

19.

Edition

July 2001
10th year

Kurtz

... NEWS



The customer and employee journal

**A new and
braver world**

**Pure strength
of performance**

**In the spirit
of da Vinci**

**The digital
corner shop**

**Wanted -
bright sparks**



**Customer - Partner
of the Kurtz Group**

**[http://
www.kurtz.de](http://www.kurtz.de)
www.ersa.de**

Good luck - all the way to the top



It all starts with the vision! An idea lodges itself in the mind, gradually attains clearer outlines and becomes a fixed goal, the achieving of which grows to a challenge. The more difficult and unusual the goal, the greater the inspiration.

Thus it was, for example, with the first ascent of the highest mountain in the world, Mount Everest.

Once the goal is established, the route to achieving it is manifested in a concept. Plans and preparations are made, routes chosen, equipment obtained and a precise schedule drawn up.

This is what Sir Edmund Hillary did in Nepal 1953.

Then comes the most important stage, selecting the right partner. He helps the conqueror of the summit in his preparations and contributes all his specialist knowledge to the service of the mutual aim. He provides support in the difficult passages, motivates and inspires.

For Sir Edmund Hillary this was Tenzing Norgay, a Nepalese Sherpa.

The greatest joy is the final mutual attainment of the goal, the ultimate satisfaction, as experienced by Hillary and Norgay on the summit of Mount Everest on 29th May 1953.

We turn now to you, our valued readers: Kurtz could be this strong partner for you. And so this issue of Kurtz News is based on the underlying theme of „Customers as Partners“. We leave to your imaginations the significance of this allegory of conquering a mountain summit to the installation of a KURTZ or ERSA machine or an SAP system.

You will find examples on the following pages of a number of moments of mutual achievement, with such renowned customers as Miele, Loewe, Lape, Zer-O-Loc and many more.

Together with our team of employees we, too, have conquered some summits of our own, summits which

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are not necessarily recognised as such, but which always represent a major step forward - the introduction of the SAP system in the Kurtz Group being just one example.

We would like to thank our customers and staff for the partnership and cooperation. We also wish you and your families a good, restful summer holiday, full of moments of pleasure and achievement, whatever the nature of your own personal summit, be it on the highest mountain in the world, by the sea or at home among your family and friends.

Sincerely yours,

*U. V. ... tz
J. K. ... tz
D. L. ... tz*

... a new and braver world!

„Customer“ is the theme of this issue of Kurtz News. „Customer Orientation“, „The Customer is King“, „Customizing“ - these are all ideas which are no longer the exclusive property of insiders.

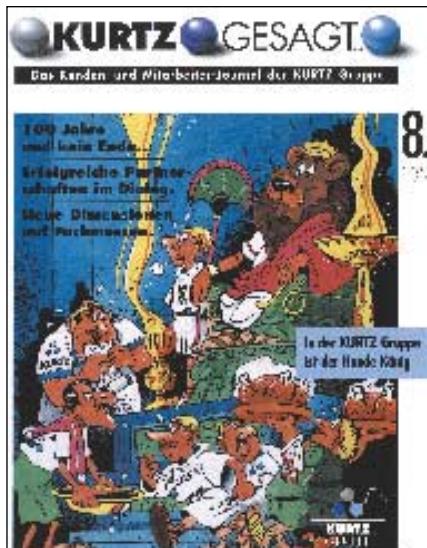
Is the digital economy perhaps opening up new opportunities for developing customer contacts? The idea is that greater transparency in business procedures and markets, network-linked and above all intelligent information systems (data-mining) should lead to personalised products, so that the biggest concern can be turned into a digital corner shop. Company structures will no longer be determined by the products and the way they are put on offer but by market structures and customer requirements.

„All in all, it looks as if we are much closer to Utopia now than anyone could have imagined fifteen years ago. At that time I thought of this Utopia as being six hundred years in the future“, wrote Aldous Huxley in a commentary on his science-fiction novel „Brave New World“.

In our own field the extremely versatile tools of Customer Relationship Management (CRM) offer us the prospect of a similar quantum leap, and one the exact scope of which cannot yet be foreseen. CRM is the latest message of the marketing strategists, who foresee that it will open up irresistible avenues for the customer, ranging from Internet fitted out with integrated e-commerce solutions and call-back-functions in call-centres, through newsletter and data base management to the „good old customer magazine“.

This brings us full circle, because Kurtz News is just such a customer relations instrument, and one that has been going for ten years now.

So we would in fact be fully justified in resting on our laurels, having shown



that we had recognised the signs of the times by making „The Customer is King“ the theme of Kurtz News‘ eighth issue. Even then there was plenty to report on, as customer-orientation is a practice that has a long tradition at Kurtz.

But when we think of a „customer“ we think of much more than a monarch before whom we bow in adoration. Ideally, what we understand by „customer“ is a „win-win“ partnership, long-term in character and of benefit to both sides.

A further question which can and must be asked is who or what actually is the customer whose inmost thoughts have to be taken to heart in a company culture. If this determined our understanding of the „customer“ then it would hardly be necessary for the customer to be courted like a king, as this new way of thinking would be practised every single time communication took place.

If this is the case then it is clearly all the more important to ask what the word „customer“ actually means.

The customer is the one who buys our products, pays our wages and salaries and guarantees the continued growth of the business group. This

is without doubt the most significant interpretation of the term „customer“, and the one which should have priority. But it is also in principle the one which everyone in the company should be aware of and should constantly seek to put into practice.

But if we continue to look at the matter externally, the term „customer“ also includes everyone who comes knocking at our door, not only as a supplier of goods or services, but also one offering to work for us. Particularly in times of limited staff capacity, customer orientation is an indispensable element in the field of human resources, as the labour market is oriented to demand and there is constant competition among companies for potential staff. The personnel manager has himself become a kind of salesman and the experts in the field in question later come into their own as the customer’s consultants. And particularly in the human resources field, the tools of personnel marketing make the company more competitive.

