

GRAND ER

INDUSTRY JOURNAL



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Peter Ortner
U.V.O. – the Grander Sales Organisation

Clear water for industry

An asset for companies and an opportunity for the environment

Never in our wildest dreams did we dare to believe, in the early days of developing the Johann Grander water revitalising system, that we could ever produce a brochure such as the one you are currently reading. The success story of the Grander water revitalising system and its worldwide presence is, first and foremost, based on the experience of satisfied private users. Water revitalisation has been around for over half a decade and has recently expanded its horizons. It is a sector, in which measurements are exact and calculations are accurate. It may amaze you to learn that industry technicians, to a greater or lesser extent, try to avoid using chemicals, replacing them with the Grander water revitalising system. We are not that surprised, since we have seen many technically-oriented individuals with science backgrounds, who originally doubted and were suspicious of our claims, endorse our product

or even become our partners. It is also one of our proud boasts that leaders in many areas of the sector carry out experiments using revitalised water. After successful private applications using revitalised water, they wanted to know if Grander would be able to broaden its horizons. The multitude of different applications, ranging from the production of plastics to assembling cars, from glass-making to cheesemaking, to name but a few, would never have been possible, without companies being proactive, having a pioneering spirit and being keen to experiment. We, therefore, gratefully acknowledge their contribution and thank them for sharing their results and experiences with us. For most companies, Grander water revitalisers are used not only for technical and scientific purposes, but also for environmental protection, to reduce the strain placed on wa-

ter resources. Just as industry has benefited from the experiences of the private user, so can private users profit from the measurable results of industry.

Of course, this brochure can only provide an initial, incomplete snapshot. The companies are above suspicion, since any claims they make can easily be checked. We, therefore, have no hesitation in presenting you with their experiences regarding the use of water revitalisers from Johann Grander in industrial and commercial applications.



Information

Grander used since 2005

Allgäuland-Käsereien GmbH

Theodor-Aufsberg-Straße 10

D-87527 Sonthofen

www.allgaeuland.de

1_ 50% savings on chemicals and 20% on water in cleansing machines

2_ Operations director Karl-Michael Grueber has confidence in the Grander effect

A better cleaning agent

The Allgäuland-dairies in Sonthofen uses Grander for its cleaning

The products made by Allgäuland-dairies GmbH are guarantees of slices of special treats. Emmental, Parmesan and mature cheeses, milk and fresh products - the list of their specialties is almost endless and recently tofu became the latest addition to their shelves. Allgäuland-Käsereien was originally founded as a consortium of dairy cooperatives with the aim of uniting their skills and know-how in terms of dairy production into a professional unit dealing with everything from processing to marketing. Out of a regional dairy cooperative was born a company that is now active on the international stage. The company is one

of the ten largest milk processing companies in Germany and is now over 106 years old. However, the quality of its raw material, milk, the technical know-how of the cheesemakers and hygiene are still decisive factors in terms of the success of the end product.

After successfully trialling the product in his own home, Karl-Michael Grueber, operations director at Allgäuland-Käsereien in Sonthofen, started to use Grander in the plant. "At home, I had noticed that there was much less lime-scale. I wanted to use the Grander revitalised water system in the plant to save on chemicals and water in the cleaning process," he

confirms. Since 2005, revitalised water has been flowing through the cleaning systems used to clean the tanks and pipes. The result – "we have made savings of 50% in terms of chemicals and 20% in terms of water, because revitalised water is a better cleaner. This has meant a reduction in operating costs of around 7,000 euros a year," reckons Grueber. The concentration of our nitrous cleaning agent has dropped from 1.3% to 0.7% in eight or nine months. Grueber's final words on the subject: "I believe that the Grander water revitalisation system is very effective in our sector."



1_ Austria Tabak is the largest cigarette manufacturer in Austria

2_ Director Martin Haberfelner: 40% savings on chemicals



Information

Grander used since 2000

Austria Tabak GmbH

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Tel.: +43 (0) 1 / 313 42-0

Fax: +43 (0) 1 / 313 42-1636

www.austriatabak.com

Revitalised air-conditioning system

Austria Tabak saves around 40,000 euros in operating costs every year

The Austria Tabak plant in Hainburg, Lower Austria, produces 13 billion cigarettes every year. It was founded in 1784 as a state company, by Kaiser Joseph II. In 1997, it was partially privatised and quoted on the Vienna Stock Exchange and, by the middle of 2001, was bought by the Gallagher Group Plc. Since April 2007, Austria Tabak has belonged to the JTI consortium and is, therefore, part of Japan Tobacco – the third largest tobacco company in the world.

The Grander water revitalisation system was first used in 2000, when, for test purposes, an air-conditioning system was chosen for the Fürstenfeld plant. In the interior production workshop rooms, air-conditioning systems ensure a constant room temperature of 22 de-

grees Celsius and 60% relative humidity. These systems renew and purify the air in the rooms, control temperature and regulate the humidity. The air is cleansed and humidified using revitalised water, by creating a mist. In order to prevent algae growth and contamination of the air-conditioning systems, water is mixed with chemicals.

After a Grander water revitalisation system was installed, the company was able to reduce significantly the quantity of chemicals used and greatly increase the cleansing intervals. Excellent test results meant that the use of the Grander revitalisation system was expanded, with seven of these systems providing clean

air for the production workshops at Hainburg, circulating 450,000 m³ of air every hour. "In 2003, around 100,000 euros was invested in chemicals for use in air-conditioning systems, whereas, after using the Grander water revitalisation system, we made annual savings of 40%," reckons Director Martin Haberfelner, who is responsible for energy matters at Austria Tabak.

