

inside acat

■ Newspaper for customers, friends and employees ■



**A Revolutionary Whirl
in Dosing Technology
Top-level Cooperation
in Thailand
ACAT Goes America
Reduction of Odour at
Special Waste Landfills**



Applied Chemicals International Group
Technical Service is our Success

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Manfred Zabl

Photo: Nestler-Kenzian

Dear readers,

Innovations are the driving forces of corporate developments and especially in economically challenging times, they are much in demand. Therefore we devote this issue to the major innovations in dosing technology for the paper industry and in the environmental sector. In addition to these two highlights there are many other interesting articles to be found.

Currently the paper industry is experiencing a major upheaval emerging mainly from the changes in the consumer behavior of the major markets. All kinds of electronic media are penetrating ever further into all areas of life and more and more they push aside printing and writing papers. The trend that has already been discernible for the last decade continues. It seems to be strengthened and to have a particularly lasting impact. An increasing number of people buy an e-book reader instead of a book or they read the daily newspaper on tablet PC or similar devices. Electronic mail is moving continuously into business processes and the printers of many companies remain silent. Conversely, the online trading sector is booming, and this leads to an increasing demand for packaging material.

Life is a constant change! In economy these sometimes inconvenient changes are caused by the development of innovations, which are not always as good as they seem to be.

But our drive for further development and improvement will continue unabated. As long as one meets the daily challenges, again and again new possibilities are created for further growth. It is the course of nature we are following - there are seldom periods without any activity and fresh winds are blowing all the time. You have to keep your eye on the ball and you also have to be prepared for forthcoming changes and jump on the bandwagon at the right moment.

We are a traditional family company with deep roots in our core businesses and we attach great importance to stability, continuity and sustainability in all areas of our activities. Together with our customers and partners we want to meet the continuous challenges with a common understanding. Together we are stronger – is the motto of our new calendar, which naturally is printed on 100% recyclable and environment-friendly high quality paper! With this in mind I wish all our readers a happy, festive season and a successful year 2014!

Manfred Zabl
CEO Applied Chemicals International AG

FreshWave® IAQ Welcomes you at MEDICA 2013!

MEDICA is the world's leading meeting place for the medical industry. This year, 4.500 exhibitors from 70 countries will present their products to about 130.000 visitors from more than 100 countries in 17 exhibition halls.

For more than 40 years it has been firmly established on every expert's calendar. As in last year, we exhibit together with our US partner company, OMI Industries, in the US-Pavilion, Hall 16, stand D20-5. Our main focus is on specialised dealers for professional cleaning, hygiene and care products. But we also expect to come into close contact with a wide range of professionals from hospitals, retirement and nursing homes, who use our products daily.

Visit MEDICA 2013 in Düsseldorf, from 20 to 23 November in Hall 16, Stand D20-5 and the teams from Applied Chemicals International AG and OMI Industries will answer all your questions and provide more detailed information about our products. We look forward to your visit!

Text: Aldo Randisi



aqua pro gaz - THE SWISS TRADE FAIR FOR WATER AND GAS PROFESSIONALS



5th to 7th of February 2014

Espace Gruyère in Bulle (CH)

Booth 30-53 in Hall 30

Aqua pro gaz is the only trade fair in Switzerland, which is dedicated to the areas of drinking water, waste water and natural gas and brings the leading companies of these branches together.

Aqua pro gaz is the most important platform for the experts of these industries. About 100 exhibitors from all over Switzerland (60 % German-speaking Switzerland, 40 % French-speaking Switzerland) welcome visitors on a floor area of 7000m².

From 5th to 7th February 2014, the 7th edition of the exhibition will take place in Bulle, the administrative centre of the Gruyères district. Several associations and organisations have already confirmed their participation and so once again, trade fair visitors will have the opportunity to participate in various conferences and discover special exhibitions.

Again ACAT will be an exhibitor and we would like to welcome you at our stand 30-53 in hall 30. We are looking forward to your visit!

Text: Susanne Durst

ZELLCHEMING EXPO 2013 - Review



A lot of visitors came to see us at our booth at Zellcheming EXPO 2013. This year our main focus was on the dry strength agent BondStar®

At Zellcheming EXPO 2013, our main focus was on the dry strength agent BondStar®. In coming years we expect a growing demand for this type of product. The growing cost pressure of production of graphic grades and the high demands on packaging grades will be the driving forces.

We had the feeling that the number of visitors left much to be desired this year. Nevertheless, as every year we welcomed a large number of customers at our booth. The move of Zellcheming to Frankfurt, scheduled for 2014, gives hope for a turnaround in visitor numbers.

Text: Nuri Kerman

APV: Water & Fiber in a Constant Connection

In the international year of cooperation on water affairs the motto of the APV 2013 was "Water and Fiber – a Sustainable Combination".

As the UN General Assembly has designated 2013 the International Year of Cooperation on Water Affairs, the Motto of the Austrian Paper Conference, held on the 15th and 16th May in Graz, was: "Water and Fiber – a Sustainable Combination".

As in recent years, again ACAT was exhibitor at the APV. The visitor frequency to our stand confirmed the great interest in our wide range of additives, which optimize processes in paper and board production. Once again the "Old University" was the perfect time-



less, impressive backdrop for the wonderful ending of the first conference day.

Text: Stefan Schaub

ACAT'S ODOR ELIMINATOR ECOSORB® was presented at ECOMONDO in Rimini

Photos: Rimini-Fiera/ecomondo



Also this year ACAT, with its odor eliminator product Ecosorb® was attending the ECOMONDO EXHIBITION at Rimini Fiera from November 6th to 9th.



ECOMONDO is the huge international expo hub, dedicated to the environment and it is the most accredited platform for southern Europe and the Mediterranean basin, for the exploitation and recycling of materials and for the large industry of the future, also called Green Economy. This owes its success to a weighted and rewarding balance between sales dimension and technical-scientific dimension, with considerable space dedicated to INNOVATION in the Green Economy sector.

Areas of particular interest at the 2013 event:

- waste characterization, management, recycling and exploitation
- monitoring, management and treatment/exploitation of industrial and civil wastewaters
- the biomass chemical industry, dedicated non-food biomass bio-refineries and residues
- the monitoring and clean-up of contaminated sites, soils and sediments (Reclaim Expo)
- monitoring and treatment of air pollution (Air)

ACAT has actively marketed and manufactured the Ecosorb® products for odor control since 1988, and is a leading developer of safe and effective industrial odor management solutions for a wide variety of applications. Our Ecosorb® odor eliminator does not mask smells, it neutralizes them.

lizes them by breaking down and removing a broad spectrum of organic and inorganic odors.

No matter what the source of the unwelcome odor, from landfills to refineries to wastewater treatment facilities, ACAT offers an industrial odor management solution that's safe for you, your process and the environment. Ecosorb® odor eliminator is biodegradable and can be applied through a number of delivery systems, including atomization, vaporization, encapsulation or infusion into end products — making it the natural odor management solution for virtually any situation.

We enjoyed your visit and look forward to meeting you at the next ECOMONDO EXHIBITION.

Text: Claudio Boscolo



WE ARE SERVICE CHAMPION: ACAT Wins the “European ServiceValue Award”

Things always seem to happen when you least expect them – and sometimes you get very good news. The fact that ACAT Vienna is one of the four Austrian Service Champions 2013 our management accidentally learned from the newspaper. As this award is based exclusively on customer surveys, ACAT would like to say a very sincere thank you!

On the morning of September 12, CEO Manfred Zabl was pleased to accept the phone call offering congratulations but he wondered: “Congratulations for what?” The answer to this was an article in the Austrian daily newspaper “Kurier”. We quote:

“The ‘European ServiceValue Award’ ... rewards the most client oriented companies throughout Europe. The awarded Austrian companies are: the specialty chemicals sales team ACAT, the credit card company CARD COMPLETE, the engine and vehicle manufacturer KTM and the technical all-rounder Konica Minolta.”

We gained more detailed information from the ServiceValue Website (www.service-awards.eu/de/wettbewerb):

The award for the best strategy in customer orientation

More than ever before, companies are finding themselves under pressure to add visible value for customers: more customer value. Key prerequisites to achieve this are on one hand the understanding of customers’ needs, on the other hand the willingness and ability to align with customer demand. But where and how can a company start? To answer this question ServiceValue offers, together with the renowned Institute of Insurance Economics of the University of St. Gallen as scientific partner, an innovative value-model for the best strategy of

customer orientation and it honors companies and managers that can be used as role models.

Certainly this is interesting and important. The motto of ACAT has always been: “Technical Service is Our Success”. That is why we always have endeavored to provide innovative solutions close to customers’ demand that work well in practice.

We are particularly pleased that this award is based only on customer data. So we owe this award exclusively to our customers. Therefore we cordially would like to express our thanks to them!



The award-winning recipe for success: “You name it - we play it”, because “Service is our success!”

ACAT GOES AMERICA



The WEFTEC (Water Environmental Federation Technical Exhibition and Conference) is the most important US exhibition for environment and waste water. For the first time ACAT took part at the fair as an exhibitor together with the company Kusters Zima



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The exhibition is an annual event and currently it is held alternating between Chicago and New Orleans. Chicago owns the largest exhibition halls in North America, and it is well known that the Chicago venue attracts the biggest number of visitors, therefore it was not surprising that WEFTEC 2013 was a great success.

ACAT was able to deepen the supplier and partner relationship and received a solid overview of the trends on the North American market. Furthermore, we also reviewed and updated our product portfolio, so once again the exhibition was a great success for us!

