



Newsletter

June 2019

From hopes to expectations



Nexam Chemical finds itself in an exciting position. In addition to the fact that there is still great potential for several application areas, we have now also reached a position where we, for the foreseeable future, dare to say that the company has a revenue level that begins to stabilize the business. One can call it that we have taken the step from being a hopes company to an expectations company. We have proven that we can commercialize our products and bring them to market, and we realize that this creates expectations for Nexam Chemical. We think this is positive as it means that the company is reaching a certain level of maturity. At the same time, there are many areas left in our business to hope for, where the business is a number of years away. All in all, this gives us a good mix of stable business and future potential. This increases our own as well as the market's expectations of Nexam Chemical, and we are no longer merely a company to hope for.

Several factors lie behind this. The acquisition of Plasticolor has generated a platform for Nexam Chemical which gives us a larger continuous business and a broadening of the customer base. We have also succeeded particularly well in two of our focus areas: PET foam and High Performance. The business in both of these areas can be attributed to increased market demand for light and more efficient materials for increased sustainability and performance in

innovative products and technologies. Nexam Chemical has a strong product portfolio that will continue to be sought after in the future.

Obviously, hard and especially smart work, is also required to achieve success. We have managed to show the value of our offering in the sales process, where we are especially appreciated by the customers for our flexibility and responsiveness.

In this newsletter, we are very happy to be able to tell you about several things that have contributed to our position transfer. You can read about an important and fun example of how Nexam Chemical can assist in the development of sustainable products, in the article about TePe. You will also be able to read more about our new board members, Ronnie Törnqvist and Mats Persson, as well as why our Chinese reseller for the past eight years, Wuxi Bohai Chemical, appreciates our cooperation.



Enjoy the reading,

Johan Arvidsson, CEO.

Nexam Chemical's expertise creates business in China



From left: Mrs. Teng Ying, Jim Zhang, Tom Feng, Lars Öhrn, Jiayi Hua

In June, Nexam Chemical visited its Chinese reseller, Wuxi Bohai Chemical, or WBC, at its headquarters in Wuxi. WBC started its operations in 2009 and currently has three warehouses in China; Shanghai, Guangzhou and Tianjin. The company, which is part of the Qicheng Group, is active in four different segments; pharma, agrochemicals, cosmetics and polymeric materials, where it is active especially in PI, PET and PE.

WBC has collaborated with Nexam Chemical for the past eight years, and it started with WBC seeing a market need for end-cappers for polyimide (PI) which Nexam Chemical has in its product portfolio.

- Nexam Chemical understands our business and is easy to work with. It means a lot to us to have suppliers that we can discuss our customers' needs with, and who find solutions in a smooth way. Their expertise around the products means that we become clearer to our customers, which leads to better business, says Tom Feng CEO of WBC.

China is an important market for Nexam Chemical, which in many respects is at the forefront of innovation and product development in many application areas.

- Our visit has indeed confirmed that we are a valued supplier who delivers on our promises. China is a special market in many ways, and there are many competitors. It is particularly fun that a Swedish player get such strong trust, says Lars Öhrn, Chief Marketing Officer at Nexam Chemical.

Foam is the future, Nexam Chemical's new board members believe

Newly elected board members Ronnie Törnqvist and Mats Persson both have long and broad experience from the plastic and chemical industry, and are very excited have the opportunity to contribute to Nexam Chemicals' development in the company's board. Both think that Nexam Chemical's products in PET foam application are interesting for the future.

Ronnie Törnqvist and Mats Persson are new board members for Nexam Chemical this year and are both convinced that Nexam Chemical's future is bright. Both have long and broad experience of the industry and of business development, which they hope will come in handy in the board work at Nexam Chemical.

Ronnie has a MSc in Mechanical Engineering from Linköping University as well as a Ph.D. in Materials Engineering at the Technical University of Lausanne in Switzerland. After finishing his studies, he stayed in Switzerland to work the company Quadrant, which is now part of Mitsubishi Chemical Advanced Materials. At Quadrant, which manufactures thermoplastic composites, he initially worked with production and process technology, and later on with business development, sales and market issues. After 12 years in Switzerland, Ronnie moved on to Klippan Safety, where he became Vice President of KB Components and now holds the position of CEO.

