

PACO

WORLD

Our International
Wire&Mesh Magazine
for Existing and
Prospective Customers

No. 15 07/2008

Customers – Our Critical Companions

Dear Reader!

How many customers does a company need? The more, the better? No way: it's the number of good and, at the same time, critical customers that's important!

At PACO we are proud of our customer base of more than 8000 national and international companies that we regularly do business with. Among these are some that are at the very forefront – even world market leaders – of their respective fields. But also included are research institutes, laboratories and other specialists.

When companies emphasise that customers are their most important capital, they are, of course, right. This is, however, only part of the truth: instead of judging customers on revenue alone, they should be viewed as a qualitative asset. After all, they are the ones that say what they need, tell us about the problems they're having and ask us about possible solutions. And, as a company, this is what gives us the ideas that make and keep us successful.

Of course we have to admit that at PACO we do like receiving compliments – particularly from critical customers. And if somebody isn't happy about something, it hurts – but that is the first step to restoring customer satisfaction. At some point every customer is going to be critical, may complain about something or change their evaluation standards for a particular supplier. And because this is often the trigger for improvements and innovations, we always try to be as self-critical as possible. At the same time we look forward to the ongoing critical companionship of our customers and partners.

Best Regards

Peter Ruppel
Managing Director



PACO proudly presents: ERP – Our New Platform for Customer Satisfaction

Of course the installation of a new weaving machine designed and built in our own workshop or the commissioning of an innovative fully automated working centre will gladden the heart of anyone that delights in technology. But what about a company-wide computer system for merchandise management, batch control and document creation etc. – what emotions does this conjure up? Now that the new ERP (Enterprise Resource Planning) system is up and running at PACO, the answer is easy: we are really proud of what has been accomplished within only 16 months, very pleased with the benefits for our resource planning and happy about the optimized service that we can provide to our customers now and on into the future.

IT is not enough

In this day and age, the use of an ERP system has become a matter of course for industrial companies. But why should a medium-sized enterprise need such a complex, elaborate and, consequently, costly software tool to plan and control its business processes?

One thing is clear: an ERP system in itself will not give you any competitive advantage. However, if you don't have it your competitors are going to have an advantage over you. But this aspect alone is not strategically important enough for PACO to invest such a considerable amount of manpower and

resources into such a project. After all, the quality of our products, our solution-oriented business policy and the wide range of services that we offer has already put us in an excellent position in the world market.

What we wanted is more than just an optimized software and IT package. As we – just like our customers – want to continue to grow in the future, we want to prepare ourselves today for the challenges of tomorrow.

Strategically structuring the future

There is no way that even the most elaborate ERP system will turn a company into successful crystal ball gazer that can consistently prophesy the future. But what it can do, in addition to optimizing existing company functions, is help establish and maintain robust, future-proof structures and processes. It is exactly this aspect that was put to the fore as PACO fundamentally changed and optimized its IT resources.

Computer assistance is already established practice in production, research and development, quality management and even environmental protection – and future technical developments are sure to enhance its value in these areas. But it is the intelligent use of state-of-the-art computer technology for managerial processes, data acquisition and management, internal and external information flow and communication, order processing, production planning, customer care and ser-

Continued on page 3





The joint SIGES and PACO presentation received a lot of interest from the exclusive specialist audience. Mr. Byron Chui (Printcolor Asia), shown on the right, kindly agreed to act as an interpreter.

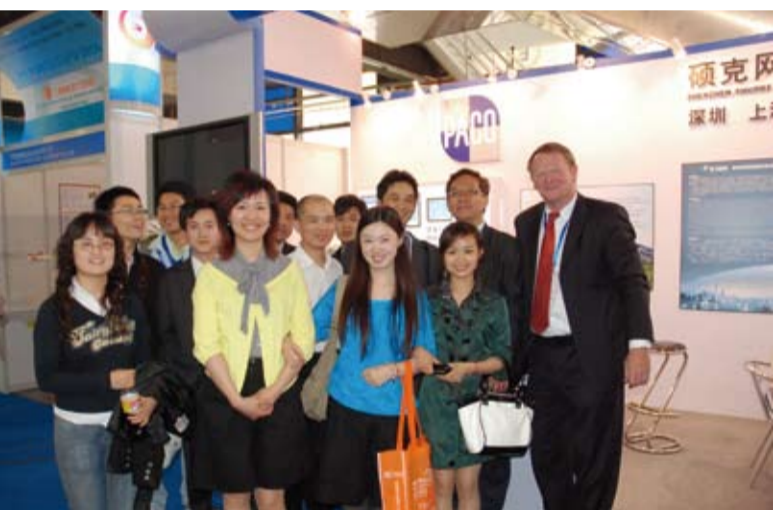
2nd International Photovoltaic Expo, Shanghai: PACO Stakes a Claim in the World's Largest Solar Market

