

magazine

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A MAGAZINE FROM G. LARSSON STARCH TECHNOLOGY AB SWEDEN

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EDITORIAL

RIGHT NOW, I am at the Sweden Rock Festival, a few kilometres away from Bromölla. I cannot help but reflect on one of tonight's greatest attractions, the rock group Kiss, one of the greatest rock bands of all times. During their performance, it occurred to me that in order to be really successful you need a stable foundation to stand on and you have to experiment with new things. This is exactly what Kiss have succeeded in.

WHAT I THINK IS that we at Larssons are on the exact same path. Thanks to the stable groundwork of all-round expertise in our area and constant improvement through development of new techniques, we are able to maintain ourselves at the cutting edge in the world starch industry. We are successful because of many years of experience in the production of starch, and we keep working on new technologies such as drying and heat transmission. Today, on Sweden's national day, we received an order for eight heat recovery units for maize starch dryers for China. A quick break-through for Lars Svenningsson's heat transmission technology!

NOW THAT WE HAVE closed our books for the previous year we can declare we have a new record in turnover and profit. We are becoming more and more stable each year and I am really happy about this. Our long-term work on improving the efficiency of production, construction, project management and development has started to yield results. As a customer you can rest assured that you are working together with a strong supplier.

Jörgen Larsson
CEO and owner



"As a customer you can rest assured that you are working together with a strong supplier."



NEWS

New Dewatering and Drying Companies

Larssons has founded two new subsidiaries in the past months.

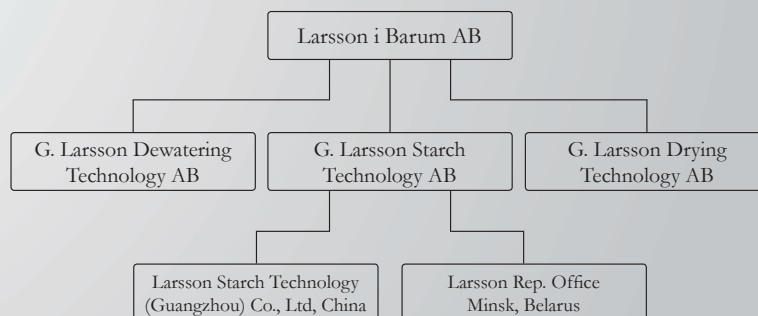
"The group is growing and we create transparency for the market through separation of the operations."

Larsson Starch Technology adds Larsson Drying Technology and Larsson Dewatering Technology to its entourage. These are three business areas, which say quite a lot about their intrinsic activities through their names.

"We are already strong on the starch side and have recently focused on developing several new drying and dewatering products. Although their target group is mainly starch industry, still we assign them to different companies. This way we emphasise that it is a matter of separate operations, says CEO Jörgen Larsson.

The new companies will not have any own staff initially.

In addition, Larssons has changed the design of its logotype and registered its trademark with the ® symbol.





Eva Larsson, COO, and Tonnie Karlsson CFO, can state with satisfaction that Larssons continues its positive development.

Strong Turnover Rise Boosts Development Opportunities

Larssons sets up new records. In the previous issue we told you about a billion Swedish kronor in invoiced work that had been done in the past 11 years. We now set up a new record in turnover and what a record it is!

"We can register an increase of 35% year-on-year," says Tonnie Karlsson, financial manager.

The past year has been very intense in terms of project activities and for the past four months of the year there has been a massive delivery of projects around the world. The most striking when keying in the numbers is the importance of the Thai market, which has made up about half the turnover.

"The positive trend continues there and on several other key markets this year," says Tonnie Karlsson.

The high turnover has also resulted in highly positive trade balance, which has giv-

en the company an opportunity to remain strong and expand.

"We are going to invest in new projects, products and technology. It will be a positive spiral and the goal is for us to become a broader supplier able to meet the requirements of both new and existing markets in terms of wide range and depth," says Tonnie Karlsson.



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NEWS



More Opportunities to Serve Spare Part Customers

The number of spare part customers is increasing and so are Larssons' sales each year.



Pella Bayer

"Many people have realised that it is smoother and easier to buy from us than through other dealers, and that they get the best the market can offer even when it comes to spare parts," says Pella Bayer, in charge of spare part

sales, together with Jacob Larsson.

The more projects Larssons have, the more customers the company gets and the more the demand for spare parts grows. Larssons has strong sales due to its reputation for offering high quality, availability and reliability.

