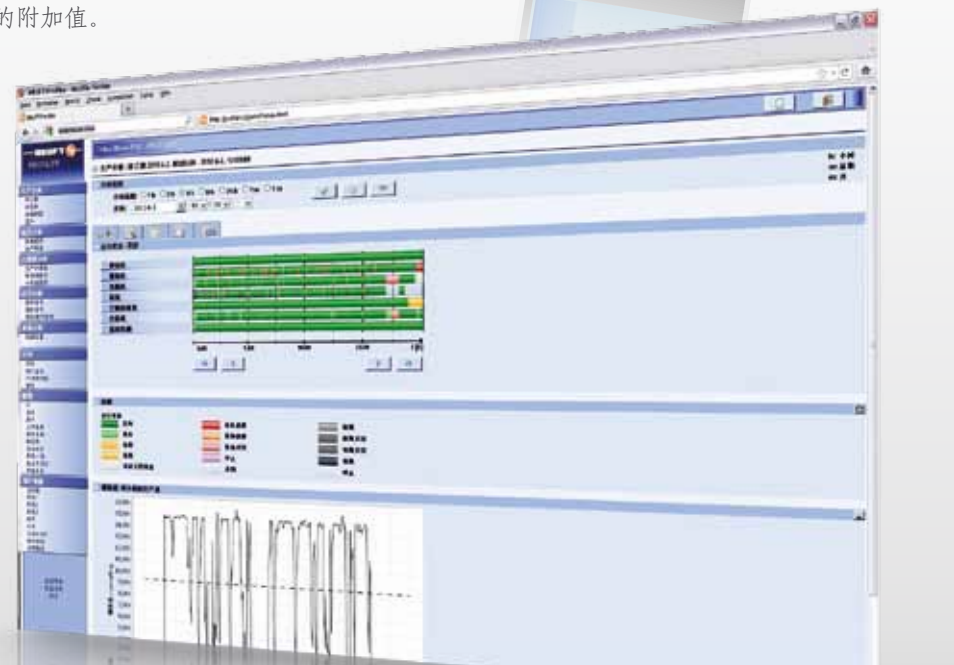
detailed key figures about individual batches as well as the overall equipment effectiveness (OEE). Furthermore the integrated HACCP limit value monitoring makes a comprehensive quality management possible.

The HEUFT PROFILER provides a clear overview of the daily, monthly or annual production and makes preventive maintenance the norm: weak points and causes of disturbances which thwart line performance or endanger product safety are identified instantly. Therefore they can be rectified straight away before they result in long standstills, costly production stops or even the total failure of complete lines.

Using the HEUFT PROFILER can considerably increase output without the necessity for an expensive new installation particularly along lines which are running at their capacity limits: double-digit percentage increases in efficiency are not unusual in such cases. And even a slight rise in line efficiency, considered over a period of time, causes a considerable increase in added value.

生产和消耗的统计，自由配置的报告及各个组的详细的关键数据以及设备的整体效率 (OEE)。此外，综合的 HACCP 极限值监控可以实现全面质量管理。

HEUFT PROFILER 能够提供一个每日，每月或者每年的清晰的生产报表，并且使得预防性维护成为标准：阻碍整线运行或者危害产品安全的薄弱环节和干扰源会被立即识别。因此，在它们导致长时间的停机，代价高昂的停产，甚至整线完全停止前会被立即改正。使用 HEUFT PROFILER 能够大大提高产量而无需在运行已经达到极限的生产线沿线进行新的昂贵的安装：在这种情况下双倍百分比效率增长不是罕见的，甚至是生产线效率的微小增长，在经过一段时间后也能够产生相当大的附加值。



