



# GAWGROUP

## NEWS FROM THE GROUP imteam

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**GAW**

**KRESTA**  
Anlagenbau Gesellschaft m.b.H NfG & Co KG

**osmo**  
membrane systems

**ARTEC**

**thomas**  
SPEDITION  
Gesellschaft m.b.H.

edition 1 | 2010  
limited edition

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People

## GAW technology for South Korea's largest paper machine



### Shortcuts

#### New GAW Dispersion System meets with Good Feedback

The CDS Dispersion System recently launched onto the market by GAW has created great interest in customer circles. Thus several orders have already come in during the last few months for the units, which provide dry product input for pigment and complete colour coating processing. You can read more about CDS on Page 2.

#### RRS System at Sappi Guarantees Problem-Free Production Processes

The plants in Stockstadt and Biberist have been successfully connected to the Sappi RRS System - now all the relevant master data such as raw materials, products and formulations is transmitted to the GAW Guidance System via „MICS Telegrams“ and the raw materials consumed in production are reported back. The fill status of the tanks is also passed back to the RRS system once daily. In addition, in the Biberist plant the thickening facility software has been updated to the latest version. The implementation of both steps was completed at the beginning of 2010.

#### Reno De Medici S.p.A - Changeover to GAW-PLS in Two Locations

With GAW-PLS, the colour coating plant of the Reno di Medici location in Blendecques, France, has been refitted with a new modern guidance system. The great challenge here was the time factor: In only three days around the turn of the year, the IO were exchanged, the hardware was rewired, an IO check was carried out and the operators received training in the new system. In addition, at the location in Santa Giustina Bellunese, Italy, the complete control of an entire colour coating processing facility was converted to GAW-PLS, including work stations for a cardboard machine which was still running on relay technology. As well as the delivery of the guidance system with three operating platforms, the order also included system training, installation supervision, activation and optimisation.

## Editorial

For many years, countless books and symposia have impressed upon us over and over again that Austria has long been part of the post-industrial age, industrial production has served its time and we must now concentrate instead on service and creativity. Yet 2009 has painfully demonstrated: If industry has a difficult time, then lots of people have a difficult time. The prophets of the industry-free, service-based economy have clearly been shown that successful tourism, solar industries and wind parks alone cannot create an upward economic trend and have seen the significance of collaborative labour institutions and industry events both internationally and globally. And this by no means exclusively applies to the industrial flagships, but also to thousands of companies engaged in material goods production and the accompanying services, whose well-being is directly connected with that of the large corporations. Taking a glance at the current job market data is enough for us to recognise that every significant sharp decline in industrial production or imports/exports has an immediate negative impact on economic growth and prosperity, and that an economic upsurge will not be possible in Austria without a broadly constructed and internationally competitive industry. And it is precisely this international orientation which will also safeguard the growth and success of the GAW Group. Whether it is in the paper sector, recycling technology or the energy investment sector - the really large investments take place above all within the markets of China, South Korea and India. And the dimensions are immense: The paper giant, Nine Dragons Paper, will extend its production capacities to 11.1 million tonnes per year by 2011, the first integrated cellulose and paper factory is being created in South Korea and the world's largest paper machine for coated fine paper was only recently put into operation on the Chinese island of Hainan. In addition there are numerous other projects running and in spite of the still tense global economic situation GAW is in the fortunate position of having full order books. We are also especially pleased at the good start

made by our new GAW Group member, ARTEC, because during its first eight weeks, the plastic recycling machinery builder has already booked incoming orders of several million Euros. There is lots going on within our group of companies and you can read more about it within these pages. I hope that we can also offer you an interesting read this time too, and wish you valuable reading enjoyment with this edition.

Mag. Jochen Pildner-Steinburg

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Editorial team edition 1 | 2010



Company Report

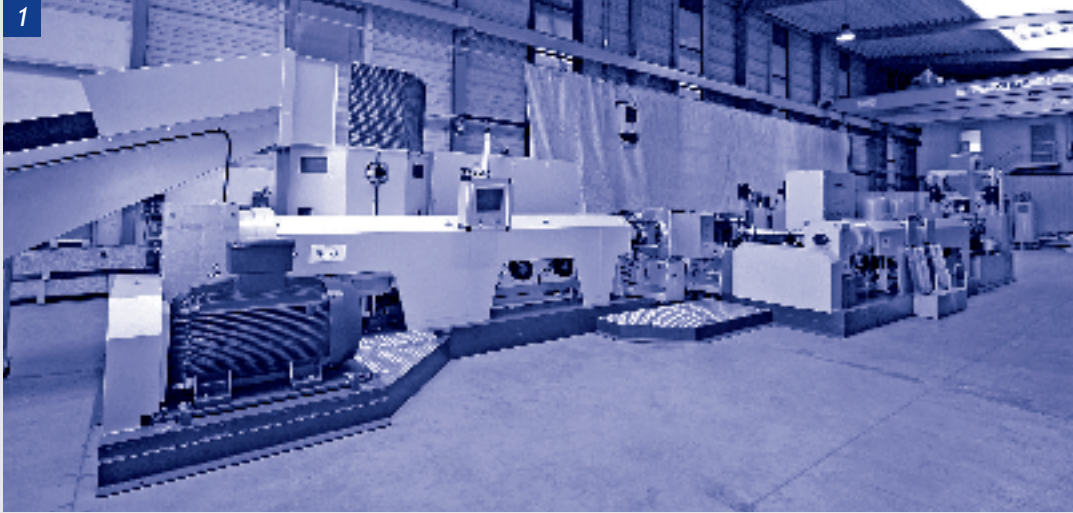
1   Plastics recycling system

# New Member of the GAW Group: ARTEC machinery GmbH

The machine builder ARTEC offers tailor-made solutions for all recyclable plastics.

