

亚马逊化工有限公司提供包括化学品、设备和系统在内的整套方案
Amazon Papyrus Chemicals supplies integrated packages of chemicals, equipment and systems



制浆造纸 化学品

亚马逊化工有限公司总经理Mike Grundy分析论述了有关化学品方面的全球化发展、环境影响和外包趋势

Chemicals for pulp and paper mills

Mike Grundy of Amazon Papyrus Chemicals discusses global developments, environmental impacts and the trend to outsourcing

据 说中国正在对化学品行业进行改造，并且中国生产企业在世界所处的地位越来越重要。亚马逊公司如何看待市场发展？

中国制浆造纸企业希望世界级的产品能够在当地得以生产，并且化学品行业对这方面也有同样的要求。例如，亚马逊化工有限公司在中国南方建立了一家新的化学品生产工厂。

最近几年，大量的资本投资都汇聚中国，从而使得很多中国化学品厂比北美和欧洲的要先进的多。由于中国的劳动力成本相对较低，因此这些投资正给化学品行业带来了很大的成本优势。

同时，中国国内对化学品的需求正在迅猛增长。因此，来年中国化学品行业将处于持续强力增长态势，并且我相信我们将会看到越来越多的外国投资从海外转向中国以获取市场发展机遇。

欧洲新化学品立法——REACH制度对亚马逊化工有限公司有影响吗？

亚马逊化工没有直接向欧洲出售化学品，但是，我们那些向欧洲一些国家出口化学品的亚洲客户将需要对他们的产品进行REACH注册。



亚马逊化工有限公司总经理Mike Grundy
Mike Grundy, MD of Amazon Papyrus Chemicals

It is said that China is reshaping the chemical industry and Chinese producers are becoming global players. How does Amazon see the market developing?

Chinese pulp and paper mills have expressed the desire for world class products that are produced locally and the chemical industry has responded. Amazon, for example, has opened a new production facility in southern China.

In recent years, massive capital investments have been focused on China, and as a result, many Chinese chemical plants are far more advanced than those in North America and Europe. This investment, along with the relatively low labour costs, is giving the industry a significant cost advantage.

At the same time the demand for chemical products within China is growing rapidly. So the Chinese chemical industry is positioned for sustained and strong growth in the coming years and I believe we will see more Chinese investments outside China to capture other developing markets.



在线过氧化氢酶和过氧化物控制
On-line catalase and peroxide control

对于出口消费产品和要求得到经过REACH注册化学品的消费者来说，REACH制度将对生产成本产生很大的影响。这是因为亚洲那些提供基础化学品的供应商没有得到REACH正式批准，所以将需要对REACH注册进行投资。

亚马逊化工可能会在生活用纸领域等一些领域受到REACH制度的影响，例如我们提供生活用纸所用的芳香剂。

为了适应环境发展趋势的要求，亚马逊化工是否已经引进新的生产线？

我们已经引进了一些新的生产线，能够使得造纸厂利用越来越多的填料和再生纤维而不会发生胶粘、纸机结垢和毛布堵塞问题。我们也对那些要求获得环境认证产品的客户作出积极反应。

在亚洲很少有像FDA(美国食品及药品管理局)和EPA(美国环保署)等这样的地域性管理机构。因此，当我们的消费者想要申请ISO14000环境注册，他们希望把北美和欧洲标准作为参照，并且要求他们的供应商提供经过FDA和EPA注册的产品。

亚马逊化工经常被要求提供符合欧洲或北美管理机构(比如FDA和EPA)要求的产品。例如，北欧天鹅——在北欧国家实行的环境

Will the REACH legislation in Europe have a significant impact on Amazon?

While Amazon does not sell directly in the EU, our Asian customers who export to EU Countries will need REACH registration of their products. This in turn means that they will expect our products to have REACH registration.

In the case of both exported customer products and customer requests for REACH regulated chemicals, there will be a major impact on product costs. This is because Asian suppliers of basic chemicals do not have REACH approval, and will therefore have to invest in REACH registration.

Amazon may be affected by REACH in some areas such as tissue where, for example, we supply the fragrances that are released from the tissue.

Has Amazon introduced new lines in response to environmental trends?

We have, for example, introduced product lines that enable paper mills to use more and more fillers and recycled fibre –without the ensuing stickies, machine fouling and felt plugging problems. We also respond to customer requests for environmentally accredited products.

In Asia, there are very few regional regulations such as FDA EPA, etc. Therefore when our customers want to apply for ISO 14000 environmental registrations, they look to the North American and European standards as guidelines and ask their suppliers for FDA, EPA registered products.

Amazon is often asked to supply products that meet European or North American regulations such as FDA and EPA. Take for example the Nordic Swan, the environmental label for the Nordic Countries. Some of our pulp customers ask us to supply products with this stamp of approval because they wish to sell their pulp in Europe where they are in competition with Nordic pulp producers.