The WEF is a community of interests and was founded in 1928. This year was the 86th Anniversary of this exhibition and the change of the name reflects the direction in which it will develop - from a fair for sewage systems to an Environmental Fair:

From the Federation of Sewage Works Associations (1928) -> Federation of Sewage and Industrial Wastes Associations (1950) -> Water Pollution Control Federation (1960) -> Water Environmental Federation (since 1991).

Text: Per O. Björn

BRAND NEW DEVELOPMENT IN DOSING TECHNOLOGY Enhances Quality and Reduces Costs

ACAT strengthens its competence in dosing technology with the expertise of ecowirl

It is an unresolved and annoying problem that especially polymer solutions with higher viscosity cannot be added homogeneously. To achieve the best possible homogeneity large amounts of dilution water must be added and the stock and sludge lines are furnished with lances or other structures. There are various approaches to solve this problem, but for larger tube diameters the insertion of mechanical elements seems to be unavoidable.

In continuous operation they often cause deposits and the attendant well-known problems. Even if you accept these problems usually the polymers cannot be mixed in completely homogeneous, which leads to yield losses. Due to their large chain lengths polymers must be treated by the shear forces as gently as possible to be fully effective.

Therefore a metering station mounted before sifters or pumps leads to a satisfactory mixing, but as polymer chains are shortened, efficiency is lost and a higher dosage is necessary.

It is always a compromise between dosing before the last shear point with the consequence to obtain optimal mixing and accept higher dosages, or dosing after the last shear

point with lower dosages and the risk of a problematic inhomogeneous mixing in larger pipe diameters. I stress – it was a compromise, because with the new ecowirl technology it is now a thing of the past.

Without any mechanical parts in the pipes single-acting nozzles, which are easily maintained, swirl the polymer solution gentle and absolutely homogeneous through the whole pipe. The result is a uniform distribution with almost 100% polymer efficiency.

The ecowirl, which is based on a high sophisticated unique high-tech dosing technology, has already achieved remarkable successes in many operations in practice.

Users report significant technical improvements in the cross-sections, better runnability and various quality improvements combined with a reduction of polymer consumption of up to 25%.

We are very pleased that we have found the ecowirl, and that we are allowed to offer this revolutionary technology to our customers and to integrate it into our numerous projects.

Text: Manfred Zabl

A REVOLUTIONARY WHIRL IN DOSING TECHNOLOGY

Addition of Sophisticated Additives - New Possibilities with the ecowirl m

**AUTHOR: DAAN WAUBERT DE PUISEAU
DWDP CONSULTING**

The picture (beside) shows multi-dimensional condensation vortex fields produced by a plane, which create impressive spacious effects. One sees that the rotary axes of the main vortexes are perpendicular to the micro vortexes.



Photo: CUER/NASA

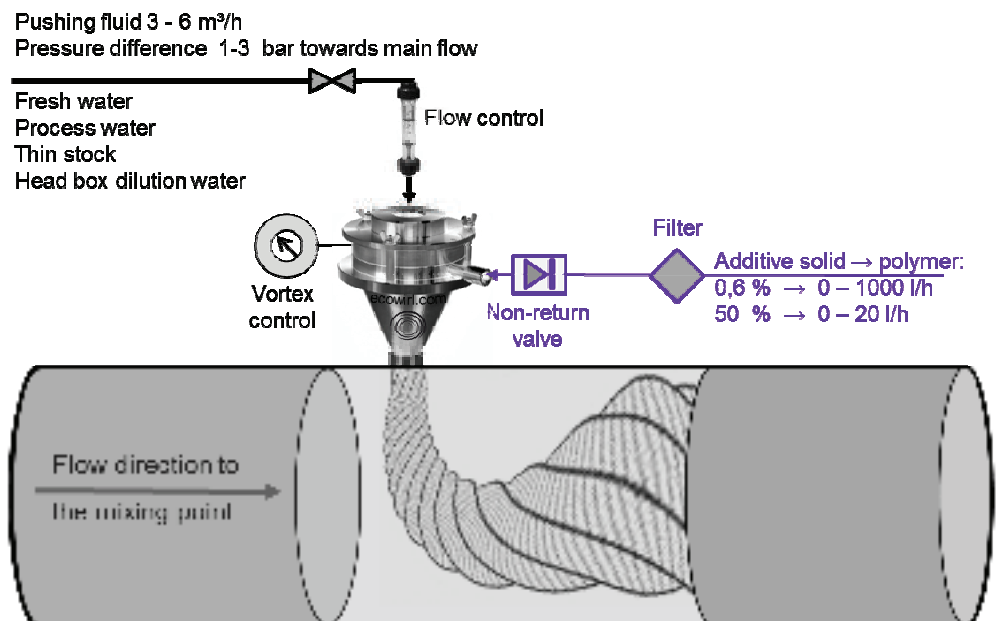
Example for multi-dimensional vortex fields

The new mixing system, ecowirl m produces a similar vortex field to blend additives efficiently into large volume flows.

The whirl generated at the exit looks like a twisted rope. It is the combination of a large vortex motion with many

small micro-vortices (= the twisted rope with braids) perpendicular to them. This process is initiated by a motive fluid with a speed of 6 m³/h and about 3 kg/h polyelectrolyte can be added. For larger quantities various complete solutions are available.

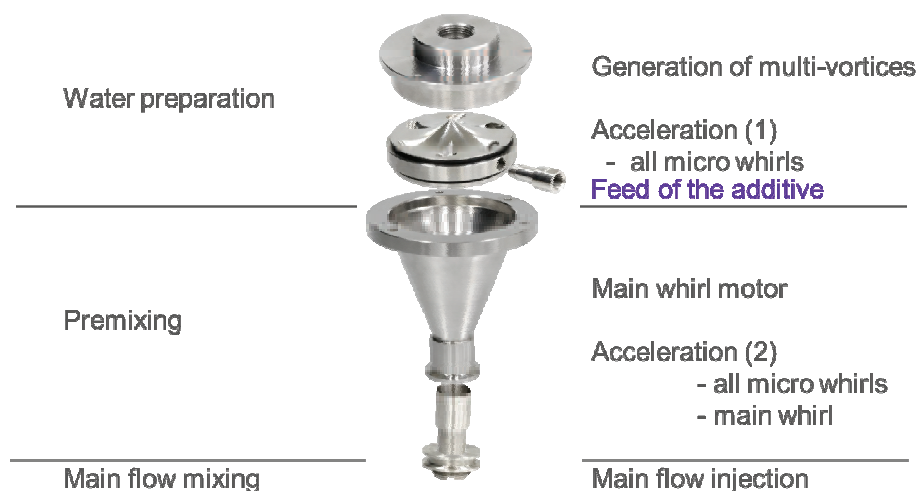
Flow sheet for the multi-dimensional rotary mixer



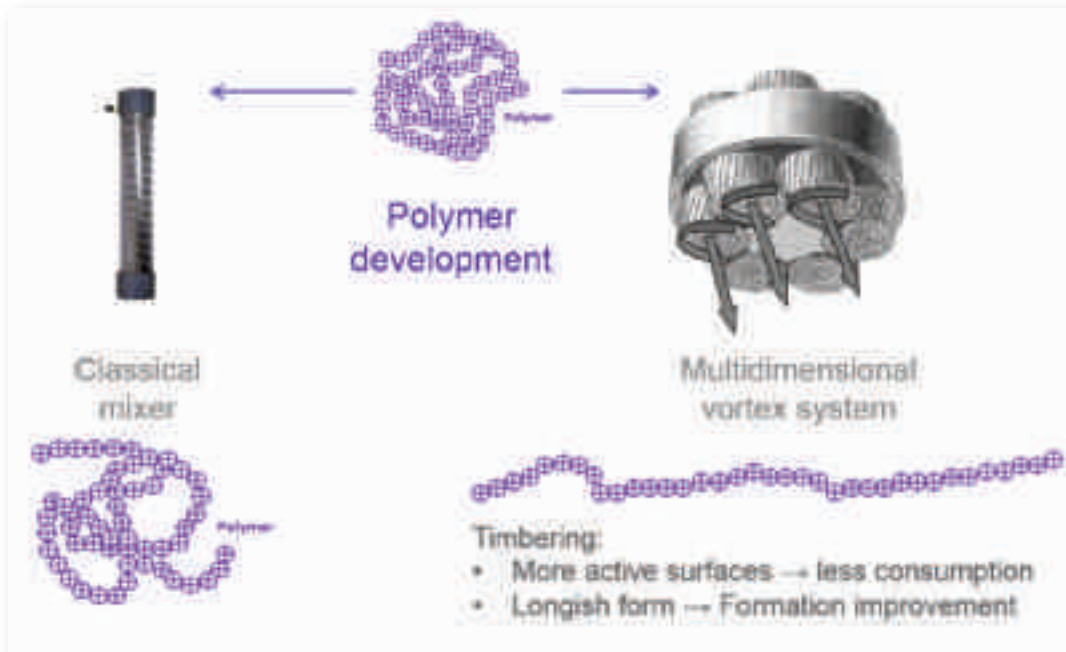
The real innovation of ecowirl is that additives with a high solid content can be added directly. Usually, mixing operations with a mixing ratio of more than 1:500 cannot be carried out in one step. With ecowirl mixing operations with a mixing ratio of 1:100.000 can be carried out in a

single step with a high uniformity. Therefore, reactions with the pre-dilution water that tend to reduce the effectiveness of the additive can be excluded. Moreover, it reduces the required equipment.