For the long-term good of us and our planet, solar energy has to be the most ideal and safest form of alternative energy. Apart from Germany, China is one of the technology leaders in the development of increasingly efficient and economic technologies that transform solar energy into electricity. That is why it is fitting that Shanghai was host to the 2nd International Photovoltaic Power Generation Expo between 10th and 12th May 2008. PACO was there as an exhibitor together with its Chinese partner SIGES.

The Chinese solar market is growing dynamically at rates of 20% – 30% per year. That's twice as fast as Europe and three times that of North America. As a leading producer of precision screen printing cloths that are indispensable for the pro-

duction of solar cells (see PACO WORLD No. 13), PACO took an active part at this exhibition that is very important for the Asian market. The appearance was in cooperation with Shuoke Screen Printing Science & Technology Co. Ltd. (SIGES). With three sites in Shanghai, Shenzhen and Dongguan, SIGES is a strategic partner for PACO in China. Together, the companies also took the opportunity presenting themselves to a specialist au-

dience through a lecture that attracted a great deal of interest. Both partners have agreed to work closely together in research and development as well as to advance and perfect the production of high precision metal cloths and screens for leading edge screen printing. The organisers of the solar expo are convinced that for humankind the age of fire is reaching its end and that we are entering into a solar age!



SIGES managing director Mr. Guo Zhang Zhen (3rd from right, back row) and Peter Ruppel (right) together with the SIGES team at the joint show booth in Shanghai.

PACO Re-Screening Service for Sieves: Taking Away the Wear Up to 3000 mm!

The sieves used in screening machines are subject to extreme mechanical loads. This results in wear and the need of re-screening. Important to making sure that this has to happen later rather than sooner is the quality of the sieve cloth and the screen fitting. PACO has significantly increased the capacity of its screening service in terms of both headcount and floor space. Measures to support the continued development and optimization of quality standards for re-screening and service.

PACO Sieve Screening: targeting customer needs

The dynamic growth of our "re-screening" service confirms that we are successfully targeting customers needs. After all, inefficient or defective screens reduce the quality and productivity of the screening process. The same applies to long service times and logistics that overlook the fundamental requirements of the user.

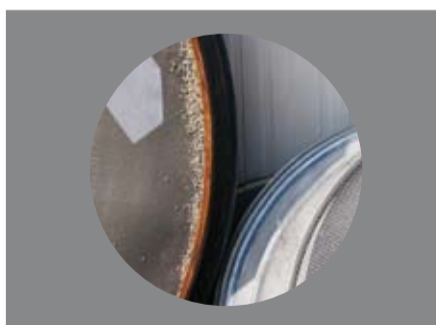
On the basis of many years of research and development of sieve cloths and metal wires, PACO already has the optimum base material. This is enhanced by a production quality that is one of the best in the world. An example of this is the high-performance PACO S-AM cloth that has been specially developed for universal use. It fulfils the demands of our customers respecting precise screening results, minimization of trapping and sticking and long lifetimes.

The fine details make the difference Most offers for sieve re-screening are

very similarly worded: re-screening of used sieve frames and sieve rings for all makes of screening machines. Production and screening of new sieve frames and sieve rings, supply of accessories such as sieve cleaning agents, sieve cleaning balls, seals etc. It goes without saying that PACO offers all of this as well.

But what makes the difference between PACO's screening service and the range of services offered by others starts with screen cloth manufacturing know-how and quality.

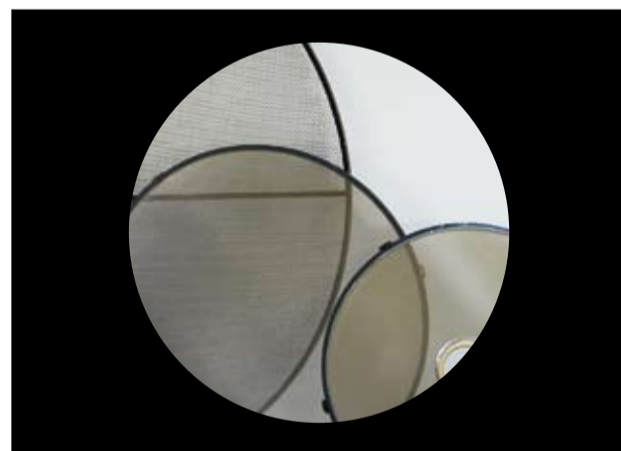
And it continues with highly developed screen fitting and measuring technology: the screen cloth is completely evenly tensioned in all directions which ensures a particularly high rigidity so that vibrations can be optimally transmitted. In addition, the high tension enables smaller diameter wires to be used meaning that, for a specific mesh size, there is a larger screening surface for higher screening performance.