If we continue to take the employee’s point of view, every member of the company’s staff is also a customer, with the company’s relation with the staff member being that of an active supplier. Given the current labour market situation, the strength of the company’s relationships with its staff members, here seen as customers, is becoming an increasingly important factor.

Looking at the whole thing the other way round, enterprises – or indeed the employers themselves – who pay for services from our staff are also in a sense „customers“.

One way in which customer orientation is put into practice is by practising a corresponding form of communication within the company.

At this point we should spare a

... a new and braver world ...

moment to think about TQM, Total Quality Management. It should be a part of our information and communication policy to keep a constant check on our customers' wants and needs, on what the customer needs in the way of information, and what each individual can do to improve the information that the customer is supplied with. Suggestions and even criticism should be considered as a positive stimulus for constant improvement. To return to the company's internal point of view, every colleague is a customer, too. Being open, polite, and objective in our dealings with one another is not simply a matter of good form, but is a way of going about things that we should be able to take for granted.

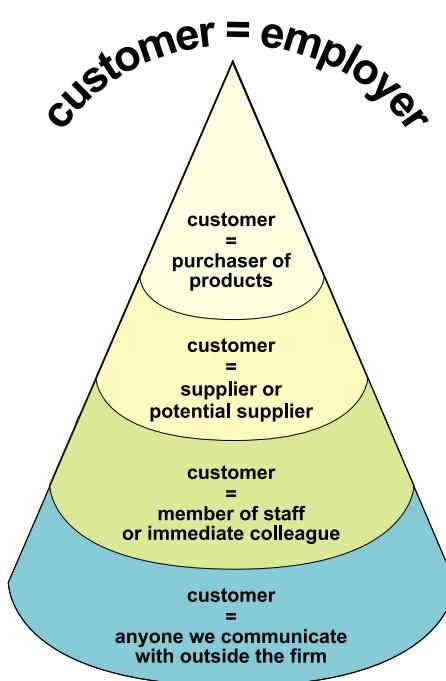
To look at the matter from a more global point of view, every single person we communicate with, inside or outside the company, is also a customer.

If this is the way we think then we will not need to do any double-takes à la „Ah, customer on the phone, I had better be friendly!“, as the practice of customer orientation will be firmly anchored in company philosophy and thus in the minds of all involved. The new image we shall have of each individual, that is to say each individual customer, will go beyond our working life in the narrow sense and everybody we have contact with in our daily life will become a „customer“.

When this is the case, marketing will have fulfilled its purpose and, our marketing goal in its most far-reaching sense will have been achieved; customer-oriented thinking and acting will then be part of and definition of everything that is done in the name of the company at all levels of the hierarchy. And then we will have to agree with the claim of Heribert Meffert,

the father of all fathers of marketing in Germany, that there will soon be nothing left of marketing as we know it; it will soon be a function that we will be able to do without entirely. Could it be the case that modern marketing will finally have the paradoxical function making itself redundant?

The question remains as to whether these thoughts are not simply fantasies, or indeed whether this way of looking at things is not based on too simple or too idealistic a world-view. Doesn't it run too much against the



grain of real life? Isn't it too much in contradiction with our „every man for himself“ society, and the tough competition of the market place? How come we have to face up to problems such as mobbing and dissatisfied customers if a harmonious way of dealing with one another is such a high priority in our corporate image? Not all that glitters is gold, either in our

daily dealings with one another, nor in our relations with our customers. And to come back to our original theme, however much CRM may offer us, a way of talking to customers individually, computer-supported advising programmes cannot replace the traditional salesman in flesh and blood, particularly in the machine construction sector. Hermann Diller, Professor of Marketing at the University of Erlangen / Nürnberg, put it as follows: „No-one can judge a customer's requirements better than an experienced sales rep.“ The human being is human and will always remain so with all his strengths, weaknesses and social needs. And in the final analysis, success is not to be attributed to the strategy, the structure or the organisational form, but first and foremost to the people who put them into practice and keep them going.

But the limitations of the system are just as fluid as the way in which our society is changing. A good mix of the innovative and the familiar is the way towards a successful future. And then perhaps – one day – we will feel, consciously or unconsciously, that some people or an increasing number of people or even all people, are thinking in a customer-oriented way, in all life situations. There is still room for human individuality and personality in the most modern CRM systems, if they are based on a CRM which is backed up by good relations on the human level, and vice versa. If we are thinking in this way then we are on the right track, not to the „Brave New World“ which Huxley described in his horror scenario of Utopia back in 1930, with ever greater diminution of personality, with classification and genetic identification, but to a „New and Braver World“. Help us to work at getting there!

Get upgraded - Sales & Service Meeting



KURTZ „Get upgraded“ was the motto for the Sales and Service Meeting of the KURTZ division for particle foam machines which was held between 21st and 26th June in Stumm, Austria. International sales and service people from all over the world met here, along with the design engineers and sales and service departments of the KURTZ companies in Wiebelbach and Altaussee, to exchange ideas and experiences. Discussions included the latest customer requirements and the various developments on the world markets. The focus of the event, however, was

the customer. Ways and means were established by which the requirements of customers could be even better served. Subjects were raised such as customer relationship management, optimised know-how transfer and more intensive consultancy services in the project development phase. In future there will be great potential to stand out from the competition by means of increased product alignment and improvements in communication, both internally and externally.

In order to ensure a vision beyond the representatives' own horizons, a spe-

cialist external communications trainer was brought in for this purpose. He acted as „coach“, leading delegates through the whole event, and demonstrating simple methods of improving communication behaviour.

Of course, having spent the day giving full consideration to the subjects outlined above against a background of wonderful weather, the delegates also enjoyed a varied range of „communicative“ evening activities in the perfect setting of the Zillertal which even extended to such delights as sightseeing on the Zillertal mountain road.