Multi dimensional vortex mixer ecowirl



Functions of the multi-dimensional rotary mixer

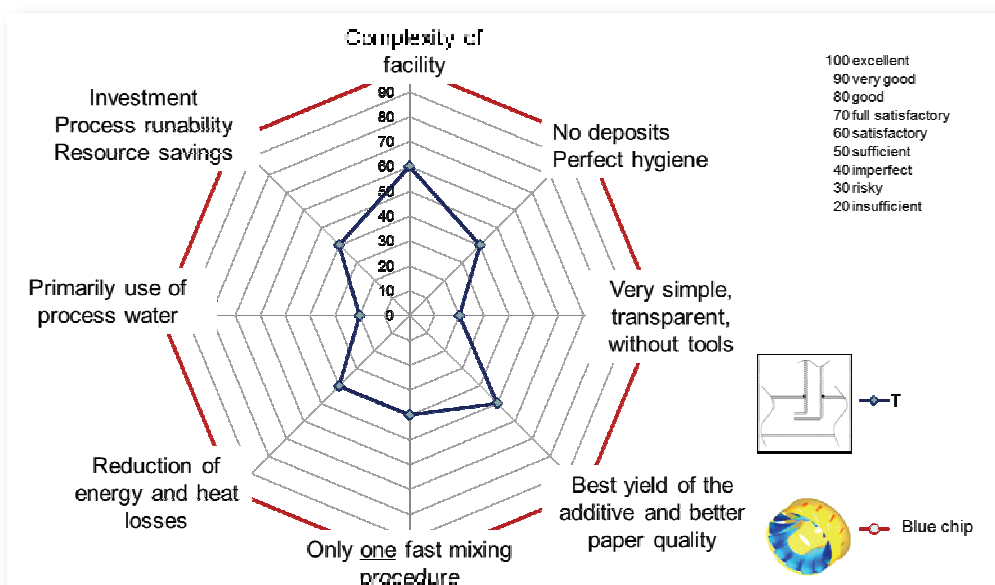


Attempt to explain the improved additive performance

The ecowirl m essentially consists of four main components, which are firmly clamped together: injector, engine, turbo and diffusor. The rotary motion is carried out by the fluid only. The four components separate the preparation area, the pre-mixing area and the main flow mixing area from each other. In the preparation area the specific surface area of the process water is increased and vortex-forces are generated. In the pre-mixing area the additive is injected counter currently, the micro-vortices rub against each other - that causes extremely high contact rates. Also an important factor for chemical reactions is temperature; therefore normally warm process water is used. The ecowirl m has already proven highly efficient

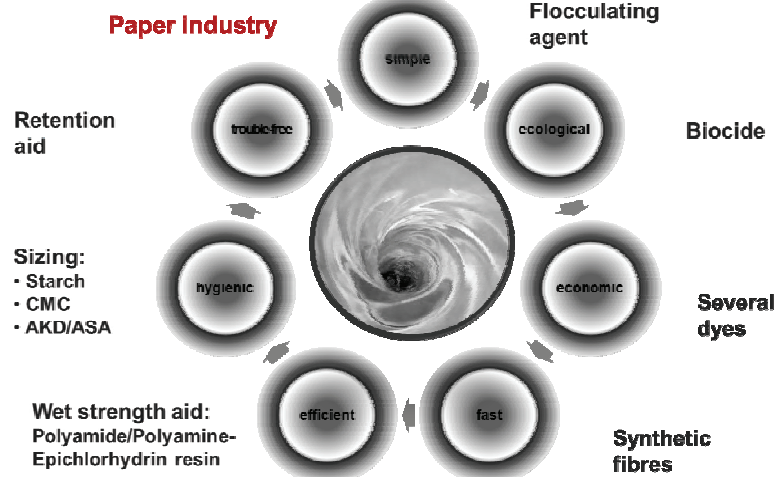
and easily meets requirements which currently available systems do not meet. How is that possible?

This diagram shows the usual requirements of an operator for a dosing unit. The complete system, from the commercial product up to the injection into the main flow, should be the perfect system, here termed as "Bluechip". The following parameters are essential for performance and reliability: low effort, cleanliness in dosing, easy operation, cost-effective yield of additive, only one mixing process, loss of energy, recycling und payback. The ecowirl meets the "Bluechip" requirements to a large extent and sets new standards in handling, economy and ecology.



Requirement profile and overall assessment

Future applications



Future applications

Ecowirl technology has proved in tests that it is able to add sophisticated additives like retention agents (after sorting and ahead of the head box of the paper machine) without problems. The successes already achieved are an incentive to revolutionize with this system step-by-step a

variety of dosing units. With this mixing technology, mixing rates up to 1:100.000, with a solid content up to 50% in 500 milliseconds can be achieved. This reactivity matches the modern process technology. The ecowirl m can be operated with thin stock, head stock dilution water, clear and fresh water.

Usually process water is used to avoid heat losses in the production, to raise the circuit temperature of the white water and to support the mixing process by the supply of heat. Further applications on the paper production line have to be checked; the fresh- and waste water treatment in the production area remain interesting.

Wissen Sie eigentlich
wie rutschig eine
Baumwurzel sein kann.
Ich schon.

Manuela R., Gmunden

Verstanden:

**Der Premium-Unfallschutz
speziell für Freizeit-Unfälle.**

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**Um zu verstehen,
muss man zuhören**

Unter den Flügeln des Löwen.



In 1983 Daan Waubert de Puiseau obtained a diploma on the TU-Darmstadt. Since for over 30 years he has worked for the European paper industry. His main task was to prepare facilities and employees of companies, to ensure competitiveness in media term.

For five years he has been working independently.

Currently working on recurrent challenges in the development of systems for dosing and aeration of liquids with multi-dimensional vortex fields.

His product development, trade name ecowirl, is an innovative process mixing technology.



Daan Waubert de Puiseau
DWdP Consulting

SAWADEE KHRAP FROM THAILAND

Although SCS Chem Ltd only started up as a company in Thailand around 4 years ago, it already is a leading supplier of Process Chemicals to the Pulp and Paper Industry.



AUTHOR: GARY REDDHOUGH

As most Chemical suppliers to the P&P Industry know, the margins for Speciality Chemicals have been seriously eroded over the last 10 years due to pressure from the large papermaking groups to move to central purchasing for cost reduction.

In particular the large global suppliers are seeing dwindling profitability from their Paper Chemicals segment businesses and are cutting costs mostly in the area of R&D, Technical Support and Customer Service. It is no secret that some of these companies are trying to sell off their P&P chemical businesses.

In Asia we are seeing that these

companies have cut back on Regional Technical Support and some have totally withdrawn from Countries where the Paper Making market is not so large, leaving their business in the hands of



agents that cannot provide the technical support and problem solving capabilities that our customers need.

The people that make up SCS Chem Ltd are all experienced in supplying technical solutions to our customers and we are 100% customer focused.

Our customers still demand the lowest cost effective programs. As all of our competitors produce outside of Thailand, they therefore have higher cost structures for their products, being subject to excess Logistics and import duties. SCS made the decision early on to invest long term by having our own production facility here in Thailand to help to give the best possible costs to our customers in Thailand. We also produce and supply some products to other Countries in Asia.

As well as supplying cost effective products and excellent technical support, we also look out for new product technology that can help our customers business to be more profitable.

SCS and ACAT started working together a few years ago as we believe that we both have the same customer focused culture.

As mentioned SCS is always on the look out for new Technology to benefit our customers, we started by using the RetStar products for Paper Machine retention, and have in the last year been focusing on Bondstar as a major business opportunity for our customers by improving machine runnability, filler increase and long fibre reduction in Fine Paper; filler increase and yield improvement in Newsprint; and recently for runnability and yield increase in Tissue.

We have seen some remarkable results with Bondstar®. ACAT's Gary Reddihough, who is a regular visitor to Thailand providing some excellent support, has been supplying Retention products for 20 years was amazed when we started adding Bondstar® to a fine paper machine. The potential saving for this customer on this machine is approx. US\$ 5 Million!

Remarkable results with Bondstar®

- 5.7% ash increase
- No breaks
- FPR86 to 90%
- FPAR53 to 70%
- Lower sheet defect
- Steam lowered 0.2 t/t paper
- Strength within specification



We have a lot of activity surrounding the Bondstar® products for Fine Paper and next year will focus on Bondstar® Strength improvements for Packaging.

April 2014 will see the Asian Paper Exhibition in Bangkok and SCS will partner with ACAT to showcase our technologies to visiting customers from all across Asia. Welcome to Thailand.



BONDSTAR® EXPERIENCES

The BondStar® range is a market leading new technology which provides a major business opportunity to customers.



Photo: Spiola

Our practical experience so far is that in Fine Paper, BondStar® provides the opportunity of improved machine runnability, filler increase and long fibre reduction. In Newsprint we have applications which have resulted in filler increase and yield improvement, while in Tissue we are running applications showing improvements in runnability and fibre yield increases.

Application knowledge, addition point optimisation and working closely with the customer are essential to maximise the customer return and get the best cost performance from the product.

Increasing ash levels in Fine Paper will normally result in poorer runnability, reduction in sheet strength properties and more deposition in the machine system.