The company's headquarters in Vienna are also now using the Grander water revitalisation system after its success in Hainburg since 2005. In addition to the air-conditioning systems, revitalised water is now installed in all the drinking water systems so that employees can enjoy revitalised water.



1_ Boxmark makes leather products for the automotive and furniture sectors and for the clothing industry

2_ Centre manager: Josef Neubauer: The Grander water revitalisation system is the optimum alternative to chemicals

Selective leather cutting

A lot of water is needed when processing leather, but water can also be an unmanageable commodity. Boxmark Leather optimised their manufacturing process using Grander.

Boxmark Leather has its company headquarters at Feldbach in Styria and, from there, manufacture and distribute worldwide around 12,400km² of high quality upholstery leather made exclusively from cattle hide for the automotive and furniture sectors. Boxmark supplies clients such as Audi, Bentley, Daimler, Lamborghini, Poltrona Frau (an Italian furniture company), Porsche, VW, Viennese workshops and many more. Splitting the leather into two surfaces is an important stage in the production of leather. Boxmark processes the shagreen side, which is then turned into suede and ready-to-use leather for shoes, handbags, clothes and accessories. This is where the Grander water revitalisation system comes in.

The revitalised water is used in the cutting machine's washing system and in the open cooling systems. The cutting machine is a pre-

cision instrument, which splits the cattle hide with accuracy of 0.2 to 0.3mm. If the water quality is poor, the leather is split unequally, i.e. there is more wastage. The machine is supplied with 6m³ of water every hour. "The splitting machine was calcifying, although we were using chemicals. The water was so hard that it affected the accuracy of the band knife," describes centre manager, Josef Neubauer. He started looking around for an alternative and, since 2003, it has been revitalised water that has been flowing through the washing system. There are hardly any lime-scale problems and the quantity of chemicals used was significantly reduced. "For every cubic centimetre of water, we need 30% chemicals. We saved up to 100% here, making an annual saving of 2,500 euros," confirms Josef Neubauer, providing evidence of an extra benefit, in addition to an improved production process.



Information

Grander used since 2003

Boxmark Leather GmbH & CoKG

Europastraße 11

A-8330 Feldbach

E-Mail: office@boxmark.com

www.boxmark.com



1_

1_ Grander in use at Daimler

2_ Water quality in the cooling process:
clear and free of chemicals

Clear and free of chemicals

Daimler AG's Mercedes-Benz vehicles assembly plant at Wörth is saving chemicals and water by using Grander.

Daimler Ag operates the largest vehicle assembly plant in the world at Wörth am Rhein. For over forty years, vehicles with prestigious names such as Atego, Actros and Axor have been rolling off the production lines. The product palette includes light, medium and heavy-duty vehicles for long-distance, distribution and construction usage, as well as specialist vehicles such as the Unimog and the Econic. In recent years, the already successful company has been selling more vehicles than before.

By using the Grander revitalisation water system in its cooling systems, the company has been able to reduce the use of chemicals and save on operating costs. Previously, corrosion and bacteria were removed using biocides

and stabilisers. The plant's cooling system is open and is used to cool air compressors and machinery. Compressors heat up the air, which then has to be cooled to normal temperatures for operations. This is a problem as each season goes by. In the Spring, pollen falls into the open cooling system, whereas, in the Summer, the extreme heat represents a real danger.

Revitalised water has been used for seven years now in the plant's cooling systems. Chemicals are hardly ever required, resulting in huge savings in terms of operating costs last year.



