



GAWGROUP

edition 1/06
limited edition

GAW • GAW PAPER COATING SYSTEMS • KRESTA • MAW • SPEDITION THOMAS • THOMLOG • CCI • STYRCON • IHR • ENVIRGY • OSMO • ETM

imteam

News from the Group

Recyclingpark Eisenerz

GAW technologies
Pildner-Steinburg GmbH Nfg & Co KG, Graz
• Plant construction and engineering for the
- paper industry
- automotive industry
- chemical industry
- environmental technologies
www.gaw.at

GAW

MAW Styria Maschinen- und Anlagenbau GmbH & Co KG
Eisenerz
• Plant construction and engineering for the
- paper industry
- automotive industry
• Special purpose machinery
www.maw.at

MAW
STYRIA
MASCHINEN- U. ANLAGENBAU GMBH & CO KG

KRESTA Anlagenbau GmbH Nfg & Co KG, St. Andrä
• Plant construction and engineering for the
- paper industry
- automotive industry
• Apparatus engineering
• Tank and pipeline construction
www.kresta.at

KRESTA
Anlagenbau GmbH Nfg & Co KG

ENVIRGY
Environment Energy Engineering & Construction GmbH, Wien
• Flue gas cleaning technologies
www.envirgy.com

ENVIRGY

OSMO MEMBRANE SYSTEMS GmbH
• Membrane technologies

OSMO
membrane systems

SPEDITION THOMAS GmbH, Graz
• Logistics and transport
www.sped-thomas.at

thomas

ThomLog GmbH, Graz
• Logistics and transport

ThomLog
Transport & Logistik GmbH

GAW Handel & Consulting, Graz
• Trading and Consulting

GAW

GAW Paper Coating Systems Inc.
Chicago Illinois / USA
• Plant construction and engineering for the paper industry

GAW

CCI Modulbau GmbH, Eisenerz
• Modular construction

CCI
MODULBAU GMBH

STYRCON GmbH, Graz
• Project development and consulting
in deregulated markets

STYRCON

IHR GmbH, Graz
• Agencies
• Trading with second-hand-equipment
www.ihr.co.at

IHR
INTERNATIONAL HANDELS- UND
RECHTSGESAMTGESELLSCHAFT

ETM Environmental Technology Magdeburg GmbH, Magdeburg
• Plants and components for flue gas cleaning and dedusting

ETM

editorial

The 2006 World Cup in Germany. Major sporting events such as this are seen as an opportunity for the regional economic policies of the countries holding them, and the expectations of the socio-economic effects are correspondingly high. Yet will the hopes of a new economic miracle in Germany also come true and can we already be making prophecies for Austria and Switzerland for 2008? Will the European Football Championship turn into a direct hit economically?

Not at all, because a single temporary event cannot realistically have a sustainable effect on a national economy in Europe or anywhere else in the world.

The headline: Europe and the economic cycle. The European Union has set itself the goal of becoming the most competitive and dynamic knowledge-based economic area in the world by 2010 – an economic area that is capable of achieving sustainable economic growth with more and better jobs and greater social cohesion. Nonetheless, the number of supporters of the EU amongst the general population is steadily declining and Austria is one of the greatest skeptics. So instead of hoping for an economic upturn on the basis of the World Cup, we should recognize that is Europe is a pivotal opportunity for growth and stability!

The GAW Group as a whole has already recognized this fact for a number of years, but it is not Europe but the whole world and our relationships with countless global customers which forms the basis for economic success, expansion and prosperity. As you will see from the reports, I am delighted to say that all our companies are enjoying good order levels from all over the world, which in turn means an excellent utilization of capacity. I am thoroughly optimistic that the next weeks and months will see further major orders coming in, which will guarantee a successful financial year for the GAW Group.

When considering all these positive developments, all of us who contribute to creating this success should bear in mind that through our hard work and excellent accomplishments today we can also

create our own success for the future. In this sense I wish all our customers, partners and staff a wonderful summer and a pleasant, trouble-free and relaxing holiday.