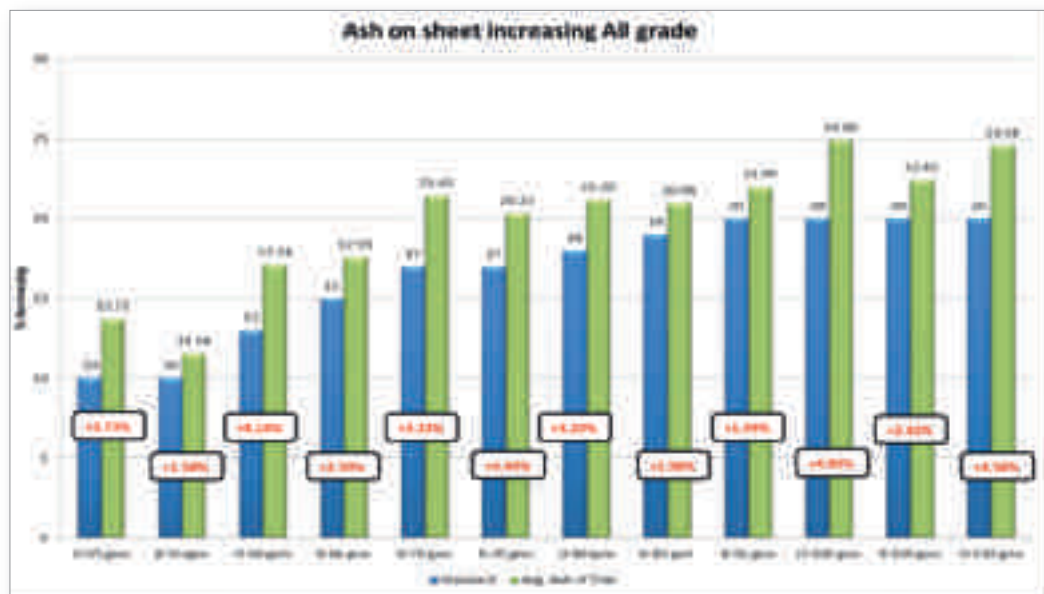
Applications currently running with BondStar® 206L in Asia have demonstrated the ability to improve first pass and ash retention, increase drainage, give more wet web strength to the sheet, reduce energy costs and maintain sheet strength properties.

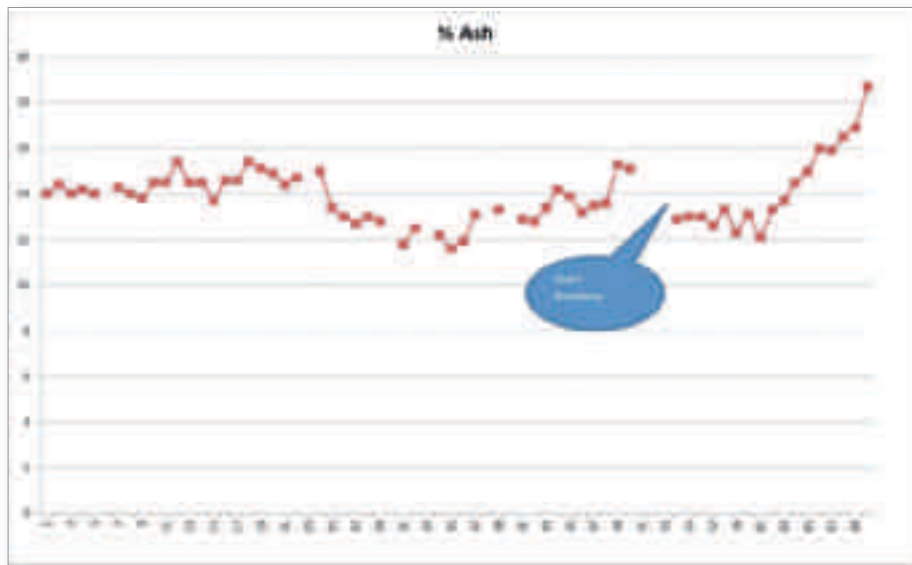
Results are from a number of different current applications;

AUTHOR:

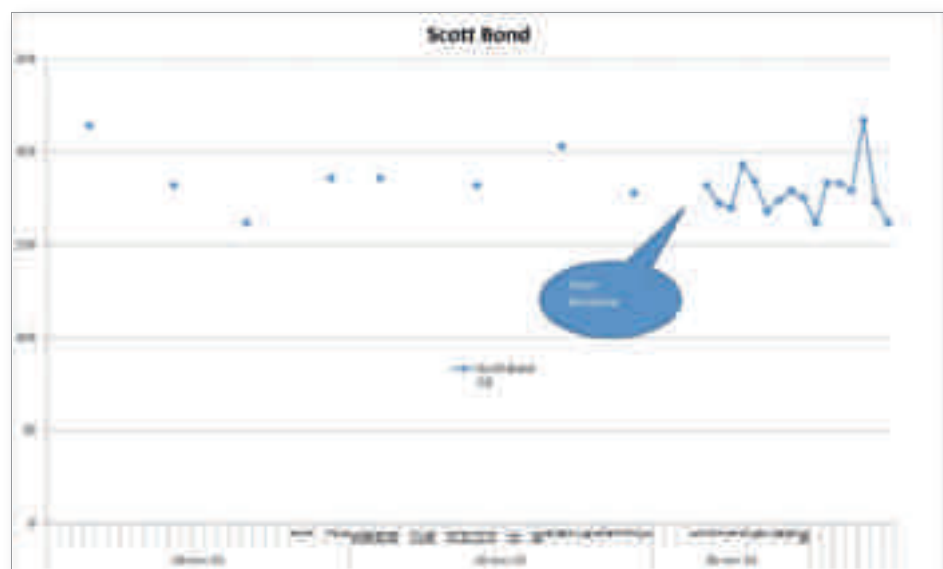
HOWARD JOHNSTON

Filler increase across a number of different grammages and grades using BondStar® 206L

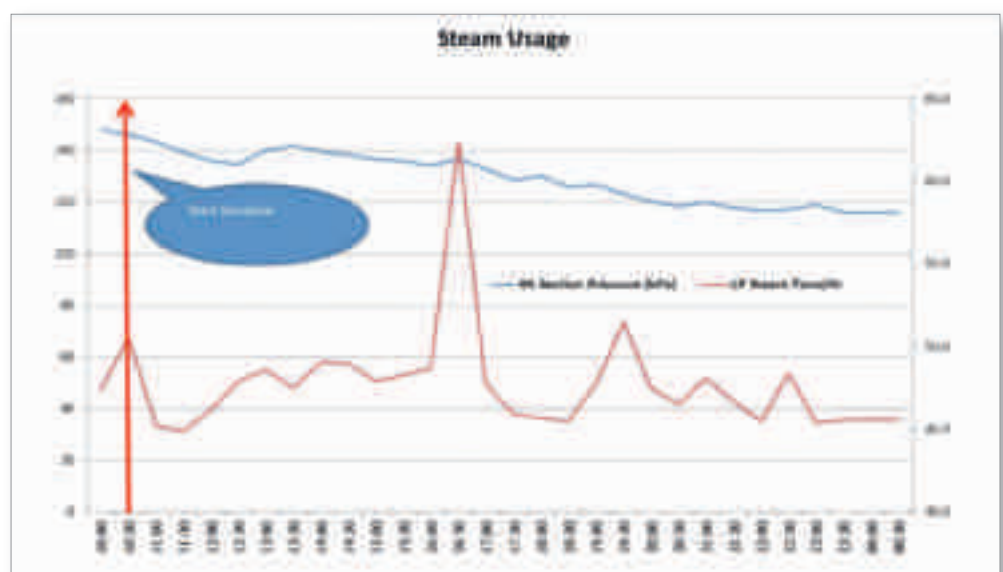




Increase in Ash level using BondStar® 206L



Maintaince in Internal Bond Strength at higher ash levels using BondStar® 206L



Reduction in Steam Usage using BondStar® 206L

IGEFA - NETWORKED COMPETENCE

for Products for Cleanliness and Hygiene in Germany, Austria and Switzerland



Photo: igeфа

AUTHOR:

ALDO RANDISI

igeфа (community of specialist wholesaler) is the leading distribution group for professional cleaning, hygiene and care products, disposable packaging and occupational safety that operates from 30 branch offices. The product range comprises cleaning and hygiene products as well as purpose cleaner and paper napkins, for professionals - and since summer 2013 NEW to the range is FreshWave®IAQ from ACAT. Commercial bulk consumers such as hospitals, retirement and nursing homes, cleaners, hotels, restaurants, caterers

as well as large and medium-sized businesses are the clients.

Seven companies represent igeфа: Arndt, Julius Brune, Eichler- Kammerer, Kruse, Toussaint and Wittrock & Uhlenwinkel and each of them have long traditions as medium-sized family businesses. Common policy at all depots: Quick and reliable supply, competent customer consulting and top-class service.

The head-quarters of the igeфа trading company is in Ahrensfelde near Berlin, from where the branch offices are supported. These include, inter alia, the support of national and international major clients, the central order and invoice processing as well as a central warehouse.

In September 2013 the most important European trade show for cleaning systems facility management and services, the CMS Berlin (Cleaning Management Services) was held. igefa was represented with an impressive booth. The CMS serves as an ideal platform for new contacts, corporate image building and potential business deals in the international cleaning market. The trade fair takes place every two years in the German capital. 354 exhibitors from more than 20 countries and a wide range of products, systems and processes have confirmed the market leadership position of the CMS Berlin and have well-established the event as the main meeting place for the European cleaning industry.

Europa-Park (biggest amusement park in Europe)
"Everything from one source"
from the igefa/Marco GmbH -
now also in the portfolio: FreshWave®IAQ

Visitors of the Europa-Park expect a top service and a high degree of flexibility. This requires a close contact to our customer, the Marco Company, meet the needs of the Europa-Park effectively. It is our duty to offer the igefa appropriate solutions and to produce customized products for the Europa-Park as well as to store them and deliver them on time.