Big get-togethers are things to celebrate

KURTZ ... and the two leading trade fairs in the plastics and electronics industries taking place in Autumn this year certainly promise to be very big get-togethers ... At K'2001, from October 25th to November 1st, KURTZ are exhibiting new trends and innovations in the field of particle foam processing machinery on the 450 m² of Stand B/21 in Hall

13. It will certainly be worth paying us a visit – not least to see something totally new celebrating its world première.

At the productronica from November 6th to 9th, ERSA will be presenting innovative quality products in the electronics production field on the more than 400 m² of Stand 578 in Hall A3. They will be introducing their visitors to revolutionary new developments in

the field of soldering machines, soldering tools and inspection systems. Both these dates are an absolute „must“ for all those working in our field and we urge you to write them in red pen in your diaries today!!



Productronica

New gear pump by Bosch-Rexroth

 The company Bosch-Rexroth with its RPU Department in Lohr am Main concentrates on aluminium products.

Design engineer Mr. Birkenmaier has developed a completely new kind of pump for tractor gear systems, for the Austrian tractor manufacturer Steyr. Two pumps are integrated into a small, compact unit:

A „gerotor“ gear pump.

This fixed displacement pump works at a max. pressure of 10 bar and serves the lubrication circuit.

Pump specifications:

Fixed displacement pump:

Max. pressure 30 bar /
displacement volume 30 cm³ / U

Variable displacement pump:

Max. pressure 30 bar /
displacement volume 30 cm³ / U
Speed: Max. 3200 rpm
Viscosity range: 10 10 000 cSt

Developer of these pumps:

Mr. Birkenmaier

A variable vane pump.

This variable displacement pump works at an operating pressure of 30 bar. It delivers the oil to cover the hydrostatic leakage, the hydrostatic flushing and the distributing valves for the clutch linkages.



The adjustable quantity control ensures that the precise quantity of oil required at any time is delivered to the system.

In comparison with conventional fixed displacement pumps, this pump leads to a reduction in power consumption. In addition, this vane pump is in a position to take in oils with a viscosity of up to 15,000 cSt.

This unique pump is therefore an energy-saving pump which automatically delivers the quantity of oil required from one moment to the next and therefore only consumes as much energy as is needed at any given time.

The material selected for this brand-new type of pump is the aluminium alloy Al Si 87 Mg wa.

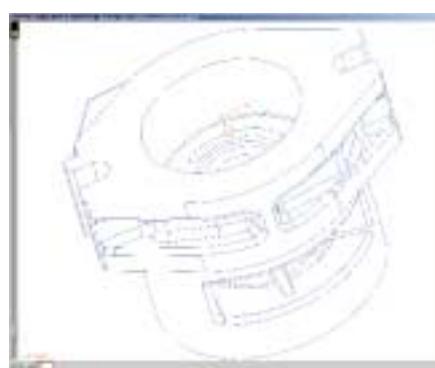
Thanks to the particularly good tribological properties of this material, these pumps are substantially simpler to construct than comparable pumps made from cast iron; a huge economic consideration, which also makes for value-for-money products!

Bosch-Rexroth design engineers set great store by castings from the Kurtz Group!

Precision, accurately-contoured aluminium castings with uniform joints are prerequisites demanded by the branch of the hydraulics industry, and by the field of application.

The Kurtz Group aluminium/die foundry has specialised for many years in complex, high-quality castings.

In particular, the low-pressure process ensures, in addition to the qualities described above, a good, uniform cast joint and thus offers the optimum prerequisites for Bosch-Rexroth pumps.



Perfect technology and perfect design ...

 ... is one of the mottos of the Kronach firm, Loewe Opta **KURTZ** GmbH (which belongs to Loewe AG). Since its foundation in 1923, the firm has been responsible for one milestone after another in the field of electronics for the entertainment business. The following are just a few examples: 1931 - Loewe presented the world's first electronic



television; 1981 - Europe's first stereo TV; 1987 - television with 100% digital technology; 1997 - the first television with integrated Internet access; 1998 the Loewe Spheros, flatter and with a more brilliant picture than any previous television.

Their aims have always remained the same - the fulfilment of the most demanding customer requirements through innovative and high-quality technology in combination with eye-catching shapes and elegant design.

This requires specialist expertise, team work, rapid communication and adaptability, not only in-house but also on the part of the company's partners. A supplier is expected to be more than just an extra workbench. A supplier in the best sense of the word is a

technological partner, contributing to the development process and making his own operational expertise available as well. Particularly when prototypes are being built, this sort of support is much in demand, during the process of optimisation and right through to the point where serial production can begin. This is where MBW Metallbearbeitung Wertheim GmbH (MBW) was once again able to prove its expertise in the development of complex and aesthetically pleasing sheet-metal parts. As a number of these constructional parts are too demanding for one partner to be able to produce on his own, the partner concerned is also expected to find and, if necessary, to build up suitable sub-suppliers.

An example of this is provided by the component parts of the Loewe Spheros - the flagship among Loewe televisions. Even the process of cutting out the thin metal parts used in the chassis area from the sheet is very demanding. Production can only be carried out economically with modern punching and nibbling equipment backed up by additional multi-tools.

In this case what are needed are multiple tools in which a number of punches - which have, admittedly, to be limited in size - are all accommodated in one single tool container. This eliminates a lengthy and costly changeover procedure at the cutting stage. These parts are then given a complete machining, followed by high-quality lacquering and screen-printing.

An additional internal cost benefit accrues to our customer in that in this case he delegates a part of his own function in the operation to

us as his suppliers - we take over the administration and logistics for the parts which we manufacture.

The goal in all these endeavours is always to ensure that delivery and assembly take place punctually, and to be responsive to the needs of the customer.