Most spare parts the company has in stock and the rest can be produced in no time thanks to good contacts with suppliers, primarily from Sweden.

"We are going to expand and further develop our business system. This way we will have more possibilities to improve even more the service we offer to customers through a better overview and better information about each customer's specific requirements," says Pella, who asks customers to contact Larssons' sellers by email or telephone to get fast personalized service.

"Personal contact is important to us," points out Pella.

The sellers' contact details can be found at the back of the magazine or at www.larssonsweden.com.

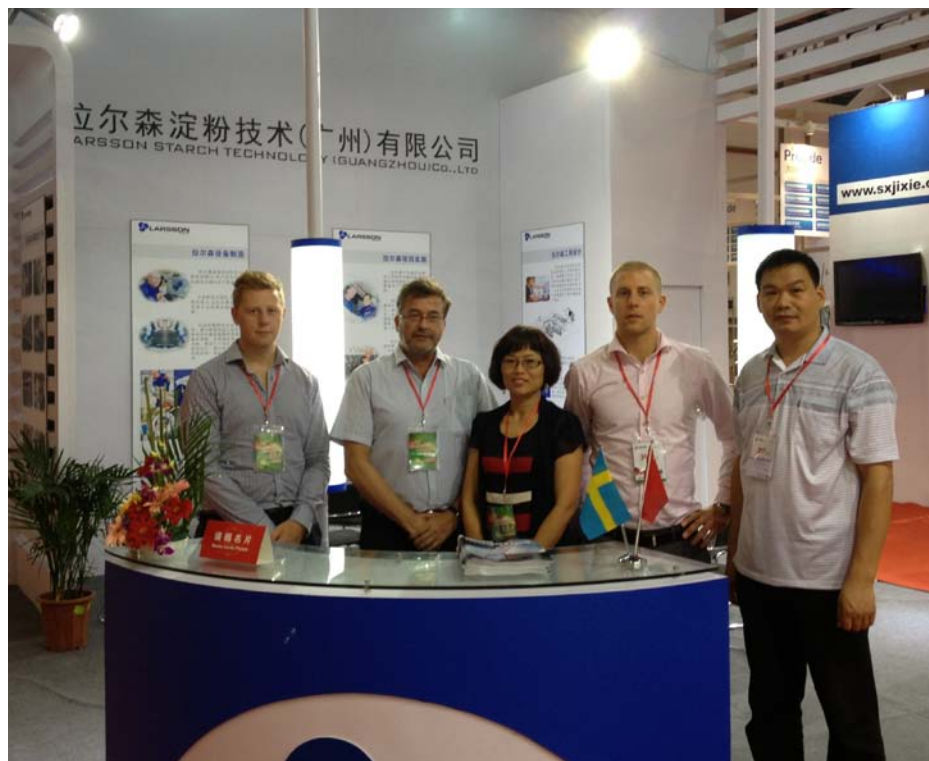
A Lot of News at the Exhibition in China

Larsson Starch Technology participated at the 8th International Starch & Starch Derivatives Exhibition, held in Shanghai in May. As a leading European starch technology provider, Larsson has never missed this big event in Chinese starch industry.

Isak Larsson and Jacob Larsson were sent from the head office in Sweden to attend this exhibition.

Visitors from different provinces of China as well from other countries such as Thailand, Argentina, Egypt, India etc. were attracted by Larsson's booth. Some of them had more detailed technical discussions with our engineers, who also seized this chance to meet prospective customers face-to-face. It was also a good opportunity to meet with old Larsson's friends who usually visit these exhibitions and always pay great attention to Larsson's new technology and newly-developed machinery. This time was no difference, as they saw many innovations introduced by Larsson.

– “With great interest, we are looking forward to the next exhibition during the coming year,” says Sarah Liu, Manager at Larsson Starch Technology Co., Ltd Guangzhou.



At the exhibition in Shanghai, from left to right: Jacob Larsson, Mauri Lehtismäki, Sarah Liu, Isak Larsson and Han Xinliang.

Automatic Cleaning Device Increases Safety

The Austrian company Agrana has traditionally been a major player in fruit, juice, bio ethanol and wheat industries. They are now investing in a new wheat factory.

Larsson has delivered hydro cyclones, centrifugal sieves, pumps and a new type of high pressure cleaning system.

The start-up of the new factory will take place in the summer of 2013. Flottweg is the main supplier for the wet process and Larssons have been their subcontractor. Jonas Oskarsson, who is the chief project engineer, is mindful of the tough European safety requirements which, as he says, have pushed Larsson to develop all the processes to their utmost.