增长的效率，增长的附加值

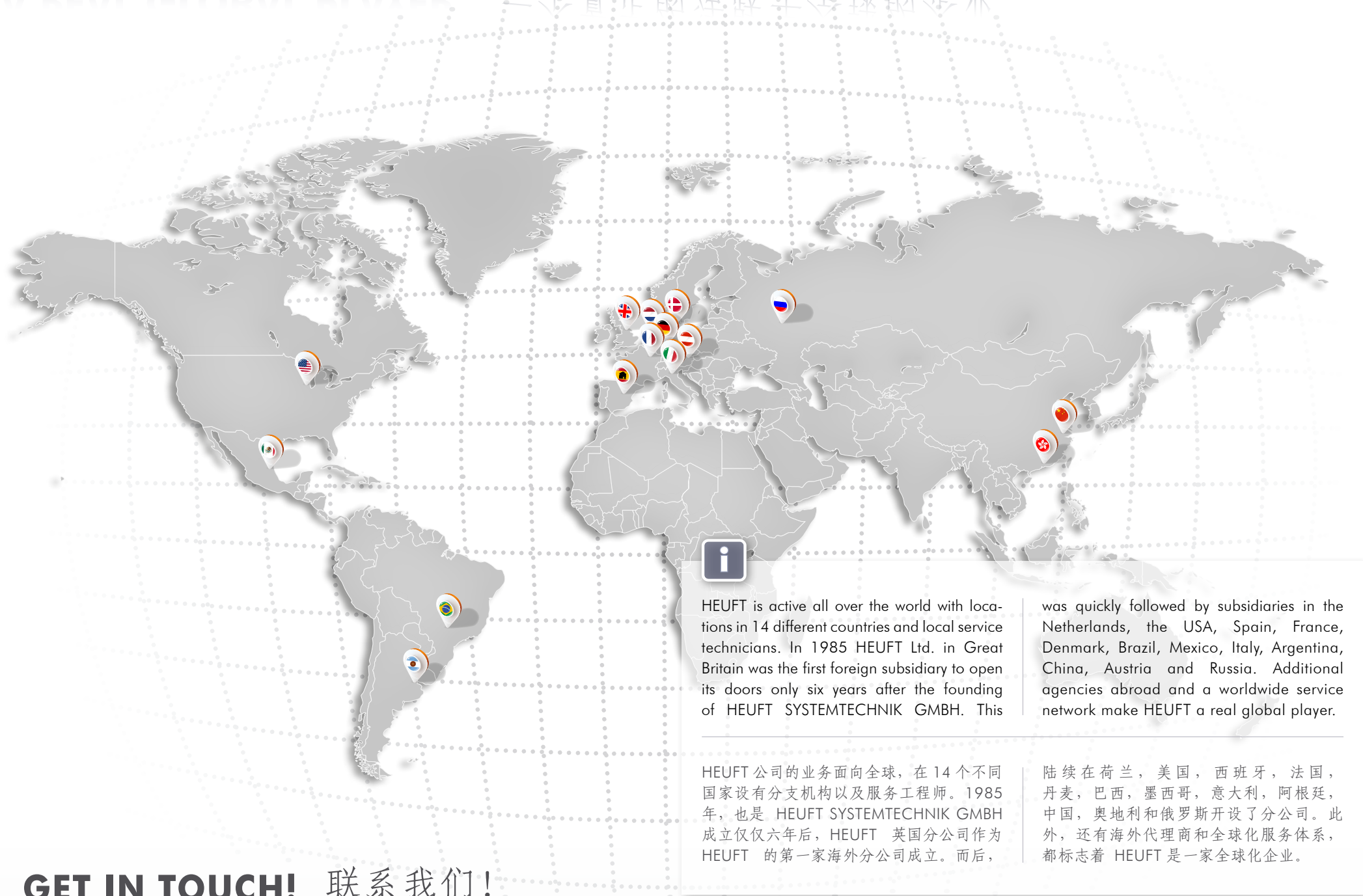
优化饮料灌装线的收益能力和显著提高产量：这个绝对可以通过 HEUFT PROFILER 获得详细的产品数据和进行精确的整线分析。

最大可能的可比性是灌装啤酒饮料时实现持续控制和最大生产力的基本条件。基于

HEUFT PROFILER 带有自动储存数据的集成 SQL 数据库的服务器实现了这一点，并且实行不带主观意识的标准效率计算。完美的 PDA 和整线分析工具能够集成到现有的 ERP 系统中，实时产生所有安装接入网络的机器和设备的信息，除此之外，能够提供重要的

A REAL GLOBAL PLAYER

一个真正的活跃于全球的企业



HEUFT is active all over the world with locations in 14 different countries and local service technicians. In 1985 HEUFT Ltd. in Great Britain was the first foreign subsidiary to open its doors only six years after the founding of HEUFT SYSTEMTECHNIK GMBH. This was quickly followed by subsidiaries in the Netherlands, the USA, Spain, France, Denmark, Brazil, Mexico, Italy, Argentina, China, Austria and Russia. Additional agencies abroad and a worldwide service network make HEUFT a real global player.

HEUFT 公司的业务面向全球，在 14 个不同国家设有分支机构以及服务工程师。1985 年，也是 HEUFT SYSTEMTECHNIK GMBH 成立仅仅六年后，HEUFT 英国分公司作为 HEUFT 的第一家海外分公司成立。而后，陆续在荷兰，美国，西班牙，法国，丹麦，巴西，墨西哥，意大利，阿根廷，中国，奥地利和俄罗斯开设了分公司。此外，还有海外代理商和全球化服务体系，都标志着 HEUFT 是一家全球化企业。

GET IN TOUCH! 联系我们!

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