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BELLMER INFO 69

Paper Technology
Separation Technology

Everything from one source

Successful start-up of PM 1 at Vreden papermill

Papierfabrik Vreden GmbH was founded in 1952. Today this modern paper mill has two paper machines which manufacture corrugating medium in basis weights of 100 – 200 g/m^2. In order to meet market needs in the long term, the mill's management decided to replace PM 1 with a new paper machine. This investment has meant not only an improvement in paper quality, but also an increase in production capacity. In addition, the mill can now extend its width options. Vreden has had positive experiences working with Bellmer in the past, and did not hesitate to choose us again as a supplier. General manager Frank Brauckmann underlines the special business relationship between our two companies, which is based entirely on partnership. This is not simply a supplier / customer relationship, he says, it's more like an old friendship! Bellmer recently supplied Vreden with a hydraulic high turbulence EQUAL-Jetter™ headbox with dilution water control. A completely new wire and dryer section were also installed, along with an EQUALSizer™ size press. The new shoe press for PM 3 had been fitted as part of an earlier project.

The heart of the paper machine: the headbox

Once again, Frank Brauckmann and his crew were very pleased with the outcome, and quality values have proved to be even better than expected. The increase in production is also considerable. Mr. Brauckmann said: "This project has turned out to be incredibly successful!" Technical director Jens Bußmann described himself as "more than pleased" with Bellmer's fitters.

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Dear INFO Reader,

Innovation has always been our first priority at Bellmer, since competitiveness is only achieved through a constant process of development. Just recently, and for the second time in three years, Bellmer has been awarded an official certificate of appreciation in connection with the "Dr. Eberle Innovation Prize" by the Federal State of Baden-Württemberg.

Innovation is our customers' top priority, too.

For years, GUTEX has successfully developed new ecological insulating boards. The city of Breslau is about to build one of the most modern sewage treatment plants in Poland, and the research ship "Polarstern" (Polar Star) is pushing the boundaries of knowledge in areas like the Arctic and Antarctic. We are proud that we can support such extraordinary customers with our innovative technologies.

Yours sincerely,
Philipp, Martin and Erich Kollmar

Breslau gets fit for Euro 2012

Extension of sewage treatment plant to 7 WinklePresses™ and 6 TurboDrains™

Breslau (Wroclaw) with its 630,000 inhabitants is the fourth-largest city in Poland, and it has qualified as a venue for the 2012 European Football Championships. Building of a new 40,000 capacity stadium is in full swing. Just a few kilometres away from this huge building site, is the Wroclaw sewage treatment plant, designed for a population equivalent of 700,000. The plant has to process sewage from the city and beyond, and has reached its capacity limits, making an extension an absolute necessity. Since 1997, Bellmer has supplied three size 3 WinklePresses™ WPN and four size 3 TurboDrains™ to the plant: Wroclaw's management was very happy with the original installation, so it had no hesitation in choosing Bellmer again. Working together with our Polish partner Klimapol, we found the ideal solution: the plan is for 7 WinklePresses™ and 6 TurboDrains™ TDC to work together thickening sludge around the clock. Each WinklePress™ will be equipped with an additional high-pressure nip zone, to ensure even higher dry contents. Altogether, more than 100 m^3/h of digested sludge will be dewatered to final dry contents of 22 % DS. Our partner Klimapol will undertake the extensive installation works, as it has in earlier projects at Wroclau.

One of the most modern plants in Poland under construction

The city of Breslau can expect not only an impeccable new football stadium, but also one of the most modern sewage treatment plants in the country.

Solis Projects bv in Holland is great success: Winklepress™ WPN-K 2 X for Noordwijk

Solis Projects bv has been a member of the Bellmer Group since 1st July 2009, and the company is well on the road to success.

The sewage treatment plant at Noordwijk belongs to the Rijnland Association for Sewage Treatment, a longstanding Solis customer. Quite a few of the Rijnland Association's sewage treatment plants have installed Bellmer sludge dewatering machines and have been very pleased with the results. To prepare for greater demand in the future, the Rijnland Association called for tenders for a comprehensive modernisation and optimisation of the Noordwijk sewage treatment plant. Since the complete sludge treatment system would have been too extensive for Solis as a sole supplier, a decision was made to seek other tenders, with Solis supplying just the Bellmer equipment. The Rijnland Association finally opted for EWW as overall supplier, and EWW then awarded Solis the order for the latest WinklePress™ technology. Rijnland Association specified a WPN-K 2 X with belt board extension as well as an additional high-pressure nip zone, to allow an increased final dry content value to be reached. The plant will be provided with encapsulation to minimise bad odours. The installation has already been approved by the customer and the plant's staff is looking forward to using the new technology - the most advanced on the market.