Major up-sizing: handling capabilities of max. 3000 mm!

PACO produces and re-screens sieves with diameters of up to 3000 mm. This, of course, means that they also offer a corresponding transport service for the collection and delivery of the sieves. Particularly with screen sizes larger than 1200 mm, alternative suppliers often encounter logistics problems.

Because the handling of larger sieve diameters is particularly important to our customers, the demand is correspondingly high. That is why PACO has further strengthened its re-screening service –



in the person of our new service technician German Weber as well as through a specially equipped transport vehicle. This is in on top of the recently completed additional 400 m² of working area. All of this serves to further strengthen the already proven qualities of our re-screening service: speed, punctuality and reliability.



On top of 400 m² of additional working area for the re-screening service are personnel and logistical gains. The photograph shows our new service technician German Weber with his new service vehicle.

Wilhelm Ruppel's Legacy: Look After the Young People for Me!

Wilhelm Ruppel, the co-founder and long-serving acting partner of the PACO Group, died in February 2008 at the age of 81. Although everybody knew that even such an enterprising life as his will come to an end at some point, the final departure of a personality that played such a large part in forming the company represents a great loss to a family business. At the same time, the death of the father of PACO brings with it the responsibility of protecting and developing his heritage. This is not only limited to the material values that he created, but also his ethical and social legacy, in which the interests of his employees was always of utmost importance.

We remember well

The editorial team at PACO World has often had the opportunity of talking to Wilhelm Ruppel. As can be expected from conversations with the senior manager, a frequently re-occurring theme was the origins and development of PACO. But this didn't stop him also liking to talk about what was happening next. Linking the past with the future was something that went without saying for Wilhelm Ruppel. After all it was him that, at the beginning of the 1950s, set up a second-hand loom in a garage to start production of metal cloths. (Long before Bill Gates started his garage career.) It was also him that, as far back as 1956, made the necessary contacts to begin exporting to the USA. And, once gain, it was also him that recognised early on that the company's range of products had to be expanded from the base product of metal wire cloth to include semi-finished and finished goods. In other words: the decisive strategic decisions and visions that influenced the development of PACO are those of Wilhelm Ruppel. He was closely involved with the company right up to the very end.

With great foresight

One of Wilhelm Ruppel's most important entrepreneurial accomplishments was that he chose and qualified his successors very early on. The PACO Group with affiliated companies in Belgium and France today employs approximately 400 people. The company is managed in the 2nd generation by the sons Peter Ruppel (managing director) and Klaus Ruppel (authorised officer). After obtaining his engineering degree, the grandson Garvin Ruppel is now the first of the third generation to enter the company.

At the same time, the company co-founder also viewed his employees as part of the family. Their job security, social protection and further education were some of his most important company objectives.

Of equal importance was his commitment to Germany as a production location, which for him was a strategic



advantage and the fundamental basis for globally competitive quality and innovation. Nevertheless he didn't hold back when it came to criticising needless bureaucracy and other factors that he considered detrimental to business development.

Time travel into the future

Even at a very advanced age, it wasn't enough for Wilhelm Ruppel to just look back. This can be seen from the speech that he held in front of a large gathering of guests consisting of dignitaries, customers and staff at the company's 50th anniversary celebrations. Here is a short excerpt:

"I would like to express a few thoughts about something which in my experience is a fundamental problem that is causing me a lot of worry – the plight of education and the problems that this is causing for our youngsters."

Politicians and NGO experts blame industry for the lack of apprenticeships and trainee schemes. They, however, often overlook the fact that a lot of school leavers have very set ideas about an apprenticeship and won't look at anything else. A further not insignificant part doesn't even have the basics that are needed to successfully complete an apprenticeship.

Those responsible for upbringing and education, parents as well as teaching staff, should take a more personal interest in their responsibilities and raise children so that they are able and willing to achieve more. Our complete society has to strike the right balance between demanding and giving. If we are not able to make the needed changes, Germany will only be able to take on a very limited role in the international community."