Mag. Jochen Pildner-Steinburg

Editorial team edition 1/2006, June
from left to right: Ingomar Gaksch/GAW, Christian Steiner/GAW, Alexandra Pichler-Jessenko/B&J, Wolfgang Senner/GAW, Nina Pildner-Steinburg/GAW, Gernot Stengl/CCI, Brigitte Paier/KRESTA, Reinhard Pilz/MAW, Franz Hörting/GAW E-Abteilung, Heimo Brenner/ENVIRGY. Unter Mitarbeit von Peter Stuffer (GAW), Christian Stine (GAW).

- **editorial**
- **leading article** – Emails: curse or stroke of genius?
- **bestseller** – Group products
- **lexika** – Technology made easily
- **proudly presents** – Projects and orders
- **on site** – Being in the front line
- **on focus** – Current news from the companies

contents

- **Emails: Curse or stroke of genius?**
In this category you can find leading articles about current topics.

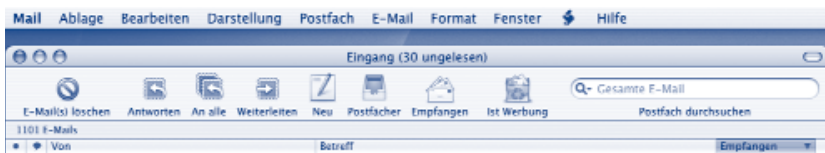
leading article

- **Group products.**
Presentation of products & processes developed by companies of GAW Group.

bestseller

Emails: Curse or stroke of genius?

Leading article



Electronic mail, a fascinating cultural technology, which nonetheless can also become a major constraint on productivity in our everyday office life. Even without destructive viruses, worms and spam, the mailboxes of many of our contemporary workers fill up over and over again with every conceivable type of unnecessary messages.

So for instance a project leader will circulate every tiny bit of information by email to all his team members and, just in case, also to everyone who could possibly become one – with the request for comments, of course. And naturally the comments are expected in real time as befits the medium! Let us draw particular attention here to those more or less talented writers who simply do not manage to get to the point and make it simply impossible for the recipient to work quickly and effectively with the

information they have been sent. If only the sender would get on with things himself instead of writing about them, then without a shadow of doubt the productivity of offices could be increased somewhat.

Just as counterproductive as the mechanism just described, and often used in combination with it, is the game of “hot potato”. This tactic is used above all when someone is given responsibility, but only wants it for the sake of appearance. Email is used to allocate subcompetences, to call for documents and statements and to delegate tasks. And the utmost care is taken to archive all the communication and reading activities. As soon as the sender actually receives these confirmations, he assumes that the recipient will start actively working on them. Preferably the same email is then sent to

several recipients, on the basis that someone is bound to take care of it. Quite apart from the fact that this systematic writing of emails runs counter to a healthy team spirit, it is above all an ideal way of concealing one’s own inactivity.

There is no doubt that the electronic mail format represents a major advance in information technology. 30, 50 or 100 emails a day are no longer unusual, and written communications are sent for all one’s worth. And often it is too much, as illustrated by a reader’s letter to a US magazine: “My boss criticized me by email – and his desk was only five metres from mine”. The well-known German writer on management issues Reinhard Sprenger has very aptly renamed this process “social allergy”. It is above all managers he is addressing here.

People who don’t like other people, rarely emerge from their office and prefer every factual problem to talking to their staff will never manage to anchor certain values in the collective consciousness of their company. Conversations need to be spoken, not put in writing, as only personal contact really makes optimum use of the benefits of “we” and true cooperation.

eposC soft sensor for optimal coating color characteristics

Continuous process optimization through the use of process models

With the development of the Coating Color Quality Management System from GAW, or in brief the Quality Loop, it became possible for the first time ever to monitor quality online during the processing of coating colors. The functionality which makes it possible to recognize variations in quality while the coating colors are being processed offers a substantial technological advantage. It means that fluctuations in paper quality can be kept to a minimum, whilst faulty batches and the associated excessive costs can be avoided.

Now the next step towards further optimization of the coating process has been taken.

Online soft sensors for optimum coating color quality

In the Stora Enso Kabel project (see also the report on page 3) for the first time online soft sensors are being used to enable the optimum coating color quality to be specified for the particular application. Using a mathematical model, the sensors calculate the target values based on the dosage quantities of pigments, fluids, binders etc and the processing time that has been set. By comparing these calculated values with those obtained from the Quality Loop, conclusions can be reached on how the deciding values for the coating color processing operation such as solids content, viscosity or pH value should be developed in the (near) future.