Mats' background differs from Ronnies; he holds an MSc in Chemical Engineering and has a broad experience of the global chemical industry. Mats has worked in the US and Dubai for a long time, for the Perstorp Group. Within the group, he has been in senior positions for about 10 years, of which the last 4 years (2009 - 2013) as deputy CEO. Other experience that Mats brings into the board work includes the role of division manager, and work with everything from R&D to production and logistics. In recent years he has started his own consulting firm, which he will spend more time on in the near future.



From left: Johan Arvidsson, Mats Persson, Ronnie Törnqvist.

The two board members mention Nexam Chemical's products in PET foam application as very interesting for the future, especially from a sustainability perspective.

- PET is a durable polymer with good mechanical properties, which means that PET foam can be used in many technical applications, including in wind power. The timing for that is good, says Mats.

Regarding the role of board members, they both agree that the most important thing is to support the management in the strategic and operational work, by acting as a sounding board. They have both experienced board work as the counterparty, in the role of CEO, and have then appreciated such support by their own board.

Regarding the biggest challenge for Nexam Chemical and the board, both Ronnie and Mats mention the balancing act between the use of the company's limited resources, controlled growth and a long-term market and technology development.

- The board of Nexam Chemical, which for other companies that are growing rapidly, has a great responsibility in helping management balance stability and growth forward, says Ronnie Törnqvist.

Nexam Chemical makes ocean waste reusable

Reuse and upgrade of old plastic products is high on the agenda for many users and industries. Especially plastic ocean waste is a global and growing concern. Nexam Chemical has been looking at how to make the ocean waste reusable and by that adding value to ocean plastics like old fishing nets and ropes made of HDPE. By creating value in the used products, the interest to collect the material for recycling and reuse increases.

- In the case of the ocean plastic we wanted to prevent further degradation during processing and see if properties of the material even could be improved, says Francesco Piscioti, CTO at Nexam Chemical.

To study the performance after processing, the viscosity of the material was analysed. The study exposed that the material showed signs of losing melt strength because of degradation.

- By adding NEXAMITE M480502 further degradation could be stopped and melt strength could even be improved, explains Francesco Piscioti, CTO at Nexam Chemical.



NEXAMITE M480502 is a masterbatch containing a bi-functional component that reacts with radicals formed during processing. The properties of the plastic, such as the impact strength of the melt strength, is improved by NEXAMITE .

From record production to expansion

Last year, Nexam Chemical's plant in St Andrews in Scotland beat production records. Record is also expected this year, as strong order intake means that the factory is still thriving. The plant mainly manufactures NEXIMID and NEXAMITE, containing Nexam Chemical's most advanced and high-performance unique molecules. Through focused process development last year, the manufacturing process and efficiency was improved, which has increased the plant's capacity. As a result of the work, the volume produced increased vastly in 2018; especially in relation to the work effort. The facility has so far been sufficiently large for the needs, but it will soon need to be made more flexible and expanded in capacity for the future.

- The factory in St Andrews is doing really well, says Susanne Thygesson, COO at Nexam Chemicals. Demand

is increasing because our customers are satisfied and buy larger volumes. Now the plant needs development and expansion, she continues.

Development is needed to be able to meet future rapid and larger customer orders and expansion is required for the gradually growing customer demand. The factory in Scotland will require investment, in the form of expansion and staff.

- To meet the needs of the future, another process line is required to enable a product to be manufactured on a larger scale, or that two different products can be manufactured parallelly, describes Susanne Thygesson. First, we need to make the factory more flexible, then expand with more shifts, she says.