After approval – the machine is ready for shipment

BELLMER gives Yara Brunsbüttel GmbH top service Finds solutions for tough problems

Yara Brunsbüttel has been a faithful Bellmer customer for many years. As early as 1994, when it was known as Hydro Agri, the company ordered a dewatering plant for the filtration of carbon black waste waters. At that time, it was the first vanadium recycling plant in the world. Using a patented process, it used a carbon black/metal mix resulting from ammonium production, to produce highly concentrated vanadium for the metallurgic industry. The recycled vanadium is used for the production of high-alloy stainless steels. In 1996, the company commissioned 2 Cascade lines. For 8 years, the specially hot-dip galvanized frames, specially coated, braved the heavy demands of 24-hour operation. However in 2004, the corrosion damage caused by the aggressive media was so severe that remedial work became essential. Since the management were more than satisfied with the technology itself, they decided to exchange the Cascade line, the frames and all steel elements in one go with new parts made from 1.4571 stainless steel and 1.4410 cast stainless steel. During the overhaul process, the assembled machine components were dismantled in the building, and the individual parts were re-assembled on a platform at a height of 26 metres. "We can definitely rely on Bellmer," said the customer after the installation was complete. Regarding the 2nd Cascade line, replacement of worn parts with stainless steel components is scheduled to take place in the spring.

Service you can rely on

Screw press AKUPRESS for "Polarstern" (Polar Star)

One of the first AKUPRESS AL 200 systems will be operating on a research ship sailing the high seas.

The Polarstern researches in the Arktic and Antarktic

The AKUPRESS AL is the new, cost-effective screw press series manufactured by Bellmer Kufferath Machinery GmbH. Like all the other press series, the AKUPRESS AL features high functionality, quality and ease of maintenance. Specifically designed for applications where good results can be achieved at low torque, the AKUPRESS AL can be used very flexibly. Decisive factors for the shipping company Laeisz (managing the "Polarstern") in their choice of AKUPRESS AL were the compact design, its functionality and last but not least its clear and simple operation. The "Polarstern" is one of the world's most capable polar research and supply ships. Its task is to gather important data for research and development purposes in the Arctic and Antarctic regions.

AKUPRESS AL simplifies the disposal of waste on the "Polarstern".

Compact AKUPRESS AL will make life easier on the "Polarstern"

Screened-off kitchen and sanitary wastes are pressed using the screw press, which makes them easy to collect and burn in the ship's boiler. AKUPRESS AL – the first screw press at the South Pole. Have a good trip!

…continued from page 1

Successful start of PM 1 at Papierfabrik Vreden: Energy-saving air technology by Lang-Hafner

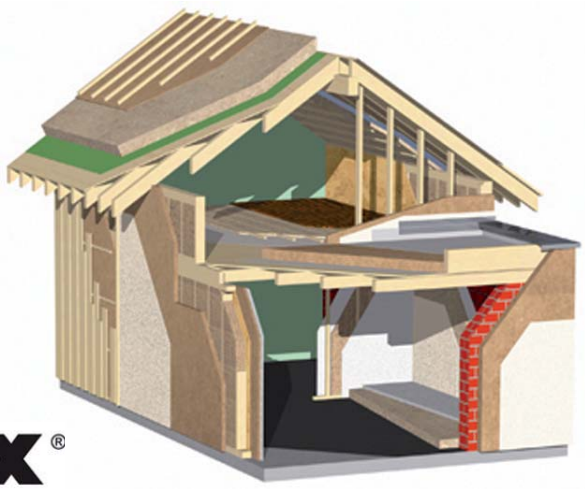
Together with the new PM 1, the scope of supply also included a new machine-related air system and hood. The whole project was delivered from one source – thanks to the Bellmer affiliated company Lang-Hafner.
A fully insulated hood with new outgoing air system was integrated into the pre-dryer section. A wire blow unit ensures optimum pocket air conditions and high evaporation potential. The secondary energy volume resulting from the steam and condensate system is used to heat additional machine air. The previously installed steam and condensate system had to be modified due to the installation of 21 new cylinders that were required for a production increase. This modernisation process has made it possible to use 100 % of secondary energy.

Better exploitation of energy with advanced air technology

Ecological insulation and improved quality at GUTEX

The Black Forest located, family-owned company "Gutex Holzfaserplattenwerk" has been producing wood fibre board for more than 75 years at its site in Waldshut-Tiengen. This is a great region for recreation, which attracts plenty of tourists. So it is particularly important to put environment and sustainability high on the agenda.
The Henselmann and Thomas families have built experience through the generations and have focussed for a long time now on insulating material made from raw stock which has been re-grown. Conservation of the Black Forest is a key concern for both families. High-quality wood-based insulating boards are developed and manufactured using chips from saw mills in the surrounding area. Gutex is constantly developing insulating materials to help house builders and owners minimize heat loss. Everybody involved can have a clean conscience, since only wood from sustainable forestry is used. This yields benefits for the Black Forest, for the end-customer and for the long-term success of GUTEX. It is with good reason that Gutex insulating boards are exported widely. When it comes to insulation, Gutex is dedicated to finding the best possible solutions.
Thanks to growing demand, Gutex, with Bellmer's help, has increased production of fibre boards from the Black Forest, and taken a further step forward with quality. The production line will be equipped with a wedge press plus two heavy-duty presses in order to cope with future demand.
The simultaneous modernisation and extension of the vacuum plant and the wire section will lead to a significant increase in the energy efficiency of the production line.
In addition to the comprehensive engineering element of the project, Bellmer will also assume the tasks of erection, startup and training production staff.