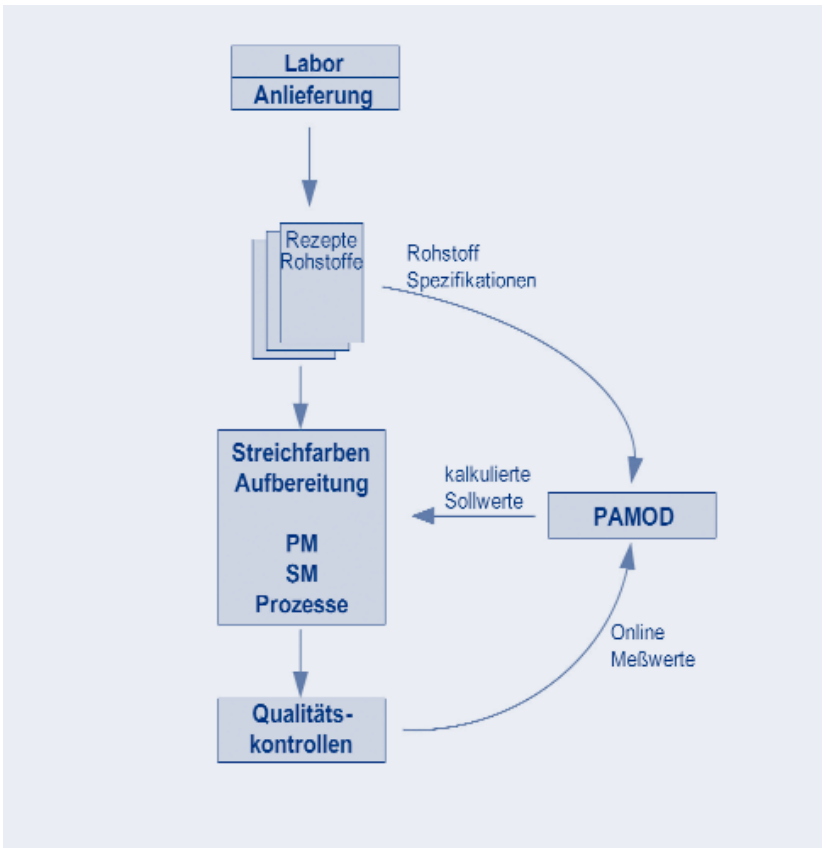
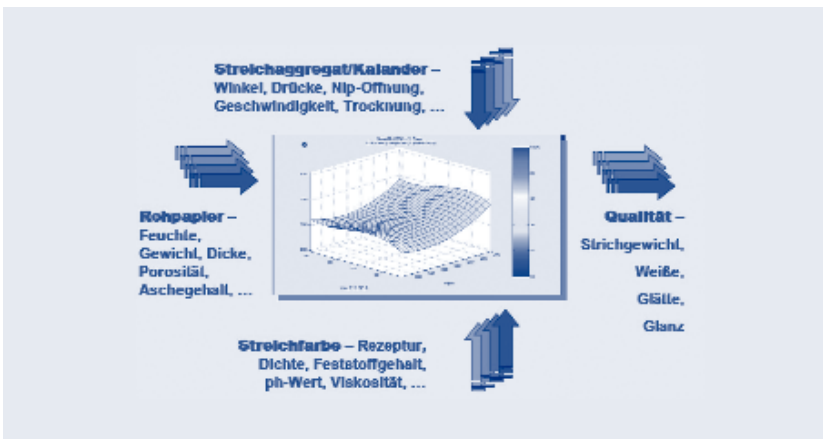
The system capabilities even extend to recognizing deviations in good time and independently calculating suggested dosages, or even automatically adapting the prescribed quantities to the target parameters.

Cooperation between GAW and eposC

The soft sensors for coating colors were developed by GAW in cooperation with the company eposC from Grambach bei Graz. This became possible as the GAW Quality Loop enables the quality characteristics of the coating colors to be ascertained simply.