The Upper Austrian machine builder, ARTEC (Advanced Recycling Technology), with its headquarters in Kematen an der Krems, has now been a member of the GAW Group since the spring. ARTEC specialises in the production of recycling facilities for plastics, and in particular in integrated recycling systems for the application in factories producing polymeric films. The machinery is custom-designed according to material and capacity requirements, built at the Kematen site, a test run is carried out and then delivery takes place on a turnkey basis.

ARTEC employs 15 co-workers, and the export quota is 90%.

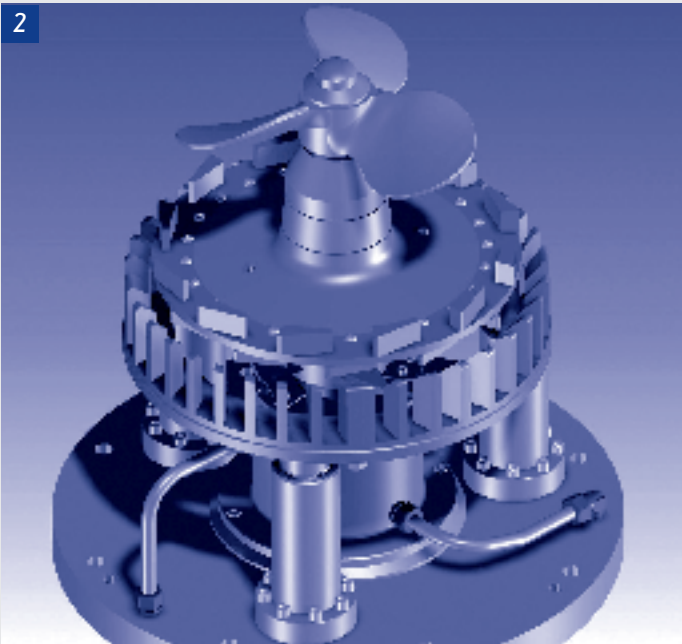


Competences

2   GAW-Combined Dispersing System

# GAW CDS Optimises Dry Product Entry

The Combined Dispersion System (CDS) allows for the optimised input of dry products and reduces the amount of dispersal product to be used with consistently high slurry stability and high solid contents.



Even when dry products are being input into the coating water or a pre-existing slurry, excellent wetting is enabled by the CDS (Combined Dispersing System). With a rotor and stator coating of 0% and a strongly designed entry funnel, the dry product is input and finely distributed into the liquid phase by the CD rotor. Afterwards dispersion follows with high shear rates in combination with the GAW-VST<sup>1</sup> with continuous adjustability up to 100 % coating. Input behaviour and shear rates can be adjusted on the one hand by means of the VST and on the other hand by the rotation speed during operation. Flow technique facilities can also further influence the input behaviour. This allows for wetting in the „low-shear“ region and dispersion in the „high shear“ region, with short batch cycle times and high solid contents. Furthermore, clear savings in terms of energy additives are achieved with a consistently high slurry stability.

**Compatibility**

CDS is fully compatible with existing GAW-VST dispersion units, which ensures that retrofitting is simple.

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<sup>1</sup> The „GAW VST system“ is based on the continuous adjustability of the rotor/stator coating during operation.

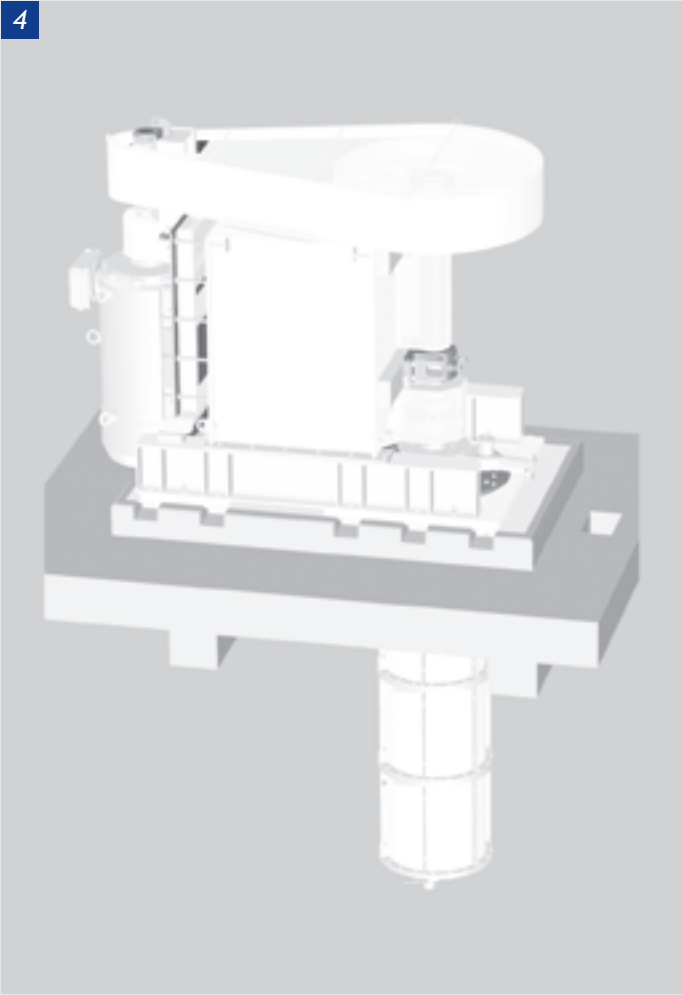


3   Milling media

4   GAW Ultramill / vertical

# GAW Ultramill – Milling Technology with Multi-Faceted Applications

The new vertical GAW milling installation Ultramill is used for the milling of a wide variety of media, for example calcium carbonate, clay, PCC, but also for the tailoring of soils containing platinum or gold.