To this end MBW gives every customer a permanent contact person, who can always be contacted by e-mail and Internet when telephone communication is not sufficient for the needs of the moment.



A strong and reliable partner

 It is now three years since Krupp Berco Bautechnik in KURTZ® Essen, a world market company, made their decision in favour of KURTZ castings. The contact was made at the Industry Trade Fair in Hannover, but almost accidentally, as KURTZ didn't actually exhibit at the fair that year. It was a chance meeting that actually led to the successful business relationship. It required a great deal of effort and the pulling out of all possible stops in the repertoire of casting techniques to meet the customer's very demanding requirements. For many years the central component of their hydraulic hammer, the cylinder lid, had been cast in the company's own foundries, but restructuring made it necessary to look around for an alternative. This was no easy decision either for the buyers or for the technical department (QS) of Krupp Berco, as by no means every foundry is capable of meeting the demands made by these particular castings.

After the separation and display of the casting structure it was immediately clear from the first test castings that there were still grave deficiencies to be overcome. But as has already been mentioned, a very close collaboration between KURTZ and Krupp Berco's department QS and colleagues in the buying department resulted shortly afterwards in the delivery of a faultless product. Further types followed for other hydraulic hammers, of which it was immediately possible to make successful copies.

These hydraulic hammers are used in conventional working situations, for instance in quarries in which blasting is either not feasible or uneconomical. Quarrying firms the world over have already had very positive results using Krupp hydraulic hammers as



an alternative to blasting and Krupp Berco is convinced that this application will be increasingly important for projects in the future - a fact which is naturally of great significance for KURTZ.

In order to choose the correct method of quarrying, the first step is to look closely at the quarry concerned and its own particular geological features. Other factors to be taken into account are the existing machine park and the existing situation as regards staff and logistics.

Priority has of course to be given to the general aims of the quarry management or rather the requirements of the quarry management's

customers, particularly in respect of bead size and the various other qualities required in the end product.

In the final analysis it has to be remembered that there are no two quarries in the whole world with exactly the same conditions. When each individual case is considered, each quarry has to be examined to see whether the use of hydraulic hammers is a rational alternative to the conventional method, blasting, in that particular quarry.

Krupp Berco have many years' experience in judging extraction methods for quarries, and it is only in partnership with a strong and reliable partner that this great variety of complex requirements can be met.

The driving force: KURTZ castings

 "Here at our location we need a strong partner, and KURTZ® above all a reliable partner." These, more or less, were the words with which the foundations were laid for what is now a notable partnership between the firm Metso Drives GmbH (formerly Santasalo) and the KURTZ foundry at Hasloch. Metso/Santasalo in Wuppertal is a subsidiary of the Finnish concern Metso, which itself has 20,000 employees in 40 countries worldwide and a turnover of DM 7,800 million. The department Metso Engineering in Wuppertal, until 1992 the independent firm Sauerwald, is with its staff of 110 a successful producer of planetary gears and a broad range of products for the whole Metso concern.

This inevitably results in synergy effects within the group. Until three years ago, the grey nodular cast iron and grey cast iron 70, with ADI bainite required for the planetary gears was supplied by the group's own foundries in Finland.

At the very beginning of the business relationship, no pains were spared at the Hasloch foundry to meet the requirements of the heat-



treated nodular cast iron; the working material had not yet been produced at Hasloch, and only if it could be produced there would the collaboration be of interest for both sides.

Pinion cages, gear rims and gearbox casings are required for the production in Wuppertal. They are used in motive power technology that is applied in many different ways in a great variety of branches of industry, for instance in the paper industry, in wood processing, in wind turbines, in ships' motors, in the steel industry, in conveyor technology, escalators, mining and extruder technology.

In Wuppertal they are able to rely on 114 years of experience in production for drive components and

cogged elements. Metso in Wuppertal has since specialised in the production of planetary gears, and in particular in the Hydroplanet series. If you want to read more about why it is only with a strong and reliable partner that it is possible to meet the constantly rising demands of the market, then information is available under www.metsocorporation.com.



The beginning of a wonderful friendship

 The project described below, the development and construction of a special aluminium low pressure die casting machine, involved close collaboration between three parties - the customer and two Kurtz sectors, foundry machine construction and supply.

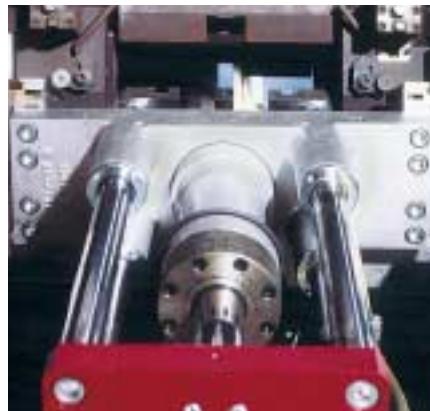
Those involved in the project had to work under considerable pressure, both as regards time and budget. And apart from the usual requirements, there were further specifications which had to be met - in respect of operator-friendliness, maintenance, and reproducibility for subsequent orders.

Although the customer already had a basic concept for this casting machine, it still needed to be fine-tuned, and to be improved through the integration of various new constructional features. This necessitated permanent close coordination and consultation on construction and production details between the customer and KURTZ:

- CUSTOMER
- Sales / Projections
- Mechanical and electrical design
- Administration of the design according to the customer's guidelines
- Buying
- In-house production and supply of parts
- Assembly at the works and installation on the customer's premises

As already mentioned, a principal problem lay in the strict deadline for the projections and execution - the customer's production start date was already immovably fixed! For this reason, the project could not, as is usually the case, be carried out part-by-part and in sequence; the various jobs had to be done simultaneously with a great deal of inter-departmental collaboration.