The legacy of Wilhelm Ruppel is foresight. It is our responsibility to continue as he intended into the future. In doing so he will always be our guide and motivation.



Visit us online!

www.paco-online.com

Now in three languages: German, English and Spanish!

ERP – System

Continued from page 1

vice optimization etc. that round off the company's today's and future performance.

Focusing on customer needs

During the planning of our new ERP system we continually envisaged what our customers needed as well as what they would possibly like to have. As they are located all around the world and are active in a number of different fields (e.g. wastewater treatment, pharmaceuticals, biotechnology, electronics, mining, vehicle manufacturing, food processing, oil production, aerospace etc.) a wide range of specifications and interfaces had to be taken into account.

Of course it was also necessary to systematically identify the company's own requirements and demands and integrate these into the project. It was particularly important to create more transparency in the production process as well as better usage and higher efficiency of the individual resources, even greater adherence to delivery dates and further increases in customer satisfaction. Also not to be forgotten was the fact that PACO has to control up to 10,000 "living" articles each year.

Concentrated information input within the company

The decision was made for an extremely efficient and intuitive software solution that already fulfilled – and in some cases completely exceeded – a number of the specified requirements. These capabilities were confirmed through a localized test installation among the major users within the company that also allowed the users' suggestions and ideas to be brought into play.

For the software package to be effectively adapted to exactly fulfil the needs of the individual users, a lot of facts and ideas had to be exchanged between each of the specialist departments. Something that had to be achieved in addition to the everyday workload. That is why we would, once again, like to express our appreciation to everybody involved!

Parallel to the modification of the standard solution, the individual programming needs were defined and the requirements for the IT infrastructure were specified: servers, workstations, communication systems etc. – as expected, state-of-the art solutions that can be upgraded to keep pace with future developments.

In addition, preparations were made for enhanced computer assistance of the manufacturing chain with the aim of prompt implementation.

Of course, getting a new software system to go on line at the push of a button without in any way upsetting

normal company operations is completely impossible. To do this would have meant setting a date on which hundreds of running orders would have to be transferred to the new ERP system overnight. Instead of this, a flowing transition was chosen.

Optimizing the complete line

Before the project could be implemented, the different PACO product groups had to be split into their individual characteristics – e.g. geometries, dimensions, materials and other specific properties. The aim of this is to collect this data together with the help of a so-called configurator to form specific articles. This enables searches in the article management system on the basis of specific characteristics, so that only a mouse click is needed for new alternatives of an existing article master to be offered. In the next step, the products generated in this way can be allocated to a specific customer with a customer-specific part number that appears in the customer's documentation. On top of this, the customer articles are fully parameterizable. This means that criteria important to the customer, such as quality specifications or specific packaging or marking requirements, can be flexibly saved and printed onto the customer's papers as required. The same also holds true for internal manufacturing parameters. All of this enables customer requirements to be satisfied even more closely.

Further improvements on the basis of the new ERP system are: increased performance of the storage organisation, optimized batch management with efficient implementation of work certification, shortening of delivery times, first steps towards Supply Chain Management (SCM) as well as enabling an EDI-link (Electronic Data Interchange) with customers, e.g. within the automobile industry.

The initial experiences with the new ERP system are extremely positive: the quality of the data gained is convincing and more than makes up for any additional effort required to implement new structures and run the processes that provide the data.



Graduate engineer Garvin Ruppel (born 1981) is in charge of the team responsible for planning and implementing the new PACO ERP system. After gaining his A-levels, he studied mechanical engineering at the University of Applied Sciences in Darmstadt, during which time he also gained extensive IT knowledge. He has been working at PACO in the area of project administration for the past two years.

10th World Filtration Congress in Leipzig PACO Filter Technology in the Limelight!

The World Filtration Congress (WFC) is internationally one of the top events dedicated to this subject. Prof. Richard Wakeman, head of the faculty "Chemical Engineering" at the Loughborough University in England, stated in his plenary lecture that during the last 30 years or so filtration has developed from a Cinderella technology to a high technology enterprise. PACO, with its filter products and solutions, has played a large part in this development and, as one of the exhibitors, enjoyed presenting this to an audience of international specialists.

The World Filtration Congress was held for the tenth time – and the first time in Leipzig (14. – 18.04.2008). It was visited by 750 delegates from 45 countries, attracted 150 exhibitors from the fields of filtration, separation and measurement technology and had 2,400 participants. 350 technical presentations as well as numerous exhibition stands showed the latest developments and technical innovations. PACO also presented their capabilities as a leading developer and manufacturer of state-of-the-art filter solutions.