Soft sensors are developed in the processing industry above all for the specification of target values which can not be specified with simple measurement sensors, or where specifying them in the laboratory involves a high degree of cost and time, as is the case with coatings.

Intensive work is now being undertaken to further develop the process model. As well as specifying target values for the processing of coating colors, in future it will also be possible to calculate the parameters for the coating process itself, such as



the coating weight, whiteness or glossiness. Besides these characteristics, a major focus lies on the reducing production costs and maintaining or increasing quality features. With the development of the Coating Color Quality Management System

from GAW, or in brief the Quality Loop, for the first time ever it became possible to monitor quality online during the processing of coating colors. Now the next step towards further optimization of the coating process has been taken.

Flue gas cleaning

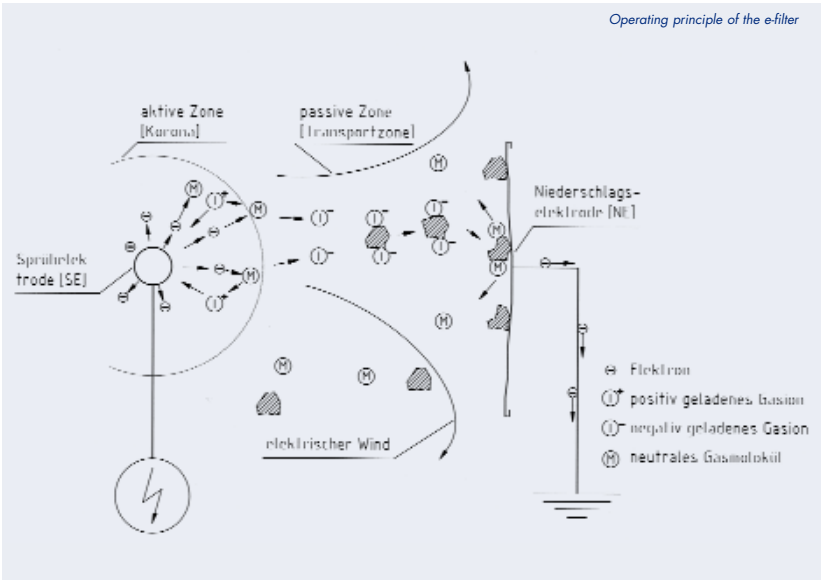
Electrostatic filters for dust removal

In the multi-stage flue gas cleaning process, the first stage generally consists in separating out the flue ash, dust particles and heavy metals bound to the dust such as lead, cadmium, zinc and chromium. Dust removal can take place using a bag or fabric filter, or by means of an electrostatic filter (E-Filter). Both systems have their advantages and disadvantages, so the most appropriate system should be chosen for each specific application.

How the electrostatic filter works

The exhaust gases streaming from the boiler are distributed equally over the surface of the filter via an entry mechanism and move between the precipitating electrodes, which are arranged in the form of parallel plates several decimeters apart. Discharge electrodes in the form of wires are suspended in the middle of the plates. A high voltage of up to 100 kV is set up between the discharge electrodes and the precipitating electrodes, as a result of which electrons are released from the discharge electrodes. The electrons which have been emitted attach themselves to dust particles and heavy metals, and these are transported to the positively-charged electrostatic electrodes. This principle is shown in the illustration alongside.

The discharge electrodes can take the form of wires, strips or a discharge rod, whilst the earthed precipitating electrode is designed as the inner wall of a pipe or a plate. The precipitating electrodes are "tapped" at intervals by special appliances powered by motors situated outside the filter housing to release the dust which has been collected.



The loose dust which is released falls into the top of the hopper (filter-shaped containers underneath the E-Filter) and is transported from there to a fly

ash silo. Electrostatic filters achieve up to 99% levels of elimination, corresponding to a pure dust concentration of less than 10mg/m³ (and in some cases even less than 5mg/m³).

The flue gas which has been cleaned in this way is then conveyed to the next stage of flue gas cleaning for further elimination of harmful substances.

GAW – Supply of six Quality Loops to Stora Enso Kabel

Early recognition of quality fluctuations in coating colors

As a manufacturer of high quality coated papers, Stora Enso Kabel attaches great value to state of the art plant technology, and to ensure the quality of its coating colors it relies on GAW's online monitoring system, the Quality Loop.