Amazon is continuously reviewing the environmental impact of its product range, which currently comprises over 300 products. We have recently launched a new range of less toxic oxidising biocide products for microbiological control. These reduce the need for the more traditional, more toxic, non-oxidising products.

One trend in the printing and writing sector is to increase the filler content to enable a reduction in the use of virgin fibre. The new biocide programmes are designed to keep the wet end of the paper machine clean despite the increased amount of filler.

Further down the machine, the increased filler content can cause more rapid felt plugging. To prevent this, Amazon has developed a new felt conditioning product which greatly improves the integrity of the felt.



亚马逊化工参与项目的启动，这可以以确保定量给料设备尺寸的精确与完整性，及其能够与纸厂DCS连接
Amazon's participation in start-up projects ensures that the dosing equipment is correctly sized, integrated and linked to the mill's DCS

证书。我们的一些纸浆客户要求我们提供符合该环境认证的产品，因为他们希望自己的纸浆能够销售到欧洲，从而有资格与北欧的纸浆生产商进行竞争。

亚马逊化工正不断考查公司系列产品对环境的影响，该系列产品包含300种产品。我们最近已经开发出了新的低毒、低氧化性生物杀菌剂用于微生物控制。这大大降低了对传统有毒、无氧化性产品的需求。

在印刷书写纸领域，一个发展趋势是提高填料加入量从而减少对原生纤维的利用。尽管填料的加入量增加，但该新的生物杀菌剂方案被设计用于保持纸机湿部清洁。

加填量的增加会导致毛布快速堵塞，从而使得停机时间更长。为了防止这方面问题，亚马逊化工已经开发出了新型毛布清洁剂，能够大幅度提高毛布的完整性能。

最近几年，再生纤维使用次数的不断增加已经导致了二次纤维质量的不断降低，其中的粘胶污染物会引起更多的问题。亚马逊化工已经开发出了一整系列产品来帮助解决这些领域出现的问题。

除了允许我们的客户使用更多的再生纤维从而带来环境利益之外，该系列化学品能够大幅度减少客户对传统有毒、溶剂型清洁产品的需要，这些有毒、溶剂型清洁剂对环境 and 操作人员来说都有害。

In recent years, the increasing use of recycled fibre has led to a reduction in secondary fibre quality, which in turn causes more problems from stickies contamination. Amazon has developed a complete range of products to help in these areas.

Apart from the environmental benefit of allowing our customers to use more recycled fibre, this chemical range greatly reduces the need for the traditional toxic solvent cleaning products, which can be harmful both to the environment and to the staff handling them.

Amazon supplies an integrated package of chemicals, equipment and systems. Is there a big uptake or do most mills prefer to pick and choose between different suppliers?

The trend in Asia is definitely towards a reduction in the number of suppliers in each mill. However, although

most chemical companies may say that they are able to supply a total solution package of all chemicals, in truth, no one company is capable of supplying the best products, application expertise and problem solving for every chemical application in the mill.

Most mills have at least a "two supplier" policy as this ensures that the suppliers remain competitive and maintain the best service to the mills.

In Europe, when a new PM is being built, the selection of the chemical regime gets as much attention as the papermaking plant. What is Amazon's experience in major start ups?

Yes, a new paper machine project is a massive capital investment and Asian papermakers understand that it is vital to select the right chemical supplier from the start. We often get involved in projects from the drawing board stage and this ensures that the dosing equipment is correctly sized, integrated and linked to the mill DCS and a chemical dosing area is allotted to ensure maximum safety.

We are also able to anticipate and prepare for potential problems on start up, such as high foaming levels or controlling the microbiological levels while stock is held in chests for longer periods as a result of intermittent machine running.

众所周知，亚马逊 能够提供关于化学品、设备和系统的整套方案。但是这里是不是具有很大的上升空间，也就是说是否大部分纸厂更喜欢在不同供应商之间进行选择？

在亚洲，每个纸厂明显趋向于减少供应商的数目。然而，尽管大部分化学品公司会说他们能够提供所有化学品的整套解决方案，但是实际上，没有一家化学品公司能够提供适合于纸厂所有化学品运用方面的最好产品、技术专家和问题解决方案。

大部分纸厂至少采用“双供应商”策略，因为这样可以确保供应商之间相互竞争，从而保持供应商能够对纸厂提供最好的服务。

在欧洲，当新的纸机正在建立时，对化学品系统的选择如同造纸设备一样倍受关注。亚马逊化工在纸厂开始投产方面有什么经验？

是的，一个新的纸机项目会涉及到大量的资金投入，亚洲造纸厂非常明确从一开始就要选择合适化学品供应商的重要性。我们从项目绘图阶段就参与进来，以便确保定量给料设备尺寸的精确、完整性及其能够与纸厂DCS连接，以及化学品给料区域的分配能够保证最大程度上的安全。