GOOD for teeth and environment

The demand for Nexam Chemical's renewable and bio-based masterbatch is constantly increasing. One recent case regards a request from toothbrush producer TePe concerning renewable polyethylene in masterbatch, as TePe wanted a series of new and green dental products to be as sustainable as possible. TePe's aim for their new dental products is very ambitious and one of TePe's measures to decrease their carbon footprint.

TePe has worked with social, economic and environmental sustainability for a long time. For instance, TePe has invested in automated production in Sweden and is only using green electricity in production. The latest step in the company's journey towards increased sustainability is the introduction of bio-based plastic in the products. This will in the long term make them independent of fossil raw material.



Nexam Chemical created the masterbatch needed for Tepe, which we now deliver. The result is TePe's GOODTM; several brushes and a tongue scraper with 96 % bio-based plastic. Apart from our polyethylene, the products are made from renewable raw materials, sugar cane and castor oil, which means that they resume up to 95% of the carbon dioxide released during their life cycle.

Positive atmosphere at Nexam Chemicals Annual General Meeting

For a number of years, Nexam Chemical has prepared for a commercial breakthrough in several different segments and markets.

Even if an Annual General Meeting (AGM) is mainly about the previous year, it is the company's future plans that keep the shareholders to listen a little extra. Johan Arvidsson presented his first AGM-report to the shareholders where he was able to address the company's future opportunities, but also challenges in making correct prioritizations and to stay persistent in the segments where Nexam Chemical has positioned itself in.

-It is now that our hard work is starting to show result. During 2018 we broke the wall of SEK 100 million and the first quarter of 2019 was our best quarter so far. I hope to continue presenting similar reports during the next couple of years. It is incredibly important for us to continue being a growth company. We need to be more innovative and fast moving than the major players in the market. I am convinced that this will be key to success, says Johan Arvidsson, new CEO in Nexam Chemical since February 15, 2019.

Some of the highlights during 2018 were reported. In addition to the large increase in sales, it was also mentioned that the additive masterbatches to producers of PET-foam started to generate large volumes. Also, the commercial breakthrough for NEXIMID® in Asia will be important for the company's continued success. Internally, the past year was characterized by the integration of Plasticolor, the production in St Andrews reaching an all-time high, and the organization being strengthened, not at least within sales and R&D.

During the AGM the Annual Report was approved and the Board of Directors was granted discharge of liabilities. The Nomination Committee presented its proposal, which means that the Board now have two newly elected members, Mats Persson and Ronnie Törnqvist. Both with a broad and deep experience from the plastic industry, but also knowledge within logistics, market and sales. The Chairman of the Board Lennart Holm together with Jonna Opitz and Cecilia Jinert Johansson will continue as members of the Board.

Johan Arvidsson's presentation at the AGM is now available on www.nexamchemical.com.



CURRENT TREND:

Giant wind power projects place high demands on composite materials

The wind turbines are becoming increasingly large and technologically advanced. One reason is that wind power is to a greater extent placed in offshore parks, which enables larger structures with high capacity. As a result, the technical requirements for the wind turbine's materials increase, where composite accounts for 67 percent penetration - an increase of 15 percentage points from 2010.

The wind power industry is estimated to account for 9% of total composite sales between 2016 and 2021. Considering the development of wind power constructions, composite materials will be crucial to satisfy characteristics such as ease of use, durability and scalability. Between 1990 and 2020, half of all wind turbines on the market are estimated to have rotor blades longer than 50 meters.

The largest wind power project today is the LM 107.0 P, which is developed by LM Wind Power. As the name implies, it is a wind turbine with a whopping 107-meter-long rotor blade. By comparison, the wing span on an Airbus A380, the world's largest passenger aircraft, is 80 meters. The LM 107.0 P is manufactured in a factory in Cherbourg, France, and after being subjected to tough tests on durability and performance, will be placed offshore.

Nexam Chemical looks forward to continuing to consolidate its position as a high-quality supplier of innovative sustainable chemistry to a strong wind power industry.

<http://www.jeccomposites.com/knowledge/features/wind-energy>

<https://www.compositesworld.com/news/lm-wind-power-manufactures-longest-wind-turbine-blade>