GUTEX®
DÄMMPLATTEN AUS SCHWARZWALDHOLZ



Versatile use of GUTEX insulating board

TURBOShaker™ awarded for innovation

Bellmer of Niefern, renowned for its paper machine expertise, has always concentrated on product development. So everybody at the company was delighted when their tireless pursuit of innovation was recognized for the second time since 2007 with the award of an official certificate of appreciation based on the Dr. Eberle Innovation Prize by the Federal State of Baden-Württemberg. Out of 80 competitors for the prize, Bellmer made it to the top 10.

Minister of economic affairs Pfister hands over this special award to our presidents Martin and Erich Kollmar

The Bellmer TurboShaker™ is a compact tool for high-frequency shaking of breast rolls on paper and board machines with a high power to energy consumption ratio. With a TurboShaker™ sheet formation becomes more homogeneous and the quality of paper is improved. An additional benefit is that use of raw materials and resources can be reduced. The technology is straightforward to retrofit.

Fruit juice production in good hands right from the start

Automatic fruit feeding system with flume water

It is not just the pressing of fruit that plays an important part in the production of fruit juices. The production process starts right after the fruit is received by the processor. After the weighing procedure the apples are stored in silos. The silos are filled

Optimum fruit acceptance helps during peak periods to avoid unnecessary waiting times

individually with different types of raw fruit. Flat, deep or high silos are used according to local conditions. At the planning stage, care must be taken to ensure that individual silos can be filled quickly and easily. Small fruit volumes – supplied by private parties – also need to be borne in mind when establishing the layout of the installation, to ensure speedy processing of fruit. Unnecessary waiting times at peak periods must be avoided as far as possible.

After storage in the silo, the fruit is conveyed via the flume channel and the seed catch to the controllable dosing tool. During transportation, the apples are washed with the flume water. In the dosing tool, the fruit volume to be treated is measured precisely. The entire installation is controlled via BellSystem™. Subsequently, the fruit is conveyed on the elevator to the sorting table, where bad or rotten fruit is removed. A fully automatic monitoring unit at the elevator inlet stops the operation of the dosing tool. From the sorting table the fruit is passed into the Bellmer Apple Crusher™ BAC mill where it is mashed. Then the mash – now ready for the press process - can be fed to the Bellmer WinklePress™ for optimum extraction of juice.

How about modernising your fruit feeding system? Please contact our specialists, they will be pleased to offer individually advice.

(mail to: frucht@bellmer.de)

Controllable dosing tool

Excursion for paper technology trainers

Every year, a group of experts in paper technology training meet in Gernsbach to learn about the latest developments in their field. A few months ago, Bellmer hosted a visit by 60 of these experts during their Gernsbach meeting. President Martin Kollmar welcomed the guests and emphasized the importance of paper technology training. He said the specific dual training system was a decisive factor in Germany's favour against global competition. With this in mind he thanked the visitors for their commitment to this winning system. He added that Bellmer had always valued job training and pointed out that Bellmer was currently training 22 apprentices. Dr. Jürgen Bihler presented a lecture on the improvement in sheet formation offered by the TurboShaker™. The end of the day was marked by a tour of Bellmer's production facilities, with the highlight of course being the TurboShaker™ test unit itself.

Commitment tor future-oriented training: Paper technology trainers meet at Bellmer

Felix Mendelssohn-Bartholdy: a cultural highlight

A concert with a festive atmosphere

For many years now, the Niefern-Öschelbronn church concerts have been one of our region's cultural highlights, and Bellmer is proud to be a regular sponsor of these events. The protestant churches of Niefern-Öschelbronn were the venue for the performance of Mendelssohn-Bartholdy's oratory "Paulus". Mendelssohn-Bartholdy was a German composer of the Romantic movement in the 19th century. "Paulus" (opus 36) is the first of the two accomplished oratorios composed by Mendelssohn-Bartholdy. It deals with the life and work of the Apostle Paul. The two parts of the oratorio describe the transformation of Saul into Paul. All the performers – the various soloists, the Kirnbach Church Choir, the Cappella Vocalis, and members of the Pforzheim Bach orchestra helped create a wonderful musical experience for the audience.

Gebr. Bellmer GmbH Maschinenfabrik • Hauptstraße 37 - 43 • D-75223 Niefern-Öschelbronn
Tel. +49 (7233) 74-0 • Fax +49 (7233) 74-100 • E-mail info@bellmer.de • http://www.bellmer.de