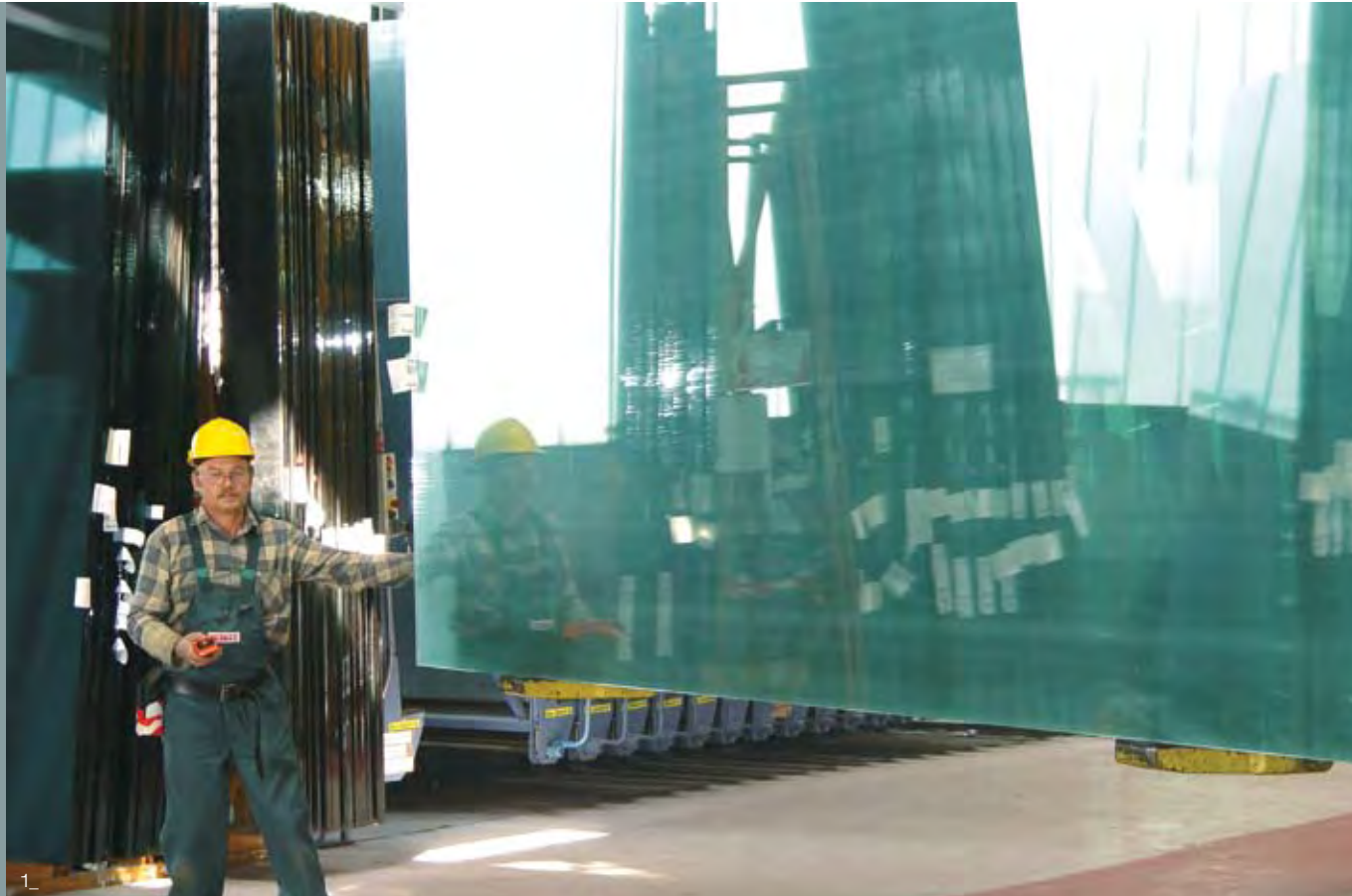
2_

Information

Grander used since 2003

Mercedes-Benz Werk Wörth

Daimlerstraße 1
D-76744 Wörth (Rheinland-Pfalz)
www.daimler.com



1_



2_

1_ Eckelt Glas manufactured the explosion-proof glass for the new World Trade Center in New York

2_ Heinz Baumgartner checks the filters. Since the Grander water revitalisation system has been introduced there is hardly any glass dust

Happiness is clear glass

When making glass, Eckelt Glas swears by Grander

Since 1989, the company has been a subsidiary of the French global company, Saint-Gobain, the world's leading consortium in terms of glass production and heat insulation. Saint-Gobain is one of the 100 largest industrial groups in the world and is active in the business areas of glass systems, design, heat insulation, safety, sun protection and interiors. The company has also broken new ground with its entirely innovative symbiosis of plastic and glass. Along with others, Eckelt Glas produced explosion-proof glass for the Seventh World Trade Center in New York. The company had to meet the enormous safety requirements and supply a special glass solution for the entrance area of the world's safest skyscraper.

The Grander revitalised water system has been used in the grinding and rinsing processes involved in the production of glass since 2003. Water is needed to polish cut edges, remove dirt and cool working materials. "Dirt and dust found their way into the machines during the production process and it was always difficult to get rid of them", reports Heinz Baumgartner, who looks after maintenance. Glass dust, which collects in the pumps and filters, can be cleaned and removed much more easily with the Grander revitalised water system. Previously, filters were used three to four times, now they are used twenty times. "The executive's decision to use Grander water revitalisers was surely the right way to go," says Baumgartner. "We were able

to save on flocculants, cleaning processes were optimised and water quality improved markedly," he added.

Information

Grander used since 2003

Eckelt Glas GmbH

Resthofstraße 18

A-4400 Steyr

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E-Mail: office@eckelt.at

www.eckelt.at



Putting the flags out

Fahnen-Gärtner in Mittersill are using Grander to improve process water

The company's main product lines are banners, flags and creatively-stitched banners for the military and companies. Additionally accessories such as masts and small articles such as pennants and emblems complete the range. The flags and banners that leave Mittersill adorn the palace of the Federal president and government buildings. Parishes, commercial and industrial premises as well as hotels and gastronomic outlets are amongst the company's preferential clients. Every year, 100,000 banners are produced by screen or digital printing, along with 30,000 national and international flags in a variety of sizes and colours. Half a million square metres of material are used to make a wide variety of flags and banners, many of which have been seen at Olympic Games and World Championships held in Europe.

An emergency led Fahnen-Gärtner having to make a fundamental decision. As the saying goes, the problem was blowing in the wind. Eight years ago, a wastewater system had been constructed, where 70% of the wastewater was used as process water. "During the night, when the plant was idle, an overpowering putrid smell was given off," remembers managing director, Gerald Heerdegen. Air quality in the

plant significantly improved after installing the water revitalisation system in both the process water and washing areas. "The amount of bacteria has clearly been reduced and the smell has improved," confirms Heerdegen.

Experiments are underway in another area. 1,200 to 1,400 litres of oil are needed every day to produce steam. A device was also installed in the oil pipe.

"Since we started using the Grander system, we have been able to save on the use of heating oil and we are expecting the boiler to be more effective," says Heerdegen. He sees the Grander water revitalisation system as a way of protecting the environment. Heerdegen is convinced by this and ending by saying that "It is important to our company that we preserve both the environment and resources. Revitalised water helps us do this."