我们也能够对纸机开机运行时可能出现的潜在问题进行预测和防范，比如高起泡程度，或者是当浆料在纸机浆池存放时间过长所导致的微生物含量的控制问题。

在过去三年里，亚马逊化工人员已经参与帮助五台包装纸纸机、八台印刷书写用纸纸机和九台生活用纸纸机的开机运行工作。

亚马逊化工是否涉及到与客户纸厂共同开发产品？

当然有这种情况。我们深信未来企业要想成功必须能够帮助纸厂辨别和提高他们产品的价值。

亚马逊化工在生活用纸方面建立了非常好的合作关系，具备一整套用于加强生活用纸产品质量的化学品，比如柔软剂、芳香剂、洗剂和香膏(这些能够提高柔软度)；抗菌剂、防霉剂、湿强剂和干强剂。

有了这些产品，我们能够和我们的客户讨论他们想要如何改变他们的纸品，从而使其具备高出竞争者产品的性能。

例如，我们的一个生活用纸用户想进入澳大利亚市场，而该市场在生活用纸性质和香气方面具备自己特殊的品味。

亚马逊化工和该生活用纸厂相互合作首先列出了他们客户的要求，然后提供了一种洗剂能够使其产品具备抗菌性，并具有澳大利亚人所喜欢的独特香气。

另外一个例子，我们曾和一家想出口包装纸到北美市场的纸厂进行过紧密合作。该纸厂在使用亚马逊化工的增干强剂化学品后，开发出了能够在北美市场高价销售的高质量、高强度性能包装纸。

亚马逊化工的产品开发与这类高附加值产品紧密连接。我们相信未来是属于那些能够与客户合作并能够帮助客户辨别和提高他们产品价值的供应商。这是我们能够在亚洲市场保持领先所采用策略的核心部分。

最近几年，造纸化学品的价格一直持续增长。这种趋势有可能延续下去吗？

Over the last three years, Amazon personnel have helped with the start up of five packaging machines, eight printing and writing machines and nine tissue machines.

Does Amazon get involved in product development with its customer mills?

This is certainly the case. We believe that the successful companies of the future will be those which help mills to differentiate and add value to their products.

Cooperative work is well established in the tissue sector where Amazon has a complete range of tissue enhancement products such as: softeners, fragrances, lotions and balms that give a softer feel; anti bacteria and viral products and wet and dry strength products.

With these products, we are able to discuss with our customers how they would like to modify their paper products to give them value above those of their competitors.

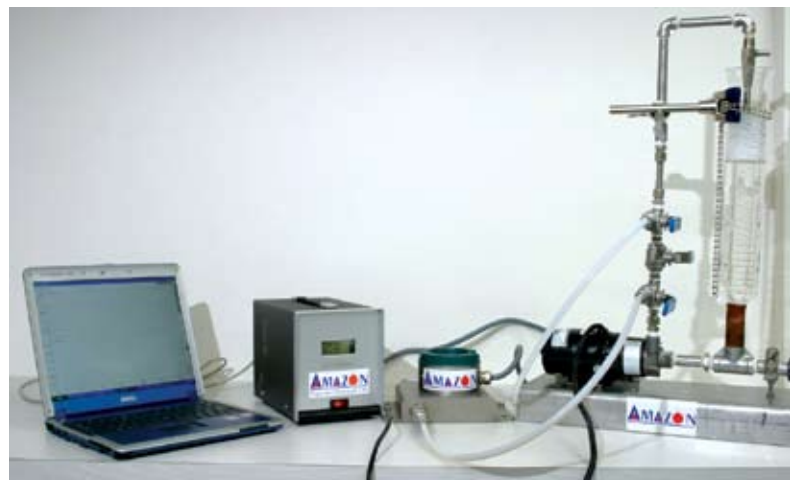
For example, we have a tissue customer who wanted to penetrate the market in Australia, a market which has its own specific taste in tissue properties and fragrances.

Amazon worked with the tissue mill to map out their customer's requirements and then provided a lotion that enables the product to be classified as anti-bacterial and imparts a distinct fragrance that Australians like.

In another case, we worked closely with a mill which was developing a packaging grade for export to the North American market. The use of Amazon's dry strength chemicals enabled the mill to develop a high quality, high strength packaging grade which could be sold in North America as a higher price.