The range of products of igefa covers the entire supply for cleaning, kitchen and washroom hygiene, catering and hospitality.

Since September 2013 all sanitary facilities of the park

(the 5 resort-hotels will follow later) have been equipped with FreshWave®IAQ products. With the Europa-Park as a reference we have the perfect conditions to conquer Europe.

igefa International, INPACS and Network

Think global, act local - Following this principle the igefa has earned a reputation that reaches far beyond the borders of Germany, Austria and Switzerland.

With the admission of so-called associated members, as well as by setting up own subsidiaries in neighboring countries, today igefa operates in 20 European countries. In order to serve customers throughout Europe the igefa founded the INPACS (International Partners for Hygiene and Cleaning Supplies) together with similar groups in Italy, Spain, Portugal, France, Great Britain, Norway and Sweden and is currently represented in 27 European countries. As a logical continuation of the globalization concept the INPACS is also member of the leading North American Network Group.

It was not an easy game to gain the interest of the igefa for FreshWave®IAQ. Of course, we were well-prepared for that, because we have learned from experience how to position ourselves successfully against competitors. With igefa and INPACS we have strong partners at our side. Let us use this chance!



*All sanitary facilities of the
Europa-Park are equipped with
FreshWave®IAQ products*

ECOSORB® SPRAYING SYSTEM

at the Hazardous Waste Landfill Kölliken



At the new hazardous waste landfill Kölliken, Switzerland Ecosorb® 606 ensures fresh and odorless air

AUTHOR:

VINCENZO CARCO

The Kölliken hazardous waste landfill, which is located in the middle of a residential area in the central part of Switzerland, was set up and operated by a consortium (the cantons of Aargau and Zurich, the City of Zurich and the Basle chemical industry) from 1978 to 1985. As a result of environmentally-related issues, the landfill was, however, closed by the judicial communal authorities before it had been completely filled. During the operational period, a total of approx. 300,000 m³ or 475,000 t of hazardous waste was deposited in drums, big bags and as loose waste.

Since 1986, extensive investigation and safety work to the extent of around CHF 150 million (approximately 120 million euros) has been carried out by the consortium. Without the introduction of sustainable measures the landfill would have represented a long-term hazard for the nearby aquifers. The waste matter will now be completely removed in accordance with the decree of the cantonal supervisory authorities.

For this purpose, three sealed halls with an internal negative pressure were built in 2006 and 2007. The exhaust air is continuously extracted from the halls, and is cleaned using activated carbon filters. The remediation work started in Autumn 2007, and should be completed in the middle of 2016. After the remediation, the halls will be removed and the area will be re-cultivated.

Ecosorb® 606 was sprayed with a spraying system – three lances with six nozzles each - between silencer and stack.

Based on the updated schedule (status March 2011) the total costs are estimated to approximately 770 million CHF (approximately 625 million euros).
Source: <http://www.smdk.ch>

Since summer 2013 sometimes the air treated by the activated carbon filters has still had a slight smell of putrefaction or fish. To eliminate all odors ACAT proposed a test with the odor neutralizer Ecosorb® 606. After detailed discussions the operator of the hazardous waste landfill Kolliken gave the go-ahead for the trial. The test facility was installed by ACAT as follows: Ecosorb® 606 was sprayed with a spraying system – three lances with six nozzles each - between silencer and stack. At the moment the optimal dosage is 0,4l Ecosorb® 606 / h diluted with water to 60l.



SUCCESSFUL START: EOS-Test Plant at the Main Waste Water Treatment Plant „ebswien“ is Running

In 2020 the EOS-Energy-Optimization in Sludge Treatment will make the municipal waste water treatment plant a self-provider in energy

“Thanks to the pioneering project EOS – Energy –Optimization in Sludge Treatment the Main Waste Water Treatment Plant Vienna EBS will be a self-provider in energy in 2020,” said the Vienna Environment Councillor Ulli Sima on the occasion of the launch of the EOS-test plant in April of this year. “The Main Waste Water Treatment Plant Vienna is already operated extremely energy-efficient, but for the waste water treatment at this high level still just less than one

percent of the Vienna electricity consumption is needed,” she continued. “ With EOS the entire energy required for the waste water treatment can be generated on site from sewage gas, the existing renewable energy source. The implementation of this project shows that the City of Vienna is investing in the environmental and climate protection and therefore in the future even in economically difficult times.”
In the EOS test plant located on

the site of the main waste water treatment plant the same processes take place as in the future large-scale plant, but in terms of quantity at a ratio of 1:600. Each digester of the test plant has a capacity of 130m³ sludge, the large-scale plant will have six digesters with a height of 35m, and together they will have a total capacity of 75.000m³ sludge. The Managing Director of the EBS, Christian Gantner explained:” The test plant is used to obtain deeper

insights for the future operation of our sludge treatment. The focus is on the technical machinery that cannot be simulated in a laboratory. The results of the test plant are the basis for an energetically and economically optimized operation of the EOS large-scale plant."

Innovative Technology

The competent partner of the EBS-Vienna for the EOS-project is the Institute for Water Quality, Resources and Water Management of the Technical University of Vienna.

The researchers attracted notice with an innovative technology: During wastewater treatment care is already given to ensure that as much energy as possible remains in the sludge. If the sludge is dehydrated before digestion, the sludge digestion is carried out with an increased solid content. The "thicker" the sludge, the less water has to be heated up unnecessarily to 38°C during the subsequent heating. This saves energy and improves the energy balance of the sludge treatment plant significantly.



Photos: Christian Houdek/PDI

The Vienna Environment Councillor Ulli Sima and ebswien-Managing Director Christian Gantner at the Start-up of the Test Plant

Just like in the future large-scale plant the sludge is thickened in the EOS test plant to approximately 8% dry substance. That is a significantly higher solids content than in other sewage treatment plants.

Another important benefit of a high dry substance content: less

water content in the sludge means that less container volume is needed for the sewage sludge stabilization. So the EOS large-scale plant will need only six digesters. This does not only save construction costs but it also reduces the costs of operation and maintenance.



This is how the EOS test plant works:

First of all in the EOS test plant the surplus sludge from the aeration tank is thickened mechanically. Then the primary sludge from the pre-treatment is added to the storage tank. Via a heat exchanger the sludge mixture is heated up to 38°C. Per day approximately 5m³ sludge are delivered to the digester, where the sludge is kept in constant movement. Under the exclusion of air anaerobic bacteria degrade the organic ingredients of the sewage sludge. During the at least 20 days lasting digestion process - the so-called anaerobic stabilization- the high-energy sewage gas is produced, which rises up in the tank. In the test plant the gas is stored temporarily in a gas container with a useable volume of 60m³ situated right above the digester. The sewage gas consists of two-thirds methane. Via a gas line it passes into the combined heat and power unit, where a gas engine generates mechanical energy. With the help of a generator the mechanical energy is converted into electricity. The waste heat of the aggregate is used again to heat the sludge mixture in the heat exchanger. The "digested" sludge is removed from the digester and dewatered with a screw

Technical Data of the EOS Test Plant

- Sludge throughput: 5,2 m³ average per day
- Sludge load: 0,4 t dry substance per day
- Digester
 - Diameter and height, each 6m
 - Usable volume: 130 m³
- Gas tank
 - Usable volume: 60 m³
 - Gas production: 200 m³ per day
- Combined heat and power unit
 - Electrical power : 35 kWel
 - Usable thermal capacity: 58 kW

press. The extracted water, the so-called filtrate, has a high ammonium content which is degraded in turbid water treatment by a biological process until it can be fed to the waste water treatment process.

EOS – Installation during full operation of the sewage treatment plant

In February 2012 the Vienna City Council decided unanimously to realize the project EOS – Energy – Optimization in Sludge Treatment. It will be built at the Main Waste Water Treatment Plant near the pre-treatment area and the first biological purification stage. In order make space the existing aeration tanks have to be remo-

EOS- Timetable

24 February 2012: The Vienna City Council decided unanimously to realize the project
 17 April 2013: Start-up of the EOS test plant
 Autumn 2013: Submission of the Environmental Impact Declaration
 2014: Approval procedures and Award procedure
 Middle of 2015: groundbreaking
 2015 to 2020: Installation during full operation of the sewage treatment plant
 End of 2020: full operation

ved. Some of the new tanks will be twice as high as the old ones and their total volume will be even enlarged. The most visible sign of the sludge treatment plant will be the six digesters- each 35meters high. Furthermore, a sludge buffer tank and two gas tanks are planned. The implementation of the EOS project is a logistical challenge, as it takes place during running operation of the Main Waste Water Treatment Plant. The quality of the waste water treatment of Vienna has to be ensured at any time. The construction period will take six years..

We treat everything

"We treat everything" is the motto of the EBS, the Main Waste Water Treatment Plant Vienna. It is located in Simmering, where the entire sewage of the Viennese people is treated 24 hours a day, 365 days a year. More than 6.000litres of sewage water enter the plant every second. Nature is taken as a model for the two biological treatment stages following the mechanical cleaning. This system ensures that the Danube remains blue: the river leaves Vienna with the same good water quality it had before it reached the town.

Photo: Christian Houdek/PDI



TUNNEL CONSTRUCTION IN LOWER AUSTRIA - ACAT-Know-how is Involved

At the gigantic railway tunnel construction in Lower Austria the resulting drilling - and service water is collected, cleaned and neutralized by a specialized company. With the chemical support of ACAT and the technical knowhow of Company Intergeo, a special procedure has been developed.