Graphic:

Anaerobic bacteria are responsible for unpleasant smells. During the observation period of May-November 2004, the bacteriological situation was seen to have greatly improved and emissions of odours were clearly reduced. The results were measured by a recognised scientific institute.

1_ Creatively-stitched military and company banners

2_ Gerald Heerdegen: An opportunity to help the environment

3_ 100,000 banners, plus 30,000 national and international flags created every year by screen or digital printing

Information

Grander used since 2004

Fahnen-Gärtner GmbH

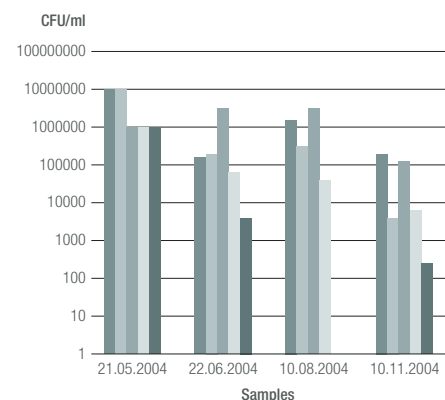
Kürsingerdamm 6

A-5730 Mittersill

E-Mail: office@fahnen-gaertner.com

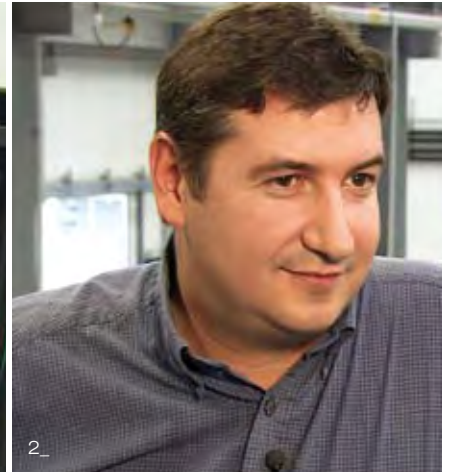
www.fahnen-gaertner.com

Bacteriological status



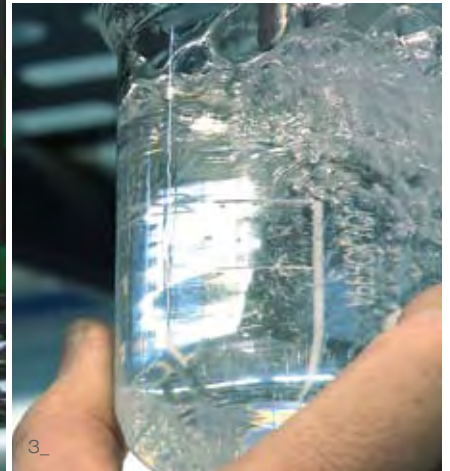


1_ Formtec, from Kronau, use special processes to manufacture injection moulding tools



2_

2_ Managing director, Andreas Czotscher: the use of chemicals in the process is banned



3_

3_ Only clear water is used in the cooling system

clear cooling water

Formtec GmbH Kunststofftechnik have replaced chemicals with revitalised water in their cooling systems

Formtec, based in Kornau near Karlsruhe in Germany supplies tools and manufactures plastics. Qualified technicians and engineers turn components into complicated injection moulding equipment, using simulation software within 3D-CAD systems and the latest analytical technology. In addition to the quality of the products, the company also lays great store by environmentally-friendly processes that help save resources.

Two cooling systems are in use. These are needed to cool the injection moulding machines and the moulds. Here, the water remains stable and fulfils its function, with the cooling water having to be supplied and maintained at a con-

stant temperature. Initially, normal water from the system of water pipes was used. The result was a build-up of sludge and algae and a higher proportion of bacteria, with various chemicals being used to stabilise the coolant water. "We tried chemical solutions and nothing really worked," reports Technical Director, Rüdiger Epp. "The Gander water revitalisation system was first used in the cooling system in 2005 and, since then, we have been able to stop the use of any type of chemicals," describes Andreas Czotscher, the company's managing director. After three quarters of the year, rust formation and iron content have been reduced to nil. Maintenance costs are minimised and savings of around 5,000 euros achieved. "Pre-

viously, the coolant water was laden and polluted with bacteria. By using the Grander revitalisation water system, water is now of drinking quality. A short while ago, I was able to draw off a glass and drink it," confirms Epp.

Information

Grander used since 2005

Formtec GmbH Kunststofftechnik

An der Oberen Lußhardt 7
D-76709 Kronau
E-Mail: info@formtec-kt.de
www.formtec-plastics.de

1_ Clean, clear water from the work-shops' cooling system

2_ World-renowned toothbrushes made by Gerresheimer Wilden



Drinking water quality from the cooling system

In the workshops of Gerresheimer Wilden AG Schweiz in Schöna, the Grander water revitalisation system is being used to tackle corrosion

Gerresheimer Wilden, formerly Interbros, are specialists in the manufacture of innovative plastics systems. Plastic parts are manufactured for the pharmacological, diagnosis and technical medicine areas of the medical sector. Parts are also made for the automotive industry and plastics systems for the consumer healthcare sector. Amongst other things, the company produces world-renowned toothbrushes. It has its headquarters in Germany, but is represented world-wide and is continuously extending its capacity.

The quality assurance of its plastics products is one of the central manufacturing requirements. The company is constantly working to optimise its production processes, analyse faults and correct them systematically. This includes the corrosion to be found in the cooling systems of the injection moulding tools.