“This leads to development of sophisticated technologies and elaborated pieces of machinery that customers will enjoy in the nearest future. Among them is the new high pressure cleaning ramp that has been built recently and which is now available as an option for automatic cleaning of existing centrifugal sieves.



Larsson has delivered equipment to Agrana's new wheat factory.

“The high pressure cleaning ramp is integrated and increases the availability, capacity and safety,” says Jonas Oskarsson, according to whom this has been an exciting project.

“We have been on the lookout, listening to the customer's requirements. It is a positive feeling to have succeeded in a delivery at this level,” he says.



Stefan Bengtsson, Design Engineer and Jan Hamer, Technical Director near a drawing of the new pulp press which is now coming to life.



Many tests have been preceded last year.

New Press Squeezes More Liquid from the Fibres

We have written about it before, but now it is about to leave the drawing table and get a life of its own in the form of a full-scale test model in operation at one of Larssons' customers.

"The new patented pulp press is one of a kind in the world," says technical manager Jan Hamer.

A lot of energy is saved as the pulp press squeezes more liquid out of the fibres than by means of any other dewatering technique.

"We have come a long way and this is the most energy-effective solution we have seen on the market," says Jan Hamer.

It is Preben Börje Hansen and Adam Hillerström from the Technical University of Denmark who developed the prototype, which has been further developed by Larssons' engineers and is now about to be produced in the form of an industrial machine.

"We cannot find any better way of testing it than in an actual production environment at one of our customers' who works with potato

starch," explains Jan Hamer.

The press can be used in many different applications for dewatering fibre from tapioca, wheat, barley, oat and even dewatering protein.

A lot of efforts were required to make the press user-friendly and hygienic thanks to simple cleaning system and easily accessible moving components that can be dismantled.

Tests will be carried out throughout 2013, but by the summer of next year we expect that it will be available for order by all interested parties.

Successful Sales Meeting in Thailand



Around 20 people participated in Larsson Starch Technology's sales meeting, which is held once every three years. This time it took place in Pattaya, Thailand. Employees from all offices and partners from around the world passed the training in Intercultural Communication. At this occasion also the new products such as the whirl flash dryer and the air-to-air heat exchanger were introduced to the participants.

"It goes without saying that we had many discussions on everything under the sun. It was a very rewarding meeting," states Jörgen Larsson, CEO.

Staff from Larsson's offices in Sweden, China and Belarus participated in the meeting. The partners Hansa International from Thailand and the International Starch Institute from Denmark were present too.



Thomas Johansson and Lars Svenningsson standing in front of the new test facility which, in only 2 months, will be ready to run on a production scale.

Heat Exchange with **Unique Performance** *- Now Ready for the Market*

In earlier editions of Larsson Magazine we told you about unique results achieved using new technology in the drying process. The product has now left the drawing table and we have planned to install several reference units on different customers' premises this year.

"Fantastic!" was the comment from Larssons' engineers last year when they talked about the new heat exchange and drying technology. Today we are even more enthusiastic now that the first part of the heat exchange process is a reality.

"We are very satisfied with the result," state project engineer Thomas Johansson and technical manager Jan Hamer, who came in contact with material physicist Lars Svenningsson during a visit to England a few years ago. Lars, one of the developers of this unique technology, says he has spent 15 years of intense research in order to get these results. But to be able to commercialize his product, he needed a strong partner which he found in Larssons.

"This is a rewarding partnership from which both partners benefit immensely," say Lars Svenningsson and Jan Hamer together.

"We guarantee a temperature efficiency of 90% but we know we can do even better," says Thomas Johansson who explains that the standard values are usually 60-70%.

The heat exchanger is manufactured from acid-proof steel and is able to withstand a temperature of 300°C. Its design allows the particles in the outgoing air to pass without accumulating in the heat exchanger.

"We are happy to have shared Lars' expertise in this area. It is far ahead of what other competitors can offer today and this means enormous energy savings for the customer," says Jan Hamer.

The next step is to develop a belt dryer based on Lars Svenningsson's technology. It will have very low power consumption and will make it possible to dry at low temperatures.