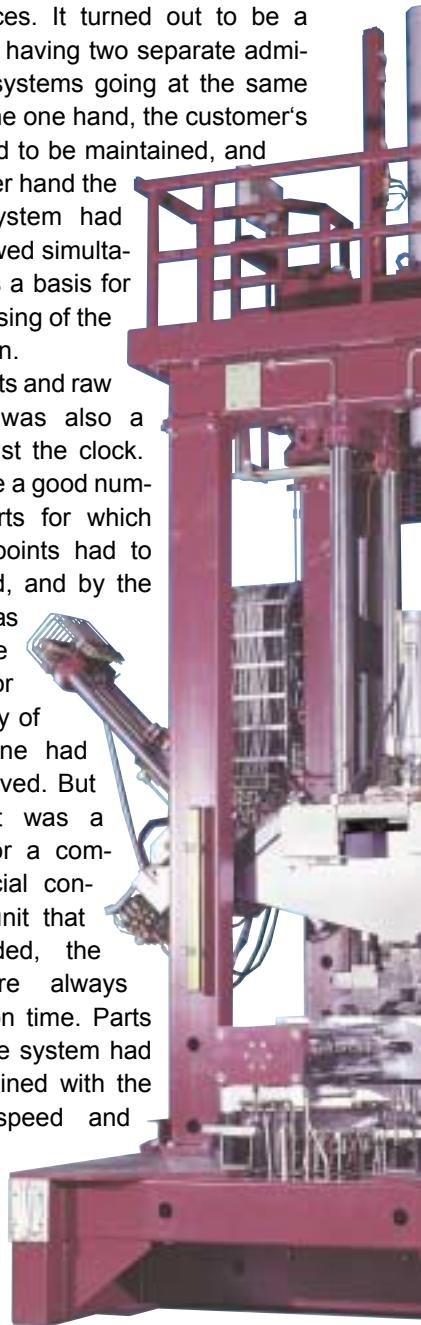
The project planners were faced with the challenge of coordinating all the various suppliers - from special individual parts right through to the complete constructional unit - without losing sight of their own construction and production plans. There was close collaboration with the customer on the choice of suppliers, partially at the former's own request and certainly in his interests, as a number of the parts involved were already used at the company and thus information already



existed regarding matters such as storekeeping and maintenance work. Choosing the best electronic construction parts with a view to their storage and maintenance was a matter of the highest priority for the customer. Another important point was the laying of cables, that is to say, the installation of the machine. They were all laid with the greatest care in special protective hoses and cable ducts, in order to protect them from thermal or mechanical damage. Measures also had to be taken to prevent mechanical damage during operational and maintenance work. Although KURTZ has many years' experience of producing low-pressure die casting machines and has an excellent reputation as a specialist on the market, it was in this case necessary to strike out on new paths. A number of various constructional units had to be built totally anew

in accordance with the customer's specifications, and existing parts had to be partially re-worked and tested in the light of new production guidelines. In this respect construction and production had to be closely coordinated, especially as far as the choice of material was concerned and the clarification of the treatment of workpieces and surfaces. It turned out to be a lot of work having two separate administrative systems going at the same time. On the one hand, the customer's system had to be maintained, and on the other hand the internal system had to be followed simultaneously as a basis for the processing of the commission.

Buying parts and raw materials was also a race against the clock. There were a good number of parts for which technical points had to be clarified, and by the time this was done the deadline for the delivery of the machine had almost arrived. But whether it was a DIN-part or a complete special construction unit that was needed, the parts were always obtained on time. Parts for the pipe system had to be obtained with the greatest speed and ingenuity to meet the deadline, in accord with the



pipe system used by the customer and quoted in the specifications booklet. One big problem was establishing the number and size of the pipes needed, but as collaborating on finding the best short cuts was one of our priorities, a solution was found.

One of the greatest advantages that the Kurtz Group enjoys is the breadth of its production range; the fact that castings are manufactured and given further processing within the Group is one of the most important reasons why, for quality, KURTZ products lead the field.

In this project the construction parts were processed on the most modern machining plant, sized X=6000, Y=25000, and Z= 1000mm, using five-side machining, and given their final shape with a series of state-of-the-art tools. The

finishing touches to the range of machining techniques

were given by NC-tooling machines with data transfer and CNC programming, that is to say NC-program-

mes were composed externally and the data was transferred by means of a DNC-network directly to the machining plant. Working to deadlines is a fact of life in KURTZ's production sector, which doesn't only produce for company use but is also active as a supplier.

In spite of the depth of practical experience and know-how amassed at KURTZ over the years, this was far from being an everyday project, and anything but „run-of-the-mill“. Quite apart from meeting the deadline, we had to cope with the size and quantity of the parts required and to co-ordinate accordingly. Everyone, from the planner to the machiner on the shop floor was stretched to the limit. As soon as production was ready with machined construction parts, they were snapped up to be installed.

Both assembly planners and those installing the parts had to be very responsive to the needs of the moment, as it was constantly necessary to adjust the assembly sequence, or, to put it in more practical terms, „whatever parts were ready had to be used straightaway“. But the biggest problem was the installation of the piping system, which consisted of heating, cooling, gas, hydraulic and pneumatic elements, along with their respective connecting hoses. On account of the number of the hoses and in order to facilitate freedom of movement the hoses were divided into two large energy-transmission chains.

It was nevertheless a problem that this installation was not pre-planned, and that all the necessary adjustment had to take place at the assembly stage. Some of the lines had to be re-positioned a number of times over, which meant that assembly took longer than it would otherwise have done. But because assembly at the KURTZ works was a phase of intensive preparation, it was on the other hand



possible to save time on the installation on the customer's premises.

In the final analysis the KURTZ departments collaborated so well with one another and with the customer that one would have thought they had all been working as a team for years. This was why it was finally possible to deliver the machine in question according to the customer's wishes and on time, thus bringing a fascinating, technically demanding but also hectic project to an exceptionally positive conclusion.