The Grander water revitalisation system was first tried in 2002, when experiments were carried out in the cooling system, which was used to cool the injection moulding machines and moulds. Prior to the Grander system, glycol was added to the cooling water to inhibit corrosion. "The sediment of rust was surely caused by the soft water that we use," conjectures the technician, Stefan Brender. A stable water quality is especially required for the injection moulding machine, where every degree is vital and where it contributes to a problem-free process. "One year after the grander water revitalisation system was introduced we had the cooling system quality checked by an independent institute. Look at that, we have drinking quality water flowing through our pipes," says the enthusiastic Brender.



Information

Grander used since 2002

**Gerresheimer Wilden AG Schweiz,
Betriebsstätte Schöna**

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www.gerresheimer-wilden.com



1_ Machines running without any problems at Hirschmann

2_ Walter Hollenstein: Dealing with the accumulation of sludge in the cooling systems

Cool water

Hirschmann Automotive GmbH in Rankweil in the Vorarlberg is solving its technical problems by using revitalised water.

Hirschmann Automotive develops innovative solutions in the automotive connector sector. Its product palette comprises various models of mechatronic components, intelligent sensors and actuator elements (position sensors), connectors, contact systems and wiring harnesses for a wide variety of applications in the safety and high-performance areas of the automotive sector. Prestigious car makers cannot get enough of the connector technologies produced by Hirschmann.

The cooling system had been a problem for years, but a permanent solution has only been a possibility since 2005. The Grander water revitalisation system was used in an experiment to tackle the extreme quantities of sludge that build up in the cooling system and the injection moulding machines. Cooling machinery

is a decisive factor in terms of production. "The temperature has to be kept constant. If it increases, the silt builds up and there is less water flowing through. This is when shut-downs and stoppages occur. In terms of mass production, this is a disaster," states Walter Hollenstein, the head of the Rankweil plant. If they went down the traditional route of using filters and chemicals, our technicians could not come to grips with the build-up of sludge in the cooling systems. When we started using the Grander system, we were able to clean out the residue of the sludge. "These problems have been solved for two years now and we no longer have any major maintenance costs – our machines are running perfectly," Hollenstein concludes.



Information

Grander used since 2005

Hirschmann Automotive GmbH

Oberer Paspelsweg 6-8

A-6830 Rankweil

Tel.: +43 (0) 5522 / 307-0

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E-Mail: info@hirschmann-automotive.com

www.hirschmann-automotive.com



Information

Grander used since 1998

ISOSPORT Eisenstadt

Industriestraße 2-8

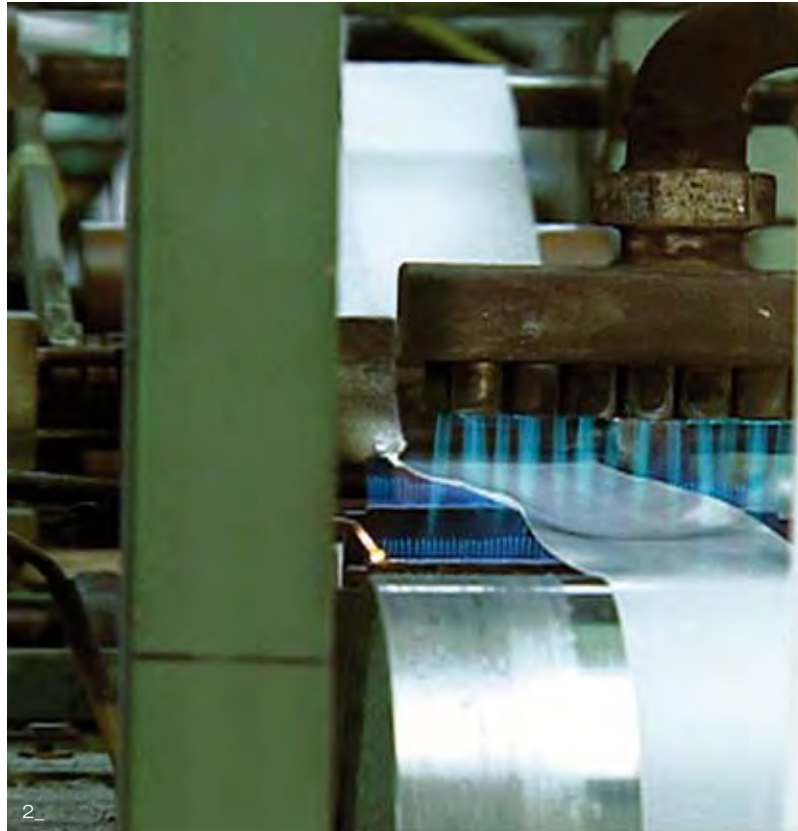
A-7000 Eisenstadt

Tel.: +43 (0) 2682 / 703-0

Fax: +43 (0) 2682 / 703-4222

E-Mail: office@isosport.com

www.isosport.com



1_ Technicians Günter Jurassovits and Hans Steindl show off a set of skis and a tennis racket – Isosport's most well-known products

2_ Stable cooling water prevents quantity problems from occurring in production

Perfect ski conditions for world champions

Isosport technicians confirm the effect of the Grander revitalised water in their cooling system

Isosport is one of the world's leading manufacturers of ski and snowboard materials from plastics. The Constantia Industries AG company was founded in 1969 and is now seen as a leading supplier to the ski, snowboarding, plate, automotive, construction, sport and leisure industries. One of their specialities is the manufacture of strings for tennis rackets. High quality raw materials guarantee quality products.

