



BELLMER

Paper Technology
Separation Technology

INFO 76

Shoe press TURBOPress™ for Licancel, Chile

Our Spanish subsidiary Bellmer Ibérica has passed another landmark, with the order for the supply of the first TURBOPress™ shoe press to South America. Licancel pulp mill forms part of Arauco (Cellulosa Arauco y Constitución S.A.).

One of the largest forest products companies in Latin America, Arauco has operations in Chile, Argentina, Brazil and Uruguay.

Pulp production is a key business area for the company: with an output of 3.2 million tons/year of bleached and unbleached kraft pulp, Arauco is the second largest producer of market pulp worldwide.

Pulp from Arauco is used for the manufacture of a great variety of papers, including printing and writing, tissue, packaging etc. Arauco insists on the best available technology on the market for its worldwide operations.

In awarding the TURBOPress™ shoe press order to Bellmer, the aim is to secure a sustainable increase in the dry contents achieved in the press section, and thereby to reduce energy consumption in the dryer section.

The scope of supply also included engineering and project management, and installation supervision. Delivery is scheduled for the third quarter 2011.



The TURBOPress™ is the optimum technology for Licancel's high quality pulp

Wroclaw gets fit for the European Football Championship 2012 with successful startup of new plant featuring seven WinklePresses™

Wroclaw in Poland, one of the venues for the European Football Championship next year, is busy preparing for the great event. One project is the renewal and extension of the city's sewage treatment plant. The authorities of this open-minded, vibrant city will only consider the most advanced

environmental technology.

As reported in Info 69, they opted for the most progressive technology for dewatering and thickening when they commissioned Bellmer, in close cooperation with its partner company Klimapol, to modernize the entire sludge dewatering plant. The scope

of supply included seven WPN-K 3 units, one conveyor system including more than 20 conveyor screws, one flocculant station and all associated pumps. The sludge thickening section within the sewage treatment plant will also be updated. Six TURBODrains™ - including the modern TD Green 3 - are still to be started up this summer.



Ultra-modern WinklePresses™ in Wroclaw

Dear INFO Reader,

The international melting pot of people, commodities, information and capital that is globalization drives our economies and captures our imagination.

It will come as no surprise that globalization is a fact of life here at Bellmer - built into our routines and our thinking. We have customers throughout the world, and wherever they are, we are always ready to support them. So we would like to use this edition of INFO to provide you with a "global" overview of our operating sites and the scope of our technology. We are going to take you to Asia (from Thailand to China) via Europe (from the south of Italy to the north of the Netherlands) ending up in Chile, South America. Wherever we are, you will of course find our subsidiaries Lang-Hafner and Kufferrath Machinery to complete our range of services. Whatever you have in mind, and wherever in the world you are reading this, Bellmer is ready to provide assistance when you need it.

Enjoy INFO 76.

Yours sincerely,
Erich, Martin and Philipp Kollmar



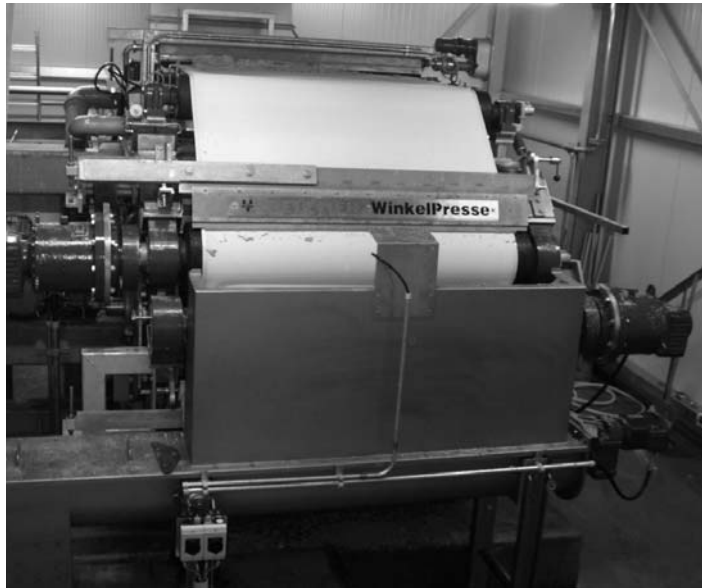
In the meantime, other venues for European Football Championship 2012 in Poland have opted for Bellmer technology for their modernization projects.

In Poznan, for example, 16 Bellmer units are already in operation at the city's sewage treatment plants. Now we just have to pin our hopes on Germany's footballers making it to Poland. If they can perform like Bellmer, we have nothing to fear!

WinklePress™ WPH rises to the challenge at Metsä Tissue

Metsä Tissue is one of Europe's largest manufacturers of tissue paper and is also market leader in Europe for baking and cooking papers. The company is behind numerous successful brands, including Lambi, Serla, Mola, Teno, Katrin, Fasana and SAGA. Part of the Metsäliitto Group, Metsä has sites in Finland, Germany, Poland, Russia, Slovakia and Sweden with a total staff of around 3,200 people.