The Kurtz Group has now been active for many years in the development, design, construction, and assembly of machines and installations. Kurtz does not turn down the challenge of any task, however „impossible“ it may be considered, and we find that - „with a little help from our friends“ - we are still capable of working small miracles.

The project described laid the foundations for an enduring partnership, or as Humphrey Bogart put it in Casablanca: „the beginning of a wonderful friendship“.

The right know-how and the best machines

Programmed for the future - with modern production procedures and innovative soldering technology

 For more than 35 years now, Miele has been responsible for developing the electronics for its household and trade appliances. The Gütersloh firm is the only producer of household appliances to date which produces its own electronics. This year alone has seen eight million Deutschmarks invested in electronics production, bringing the sum invested since the company started producing electronic components fifteen years ago to a total

of DM 50 million. This sum is in itself proof of the significance the company attaches to the quality of its electronics. Miele's most recent investment in two new production lines is a clear sign of the priorities that govern its operations in Germany - quality and environmentally-friendly production.

Production to a world-class standard

The 4,500 m² electronics production plant consists of the most modern machines that the market can offer. The Gütersloh works produces all the elec-

tronic component units required in the entire range of Miele appliances; the plant is notable for living up to the highest quality demands, for being ecologically conscious and for a high level of automation.

The new production lines were put into operation by Rudolf Miele and Dr. Peter Zinkann on January 30th, 2001, and are a particularly clear indication of Miele's role as a leader in innovation. Miele is the first company in the world to use the ERSA Multiflow selection soldering procedure in which fountain technology is used to ensure that the solder is put on the spots to be soldered with



absolute accuracy. This is technology for the future and was presented by ERSA in the middle of last year; it fits in ideally with Miele's new production concept which has to combine high quality standards, awareness of ecological factors and efficiency. And a trusting and cooperative collaboration between the two firms resulted in the successful introduction of ERSA's Multiflow technology into the first serial production machine.

In addition to the quality demands made by both partners, considerable attention was paid to environmental factors. The ERSA Multiflow selective soldering procedure brings about enormous reductions in the consumption of solder and flux. This results from the absolute precision with which they are applied, and from the use of inert gas. Other goals of



the machine concept were low energy consumption, high machine availability and the lowest possible maintenance and set-up and take-down times. Miele's investment in the economical selective soldering procedure is a sign of the commitment they have to producing their own electronics.

Almost all production of component units at Miele takes place under inert atmosphere conditions. In addition to numerous ERSA Hotflow 11 reflow ovens with inert gas equipment, Miele also uses ERSA's modern N-Wave nitrogen wave-soldering machines.

Quality is Miele's highest priority, and production is supervised on-line. The defect rate is nowadays under 200 ppm. Every component unit produced by Miele receives a bar-code and is recorded. This level of traceability makes Miele a leader in its field.

Milestones in electronics development at Miele

1966	Miele begins producing Europe's first electric dryer.
1978	Miele is responsible for a quantum leap by producing the first household appliances with microcomputers and electronic sensors.
1986	Fully electronic washing machines, driers and washing-up machines with user control (super-electronics).
1989	The first household appliances in the world (washing machines, driers, washing-up machines, microwave ovens) with Novotronic - Miele's fully electronic system - with SMD technology.
1995	The first household washing and washing-up machines with an updating function - making Miele's technology for the future reloadable.
1997	Info Control - the world's first mobile instrument putting Miele users into communication with their appliances.
2001	Presentation of Miele@Home - the concept for a network-integrated household.

Adding value with in-house electronics expertise

The reputation Miele enjoys of being an innovation leader in electronics for household appliances is based on three particular strengths, namely its own in-house developments in the field of sensors, the high production quality resulting from in-house electronics production and the very effective interaction between this and the production technology generally. This interaction is particularly effective because there are close links between the development and production of electronics and all other fields. These close links are enormously advantageous, greatly facilitating pre-development phases in particular. The company's appliances are consequently fitted out with controls available only to Miele. Whereas many brands of household appliances are fitted with the same universally used electronics components, every Miele appliance has controls which were developed particularly for that appliance and none other. Miele's know-how in process engineering has been bringing the company great advantages for a good while now – the electronics development department has after all now existed for 35 years. Data from in-house production has now been gathered systematically for over 15 years. It was only possible to make innovations such as load adjustment automation or the handwash programme for wool because the developers had not only been dealing with the electronics but

also with the washing-machines and the requirements of the machine-users. A company's ability to see beyond its own backyard is essential if it is to hold its own as a pioneer in its field. But this is something any company that is an „in-house supplier“ knows only too well. The electronics works in Gütersloh supply all Miele works with electronic component units and is thus in competition with other suppliers from all over Europe and Asia. But working as an „in-house supplier“ also brings certain advantages. Miele is, for instance, capable of reacting much more quickly to situation changes than an external supplier is able to do. This is not surprising given that at Miele the pre-assembly production phase is only two or three days long.

Around 120 different kinds of electronic modules are processed, mostly in lots of 3,000 to 5,000 per order. Sometimes, on the other hand, lots of 20 pieces are manufactured to serve as spare parts in machines produced 10 years before – after all, a Miele washing machine has a life of longer than 20 years! The volume of production amounts to about 11,000 component units per day, which in their turn are composed of about 1.5 million component parts.

As a result of the growing importance of electronics, the number of staff at Miele has more than doubled in the last ten years, in spite of the high degree of automation. The electronics works now has 330 employees generating a turnover of DM 175 million per year.

ERSA IR 500 A: WIN-WIN-WIN!

 An increasing globalization and wide-ranging international cooperations have a huge impact on the relationship between supplier and customer.

However, this much is certain: The saying „The customer is always right“ is valid for both the present and the future. Conditions will change, though, as a successful and long-lasting business relation cannot satisfy only one party.

It has to be insured that, in the end, both business partners benefit from their cooperation.