The evolution of skis and snowboards matches current trends. In terms of firmness, the composition of the upper surface and colour, products are made-to-measure. On the recommendation

of its managing director, who was an enthusiastic private user of Grander, the Grander water revitalisation system was incorporated into the company in 1998. It is particularly vital that the plastics machines, the so-called extrusion systems, are cooled. Here, plastic granulate is melted and forced through a nozzle, before being moulded into the appropriate shape on a calender, a system consisting of several heated and polished rollers, arranged one on top of the other, and finally cooled.

"If there is a fault in this cooling process or if the heat is not optimally distributed by these cooling rollers, faults appear and the plastic warps. This in turn means that these products

are unusable for further processing," declares development technician, Günter Jurassovits. Before Grander was used, anti scaling agents and corrosion inhibitors had to be added to maintain the coolant water's equilibrium and to remove algae and rust. "After we installed the Grander water revitalisation system, we reduced our use of chemicals by 20% and, a year later, we were able to do without the chemicals altogether, since the cooling system was stabilised," announces Jurassovits. "In our experience, it is possible to have a chemical-free cooling water water stabilisation system," he concludes.



The pioneering spirit and the desire to exper

Manner looks back on 15 years' experience of using Grander

Helmut Ondricek, a technician with Manner AG, is the father of the industrial use of the grander water revitalisation system. As far back as 1992, he was successfully experimenting in the Viennese operation (Napoli-Casali), where he introduced Grander systems into the cooling system for the first time. Before this date, they had not been used in any mass-production plant. 35 cooling machines were in service, supplied with water from two cooling towers. 400m³ of water circulated every hour over two 2" devices, which were installed in the bypass. Ondricek tried to

come to terms with the algae and the slime bacteria in the cooling system, but these could only be controlled by using large quantities of chemicals. The results were overwhelming: "After only two weeks, we were able to discontinue the use of any chemicals. The system was amortised in nine months, because of the savings we made on chemicals," reports Ondricek. Not only were savings made in terms of chemicals, maintenance costs were also clearly reduced by up to 70% annually.

Ondricek's curiosity was aroused. "I was constantly monitoring my environment to see what I could improve." He also entrusted the cleaning of the plastic chocolate moulds to Grander. Since that time, the moulds have never become brittle, as rinsing agents and high temperatures can now be avoided during the washing process.



iment

- 1_ A secret ingredient in Manner wafers:
For a little while now, revitalised water
has been used in the production of the
wafers
- 2_ Helmut Ondricek is the father of the
industrial use of Grander
- 3_ Special application of revitalised wa-
ter in the cooling system



Information

Grander used since 1992

Josef Manner & Comp. AG

Wilhelminenstraße 6

A-1170 Wien

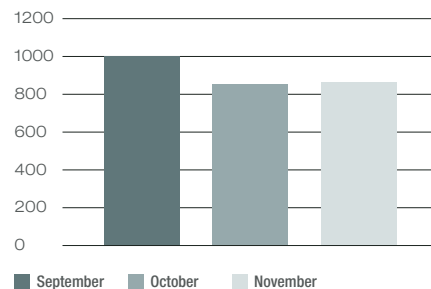
Tel.: +43 (0) 1 / 488 22-0

Fax: +43 (0) 1 / 486 21 55

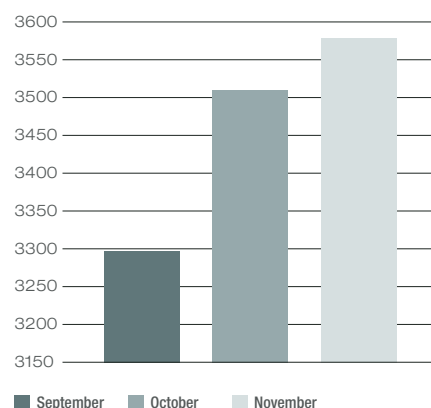
E-Mail: j.manner@manner.com

www.manner.com

Broken wafers



Acceptable wafers



Graphic:

Experiments using revitalised water were also carried out on wafers. Within three months of using the Grander water revitalisation system, a clear reduction in the amount of broken wafers and an increase in the quantity of good wafers could be documented.

When the technicians symposium was held in the famous Spanish Riding School of Vienna, Ondricek unveiled a secret: "Recently, we haven't used revitalised water just in our cooling system, we have also carried out successful experiments with regard to the production of the world-famous Manner-wafers," he enthused. The confectionery company produces up to 4,000 tons of slices every month and the amount of water in the dough is vital, since the less water there is, the crispier the wafers are.

Since the Grander water revitalisation system was used, the quantity of water and the amount of substandard wafers have been reduced and production increased. Ondricek summarises this as follows: "We have used the Grander water revitalisation system for the past 15 years and it is still working as well as it did on the first day. It is a really sensible idea and I can only recommend it to each and everybody."

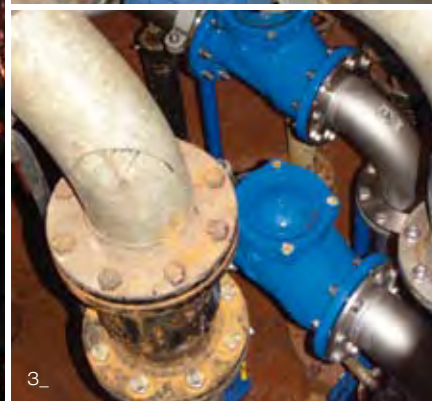




1_ Molten metal is decanted from an electric arc oven



2_



3_

2_ Site supervisor, Ludwig Jernej: convinced by the effectiveness of Grander

3_ Corroded heating pipe and calcified pipes belong in the past

Soft water

The successful use of Grander in Maschinenfabrik Liezen and Gießerei GesmbH

Corroded heating pipes and lime-scale were the main problems facing the technicians at Maschinenfabrik Liezen and Gießerei GesmbH. The company can count on over 50 years experience in the sectors of processing technology, machine assembly and casting.