The new vertical mill, which is already successfully used in more than 90 applications worldwide in its execution for the milling of natural calcium carbonate, permits multiple adaptations. Amongst others, it can be also used in platinum mines and gold mines to loosen the high-value material from the rock - with the advantage of a substantially higher selectivity than when the customary procedures are used.

**Low Energy Consumption with High Installation Efficiency**

The milling machine uses an extremely energy-saving milling ball technology, which enables it to achieve specific and tailor-made particle dimensions from 0.5-200 micrometers. This can be easily adapted for different milling processes. The milling discs are built in the exclusive GAW turbo design and are of modular configuration to allow for a wide variety of end products. All the parts used for milling operations are designed to be able to slide around the shaft in any required configuration. This guarantees maximum flexibility of design and optimises the energy consumption, installation efficiency and maintenance costs.

<b>Different Sizes</b>
Sizes range from the Ultramill 100 with a milling chamber volume of 100 l, engine capacity of 22 kW and a unit weight excluding milling balls of 0.9 tonnes, to the Ultramill 4000, with a milling chamber volume of 4000 l, engine capacity of 830 kW and a unit weight excluding milling balls of 32 tonnes.
<b>Added Value for the Customer</b>
Low energy costs
High milling efficiency
Efficient definition of particle dimensions
Robust construction
No seal leakage loss
No backing up problems
No filtration problems
Optimised heat dissipation
High reliability
Low maintenance costs
No oil-containing gear container
Standard IEC engines
Small physical size



# GAW delivers coating color processing system for South Korea’s largest paper machine

The Moorim Group is currently installing South Korea’s largest paper machine for double-sided double-coated paper and for which GAW is supplying the auxiliary material processing system and a complete coating kitchen with a capacity of around 2,400 tonnes of coating color per day. Once complete it will be among the world’s largest such facilities.

**An environment-friendly integrated production line**

The new paper machine is being installed at the Moorim Pulp & Paper mill in Ulsan and will mainly use pulp produced on site, making Moorim South Korea’s first integrated pulp and paper mill. From pulp through inputs to the finished product, everything will be produced on a non-stop line, a concept that offers both economic and environmental benefits: there is no need to dry pulp (because some market pulps - NBKP, CTMP - will be used) and the steam produced in pulp production can be

used in the manufacture of paper. This means the mill uses no fossil fuel under normal operating conditions.

## 2,400 tons of coating color per day

With a capacity of up to 2,400 tonnes of coating color per day the GAW coating kitchen serving the offline coating machine will be one of the largest of its kind. The contract is worth several million euros and covers the planning, delivery, supervision of assembly and start-up of the unloading, storage, preparation and measuring of pigments and binding agents and auxiliary materials and fully automated processing of the color coating.

The start-up of the machine, slated for spring 2011, will boost the Moorim Group’s total fine paper production to over one million tonnes p.a., making it South Korea’s largest manufacturer of fine paper. The site in Ulsan has belonged to the Moorim Group since April 2008. The company also owns fine paper production

lines in Jinju and Daegu. The construction of the integrated mill also fits perfectly into the government’s plans to generate sustainable growth through the greening of the country’s economy. During the course of the first five-year plan energy consumption is expected to fall significantly, with the contribution of renewables rising from just 2.3% at present to eleven per cent. Projects ranging from the decontamination (for example the present wastewater treatment system will handle paper line waste-water) of the country’s four main rivers to the stepping-up of initiatives to use waste for fuel are expected to create around one million jobs by 2012.

The Moorim Group is building South Korea’s first integrated pulp and paper mill.

## Projects



**Economic outlook barometer**

When the Asian economic crisis erupted at the end of the 90s, South Korea saw its banks and real economy collapse. After two quarters of recession, a further four quarters passed before an upturn got underway. 20 years later there is evidence that the government has learnt some lessons: When the global economic crisis took hold, the government invested EUR 43 billion (6.9 % of GDP) in stimulus measures. The package for banks was rolled back but the measures for the real economy are likely to prove invaluable, ranging from assistance for large enterprises and SMEs to government service schemes for the underqualified. It also helped that the proportion of the country’s exports to the US, the EU and Japan has fallen to 31.7% from 71.4% in recent decades. Today the high-growth BRIC states are at the top of South Korea’s list of customers and the country’s economy had regained its level prior to the outbreak of the crisis by 3Q09.

5 Factory construction In Ulsan

# GAW – Colour Coating Plants and Fibre Extraction System for Changle Numat Paper

In the summer of 2009, GAW received the order to supply a complete colour coating processing facility including work stations, a wet end chemical processing facility, plus a deinking facility for the PM1 paper machine and an additional filtration system for fibre separation in the coating paint cycle at the work stations, the GAW-Fibre Extracting System. The order value is more than 1.6 million Euros. The contract was concluded with a subsidiary of the Shandong Century Sunshine Paper Group Company Limited, the largest white top liner manufacturer in China.