This situation is described by the word „Win-Win-relationship“ which is already commonly used today.

ERSA set their business relations according to these guidelines as well.

In this connection ERSA goes even one step further and includes the local agent into the business relations. Thus the „Win-Win-relationship“ becomes now a „Win-Win-Win-relationship“.

This complicates the entire situation, as including an additional party means additional interests have to be taken care of.

Apart from taking care of his own interests the agent also acts on behalf of both the customer and the manufacturer, in this case the manufacturer being ERSA.



This shows what a decisive role the agent plays in a business relation. So not without good reason do ERSA select their local partners

with great care. Only if sales & service competence are as convincing as willingness, involvement and solidity, a company can become an ERSA agency.

The ERSA Rework Center IR 500 / IR 400 is a good example to show how well „Win-Win-Win-partnerships“ can work.

Within virtually no time ERSA agencies all over the world extremely successfully established this new product on the market.

Customers were, for example, a large number of repair and service centers of mobile phones.

In this services sector very high demands are made as far as flexibility, easy handling and little capital investment are concerned - demands, the ERSA IR 500 A Rework-Center meets perfectly, but rework centers of other manufacturers can't.



Go for an upturn in the turnover!

Mainly due to the high capital investment involved with complex systems, many service centers cannot afford them, as they do not provide the desired ROI (Return On Invest).

Furthermore, the operator has to meet high standards and some of the systems cannot be used flexibly.

The semi-automatic rework center ERSA IR500A is totally different. It was designed for every operator, every workbench and every budget!

The ERSA IR 500 A Rework Station is the perfect, innovative, complete solution for soldering and desoldering a wide range of components, whether it be SMT, Fine-Pitch, BGA or MicroBGAs.

The patented aperture system does not demand the use of nozzles or stencils for the various components available on the market.

The use of dark IR radiators avoids overheating. The capability of connecting up to 3 soldering irons and 2 desoldering tools offer the utmost flexibility for practically any application.

A further welcome advantage is the easy handling. Even unskilled workers can repeatedly achieve good soldering results within a short period of time.

The IR 500 A is offered at an attractive price which provides a „Win“ for all the parties involved: customer, agent and ERSA.

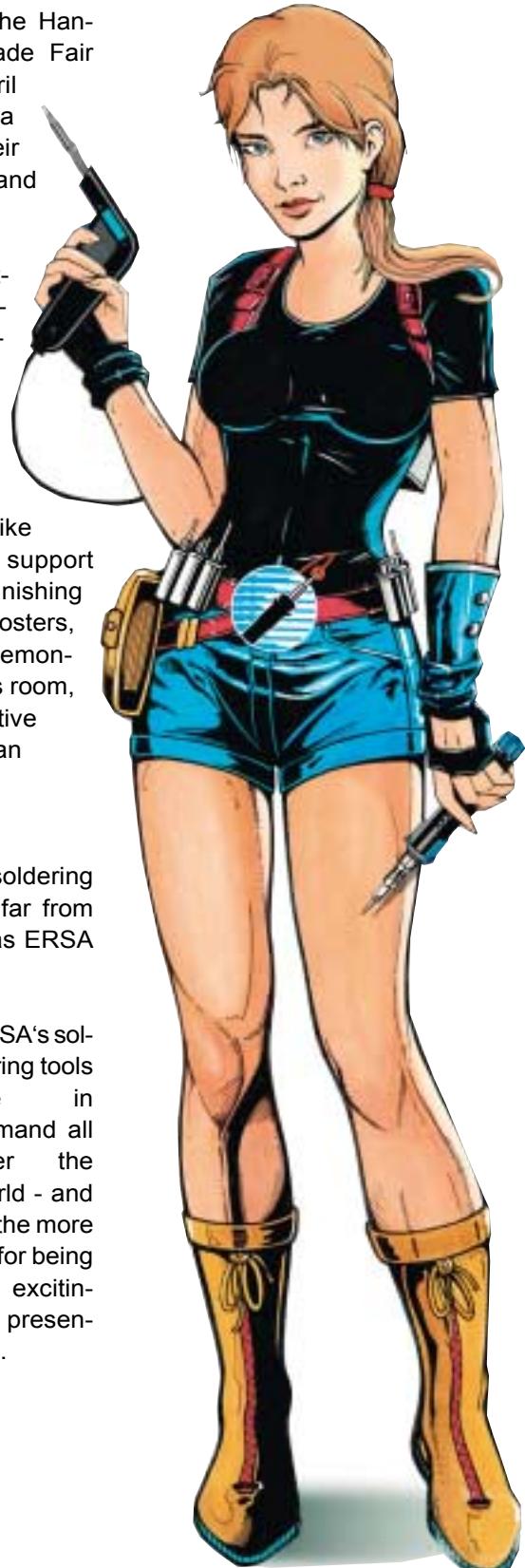
 ERSA's slogan at the Hanover Industrial Trade Fair from 23rd to 28th April 2001 where they staged a powerful sales drive for their partners in the electrical and electronics trade.

They put together the best-sellers from the ERSA Profi-Line range of quality soldering tools, stylishly packed and ideally presented for the point of sale.

There was also praise from retailers and end-users alike for the attractive sales support measures which put the finishing touches to this sales drive: posters, counter displays, life-size demonstration models for the sales room, and practical and informative brochures for the layman entitled „Hot Tips on Soldering“.

These activities from the soldering tools sector are of course far from being limited to Germany, as ERSA is a global player.

ERSA's soldering tools are in demand all over the world - and all the more so for being so excitingly presented.



Fagerdala - Partner of KURTZ

 When the company Fagerdala first contacted KURTZ back in 1994 to find out about moulding machinery for EPP, no-one as yet imagined that within 5 years this concern would develop into one of the biggest and most innovative particle foam materials processors in the whole of Europe.