At the WFC in Leipzig, a number of existing and potential customers took the opportunity of making contact or strengthening their personal ties with PACO.

In a fast changing environment of ever scarcer raw materials, soaring energy prices and increasing globalisation, the filtration branch also has to deliver new and improved solutions at shorter and shorter intervals. PACO has taken on this challenge and, consequently, likes to come face to face with researchers, developers and users at conventions and exhibitions. The presence at WFC led to interesting discussions about subjects such as regenerative energies, process optimisation in plastics manufacturing and emission control.

The extremely positive resonance experienced means that, in future, PACO will increase its activities at national and international exhibitions and conventions.

PACO's Short Guide to Manufacturing



Work at PACO is characterised by a variety of different production techniques. We present the most important of these in a series that is appearing periodically in various issues of PACO WORLD:

6. Water jet cutting

A Chinese proverb says that "constant dripping wears away the stone" – and can even cut through metal. This separating technique is based on the use of a high velocity and high pressure jet of water. This jet can reach a pressure of 6000 bar and emerge at speeds of up to 1000 m/s, which is equivalent to three times the speed of sound. As there is no heat affected zone (HAZ), material can be cut without affecting its inherent structure and the precision provided by the extremely small kerf provides extremely accurate cutting results with tolerances of +/- 0.1 mm.

Water jet cutting differentiates between "pure water cutting" which is more suitable for softer materials and "abrasive cutting". In the case of the latter, abrasives are added to the water to increase the cutting performance so that very hard materials can be separated. PACO uses abrasive cutting, for example, to cut PACO seals out of aluminium and copper for the production of spin packs.

Steinau an der Straße: Legendary Artist David Hockney in the 'Brüder Grimm Haus'

This exhibition could be easily at the Tate Gallery in London or the MOMA (Museum of Modern Art) in New York – but no: it can be seen in Steinau! To celebrate the opening of the fully renovated exhibition rooms, the "Brüder Grimm Haus" in the town is presenting an unique set of 39 etchings based on scenes from Brothers Grimm fairy tales. Their creator is the British/American artist David Hockney (70), someone who is mentioned in the same breath as other pop art giants such as Jasper Johns or Andy Warhol.

The exhibition is entitled: Six Fairy Tales From The Brothers Grimm. The ec-



David Hockney *Inside the Castle from The Boy who Left Home to Learn Fear*, 1969

centric artist – who claims to have read all 220 Grimm fairy tales over the years – originally intended to only make one or two illustrations – but ended up doing 39. They date from 1969 and are among the most famous prints that the artist has ever produced. But whoever expects some more-or-less naive illustrations of the fairy tales can expect a visual surprise: Hockney interprets the Brothers Grimm in his own very distinctive style. Definitely worth looking at!

www.Hockney.Brueeder-Grimm-Haus.de

Bits and Pieces: Bill and others got it wrong here...



The inability to correctly interpret the technological future

Things often don't turn out the way that you expect – this also applies to developments in the fields of IT, media and communication. Even acclaimed experts have got it wrong with their prognoses. Here are a few entertaining examples:

"This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us"

(Executives of the American Western Union Telegraph Company, 1876 – considered today to be one of the pioneers of the Internet)

"The wireless music box has no imaginable commercial value. Who would pay for a message sent to nobody in particular?"

(A potential investor about the invention of the radio in the 1920s)

"Who the hell wants to hear actors talk?"

(Warner Brothers, Hollywood, about talkies, 1927)

"I think there is a world market for maybe five computers."

(Thomas Watson, IBM chairman, 1943)

"Computers of the future won't weigh more than 1,5 t."

(The magazine 'Populäre Mechanik', 1949)

"There is no reason anyone would want a computer in their home."

(Ken Olson, founder of Digital Equipment, the internationally renowned computer company, in 1977)

"640 K ought to be enough for anybody."

(Bill Gates, Microsoft founder, 1981)

Imprint

All information in this edition of PACO WORLD has been carefully checked prior to publication. Nevertheless, we can make no guarantee for completeness, accuracy and up-to-dateness.

Publisher:

PACO PAUL GmbH & Co.
Metallgewebe und Filterfabrik
Industriegebiet West
36396 Steinau a.d. Straße
Germany
Telephone: +49 66 63-97 80

Editor, copywriter: ralf.geisler@t-online.de

Layout: info@knoechel.info

Printer: Druckerei Chmielorz,
Wiesbaden-Nordenstadt