In order to deal with the rust and limescale that build up in the cooling water system, the management turned to Grander. "Every two to three months, silt and dirt collected in the heating pipes, resulting in rust and, finally, in the pipe leaking," declares site supervisor, Ludwig Jernej. Whenever any damage occurred, the technician had to introduce an emergency supply so that the system could be repaired. Although the Grander revitalisation water system was not intended to deal with the lime-scale problems, they gave it a go.

The system has been in use for eighteen

months now, with the first successes being reported within two months. The revitalised water was connected directly to the main network and all the process water revitalised alongside the drinking and cooling water. Site supervisor Jernej was amazed at the results: "I cannot really explain what happened, but the number of pipe breakages has been significantly reduced since then, the shower heads aren't clogged up with limescale any more and the water seems much softer and better to wash in." Measurements taken confirm this result: The iron content of the water fell from 25.95 mg/l to 0.957 mg/l. The foreman, Hubert Kettner, confirms that "there is practically no more iron in the water."

Graphic:

During the observation period February to November 2006, the iron content fell from 25.95 mg/l to 0.957 mg/l.

Information

Grander used since 2005

Maschinenfabrik Liezen und Gießerei GesmbH

Werkstraße

A-8940 Liezen

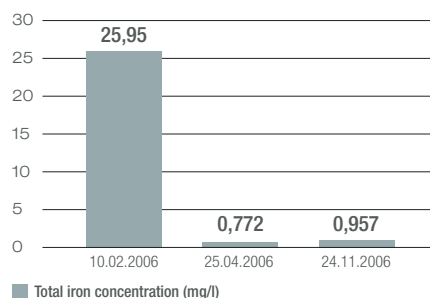
Tel.: +43 (0) 3612 / 270-0

Fax: +43 (0) 3612 / 270-595

E-Mail: geschaeftsleitung@mfl.at

www.mfl.at

Iron content in water





1_ Vorarlberger Nachrichten: Bright colours and contrasting images

2_ The Austrian flagship company produces 55 print media



Information

Grander used since 2000

Vorarlberger Medienhaus

Gutenbergstraße 1
A-6858 Schwarzach
Tel.: +43 (0) 5572 / 501-0
Fax: +43 (0) 5572 / 501-227
www.medienhaus.at

Black on white

Revitalised water used for printing

55 different newspapers are printed by Medienhaus at Schwarzach. The media company operates internet portals and regional radio broadcasts in Austria, Hungary and Rumania. In terms of its leading print medium, the Vorarlberger Nachrichten (VN), in particular, the company sees journalistic independence and detailed research as two of its main quality characteristics, in addition to the great care taken with layout and design and production and printing. The company's executive wants to bring worthwhile regional information and entertainment to its readers, listeners and internet users.

Products and production are constantly being improved and the media company has its nose

in front in terms of technology. "Vorarlberger Medienhaus is the only printing house in Austria to meet the strict guidelines with regard to low-emission printing and to have been awarded the Austrian Environment Minister's Environmental Seal of Approval," boasts the company's homepage. In 2006, Vorarlberger Nachrichten was selected as the newspaper of the year, from over 18,000 newspapers worldwide. The jury were impressed by journalistic performance, print quality, design, content and profitability. "I am convinced that the Grander water revitalisation system has a part to play in this success," adds Wilfried Übelher, the company's technical director.

The Grander system was first used by the Vo-

rarlberger Medienhaus in 2000, when a test run was started using the offset printing machines. "In offset printing, water quality, the pH value, conductivity and surface tension are very important. During the print process, these contribute to the excellent brilliance of the colours and the sharp, contrasting images," reports Übelher. Since the Grander water revitalisation system was introduced, the quality of the print products has markedly increased. The printing process is more stable and fewer corrections need to be made with regard to colour and flow conditions.

The technical director confirms that "the Grander water revitalisation system has brought major technical advantages to our operation."



A revitalised brewing culture

The Memminger Brauerei increased the quality of its beer by using revitalised water

1_ Beer tastes rounder, smoother, more intensive and is easier to drink

2_ Master brewer and company representative Wolfgang Kesselschläger: a very good idea to use Grander

Hops, malt yeast and water and the ingredients of beers brewed according to the purity requirements. Since 90% of beer is water, this water is a decisive factor in the way beer tastes. Memminger Brauerei's basic idea was to revitalise the water using the Grander system, thereby improving the twenty speciality beers and alcohol-free drinks they produce. Since the spring of 2006, the Grander water revitalisation system has been in use to the company's complete satisfaction.

After using revitalised water, the award-winning master brewer and company representative Wolfgang Kesselschläger noticed changes in the way the products tasted. "The beer tastes rounder, smoother and more intensive." Brewing times have been reduced to just one day and, according to the expert, the carbonic acid has become like "fine pearls", making the beer easier to drink.