**Aligned with the Highest Customer Requirements**

As the quality leader in white top liners with the highest shine and the highest smoothness, the customer made particular demands for the delivered components. The processing plants were

designed by GAW especially for the customer’s demands and feature the following components:

- Tanks
- Agitators
- Rotation filters
- Pumps
- Armatures
- Instruments
- Conduits
- Electrical controls
- Computer control systems
- Power elements (drive systems and engines)

The scope of supply additionally included the engineering, the GAW Batch Management aX and supervision of the mechanical and electric installations, as well as the implementation of the facilities and the on-site training of the staff by certified GAW specialists. Start-up of the facilities is planned for autumn 2010.

The Shandong Century Sunshine Paper Group is the largest white top liner manufacturer in China.



6 Industrial location Weifang with more than 8.5 million inhabitants

**Industrial Location Weifang**

Weifang is located to the southeast of Peking halfway between Jinan and Qingdao, and is a metropolis with more than 8.5 million inhabitants. The city to the south of the Yishan Mountain and to the north of the Bohai Sea counts as the „corridor to the Eastern province of Shandong“ and is rich in resources such as iron, coal, gold, oil, granite and marble. Weifang is the fourth largest industrial base of Shandong. However, it is agriculture which is most important economically. Weifang is Shandong’s most important agricultural region. Weifang is known for its handmade dragons, which are produced in the factories there. An International Dragon Festival which attracts numerous visitors takes place in the city annually.



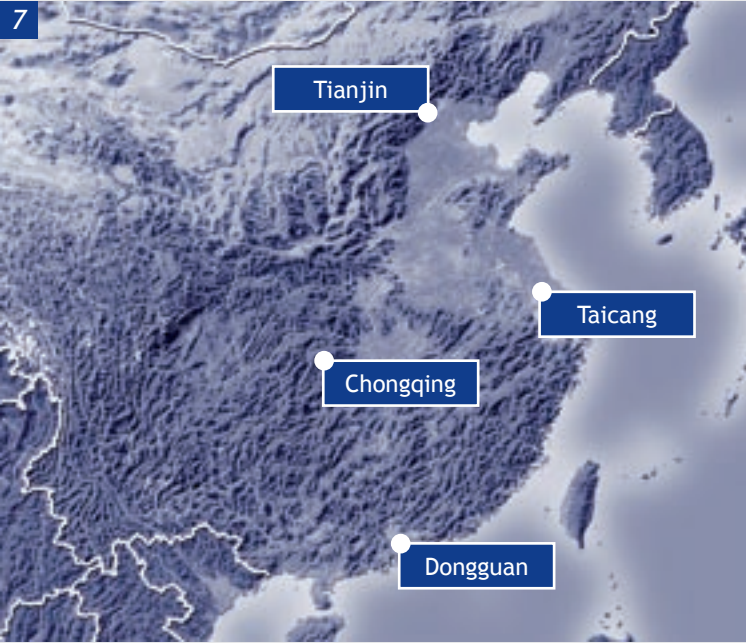
Projects

7 Overview of locations  
Nine Dragons Paper Group

**The Paper Group of the Richest Self-Made Woman in the World**  
*After setting up Nine Dragons Paper in 1995, within only 11 years Zhang Yin (the Hong Kong spelling is Cheung Yan) rose to become the richest person in China and at the same time the richest self-made woman in the world. Zhang Yin recognised in good time that the economic rise of China would create a huge demand for paper. She emigrated to the USA, started to collect waste paper on a large scale, very successfully exported it from there for reprocessing in China and soon afterwards her company became the largest exporter of waste paper in volume terms in the USA.*

# Multi-Million Orders from Nine Dragons Paper

All 34 paper machines of the largest Chinese packaging paper manufacturer include the know-how and machinery of GAW.



**G**AW and the stock market-listed Nine Dragons Group, which is currently pursuing a policy of extreme expansion, have been linked together in a successful partnership for many years. By the end of 2011, the paper giant will expand its production capacities by at least 26% to 11.1 million tonnes per year and has commissioned GAW with the delivery of the facilities for coating paints, de-inking chemicals and thickness processing, the chemical plants for paper production, the work stations and also the calcium carbonate wet milling systems.

Five New Paper Machines

In total, five new paper machines will be set up - the PM 21, 28, 32, 33 and 34 - in the locations of Taicang, 50 kilometres from Shanghai; Tianjin, where in 2009 two new paper machines already went into operation; Dongguan, one of

the most important locations for the production of paper and cardboard in the world, and Chongqing. The entire order value amounts to 14 million Euros. As well as the planning and delivery, the scope of services also includes the supervision of the mechanical and electric installation, the commissioning and the on-site training. The core of the calcium carbonate facilities is the GAW Ultramills, which have been continually developed on the basis of long-standing experience and are now used more and more frequently with great success. (In addition, see also Page 2)  
Nine Dragons has been a customer of GAW for nearly a decade and it can be stated with pride that GAW has supplied all the paper machinery for the multi-national Asian paper manufacturer, which including machinery currently under construction comes to 34 machines after all.

# GAW – Wet Part Chemical Facility for New Paper Machine in Switzerland

The new GAW Colour Metering System guarantees the precise control of the colour quantity and a pulsation-free dosage.

**V**oith Paper commissioned GAW with the delivery of a wet section chemical facility for the new PM7 paper machine at Perlen Papier AG, near Lucerne. At the moment, this installation is the only paper manufacturing plant in Central Europe to have been completely newly built. The performance capacity is 1095 tonnes of newspaper printing paper per day.

Scope of Supply

In the wet section chemical facility manufactured by GAW, the chemicals needed in the wet section (constant section) are prepared and dosed.

**The wet section chemical facility essentially includes the following plant sections:**

- Filler delivery system
- Retention agent processing and delivery system

- Bentonite processing and delivery system
- Thickeners delivery system
- Fixative delivery system
- Colouring delivery system for 4 colours
- Delivery system for various small additives such as whiteners, Biocide, defoaming agents, etc.