First Deliveries of the New Whirl Flash®

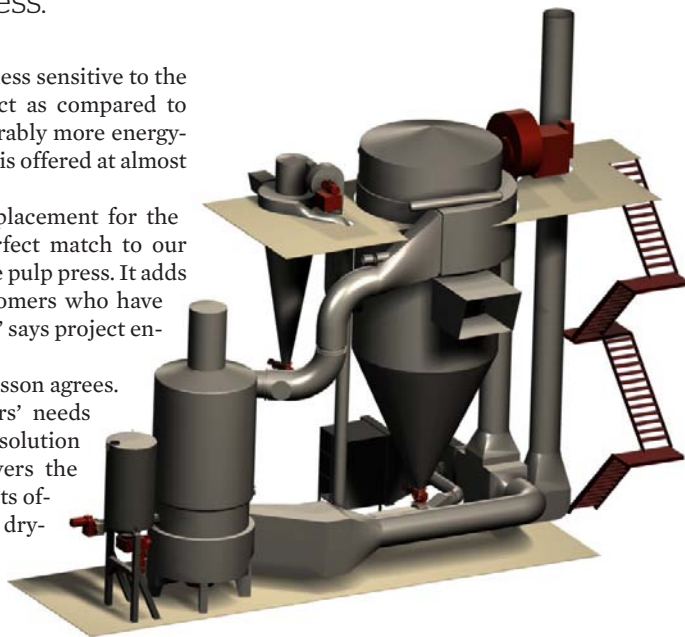
Larssons' new dryer, Whirl Flash®, has seen the light of day and the first deliveries have reached the customer. The dryer offers a unique combination of a price adjusted to the conditions of the market, low energy consumption and higher effectiveness.

Larssons' Whirl Flash® is less sensitive to the consistency of the product as compared to other dryers. It is considerably more energy-effective, not so bulky and is offered at almost the same price.

"It is an interesting replacement for the existing dryers and a perfect match to our vacuum filter as well as the pulp press. It adds to the excitement of customers who have made such an investment," says project engineer Richard Klang.

His colleague Stefan Nilsson agrees.

"It meets the customers' needs and is a price-effective solution which in most cases lowers the customer's production costs offering also a more gentle drying without the need for back-mixing," he says.



Mini Rasper Completes the Product Chain



Constructor André Swahn (on the right) and Mikael Svensson showing the compact rasper which has been given the designation GL500/300.

The first compact rasper GL 500/300 has left the factory. These rasps are much smaller than their predecessors and are suitable for laboratories and smaller factories, or for those who wish to run test series. This rasper can also be an interesting model to get for new customers.

"It completes the product chain. We now have a whole range of rasps from 18.5 to 500 kW," says technical manager Jan Hamer.

Constructor André Swahn has developed the product which is characterised by quick and simple operation and maintenance.

NEWS

New Dryers for Triple A



Stefan Nilsson, project engineer.

Danish Triple A was the first company to invest in two Whirl Flash® dryers.

The decision was supported after a successful test run in an existing facility.

Triple A is building a new process at an existing factory for manufacturing protein concentrate for food industry.

The investment in two dryers of the model Whirl Flash® means also a very important reference facility for Larsson, both in Europe and around the world.

Before the purchase, Larsson offered a thorough test run where the customer could personally see the results.

"They saw that the final results were very good as compared to what other dryer manufacturers offer, so it was a relatively simple decision for them to make," says project engineer Stefan Nilsson.

The dryers have been delivered and will be put into operation in the summer of 2013.

"The Spray Dryer Makes Us Complete"

"With the new Spray Dryer we are almost complete as far as drying is concerned; with the existing technology we can handle, amongst other things, vegetable fibre as well as animal and vegetable proteins; with the new spray dryer technology we can also manage cold water soluble starch derivatives which demand high hygiene," says project engineer Stefan Nilsson.

Larssons' desire to be a complete supplier when it comes to drying is about to become reality. In future manufacturing processes involving starch derivatives, an effective spray dryer will be an important building block. And it is ready on Larssons' drawing table. The first examples based on a technology acquired from an external constructor will be probably manufactured this year. Larssons' spray dryer technology has a unique blast distributor which gives a competitive edge as compared to rival equipment. Even when it comes to energy optimisation, we are well-equipped and this is exactly what customers are looking for in a time when energy prices are constantly on the rise.

"If we share our long-term experience with wet process technology, we can give each and every customer a tailor-made solution with a focus on high quality, high raw material return and lower operating costs. The product allows us to really expand and we have already received many inquiries regarding the product," says Stefan Nilsson.

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We provide help from spare parts to complete plants! The sources of Larsson's activities are know-how and quality. Together we have the resources and the contacts required to provide help regarding starch production. We work worldwide. Do not hesitate to contact us!

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