Grander is used in many ways in the privately-run brewery. "Everything to do with water is connected to the Grander water revitalisation system, i.e. the cleaning, heating, drinking water and beer production," confirms Kesselschläger. Savings can be made on energy costs by reducing the flow temperature of the heating devices and far fewer additives are used in the cooling system. Every year, 10% fewer acids and alkalis are used to clean the tanks, including a reduction of 2.5 tonnes in the amount of chlorine used every year in the alkaline tank cleaning process. "I believe the Grander water revitalisation system to be a very effective and efficient method and our company has been able to make significant savings in terms of energy and cleaning costs," confirms Kesselschläger.



Information

Grander used since 2006

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Information

Grander used since 2005

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MKE

Water for employees and machines

Excellent quality in terms of coolant lubricants recorded by the technicians of the metal and plastics product company in Heidenreichstein

The cult car known as the Bentley has enhanced the reputation of this Austrian company, which also makes special cigarette lighters for such luminaries as Cartier and Yves Saint Laurent, with collectors willing to offer the highest prices for these objects. The metal- und Kunststoffherzeugung company (MKE) one of only three companies in Europe still manufacturing these special lighters. The company's main area of activity extends from small items made from metal and plastics to dental implants and heavy pressure reduction valves weighing up to 20 tonnes. Its products include hydrants, mountings, components and systems for railways, and the makers of film and medicine products.

In 2005, positive domestic experiences persuaded the company's executive to test the Grander water revitalisation system in their company. Initially, employees thought that

they would be able to enjoy their drinking water from a Grander drinking water fountain. The "gift" was gratefully accepted by the workers. However, the mental leap was not that great. Could revitalised water also be used effectively in the production area? "In the summer, when it's very hot, the cooling water turned bad after three months, stank terribly and couldn't be used again," remembers the chairman of the council of employees, training officers and safety technicians, Christian Schleritzko.

The smell of the production water was unbearable and coming into contact with it could lead to skin irritation. Machines had to be cleared out in a relatively short space of time and refilled. The aim of this was to stabilise the coolant water in the system by using Grander water revitalisation system and to get rid of the smell caused by bacteria.

"In the beginning, we were still sceptical about the Grander water revitalisation system, but the smell got better and our skin was able to tolerate the coolant lubricant. We don't know how it happens, but Grander does work," says a very satisfied Christian Schleritzko.

1_ Christian Schleritzko: best quality in terms of coolant lubricants

2_ MKE: Red hydrants for the city of Vienna



1_



2_

2_ Water is certainly not one of the commodities in short supply in Bangkok, although there are problems in providing high quality water



3_

3_ Slime formation in Aloe Vera processing is clearly reduced



4_

4_ The swimming pool no longer has to be cleaned by divers

Every child in Bangkok knows the TIPCO Tower, the stately skyscraper on Rama 6 Road, but hardly anyone knows that from basement to penthouse, the water is provided by a revitalised water system, including the swimming pool that is open to the public. The brains behind the idea was the chairperson of the TIPCO Group, Anurat Tiamtan, who came across the Grander system on the internet and tested it out at home. She found that the water she had used throughout her life was changed.

Anurat Tiamtan then used her experiences as a basis for fitting out the company's headquarters. The use of chemical additives was reduced, together with the amount of cleaning and service work. The amount of chlorine added to the swimming pool was halved. The reduction in the smell was especially welcomed in both the swimming pool and the adjoining fitness centre. The manageress of the swimming pool, Suthikan Phothiphat was able to do without the divers, who regularly

had to remove the algae from the pool walls.

TIPCO is one of the largest foodstuff groups in Asia and, in September 2007, joined forces with the Japanese Suntory Group. TIPCO has grown from its origins as a small pineapple factory in 1976 until the present day, when it is one of the largest suppliers of tropical fruits, teas and Aloe Vera etc. The plant, located 300km to the south of Bangkok, houses 6,000 workers. The familiar reactions that fol-



1_ Tipco Foods: preparing fruit, vegetables, green tea and Aloe Vera

...and in the big, wide world

Revitalised water cleans Aloe Vera plants, hot water boilers and the swimming pool in the TIPCO Tower in Thailand



5_ The chairperson of the TIPCO Group, Mrs Anurat Tiamtan uses Grander throughout the tower

low the use of the Grander water revitalisation system were also seen here. The hot water boiler does not attract limescale to the same extent and pipes are easier to clean. The water made the washing of Aloe Vera much easier by reducing the build-up of slime and also many other small positive reactions were observed during operations.

In all respects, including the technical, Anurat Tiamtan confesses to be particularly impressed, especially after observing a very

specific aspect: "Since the fountains in front of the company's headquarters also use revitalised water, the area's homeless dogs have become permanent visitors, coming to drink the water," she says with satisfaction. "I came across a dishevelled dog and found that his sores had healed and that his fur was as soft as silk!"

Information

Grander used since 2005

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Grander Journal IV

This journal contains valuable information on the topic of water and a representative cross-section of current applications of the Grander water revitalisation system

You can obtain the above, along with more information on the Grander water revitalisation at www.grander.com or by contacting Uranus Verlag on +43 (0) 4 / 403 91 11 or verlag@uranus.at, free of charge.

Grander DVDs

Clear water for industry

This DVD gives you more information about the industrial applications contained in this brochure. The relevant technicians discuss their individual experiences of using the Grander water revitalisation system in their operations.

Dual language DVD: German and English



Grander – experiences

This DVD documents current and traditional examples of users. Specific emphasis is placed on the benefits of using the Grander water revitalisation system in baking and in processing cereals.

5-language DVD
German, English, French, Italian and Spanish





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