AUTHOR: ERICH SAILER

In the east of Austria currently a single tube, double-track tunnel is being built. With 3.5 km it is the longest of three planned tunnels along the railroad track. The con-

struction of the tunnel started in January 2012 and the completion is scheduled for the end of 2014. Because of the geologically highly demanding conditions, the largest part of the tunnel is built in trenchless construction, the so-called NÖT (New Austrian Tunnel Construction) - only the remaining parts in the entrance areas is the open construction technique partly used. The excavated material is transported eco-friendly and in a way that is tolerable for the local

residents via the route and via motorway and it is used for further embankments along the way. The resulting drilling and service water is collected, cleaned and neutralized by an Austrian specialized company. At the end of 2011 a special procedure for this purpose was developed with the chemical support of ACAT. At the beginning of 2012 the water treatment was installed. At the east and at the west portal a plant was built with a capacity of 20-25 l/sec

where, with a pre-clarification, the coarse impurities are removed from the drilling, service and workshops water. This is followed by a pre-treatment with coagulants and a flocculation. The contaminants are finally separated from the treated water in the sedimentation stage. After buffering, the purified water is neutralized and after a final inspection it is discharged into a collection well, an outlet channel or a sewer. This process is automatically controlled and monitored, turbidity and pH-value are measured continuously online and the measurement data obtained are recorded.

Construction in harmony with nature

Each large construction project has an impact on nature and habitats. The aim is to carry out such projects as gently as possible. Nowadays environmental aspects as well as technology and econo-

mic efficiency are taken into account during the planning phase. Even the conservation of preservation areas, like biotopes and natural monuments, the recultivation of the embankment and noise protection facilities that are harmoniously integrated into the surrounding landscape are part of the planning. At the beginning of the 1990s the most important agricultural and forestry areas as well as ecologically relevant habitats and landscapes were gathered and analysed.

Technical Data

The core of the construction project is the double-track tunnel with a length of 3.485 meters. From both entrances an outbreak cross section of approximately 120m² is driven cyclically. This is the so-called hybrid propulsion, where the release methods dredging or blasting are used depending on the weathering grade of



The necessary interventions in nature are carried out as gently as possible



the in situ rock (Miocene-Schlierre). The covering varies between minimum seven meters (at the entrances) and maximum 20 meters. The excavation of the tunnel cross-section is divided into three sections: top heading, bench, and floor. The pulls have a maximum of 1.7 m at the calotte and the double length at the bench. Immediately after each pull the area exposed is secured with shotcrete (20 – 30 cm), reinforcement steel mesh (single or double layer) steel arches, pikes in the overhead area and anchors (length 4 - 6 m). The unreinforced inner shell (d = 30 cm) is installed after the establishment of the embankment, the two Ulmen-drainages and sealing foil by using two formwork carriages with block lengths of 12.5 meters.

Furthermore, six emergency exits, each consisting of a manhole with an inside diameter of eight meters and a depth of 18 - 28 meters and a cross cut to connect them to the main tube.

19 TONNES OF FIGHTING WEIGHT

for a Sustainable Sewage Sludge Dewatering

ACAT XXL Screwpress dehydrates the sludge of the sewage treatment plant for the 105.000 inhabitants of Bad Vöslau and surroundings in Lower Austria



Procedure of bringing the screw press into the new press building

AUTHORS:

**EWALD KERN
MICHAEL RIEGER**

The previous summer ACAT was awarded the contract for the sludge dewatering of the municipal sewage treatment plant Bad Vöslau. The parts of the screw press which come into contact with the sludge are made entirely of stainless steel and currently it is running in test operation.

After an intensive period of comparative tests of various dewatering technologies by the AWA, a new sludge dewatering with screw press was put out to tender in summer 2012.

The criterion for the determination of the best bidder was based on the lowest bid principle including a five-year operation- and maintenance contract that demands the ongoing compliance of the pre-defined economic efficiency.

Such a requirement takes the contractor in long term obligation and it requires a permanent, optimal interaction between plant and equipment technology - but exactly in this sector ACAT sees its positioning and strength. After the examination of the offers by the contracting planning office Dr. Prendl, the contract was awarded to our company.

*ACAT Screw press
1105 S with
mixing reactor
Total connected
load 11,2 kW*



The project required some prior structural measures. A new press building, and new roofing of the existing further used sludge discharge system and of the previously open loading of containers were built. The time had come in April: the screw press was moved to the press building. The sludge touching parts of the screw press are entirely made of stainless steel and it has stunning body dimensions of 8.500/2.200/2.500 millimeters and robust 19 tons total weight.

The 15 year old Netzsch chamber filter press that reached its capacity limit is still in operation. To avoid decommissioning, it will press two charges a week, in order to be ready for emergencies. On the 9th of August the new plant was put into operation and it is currently running in test operation. Meanwhile, already approx.

15,000 m³ of thin sludge have been dewatered with the new system. The results achieved with the specific sludge conditions and a throughput capacity of approx. 500 kg DS / h are between 23-26% dry substance content. Due to the high required degree of separation a further treatment of the filtrate with a filter belt is necessary.

Such a heavyweight reference has a high value because it offers the opportunity for us to show our full range of services. Our special thanks go to the operational manager Harald Bayer, the entire team of the sewage treatment plant and the engineering office Dr. Prendl for the excellent cooperation and construction management.



Feed of containers in the new hall for sludge loading

IN FULL OPERATION:

The Mobile Sludge Dewatering Demonstration Plant for Switzerland

Due to the very good utilization of the demonstration systems of the ACAT screw presses in Austria, for Switzerland now an own mobile demonstration unit is available.



AUHTOR:

RONALD POELGEEST

The following requirements were clearly defined in the planning stage of the new demonstration unit for Switzerland:

To achieve maximum flexibility the new mobile sludge dewatering must be designed so that it can be easily transported by car and that it still has all the components needed to carry out quick and easy test pressings.

As the existing towing vehicles are approved for a maximum towing capacity of only 2,000 kg it was quickly clear that only the smallest ACAT screw press type AS 250 could be used for this purpose. All components were installed in a tandem axle trailer. In order to take the "plug and play" system into operation as quickly and easily as possible, the connections for sludge, water, filtrate, power and discharge are installed on the outside of the trailer. With its maximum throughput capacity of 20-30 kg DS / h and a maximum of 1 m³ / h the AS 250 is a dwarf related to the sludge throughput, but it is a giant in dewatering results. According to the degree of dehydration in no way the AS 250 is inferior to the large ACAT screw



*The smallest ACAT screw press type AS 250 is impressive:
it is a dwarf regarding sludge flow, but a giant in drainage results*

presses that are designed for throughputs of up to 30 m³ / h. The aim is to demonstrate to the customer, the guaranteed values which are possible with the new system in relation to the degree of dehydration, consumption of polymer and filtrate quality. We are aware of the fact that for larger treatment plants the AS 250 rather gives the impression of a laboratory test device at first, but the customers are really amazed as soon as the first sludge leaves the spiral conveyor and when the drying balance shows the remarkable dewatering values. Fortunately, ACAT has sufficient reference systems with screw presses in all dimensions in its portfolio, so we are able to show customers all available options of the sludge dewatering system regarding size and quality.

Since the first day our new Swiss demonstration unit

for the sludge dewatering with the ACAT screw press has been fully booked. It is already taken into consideration to build a second demonstration unit for Switzerland.

Of course, there is still the option of a demonstration with one of our larger demonstration units.

The following ACAT screw presses are available for test pressings:

- Car tandem axle trailer with the ACAT screw -press AS 250
- Car tandem axle trailer with the ACAT screw -press AS 450
- Truck trailers with the screw press AS 0505 S

Technical Data:

- Feed pump: eccentric screw pump for a throughput capacity from 0.2 to 1.8 m³ / h
 - additional, for sucking from great depth there is a centrifugal pump as a booster pump
- Polymer preparation: online preparation for liquid polymeres
 - there is also a possibility to test powder polymers with a separate connection
- Screw press: ACAT AS 250 for a throughput capacity of max. 20-30 kg DS/h or max. 1 m³/h
 - Inclusive mixing reactor with speed controlled agitator for sludge conditioning
- spiral conveyor for the discharge of the dewatered sludge to a discharge height of approximately 1.3
- Compressor for the supply of compressed air
- Control by PLC Siemens S7; operation with touch Panel



*Both practical and functional:
the most important connections
mounted externally on the trailer*

THE NEW SLUDGE DEWATERING OF THE SEWAGE TREATMENT PLANT LÄNGENFELD, TIROL

Installed in record time- in continuous operation the plant fulfills all the requirements



AUTHOR:

RONALD POELGEEST

In the course of the reconstruction of the treatment plant, the technical office Dipl. Thomas Sprenger, tendered a new sludge dewatering. The contract was awarded to ACAT as the best bidder for the screw press type S AS 0505. For logistical reasons the new sludge dewatering unit was installed in a newly built hall, so that the existing filter press could continue to operate until the commissioning of the new screw press.

The commissioning of all electrical components of the sludge dewatering was completed on the first day in record time. By noon the sludge was flying through the screw press. Unfortunately, a small stainless steel clamp in a shaft passage put a spoke in the wheels of this record-breaking commissioning., but thanks to the professional support of the staff of the ARA Längenfeld, the problem was quickly solved.