A new sludge treatment plant installed in 2009 at Metsä Tissue Raubach in Germany was specified to boost dry content to 56 % and reach an average capacity of 2,850 kg dry substance/hour. These figures were achieved right from startup and, to the amazement of the plant's operators, actually exceeded. Present values



Profit from savings with the WinklePress™ WPH

are around 62 % and thus almost 6 % higher than originally calculated. The new WinklePress™ WPH allowed three dewatering units to be replaced at Raubach. The old dewatering line had been in poor condition and would

have required a general overhaul, but this option was discounted when it was realised that the old line simply would be unable to cope with the quantity of sludge predicted from the mill. Savings have been quite considerable. The quantity of sludge to be disposed of has been reduced by 7,000 tons/year resulting in annual savings of approximately 180,000 EUR. The high dry contents have led to improved retention of the filtrate. This means fresh water consumption can be cut by 24,000 m³/year - which roughly corresponds to the yearly water consumption of 500 people.

The low quantities for disposal have also reduced the operation's carbon footprint, by reducing transport needs. It is predicted this will save 150 tons CO₂ per annum.

Efficient thickening combined with reduced operating costs SOLIS installs TurboDrain™ Green in Zwolle, Netherlands



Jan van der Wilt (left) and Anco Hogenkamp are delighted with the savings

Groot Salland water authority has opted for two new TurboDrain™ Green 08s to replace the original sludge thickening plant at Zwolle's sewage treatment facility in the Netherlands. The existing equipment required urgent replacement: the flotation system took up too much space,

required a lot of maintenance and, above all, consumed far too much energy. The two belt thickeners were installed by our Dutch branch SOLIS Engineering bv. and the sewage treatment plant crew at Zwolle have so far given very positive feedback about their performance. Operators also appreciate the special design features, including the odor hood, which

prevent the escape of aerosols or odors.

Particularly satisfying for Zwolle is the higher processing capacity and the significant improvement in dry content. However, the main benefit of the new installation is opera-

ting costs: flocculent consumption is down by 20 %, water consumption by 30 % and the filtrate quality has visibly improved. The on-site power requirement has reduced by about 30 %, since the TURBODrain™ Green uses considerably less energy than its predecessor.

But this should come as no surprise: TurboDrain™ Green was developed specifically for resource conservation.



The two TurboDrain™ Greens can work energy saving miracles

Great success for AKUFORM dandy roll installation in China

Despite tremendous price pressure, Bellmer Kufferath Machinery is successful in the Chinese market. Chinese customers clearly appreciate our know-how as the world's leading dandy roll installation experts. To guarantee excellent paper quality, Chinese customers prefer to minimize risk and invest in the quality associated with "Made in Germany".

Only in the past few months four orders for AKUFORM dandy roll systems have been received from China.

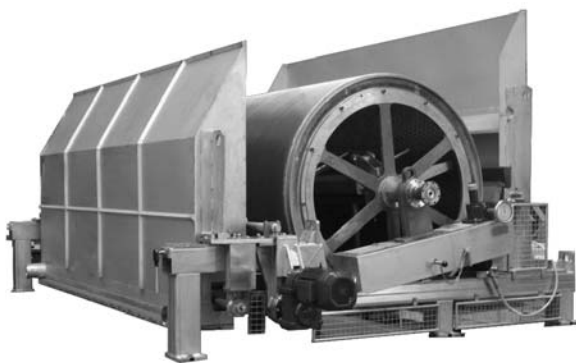
AKUFORM dandy roll systems can be used:

- on all Fourdrinier paper machines
- in multi layer board machines
- for almost all kinds of paper
- for basis weights from 20 g/m²
- for oper. speeds up to 1,200 m/min,

reaching the following targets:

- better formation
- surface improvement
- reduction of pinholes combined with fine and even porous sheets.

Not only is the dandy roll body supremely well-constructed, but the painstaking design development behind the AKUFORM RX system has ensured remarkable performance. For example, in order to deal with the trajectory parabola, a special water catching device has been integrated to avoid any negative effect on paper quality.



Improve your paper quality with AKUFORM dandy roll installations

BELLMER refurbishes PM 2 at Cartiere di Guarcino in Italy

Décor paper maker Cartiere di Guarcino S.p.A. forms part of the Italian Valentini group which produces, among other things, flat-pack furniture. The site in Guarcino has two 2.90-metre wide paper machines, but PM 2 was shut down in 2001. Last year, due to strong demand for décor papers in Southern Europe, Guarcino's management decided to wake PM 2 from its slumber.