New Colour Metering Facility with an Intelligent Guidance Control Unit

Until recently, concentrated colourings were diluted in the customer's own facilities before dosage to the paper machine. However at Perlen Papier the new GAW Colour Metering System is used, in which the concentrated colourings are measured directly in the paper machine without previous dilution. Due to the high concentration and the requirement for an absolutely pulsation-free dosage, controlling the exact dosage quantities where very small amounts are involved presents a special challenge. This is achieved through a special metering pump with an intelligent guidance control unit.

New Machine Guidelines as a Special Challenge

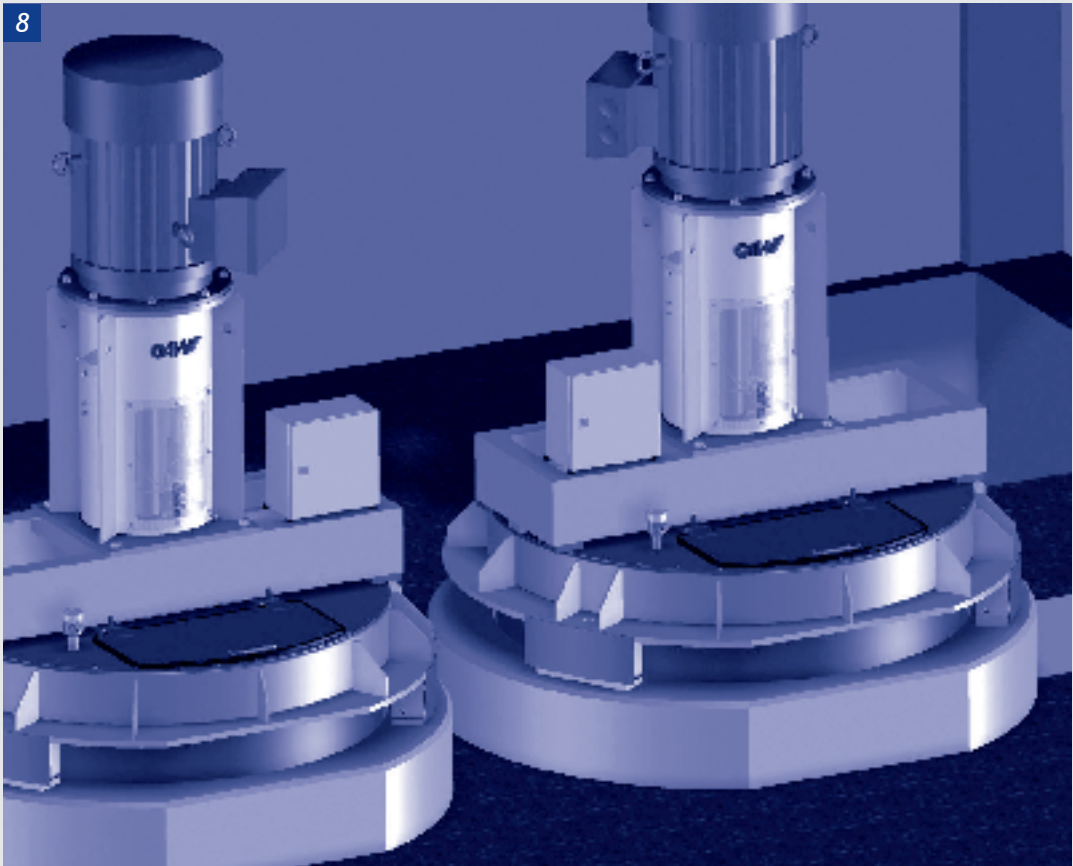
During the implementation of the project, the new European Union machine guidelines were applied, which came into effect at the end of 2009 and were also adopted by Switzerland as a non-EU member. However, as the list of „harmonised norms“ was published in the EU official gazette only a short time before the introduction of the new guidelines, there was some doubt about the validity of the various regulations. Hence „EC-compliant“ machines and sub-systems which had been approved for many years had to be reassessed and the designs - as far as necessary - adapted to the new guidelines. The installation started in April 2010 and functional tests and trial operations will go ahead in August 2010. The implementation of the installation is planned for autumn 2010.

8 GAW topdrive VST dispersion machines

# GAW Delivers Complete Colour Coating Processing Facility for Mayr-Melnhof

Leading cardboard manufacturer commissions GAW with the modernisation of the existing coating plants.

**M**ayr-Melnhof Cardboard Group is one of the largest folding cardboard box manufacturers in Europe and is the leading producer of coated recycling cardboard worldwide. GAW was commissioned with the modernisation of the existing GAW coating plants. As well as the two new GAW Topdrive VST dispersion machines and the expansion of the metering station, the extent of the work also included the complete renovation of the control system. The automation of the installation and the batch management required for the complete colour coating processing were achieved with the GAW-PLS automationX. The entire engineering plus the installation and implementation are taking place in close collaboration with the customer. The commissioning of the installation is planned for June 2010.





# Indian Paper Manufacturer Modernises Facilities for the Production of High-Quality Paper

Founded in 1984 and a division of Century Textiles and Industries, Century Pulp & Paper in Lalkua (District Nainital) is one of the largest Indian industrial companies still in family ownership. Century Pulp and Paper concentrates on the production of writing paper, printing paper and copy paper, with the raw material used being

cellulose from wood and bagasse, a fibre-containing by-product of the sugar cane from sugar production. In addition, it also produces rayon for the textile industry. Voith Paper and GAW were commissioned with the modernisation of the PM4 for the production of high quality copy paper and pigmented papers.