Modeling multivariable relationships with GAW EposC

Linking the Quality Loop into the coating cycle ensures that all the properties of the coating colors that are relevant to both quality and production can be monitored and documented.

At the same time through the interaction of the Quality Loop control, GAW AutomationX, with the modular computer program variations in the coating color can be recognized in good time and their causes ascertained.

The data from the coating color processing and from the Quality Loop is recorded and analyzed over a particular period using the PAMODTM software, in order to quantify the behavior of the raw and auxiliary materials in respect of the quality factors of the coating color.

Management system for standard formulations

Conclusions can be drawn from the results as to the interactive behavior of the materials used, the quantity of the effects and the consistency of the impact during the period of time under observation. The output, a mathematical process description, is used for calculating the three target parameters of solids content, viscosity and pH value in the Batch Management System for standard formulations.

The six Quality Loops, which were supplied as a compact unit, have been running online since the end of April and since then have been continuously providing Stora Hagen Kabel with measurement data.

The Kabel plant, part of the Swedish-Finnish Stora Enso group, is located in Germany around 15 km. south of Dortmund. With an annual capacity of around 600,000 tonnes of coated wood-containing paper, which is used for magazines, catalogues and advertising brochures, Kabel is one of Stora Enso's most modern and efficient production units.



GAW – coating color processing in Iran

Cardboard production for the domestic market

In the Iranian province of Esfahan, approx. 70 km southwest of the provincial capital of the same name, Atrak Pulp and Paper Ltd. is setting up a new cardboard factory for the production of coated cartonboard.

An order was placed with GAW for the retrofitting of the existing coating kitchen that is needed for this in Europe (originally Cellier).

The scope of the project

As well as upgrading coating processing, the project also includes the engineering, supplying the main components, supervising the assembly and the commissioning of the following systems:

- Pigment processing
- Unloading and storage of synthetic binders
- CMC and PVA processing

- Color thinning and dosing
- Stocking and dosing of Basoplast
- Processing of cationic starch using jet boilers

From January 2007 around 400 people will be employed in the new factory producing double coated duplex cardboard for the Iranian domestic market and various export markets. The plant's capacity will be around 100,000 tonnes a year.

- Technology made easily.

Here, products or processes are explained comprehensibly for everyone.

lexica

- Projects and orders.

Presentation of current projects and orders of the group's companies.

proudly presents

- **Projects and orders.**
presentation of current
projects/orders of the group
companies.

GAW PCS – Coating kitchen for pressure-sensitive paper

Boise Cascade invests 72 million USD

Boise Cascade is investing 72 million USD in the expansion of its Wallula paper factory in the US state of Washington and GAW Paper Coating Systems has received the order to supply a new coating kitchen.

The coating kitchen will be housed in a building which is to be newly erected adjoining the existing paper machinery building. Work on the re-design will start this summer and operations

should start in the first quarter of next year. The new machine will increase the current production capacity for pressure-sensitive paper for labels, stickers, stamps and similar products by 200,000 tonnes.

Scope of supply

As well as the fully automated coating color processing system including the process control system,

the scope of supply also includes the unloading and storage of kaolin, CaCO₃ and latex, the processing of delaminated kaolin, the storage and dosing of auxiliary materials, starch processing and the work stations on the Speed Sizer.

Boise has been serving the market for pressure sensitive paper for more than 30 years, and the new machine will enable it to satisfy the globally increasing demand even better.

KRESTA – Bulk containers for South America

Uruguay invests in new pulp factory

Four hours by car from Montevideo, the capital of Uruguay, and close to the border with Argentina, a new pulp factory is being created in Fray Bentos, which represents the largest investment in the history of Uruguay. During the main assembly period 4000 fitters will be employed in Fray Bentos, a high percentage of them from Europe.

Scope of supply

For this project, KRESTA received an order to manufacture 22 containers ranging from 90 to 6600 m³ in content. The prefabricated parts are

being sent to Uruguay by ship and being assembled and fitted on-site by approximately 80 KRESTA fitters. All the necessary tools, welding machinery etc. are being transported to Uruguay so as to ensure the quality of the work.