The goal was to achieve a sustainable increase of production capacity combined with an extension of the product range. The goal was to become more flexible when responding to customer demand.

To re-commission a paper machine after so many years required an extensive overhaul and modernization.

Bellmer, which specializes in rebuilds, was commissioned to refurbish PM 2 at the end of 2010.

The scope of supply included new parts for the press and dryer sections, modification of the web transfer from the dryer section to the Yankee cylinder, rebuild of the calender and, last but not least, parts for the rope system. When the project was underway, Guarcino commented:

"Bellmer's technicians have cooperated closely with the project team here at CdG with a view to achieving the expected results in the shortest possible time."

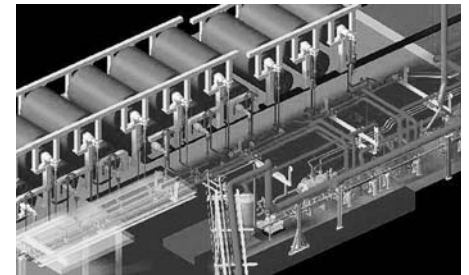


The project team at Cartiere di Guarcino: Messrs. Toti, Serafini, Marcoccia and Principia (from left) were impressed with the successful restart

LANG-HAFNER lowers energy consumption at Thai Union Paper Ltd.

Thai Union Paper Ltd. is a subsidiary company of Siam Cement Group in Thailand and operates two paper machines at its site in Kanchanaburi. When the steam and condensate system started to cause considerable problems, the weak points were first detected through an ExpertCheck performed on site.

It showed that the specific steam consumption was much too high, and that hardly any secondary energy was being harnessed to warm up additional machine air. As a consequence, steam was permanently being lost through the roof or deposited on the auxiliary condenser. It proved impossible to adjust the temperature curve in the dryer section correctly and frequent breaks through sticking and



Expert planning by LANG-HAFNER ensured immediate success

picking occurred. The auxiliary condenser also became blocked with lime-scale.

The solution was a system modification based on LANG-HAFNER's integrated energy use technology. The control of the steam and condensate system was revised, and new damper registers installed in the additional machine air system to exploit energy from exhaust vapours and hot condensate. The success of the project became obvious right after startup. The steam plume above the roof had disappeared, and the auxiliary condenser is only slightly loaded with steam. Steam consumption has been reduced by approximately 0.4 tons / per ton of paper, which means return on investment will be achieved comfortably within two years. In addition to the energy savings, the heating of the drying cylinders can be adjusted more precisely, and effective dewatering assured.

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Girls' Day 2011 at BELLMER



First glimpses of a strange new territory



We could soon be seeing some Girls' Day participants in our trainee department

On Girls' Day companies throughout Germany - especially technologically oriented companies - open their doors to girls of grade 5 and up - along with colleges, universities and training centers. This is the day when girls are introduced to jobs in which women are traditionally poorly represented. Girls' Day is Germany's way of improving the balance.

As usual, Bellmer was happy to open its doors to provide these young women with a taste of what is involved in roles still typically regarded as male: construction, chipping, welding, and mounting. Theory as well as practical work was on offer, and at the end of the day each participant could take home a special Bellmer Girls' Day souvenir: something she had made herself.

Girls' Day

Changeover at LANG-HAFNER

Jürgen Paul, Lang-Hafner's managing director for many years, has retired aged 67. Mr. Paul can take great credit for way Lang-Regler and Hafner evolved to become leading providers of energy-efficient steam and condensate systems as well as air technology.

For long-standing customers of LANG-HAFNER, Mr. Paul will continue to work as a consultant and provide expert support.

Jürgen Schubbert, who has served as commercial manager for many years, has been appointed managing director, working alongside existing managing directors

Philipp, Martin and Erich Kollmar. Wolfgang Bayer and Alfred Gebhardt will still be the main contacts for hoods & air systems, while Rainer Rösch and Joachim Thiel continue their roles within steam & condensate systems.



J. Paul (left) has handed his responsibilities to J. Schubbert

BELLMER Cup - 4 most successful days

Great weather, great football and a great atmosphere. That pretty much sums up this year's Bellmer Cup which took place in Niefern over four days. As we have come to expect, there were plenty of enthusiastic spectators to appreciate football played with wonderful fighting spirit as the teams battled it out for the coveted challenge cup.



... the ladies impressed everyone with their skills

This year's Bellmer Cup featured one women's regional league match as well as a tournament of mixed Sunday-league football teams, whose main objective was clearly to have fun. This the 12th Bellmer Cup was, as usual, organized in close cooperation with local football club, FV 09 Niefern. We would like to thank all participating teams for their enthusiasm and skill.



The top company teams

And of course a big "thank you" is due to those loyal supporters whose dedication was rewarded with a great spread of food and live music courtesy of Bellmer.

We are looking forward to the 2012 Bellmer Cup already.



Gegr. 1842

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