Century Pulp & Paper - one the largest Indian paper manufacturers - commissioned Voith Paper and GAW with the retrofitting of the PM4.

GAW is supplying the work stations for the SpeedSizer (Voith Coating Plant) and the thickening plant including the processing of calcium carbonate, salt and certain additives for surface treatments. The complete detailed engineering was carried out entirely in 3D. The commissioning of the facilities is planned for 2011.

# GAW - Reject Cleaner Facility for Paper Factory in Garda

Cartier del Garda, founded in 1956 and located in the middle of the town of Riva to the north of lake Garda, commissioned GAW with the delivery, installation and implementation of a reject cleaner facility. The cleaned rejects from paper machines 1 and 2 are collected, thickened, milled and then returned online to the production process as a high quality fibrous material or filler.

### Economic Efficiency and Environmental Protection

The treatment of the rejects within a special milling installation allows for a 100% return to circulation of the paper mass production and

reduces the quantity of fibrous material and filler necessary for production. As a result on the one hand the costs of paper raw materials and disposal are clearly reduced, and on the other hand, the depletion of raw materials is reduced, the load on landfills is sustainably lessened and transport expenses are noticeably reduced. The operation of the reject cleaner facility is supervised by the QCS of the paper machines, with the predetermined grain dimensions after milling being achieved through the guided input of milling energy and the combined effect of the rotors and milling medium according to the individually controlled ash content regulators of the paper machines.

Saving raw materials by returning cleaned rejects to the production process.

### The Best Paper Factory in Italy

The Cartier del Garda factory, established 45 years ago, has since 1997 been a company within the Lecta Group, a manufacturer of coated fine papers and special papers with a total annual capacity of more than 1,500,000 tonnes. The reject cleaner facility established in Garda is already the third of its kind that GAW has been able to implement in the Lecta Group. On account of its high technical and quality standards, Cartier del Garda possesses the title of best paper factory in Italy. With this as a reference, GAW will also succeed in establishing the return to production of the reject cleaners at other factories.

# GAW – Automotive Projects in the Finishing Stages

GAW proves its expertise in the automobile industry once more with Audi and Magna.



Peugeot 308RCZ - Final Inspection at Magna Steyr Graz

As already reported in the last edition of „imteam“, GAW was substantially involved in setting up the production line for the new Peugeot 308 RCZ. Thus, 27 engine palettes plus 10 rear axle palettes including pre-assembly of the chassis were delivered to Magna Steyr in Graz. The serial production of the new Peugeot sports coupé, intended as competition for the Audi TT and Porsche Caymann, started as planned at the end of November 2009. At the beginning of 2010, the successful final inspection of the project was carried out together with the Magna planning department. Currently about 90 vehicles per day are manufactured in Graz and by the end of 2010, 16,000 items will come off the conveyor belt in Graz. The production of the Peugeot 308RCZ will probably remain in Graz until 2014.

Audi Neckarsulm - Skid Conveying Technology Successfully Integrated

The low floor skid conveying technology for the successor to the Audi A6 in Neckarsulm was successfully integrated by GAW. Following the project start in October 2008 and a phased rebuilding of several medium-sized facility components, the final inspection will probably be carried out in August 2010. The project is characterised by especially intensive cooperation with the customer, as part of which the production conditions were continually optimised. Since production started the facility has been running free of problems and to the fullest satisfaction of the customer.



Audi Brussels -Conclusion of the Push Skid Installation Project in Autumn, 2010

The Audi A3 Sportback, the Volkswagen Polo and since 2010 also the new A1, are manufactured in the Brussels Audi facility - and for the first time in the company history, as a complete vehicle. Since August 2009, the push skid installation supplied by GAW, consisting of 34 push skid platforms with integrated lift tables, has performed solidly for the Audi A1 in the automatic test operations. The 0-series production in this facility began according to plan at the beginning of March 2010. The SOP date (Start of Production) is scheduled for the beginning of June and the maximum number of units will probably be reached in September 2010, with approximately 250 vehicles/shift and 2-shift operations.