亚马逊实验室已经开发出来的新化学品使得纸厂能够利用更多的填料和再生纤维

In Amazon's laboratories, new chemicals have been developed to enable mills to use more fillers and recycled fibre



我认为近期我们会看到造纸化学品价格将进一步增长。很多化学品来源于石油，而现在石油价格正接近或已经创历史新高。同样中国对基础化学品需求量非常高，这导致某些产品的短缺，进而使得化学品的价格将会进一步提高。

在亚马逊我们的商务系统和生产一线，我们正通过提高效率来努力获得更多的利润增长。最近几年，造纸化学品部门已经看到了他们利润的减少，但是他还是处于盈利状态。

与BIM Kemi的战略性联盟对亚马逊化工有利吗？

这次战略性联盟无疑已经带来一种益处，因为BIM Kemi和亚马逊都是私人所有的企业。

然而大部分大型化学品公司都已上市，并且必须关注于短期股东价值，而BIM和亚马逊能够着眼于进行长期发展，特别是在产品开发 and 职员培训领域。

BIM Kemi是技术型企业，主要关注于研究与开发，具备非常好的设备，并且在瑞典具有人员非常丰富的实验室。已经开发出了独一无二的产品和技术，我们能够把这些产品和技术带给亚洲的客户。

与BIM Kemi联盟已经给亚马逊化工及其客户带来了该瑞典公司的先进技术和研究、开发资源
The alliance with BIM Kemi has given Amazon and its customers access to the advanced technology and R&D resources of the Swedish company

Amazon's product development is geared to value added products of this kind. We believe that the future belongs to chemical suppliers who can work with customers to help them differentiate and add value to their products. This is a key part of our strategy to remain the market leader in Asia.

The price of papermaking chemicals has been on a continuous rising curve in recent years. Is this likely to continue?

I think we will see further increases in papermaking chemicals in the near future. Many of the chemicals are derived from oil and the oil price is now at or near a record high. Also, the extremely high demand for basic chemicals in China has led to a shortage of some products which in turn has led to further price increases.

At Amazon we are working to absorb much of the increases through improved efficiency, both in our business systems and in our front line operations. Although the paper chemical sector has seen a reduction in its margins in recent years, it is still a profitable sector.

Has the strategic alliance with BIM Kemi been of benefit to Amazon?

The strategic alliance has definitely been a benefit and one that is underpinned by the fact that both BIM Kemi and Amazon are privately owned companies.

Whereas most of the large chemical companies are publicly listed and have to focus on short term shareholder value, BIM and Amazon are able to take a longer term view, particularly in areas such as product development and staff development.

BIM Kemi is a technology driven company with a focus on research and development (R&D) and an extremely well equipped and well staffed laboratory in Sweden. This has resulted in the development of unique products and technologies that we are able to bring to customers in Asia. We can also give our customers access to BIM Kemi's laboratories and in-house expertise for problem solving.

There seems to be a trend to outsourcing. Are chemical companies likely to form strategic partnerships with paper mills?

Certainly there has been a move towards outsourcing in the US and Europe, where the



我们也能够让我们的客户到BIM Kemi实验室，让内部专家来解决一些客户遇到的问题。

现在外包似乎成为一种趋势。化学品公司是否很有可能和纸厂建立战略伙伴关系？

当然在美国和欧洲造纸工业已经向外包方向发展，并且非常统一。拥有许多纸厂的大公司能够把涵盖他们许多纸厂的外包集中在一起。然而，我不认为这将会给制浆造纸行业带来好处。

商业顾问们一直告诉客户我们所有的化学品都一样，应该实行外包或者是采用单独一家原料供应商。他们没有认识到在大多数情况下纸厂选择供应商不仅仅是为了获得他们的化学品，还是为了得到他们的技术支持以及在其它纸厂解决问题的能力 and 经验。

就眼前来说，很多纸厂会从低成本外包得到好处。但是，长远来看，其不利影响是当有经验的人离开时，纸厂将失去技术支持和服务，并且在像研究与开发这样的重要领域会存在裁员问题。

在亚洲，由于市场非常分散，我们没有看到外包发展的推动力。由于上面列出的原因，我认为外包对于制浆造纸行业的长期健康发展来说不利。

paper industry is much more consolidated. Big companies with many paper mills can put together outsourcing deals covering a number of their mills. However, I am not so sure that this is good for the pulp and paper industry.

Business consultants have been telling our customers that all chemicals are the same and that they should outsource or use single source suppliers. What they don't realise is that in most cases mills choose suppliers not just for their chemicals, but for their technical support, problem solving capabilities and experiences at other mills.

In the short term, mills may benefit from outsourcing in terms of lower costs. However the impact in the longer term is the loss of technical support and service as experienced people leave the industry and there are cut backs in crucial areas such as R&D.

In Asia, the market is much more fragmented and we have not yet seen a push towards outsourcing. For the reasons outlined above, I don't think it would be a good move for the longer term health of the Pulp and Paper Industry. ■