Our efforts were rewarded at the moment when the first dewatered sludge trickled from the screw press. Already the first results were showing that the guaranteed dewatering results could be exceeded without



any problem. The degree of dehydration was constantly more than 30% DS. In the course of the optimization of the system also the consumption of flocculants could be set below our guaranteed value. The installed screw press AS 0505 Type S is designed for a throughput capacity of up to 160 kg DS / h. According to the tendering the system was put into operation at a flow rate of approximately 120 kg DS / h. The complete sludge dewatering is designed for an unattended 24 hours operation. Fluctuations of the dry substance content of the thin sludge are detected by measuring of

the turbidity. This data is used to adjust the amount of the polymer. The containers are filled via a shaftless spiral conveyor and the measurement of the filling level ensures that the roll on / off container is steadily filled with three droppings.

Again we would like to thank at this point the highly interested team of the ARA Längenfeld for the active assistance. Rarely before, a customer has assumed the responsibility for the operation of a facility with such an enthusiasm and within such a short time. ●



SPAANS BABCOCK AND ACAT VIENNA - Two Successful Family Companies Now in Joint Mission

AUTHOR: EWALD KERN

Spaans Babcock – More than every second screw pump produced in the World, is manufactured by the Dutch company Spaans Babcock, founded in 1897. With more than 30,000 units produced the company has a worldwide reputation of being the oldest and the largest manufacturer of screw pumps. The Archimedean Screw Pumps are well-known for their simple and robust design - even under the most difficult conditions with coarse material, superb reliability and a long life time is guaranteed.

The screw pumps have a wide range of applications as they can be used for capacities from 15 litres/sec up to max. 11m³/sec and as they are built in various designs: in the traditional concrete trough or with steel trough liner.



Therefore, there are references from various applications available: from the conventional use at the largest and at the smallest municipal and industrial wastewater treatment plants, from pumping stations at the feed or for the recirculation of surplus sludge, up to the innovative installation as a

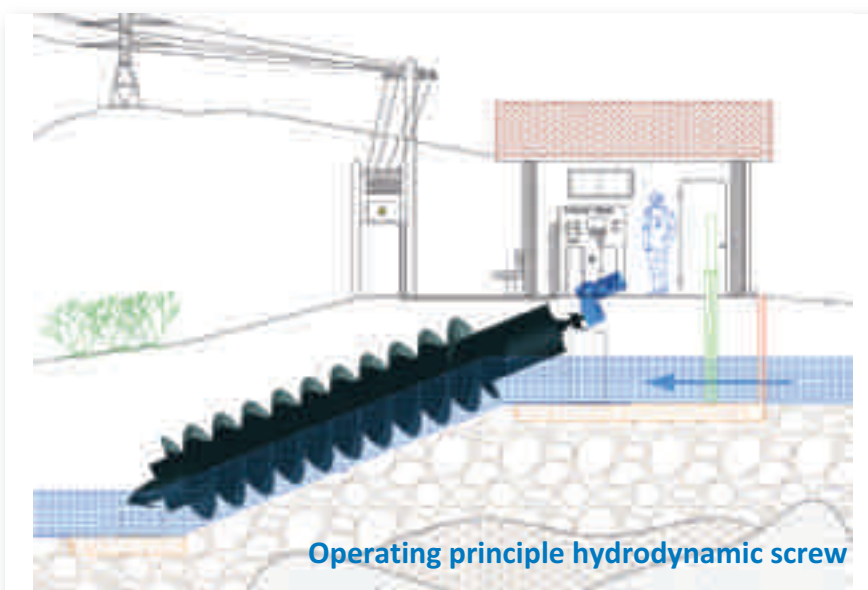
hydrodynamic screw for power generation using natural fall heights. This unfortunately too rare sustainability and innovation combined with worldwide recognised quality of the "Spaans screw" as well as the personal commitment of the employees of Spaans has convinced us also.

Both companies see numerous synergies through future cooperation. ACAT is now able to offer this perfect system extension of our plant technology as the exclusive partner of Spaans on the Austrian market.

It goes without saying that we will make continuing efforts to support the existing 800 Austrian screw presses.

Our internal contact person for service and repairs, Joseph Söllner, can be contacted by phone on +43 664 5327045.

We look forward to a successful cooperation with Spaans Babcock.



TOGETHER

This is the Motto of the 2014 ACAT Art Calendar



*We believe that in the long term only united forces combined with a positive prevailing mood, absolutely essential for a prosperous **TOGETHER**, leads to success.*

Therefore, we hope that all the friends and partners of ACAT enjoy together with us, the works of art illustrating our calendar every day in 2014. Look at the pictures and let yourself be carried away by their fascinating expressiveness!

*What else can be said about this year's motto **TOGETHER**? Our guest author **GERTRUDE MITTERBÖCK** has made some reflections on this topic.*

What does together actually mean?
Everyone longs for - for being together.

At all times being together is important for mankind.

Certainly everybody knows from experience how it feels if togetherness is not possible, because it is not as easily achievable as everyone would like.

If people live together day-to-day conflicts are bound to occur, because everybody thinks feels and acts in his individual way and everybody thinks they are right. Often opinions differ; they are not always the same.

What is the reason?

Human beings are different to each other and they are not always of one mind. Each person is a distinctive

and unique individual. Probably it would be very boring, if we always agreed and if we did the same things. Many conflicts arise from the fact that some people think that they are entitled to know exactly what their counterpart should do for better living.

Why do we care more often for others than for ourselves? Is it so difficult to concentrate on oneself and let the others be different and let them live their lives in the way they want. In a peaceful co-existence you can note how attractive individuality can be.

Different opinions, views and talents indeed give us the opportunity to develop further as a person. Is it really necessary for a co-existence to have only one mind? Look at nature: thistle and daisy stand side by side -

they do not regard them enemies. The stone in the water – they are not at war. They all retain their individuality, they change, but they leave each other alone. That is the reason why they can be together.

*You must - leave me alone
I must - leave you alone
But we must never leave alone - togetherness*

Ernst Förstl

Communication is one of the cornerstones for a harmoniously living together.

Communication (from Latin *communicare*) means, "to share", but also to "join together".



The artist: SOLOMON OKPURUKHRE, painter, sculptor, computer graphic artist and exhibition organizer



- Born in Lagos, Nigeria
- 1973 – 1986: Formed at various schools and institutes
- 1986 – 1991: Travels

- and explorations
- 1991 – 1999: Freelance painter and sculptor in Dakar, Senegal
- Since 1999 married to an Austrian, four chil-

- dren, lives and works in Waidhofen/ Ybbs, Lower Austria
- Exhibition organizer
- 2001 Founder of the SARTO Art Agency

FLAMENCO AN ART OF PERSONALITY - and My Great Passion

This is the “dancing credo” of Bernadette Kerman, Business Assistant, Department of Paper Technology at ACAT

Flamenco combines all things required for the head start in work today. Today expertise is no longer sufficient to be successful in professional life. Whether in politics, in the IT sector or in the automotive industry, people with clear messages, strong presence, passion and communication skills will succeed. It is not always fair, but it is a reality. As a "side effect" precisely these skills are acquired by dancing Flamenco. Each flamenco dancer knows that in flamenco dance lessons you learn much more than just step sequences. Flamenco changes you and your life and you acquire skills you never would have thought, for example, discipline, posture, presence and dignity. Besides a profound training, which is great fun, body language and nonverbal communication are improved. You get new vitality, clarity and energy for personal goals. You learn to spread recognition, to listen and to decide quickly.

How Bernadette Kerman came to dance flamenco?

Since the age of five dancing has accompanied me. I started with classical ballet, tap dance, modern and jazz dance were added later. Some years ago I had dared the "adventure flamenco" that enriches my life incredibly: it includes the regular dance training, workshops with professional stage dancers from Spain (for example Belen Cabanes, Mercedes Ruiz, Leonor Leal, and many others) and performances at fiestas and charity events. I also teach in a dance workshop in Darmstadt in order to pass on my passion for flamenco dancing. The cooperation with singers and guitarists leaves plenty of room for my own creativity.

The history of flamenco

The roots of flamenco can be found in a small territory of Andalusia, which mainly comprises the provinces of Cadiz and Seville. The mythical quarter of the Gitanos (Spanish Roma) like the Barrios (part of town) Santiago and San Miguel in Jerez or Seville Triana are regarded as its birthplace. In the 15th century the gypsies originating from India immigrated to Spain and enriched in particular the multicultural Andalusia with their talent for music and dance.



Photos: Kerman

Bernadette Kerman: “Flamenco combines all things required for the head start in work today.”

It has been proven that already hundred years ago there were singings belonging to the basic styles of flamenco. But only since 1860 a new form of music called flamenco has been mentioned. During this time the dance elements and the songs accompanied by guitars were mixed with the older laments, the Cante Jondos, to the very deep and meaningful art of flamenco. With the rising interest in flamenco the commercialization started. Years before Europe the popular trend of concert cafes had reached Spain. The first concert cafe opened in Seville in 1847.

Mainly the elegant, aristocratic upper class met there for talking and listening to cultivated piano music. Next to them the new Cafes Cantante were established that combined flamenco performances and dining, and for the first time, the flamenco artists were offered employment contracts with a fixed and regular income. It was the era of the greatest activity in the development of flamenco. Therefore it is called the "Golden Age" (La Edad de Oro).

The period from about 1910 to 1955 was characterized by the Opera Flamenca, a kind of Flamenco-musical. The sin-

gers, who usually were surrounded by a kitschy folklore atmosphere and who sang with vocal acrobatics, often became stars of theater and film. But thanks to the companies of excellently trained dancers, like La Argentina, the Baile- flamenco and other Spanish dances conquered the major stages of the world. The flamenco guitarists and singers, who accompanied the dancers on journeys abroad, also sparked the excitement of the audience for this deeply moving art. A particular appreciation was given to flamenco when he was appointed a UNESCO Intangible Cultural Heritage in November 2010.