## Projects

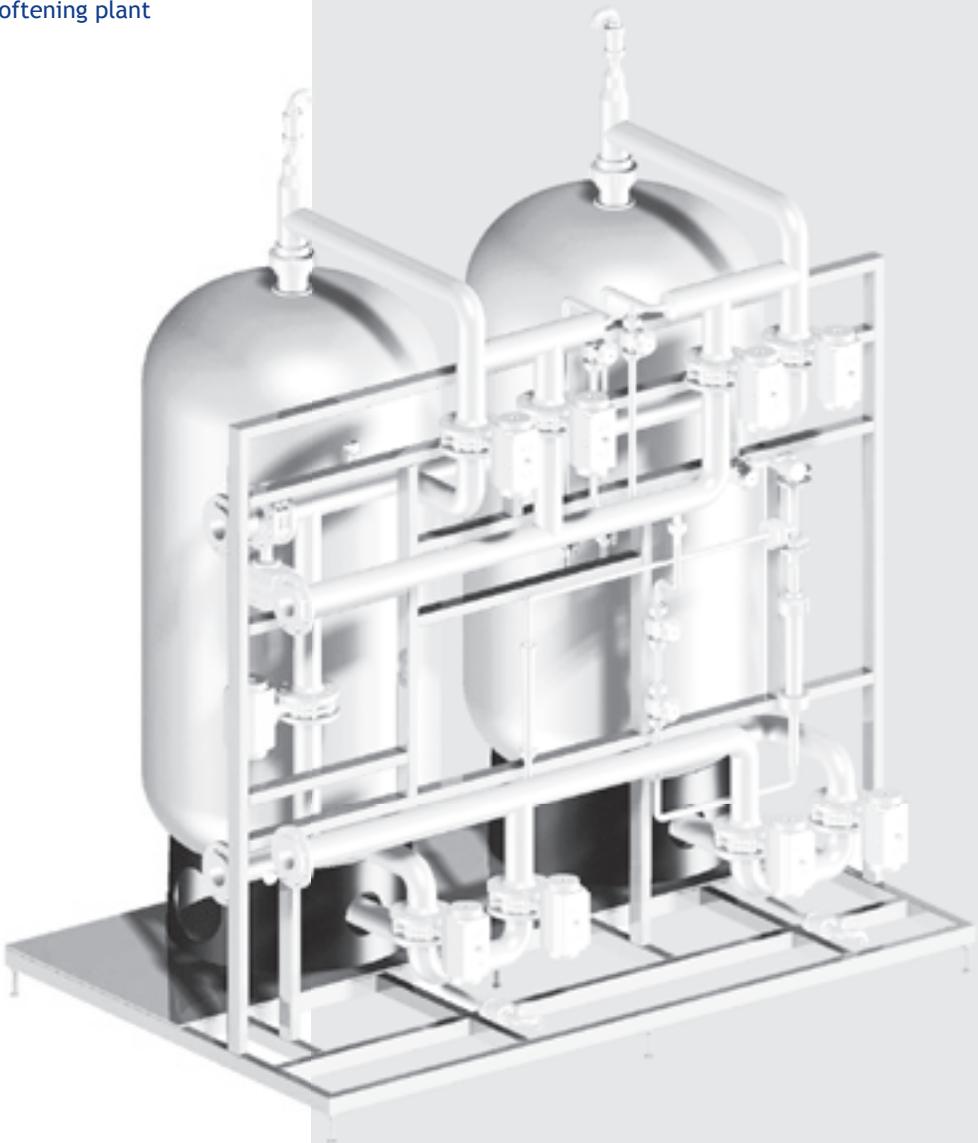
9 Push Skid Installation

10 Peugeot 308RCZ



Projects

11 OSMO-softening plant



# Paper Manufacturer is working with OSMO technology

OSMO plans custom-made demineralised water preparation for a renowned manufacturer of corrugated cardboard in Germany.

**11** At the end of 2009 a well-known German manufacturer of corrugated cardboard invited tenders for the renewal of the boiler feed preparation in an existing industrial power plant. The preparation system had been in operation for less than ten years at this time and no longer corresponded to the modern availability and automation requirements of the operator.

Technological challenge

The challenge for OSMO Membrane Systems GmbH lay in re-engineering the old system without interrupting steam production. The experiences that the operator had gathered with the existing system were first analysed and incorporated into the concept for the new system. For example the operator had been forced to replace some of the membranes in the old system after a short time and there was no further opportunity to test the installed membrane module during operation. Because of the low level of automation there were also only limited opportunities for remote monitoring.

Scope of delivery

The system technology delivered by OSMO comprises pre-filtration, conditioning and a reverse osmosis system with downstream water-softening system for the production of absolutely soft and low-salt drinking water in the so-called low salt content process. The maximum flow rate of the entire system is 24 m³/h, whereby the individual process levels of reverse osmosis and softening can also be carried out individually

if necessary. This substantially increases the availability of the system technology and represents an advantage for the client. In addition the reverse osmosis equipment was designed with the necessary automation to prevent exceeding the maximum concentration that is physically possible (scale control). This measure results in a long membrane lifespan. In the realised OSMO system it is also possible to test the quality of the membrane elements during operation (element control). The system technology was completely visualised so that it is now also possible to carry out efficient remote operation.

OSMO provided the client with a mobile, container type preparation system for the entire duration of the conversion to ensure that sufficient steam was available for paper production at all times.

# Small Facilities as a Trend – Miniflot and Chemflot

Compact and fully automatic, standardised small units such as „Miniflot“ and „Chemflot“ are in demand for waste water treatment.

12 Chemflot-unit

13 RSE-measurings

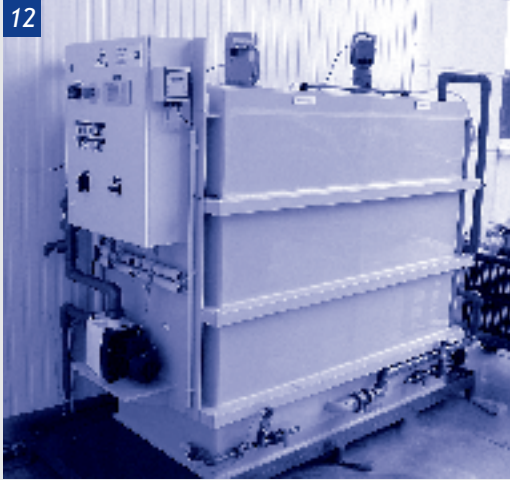
**R**SE Entsorgung AG, a specialist in the cleaning of industrial waste water, also supplies standardised small facilities as well as large facilities.