A detailed report will follow in the next issue.



CCI – Road project in Eisenerz

New access to the industrial site

As there have repeatedly been substantial difficulties in accessing the industrial site in Eisenerz by road over recent years, especially in winter, CCI Modulbau has now been entrusted with the task of undertaking a road redevelopment project.

The steep slope and the fact that the road is not wide enough in some places has made both deliveries to the companies located there – MAW Styria, CCI Modulbau, RPE Eisenerz, Pilkington Auto-

motive and BTE Blechtechnik – and also deliveries from the industrial site extremely problematical on many occasions.

Project with the borough of Eisenerz and the province of Styria

A joint decision has been taken with the borough of Eisenerz and the province of Styria to widen the

road in some places and to reduce the slope. Working in conjunction with the resident building department, CCI Modulbau developed an appropriate plan and was consequently awarded the order for carrying out the project.

The entire project is being financed by the companies located there, the borough of Eisenerz and the province of Styria.

The works – demolition work, earthworks, sewerage works, external facilities, asphalt works etc. – started at the beginning of June 2006.

MAW – a reliable partner in the automotive industry

Facilities for the production of the Audi A4 and A6

In recent years MAW has developed into a reliable partner for the automotive industry and is continuously being entrusted with various orders, particularly in the area of conveyor technology. Two projects are currently underway at the Ingolstadt plant of Audi AG.

Supply and conveyor belts for the Audi A4

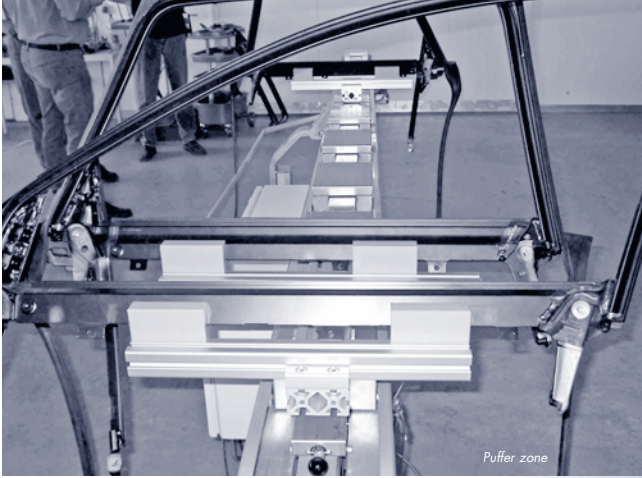
MAW was tasked with the construction of two new supply and conveyor belts for the production of the Audi A4. The equipment comprises chain conveyors, trolleys and turntables and is used to convey special pallets. The engine, front and rear axles, tank and exhaust equipment are assembled on the pallets while they are being transported along the conveyor facility, then in a further step at the respective assembly station they are bolted together with the bodywork which is located on a Power and

Free facility¹. Then the "vehicle" is timed and fully assembled in the Power and Free facility. The first facility will become operational this summer, and the second will follow in summer 2007.

Conveyor belt for the Audi A6

For the production of the Audi A6, two conveyor belts of identical dimensions were ordered for transporting doorframes. These are special conveyor systems in which the doorframes are loaded onto the conveyor system manually. The conveyor belt operates with a capacity of five pairs of doorframes.

When it is released the equipment, which is designed as a puffer zone², returns to its inspection position and back to its starting position. As this equipment has to be accessible to workers from all sides, great importance is attached in particular to safety engineering.



1 In a Power and Free System the load is not suspended from the carrying rollers of the chain, but runs suspended from its own wagon on a track underneath the chain track. The load can be connected and disconnected using appropriate equipment.
2 Puffer zones are used when the goods being conveyed are to be stopped so that they can move on again independently later.

ENVIRGY supplies complete SCR-DeNOx facility to Norway

New standards for emissions

Envirgy was awarded the order to supply the SCR DeNO_x plant for the combined power plant in Kårstø (Norway) with Naturkraft A/S as the operator. The DeNO_x plant will be directly integrated into the heat recovery boiler downstream from a gas turbine, and basically consists of a highly efficient ammonia diffusion grid, the actual SCR catalyst, the recirculation gas system for processing the reducing agent ammonia water, and the control station associated with it.