The basic elements of the flamenco

For the further development of flamenco, the interaction of the three elements Cante (song), baile (dance) and toque (guitar) was essential. Since the introduction of the cafes Cantantes a professional "cuadro flamenco" consists at least of one Cantaor, one Bailaor and one Tocaor and a Palmero, who supports them with rhythmic hand clapping (Palmas).

Baile, the dance

The flamenco dance is characterized by "La Postura" the impeccable posture: the back held in a marked back bend, the chest high raised, the shoulders low, the look proud. In contrast to the oriental dance, where the center is the navel, the flamenco is danced heart first. Each gesture is an exclamation, each step is meaningful. Space is the element of the ballet: the dancers take up

space with space-taking jumps and turns. The element of the flamenco dance is Mother Earth. This is particularly evident at the taconeo, the percussive footwork with nailed shoes.

The flamenco dancer is both musician and dancer. He is not only heard by its palmas (clapping), pitos (finger snapping) and zapateados (footwork), he has also a strong influence on the dynamics and the tempo of the performance. It can be said that the dancers set the pace, and the musicians adapt it. Therefore, the flamenco dance can only develop with live music.

Palos, the styles of the flamenco

The styles of the flamenco referred to as palos. As a story is told with formal aesthetics and textual content, the knowledge of styles is important, because it offers the public a deeper understanding of the music. A flamenco performance is animated by a knowing audience and that is evident by the quality of jaleos (cheers) and the intermediate applause. At the flamenco the communication between the artist and the audience is based to a great extent on the mutual knowledge of styles. They express common basic sensitivities, such as loneliness at the Solea or pleasure at the Alegria.

Or they provide background information, such as the Carcelera, the prison song, or the Taranto, the song of the miner-workers. Others are memories of a landscape or a city, like Granaina and Malaguena.



Literature, video-clips and further information on flamenco:

This article is based on the book of Gitta Merkle: „El Arte Flamenco“. The only German language magazine on the subject flamenco "anda" and the website www.anda.de informs on current productions. Video-clips of current events are available online on www.flamencotv.es

“Flamenco Works” provides seminars and workshops for employees and managers, as confident appearance or superior leadership cannot be learned from books or power point presentations.

ACAT - CHARITY

RunningMiracle : Collect Kilometers for Charity



Photos: Gabi Horak



A great deal of the money achieved is due to the excellent running performances of ACAT's young talents

On the 8th May 2013, 1222 highly motivated students of the BG / BRG Pukersdorf, the VS and the SPZ Pukersdorf, laced their trainers to actively engage in the fight against poverty. The Running Miracle is a charity event organized by Young Caritas. It took place at the sport field Speichberg. The students ran 4238 kilometers and collected donations for the children and youth of the mother-and-child houses of the Caritas

Vienna and for people affected by hunger in the Sahel. Thanks to their commitment, the Running Miracle lives up to its name as more than 25,000 euros was collected.

The young talents of the ACAT company were highly motivated and a great deal of the money achieved is due to their excellent running performance.

Text: Erich Sailer

ANNIVERSARIES

Ursula Jekal: 15 years of ACAT accounting in your trustworthy hands



Photo: Christine Nestler-Kenzian

Ursula, we are horrified to realize that there is not much more time for us to count on your reliable service, because in a few years you will enter into your well-earned retirement. Who, with the same patience of a Saint, will ask our field staff to hand in their receipts on time to complete the monthly reports? We hope that you will have this same measure of patience for your future grandchildren - with 3 children, now 22 years old there is a realistic chance you will have some, but until then, we hope that you will continue to enjoy your

work at ACAT accounting and that you will pass on your comprehensive knowledge to your young colleague. While waiting for grandchildren, you will finally have the opportunity to enjoy your garden. Due to lack of time you only could maintain it during recent years.

Dear Ursula, we really appreciate you and we hope that in the few years left to your retirement you will be what you are, a cheerful, loyal colleague.

We sincerely congratulate you on 15 years of loyal service.

HR

ANNIVERSARIES

Ewald Kern: 15 Years of established management of the ACAT environmental plant and mechanical engineering division

With this anniversary announcement one can clearly see how quickly time flies. It is 15 years now since our Ewald Kern laid the foundation for the expansion of ACAT mechanical engineering with much effort, enormous expertise and great enthusiasm.

It was and it still is, difficult to survive in this industry. If one has never been an insider of this business one can never know exactly how back breaking the work is there.

Within the crisis-ridden industry of investment goods - most of the activities of this department fall in this category - there is only limited scope for development, and only with great personal effort, can the future be secured.

Ewald, we thank you for your tireless hard work and for your personal commitment, for your loyalty you have shown to our company. We sincerely congratulate you on your 15th anniversary and we look forward to many more years of successful cooperation.

MZ



Gabriele Horak: 10 Years 1st class Organisation at the back-office of our Industrial Chemicals Department



For 10 years Gabriele Nicole Horak has been employed at the back-office of our Industrial Chemicals Department. Her responsibilities include order processing, organization of samples and many administration activities. Gabi, – as we are allowed to call her – restores order to the chaos caused by the field service team sometimes and she keeps the overview even in difficult situations. She is very reliable and she has a

high level of commitment and flexibility. She also likes to learn something new and she supports IBS Division as a stand-in in the administration of purchase prices and in the preparation of price lists. In her private life Gabi Horak does sports, she loves animals and sunflowers, enjoys photography and just recently is riding a Vespa. As Gabi Horak also supports the department management, I would like to say thank you on behalf of the entire team for her commitment and excellent cooperation.

FR

Photos: Christine Nestler-Kenzian

Sabine Weinbrenner: 10 Years ACAT Service Center Scheibbs

For 10 years Sabine Weinbrenner has been the good spirit and the soul of the service centre in Scheibbs. At the age of 20 she took the helm of the administration, which is one of the most important business areas, and henceforth she has kept everything under control.

While the "Lords and Masters of Creation" construct machines and switch boards someone has to keep an eye on stock / inventory, accounting, organization of supplies and on many

other things that are handled almost unnoticed on the sidelines. It is not easy to gain acceptance in the rough world of mechanical engineering and packaging of chemical products, but Sabine masters her task superbly, and, by all accounts, without protest. In addition to her duties in Scheibbs she participates in the ISO certification process with her comprehensive experience and she also conducts the internal audits.

Sabine, we warmly congratulate you on your 10th anniversary, we thank you for your great achievements and your loyalty to our company over the past years and we are looking forward to many future decades of cooperation!

MZ



Theo Weinbrenner: 10 Years in the Service of our Company



Following the call of the powerful voice of his father, Theo Weinbrenner jun joined our company as a working student during his studies at the University of Linz, so he had the chance to become familiar with all the intricacies of plant engineering and maintenance work of our service center in Scheibbs. After his graduation Theo jun. took over the management of our operations in Scheibbs. Since this time his main task has been the introduction of a new generation of mechanical

engineering plant for dissolving and dosing equipment, and he has been responsible for the efficient maintenance and service system in Scheibbs. Recently the production and the packing of our upcoming division for functional chemicals for commercial use were added to his activities.

Sometimes it is really an exciting task to meet all needs and requirements, but Theo is working tirelessly and with great commitment to fulfill the tasks of a modern service provider and to actively support our sales departments.

Theo, we congratulate on your 10th anniversary and we look forward to a successful future together.

MZ

NEWCOMERS

Magdalena Aigelsreiter

In July Magdalena Aigelsreiter succeeded Mrs. Rolek, at the plant engineering and logistics centre in Scheibbs. The 20 year old took over all the agendas in logistics and internal administration. In the near future she will also support the FreshWave®



team with her youthful enthusiasm. She completed her apprenticeship as a trained retail sales woman at the Raiffeisen warehouse Steinakirchen. After the excellent graduation of the vocational school, she rises to a new challenge by attending evening classes in the gymnasium to pass the school leaving examination. Her leisure activities include skiing, ice skating and volleyball. With her sociability, her purposefulness and helpfulness she has enriched our team. We wish her much fun and success for the upcoming challenges Welcome to the team!

WT

David Koesmartono



Photos: Christine Nestler-Kenzian (2) zVg (1)

Since 1 July David Koesmartono has been member of our paper technology team. After finishing school he decided to do social work at the St. Pankratius Altenheim (Iserlohn). It was his duty to bring variety into the everyday life of the elderly residents.

Afterwards he decided

to study mechanical engineering and communication sciences. He was attracted to mastering the unusual combination of these very different study fields. During his studies in Aachen, the opportunity arose to participate in rally sport for one season. The automobile in general and racing in particular are his great passions. If time permits, he tries to visit races and rallies. Furthermore he has a great passion for football. He likes to watch football matches on TV or to have an occasional "kick" with friends. David Koesmartono will support our sales team as a sales engineer.

NK

Christian Wellenbrock

Since 1 September Christian Wellenbrock has been member of the paper sales team. He started working in tissue and board production, but in recent years he worked on one of the most modern newsprint paper machines in the world.



Being a practitioner in the fields of laboratory, stock preparation and paper machine and he will enrich our paper team. He mainly will serve our clients in Western and Northern Germany. Christian Wellenbrock spends his spare time with his young family. He is an active member of a hobby football team and moreover he loves riding his mountain bike

NK

Imprint inside acat, issue 18, November 2013

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Layout: Dieter Spet

Cover: CUER/NASA

Photos unless indicated otherwise: ACAT

Printing: Bösmüller Print, A-1200 Wien

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