Miniflot Units

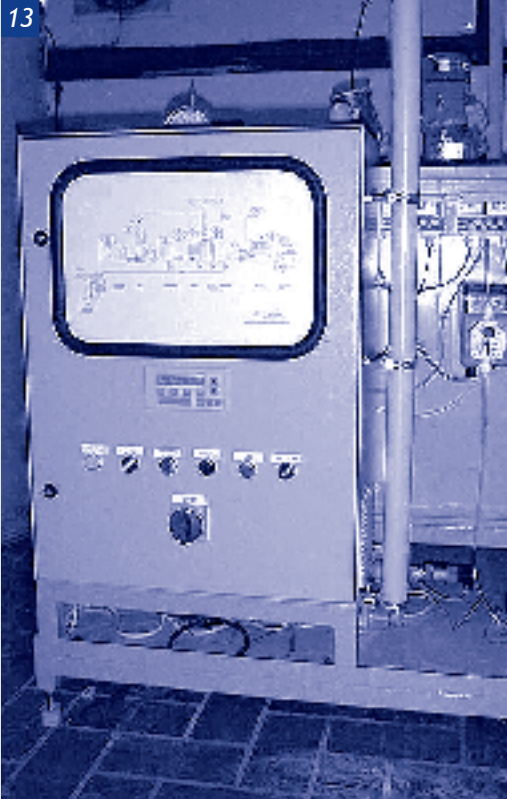
These units are based on the principle of electro flotation and are used for the processing of spent acid (in Azerbaijan), for the cleaning of emulsions (in Germany and Serbia) as well as for processing waste water from pickling operations (in Slovenia). The average capacity of these units is 2 or 5 m3. With their compact construction, the fully automated functioning (up to the filter press drainage) and the cleaning of large amounts of industrial waste water to indirect discharge quality, Miniflot units are in demand as waste water treatment facilities.

Chemflot Units

Chemflot units on the other hand are based on chemical precipitation / flocculation and are primarily used for the cleaning of waste water



from pickling operations. These involve fully automated batch systems - designed on the basis of experiences with the Miniflot units. Chemflot units are also suitable for the reduction of Cr6 + (chrome) or the removal of cyanide from processed water. This type of equipment was developed in 2008. Up to now, five units have been delivered and other orders are being processed at the moment.



# CCI Modulbau – Turnkey Delivery to Napalm Records

CCI achieves another construction project for the Austrian heavy metal record label based in Eisenerz.

14 Company area Napalm Records in Eisenerz



**N**apalm Records primarily concentrates on Underground metal and Goth music. Famous bands of this genre such as Falkenbach, Vintersorg and Tristania are under contract here - these groups have also to some extent managed to make it into the charts and have also been able to position themselves with the mainstream audience away from the pure metal scene. As well as marketing the bands, the head office of Napalm Records in Eisenerz, which has

other subsidiaries in Texas, USA and Canada, is also responsible for the merchandising of the fan articles. More than 15,000 articles are currently sold through an online shop. In the past CCI Modulbau has already carried out construction projects for the company headquarters in Eisenerz. At the beginning of 2010, a second warehouse was handed over on a turnkey basis. Other extensions to Hall 1 and the existing office space are being planned.



# KRESTA Successful in the Energy Investment Sector

Entering specific strategic partnerships has paid off for KRESTA over recent years. In this way they have been able to establish themselves particularly successfully in the energy investment sector and win market share, especially in the areas of plant feed-water systems,

high-pressure conduits, condensate systems and condensate containers, and are currently working on corresponding projects in Poland, France, South Africa and the Netherlands. The product portfolio was also significantly enlarged in 2008 with the acquisition of the steel

construction service company, KWE, which has developed during the past years to become a specialised supplier for the chemical and oil manufacturing industry.

Introduction: Strategic partnerships extend the product portfolio of KRESTA.

## Projects



15 Condensate tank as a part of a caloric power plant

# The Best Minds and Hands for the Austrian Location

A modern professional training system distinguishes itself by combining a practically oriented education with the provision of well-founded specialised knowledge and key competences. An apprenticeship fulfils just these requirements and particularly in the industry which represents the backbone of our national economy, committed young people looking for professional training are in great demand. And the people who work in the industry can also be proud of themselves: The jobs are challenging: you need intelligence, intuition, powers of observation and a sense of responsibility.

### Professional Training with the GAWGROUP

A sound technical training in the interest of the future is a major priority of GAW and KRESTA. Both companies offer the technical draughtsmen, steel structure technicians and metal-working technicians who are just starting out a variety of advanced training programmes, along with opportunities to take their vocational ma-

triculation exams either alongside or after their training. So not only is the path to a specialized career open to the apprentices, but also access to a course of studies.

### Industrial Engineering Education: The First Ones are on Target

The fact that industry in general is very intensely and impressively committed to educating apprentices is also reflected in the success of various innovative professional training concepts such as that of the Styrian industrial technician - an innovative combination of the final apprenticeship exam in an industrial profession, a foreman's exam and vocational matriculation exams. The interlinking of the dual education system with higher education opens up prospects and opportunities for young people, and is currently being taken up by about 250 Styrian apprentices. In the spring, the first five industrial technicians received their certificates from industry president Jochen Pildner-Steinburg.

By completing an apprenticeship, young people can tap into a vast number of career options in the GAWGROUP.

## Focus on

- 16 fltr Stefan (Steelwork engineer)
- Claudia (Industrial management assistant)
- Jürgen (IT-engineer)
- Dominik (Steelwork engineer)
- Philipp (Mechanical engineer)



# Image CDS with PTS

At the PTS professional seminar "Production and Assessment of Coating Paints" in February 2010, GAW, represented by Mr. Manfred Krammer (Sales) and Christian Stine (Development), introduced the professional world to the new Combined Dispersing System for the optimised input of dry products.

The use of CDS brings savings of energy, additives and time - read more on Page 2.

GAW introduces its Combined Dispersing System to a select professional audience.



- 17 Christian Stine – Research & Development
- 18 Manfred Krammer – Sales Department