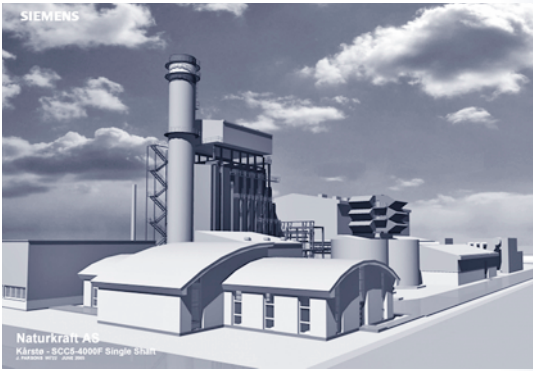
New standards for emissions

The DeNO_x plant will set new standards in

Europe in terms of emissions. Both nitrogen oxide (NO_x) and ammonia (NH₃) will be kept below the threshold of 4mg, a combination which has not previously been achieved by any European plant. For comparison: NO_x emissions from good plants currently stand at 35mg, while new plants will meet threshold values of 20mg NO_x.

The customer is Balcke-Dürr Austria, the supplier of the heat recovery boiler.

Envirgy has also succeeded in obtaining the order for the supply and assembly of the storage facility for ammonia water (NH₄OH) from the general contractor Siemens Power Generation AG.



OSMO – projects for the chemical industry

Successes in Germany and Belgium

In the spring of this year Osmo Membrane Systems succeeded in winning two orders from the chemical industry, including one from Lanxess, a leading chemicals group in the areas of chemicals, synthetic materials and rubber.

Reverse osmosis plant at LANXESS in Germany:

OSMO received the order for the construction



of a reverse osmosis plant for the treatment of a waste water flow. The waste water flow requiring treatment displays both high organic levels and also very high levels of chlorides, which present a high potential for corrosion due to the composition of the local water. For this reason the entire plant is being produced from chloride-resistant special steel (1.4539/1.4462) and is additionally being executed in a sanitary version, in other words where there is a high level of organic contamination the membrane elements contained can all be heated up to 80 °C so as to keep the biofouling¹ in check. The supply includes the complete reverse osmosis unit with CIP Station² and the plant control including visualization.

High pressure reverse osmosis in Antwerp

Another project is being undertaken for a major company in the chemical industry in Antwerp. This involves high pressure reverse osmosis, which was also implemented a year ago at Südchemie AG in Bavaria.

Underlying the principle of high pressure technology is the separation of organic content by means of a very high operating pressure: The reverse osmosis purifies any process condensate that occurs before this is circulated into the further water treatment process, i.e. the organic contents are separated out and returned to the materials

cycle. Because of the concentration of the contents, working pressures of 80 – 90 bar are required, so the plant is constructed for an operating pressure of 100 bar. The entire high pressure plant consists of 5 layers of membranes, which can be fitted with a total of 160 spiral elements, which must make it one of the largest high pressure reverse osmosis units in the chemical industry worldwide. The scope of supply for OSMO includes the reverse osmosis plant and all the aggregates necessary for assembly in the explosion hazard area, all the control engineering and the plant housing. Completion of the plant is planned for the end of 2008.

1 Biofilm, Biofouling
Put simply, biofouling means a slime-like film of microorganisms. This film is found above all on the pipe walls of water systems, and more especially in places where the flow is less. Sometimes the microorganisms contained in the biofilm eliminate secretions which are very aggressive and can lead to substantial corrosion damage in the water systems. A further problem associated with the biofilm is that whole plates of the biofilm can become detached and be forced through the pipes. This layer can result in blockages of narrow sections of the system or of machinery.

2 CIP
is the abbreviation of "cleaning in place", a cleaning process which often takes place in the chemical industry regularly, automatically and at short intervals.

• Projects and orders.

Presentation of current projects and orders of the group's companies.

proudly presents

- **Being in the front line.**
- Reports directly from the construction sites.**

on site

CCI recyclingpark Eisenerz in operation

Recycling of old cars

The only plant in Austria for processing shredder light fraction recently went into operation at the company premises of CCI Liegenschafts- und Verwaltungs GmbH.

Infrastructure through CCI

- As we have already reported, CCI supplied and installed the entire infrastructure for this project:
- Revitalization of the existing former CCI halls

(steel construction works, metalworking, glazing work, sheet metal and facing works, plumbing and metal coating works)

- Fencing works
- Access tracks and various supplementary works such as walkways and staging on the 12,000m² site (of which approx. 4000m² is covered areas).

Recycling of old cars

With state of the art filtering and separating technology, in future around 35,000 tonnes of the so-called shredder light fraction, which is created mainly when old cars are being shredded, will be processed every year as well as conventional pre-processed commercial and industrial waste.

Metals will be reclaimed and channelled back into the materials chain, and the remaining material will be processed into two different qualities for thermal use; mineral residue will be deposited.

The high recycling requirements under the EU guideline on old cars, the continuously increasing demand for raw materials – chiefly, but not only, from China – and the current issues around fossil energy sources all ensure that this modern processing plant on the site of the GAW Group in Eisenerz is a proper step towards the future. This facility will make secondary raw materials available for manufacturing industry and secondary fuels for the production of electricity and heating energy.

The founder and operator of the Eisenerz Recycling Park is RPE GmbH, with a 44% shareholding in the UEG Group, whilst the GAW Group holds 34% and SOB Bauräger GmbH 22%.

Around 4.5 million Euro was invested in the ultra-modern plant.



Metals are reclaimed and channelled back into the materials chain.
Photo: UEG/MedienService

- **Current news from the companies.**
- Current topics in the companies.**

on focus

GAW – Vacuum dispersing machine

Winner at the 2006 Design Awards



The winner
Christian Stine,
GAW (left)

After receiving an award for the Continimixer CC500 last year, this year GAW emerges as a winner of the CoCreate design competition. In the category for tooling machines and special machinery the GAW vacuum dispersing machine took first place.

The vacuum dispersing machine

The GAW vacuum dispersing machine was specially

designed for processing special coating colors:

- Coating colors with no air content for jet and curtain coaters
- Colors with a high solid content
- High viscosity coating pastes
- Special pigments (pigment-talcum mix)
- Shear-sensitive binding additives
- Synthetic pastes
- Fine dispersions

The system is very easy to maintain due to its modular design and is used in particular in the manufacture of coating color for high quality special papers, such as photographic and magazine papers.

Industry and enterprise

The young people of today are determining the Austria of tomorrow

Industry is Austria's largest employer, investing in research and development, training and the environment. In Styria alone 38% of economic power is generated by industry and at 3.67% the R&D rate is already well above the European goal.¹

Styrian industry provides more than half of all the jobs in Styria and concerns itself with training young people – in the last 5 years alone the number of training places has risen by 10%.

Yet in a great variety of sectors the significance of industry is not sufficiently recognized and the image of industry is mostly associated with smoking chimneys.

Industry and management – a school campaign from Junge Industrie

The role to be played in future by industry for Austria as an economic location depends not least on the image that we convey today to the younger generation above all.

Junge Industrie Österreich [the Austrian association of young people in industry] has launched a school campaign under the title "Industry and enterprise" so as to confront children and young

people with subjects from industry and commerce at an early age and to encourage an entrepreneurial mindset. In the view of the Industriellenvereinigung [the Austrian Association of Industry] economic subjects are underrepresented on the Austrian school timetable, so an educational package is intended to anchor entrepreneurship and domestic industry in practice and positively in the minds of the pupils. Thus over the coming school year members of Junge Industrie will visit a large number of schools and let the pupils know about the significance of industry for Austria as an economic location.

Austria is an industrialized country offering great opportunities for ambitious young people

Unsere Industrie ist...

...die stärkste Wirtschaftskraft in der Steiermark.

...der größte Arbeitgeber in der Steiermark.

...der wichtigste Innovationsmotor für die Steiermark.

www.zukunft-industrie.at

¹ At the Lisbon summit in 2000, a European-level goal was formulated of making the Union into the most competitive and dynamic knowledge-based economic area in the world. An R&D quota of 3.0 % of GDP by 2010 was set.