The Fagerdala Group now owns 8 production plants in all, in Germany, Belgium, Sweden, the USA and Brazil, with a total of around 80 shape moulding machines and pre-expanders.

Fagerdala's development and introduction of the extruded EPP material „Fawocell“ presented machine-manufacturers KURTZ with the new challenge of enabling them to process it on shape moulding machines. KURTZ were successful in taking the Gefinex specifications (Fawocell 7.5 bar) and incorporating them quickly and reliably into a convincing machine concept, thus adding Fagerdala to the company's list of customers.

As a result of the close collaboration which followed on control and process technology, we have witnessed the growth of a good, open and honest partnership devoted to the development of new applications for particle foam materials. And by building up their location Ohrdruf in Germany



as a European centre for research and development of multilayer foams, materials, moulds and processing the Fagerdala Group has been responsible for another milestone in the history of EPP.

The automotive industry in particular is in need of complete solutions, for example sun-roofs, dashboards and door panelling, needs which Fagerdala, armed with innovative ideas from their research centre, is now fully capable of fulfilling. The company is now collaborating closely with automobile manufacturers on the development of a moulding technology with a TPO film coating in the moulding machine.

Fagerdala is the only firm in Europe

with the necessary know-how for the production of EPP raw material using an autoclave or extrusion process.

These EPP mouldings are mainly used in the automotive industry, but also in the fields of packaging and insulation, and in the food, construction and leisure industries.

Fagerdala plans to develop its activities and build up its production sites in the coming years, thus providing customers all over the world with a reliable and expert supply of EPP mouldings. So we can look forward to finding out what challenges Fagerdala and KURTZ are going to set themselves, and to seeing how they rise to them, as they most certainly will.



Innovative EPS applications in the spirit of Leonardo da Vinci

 LAPE srl is an innovative XPS and EPS block and **KURTZ**® shape moulding processor located in beautiful Tuscany.

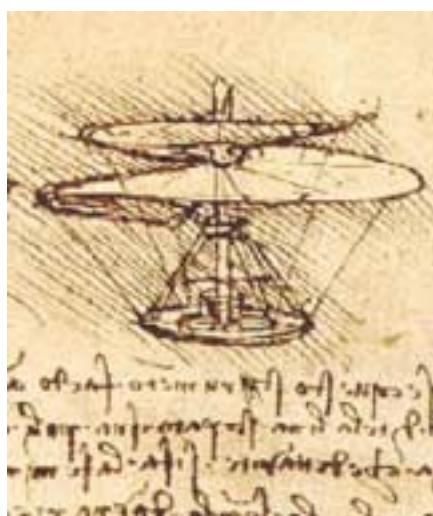
The wide product range includes construction and packaging applications for almost all industrial sectors.

Immediately adjacent to Empoli, where the company has its headquarters, is Vinci, the birthplace of Leonardo da Vinci.

This may well be the inspiration behind their constant supply of innovative ideas for the implementation of EPS applications.

In 1991, when the LAPE srl considered the manufacture of perimeter insulating panels in shape moulding machines, it was recognised that conventional machines only allowed for a low output with a relatively high energy consumption.

At that time, they turned first to KURTZ with the brief of designing a machine for the more efficient production of these panels.



The solution involved placing the moulding area into the steam chamber depth, and in this way producing 14 panels with dimensions 600 mm x 1200 mm in a single K 13.517 machine (1350 mm x 1700 mm moulding area).

The experience gained in production of the first machine soon led to the construction of a further plant.

As the demand for this kind of insulating panel increased, even larger panels were required. This led to the development of what is probably the biggest moulding machine in the world.

This is the K 3220 with the inner steam chamber dimensions of 3200 mm x 2000 mm enabling the production of 12 panels measuring 3000 mm x 600 mm.

Further ideas and requirements have been implemented in partnership

with KURTZ GmbH. Recent additions to the product range include laminated and skinmoulded parts.

We are constantly seeking new challenges which we can work on together.

Innovative invention by Leonardo da Vinci



Pure strength of performance and service

 Since its foundation in 1969, Zer-O-Loc has become one of the most significant manufacturers worldwide of insulating panels and door systems. Two main factors have contributed to this success: The great dedicati-

expansion has necessitated the integration of new suppliers into the supply chain and thus also into the company philosophy.

The Kurtz Group was the final piece in the mosaic. Equipping the expan-

the Zer-O-Loc management team, were fully able to rely on KURTZ with the installation of the new plant. The Zer-O-Loc philosophy demanded a high level of precision and speed from the new plant.

Furthermore, the new plant needed to be integrated into the production system as quickly as possible, with the quality up to scratch right from the start.

And in practice, the very first block produced with the KURTZ block mould was of high quality and

ready for use. The quality of the blockmould was never called into question by Zer-O-Loc or its customers; on the contrary, they deemed it „outstanding”.

KURTZ also shone in the after-sales service. Maximum emphasis was placed on service and all employees called in from KURTZ North America or KURTZ in Germany were always on site punctually when requested. The fast reaction by KURTZ to the requirements of Zer-O-Loc can be expressed simply in terms of „satisfied Zer-O-Loc customers”.

Last but not least, therefore, Zer-O-Loc looks forward with pleasure to a continued co-operation with KURTZ, a partnership which can be described as follows: pure strength of performance and service.



on of all their employees and the constant striving to offer their customers the best possible benefits and service.

Quality, service and trust are never placed second best. This maxim is the basis of the Zer-O-Loc company philosophy and also provides the foundation for the growth and well-being of the customers, and therefore of Zer-O-Loc.

These close links ensure that the customer's loyalty is rewarded with the best possible ROI (Return on Investment).

However, this philosophy is not fixed, but dynamic.

Growth brings with it an expansion of production capacities, and this

ision project involved a KURTZ pre-expander, a blockmould and several cutting plants.

The company directors, Mr. Len Kitchen and Mr. Oscar Elliott, and



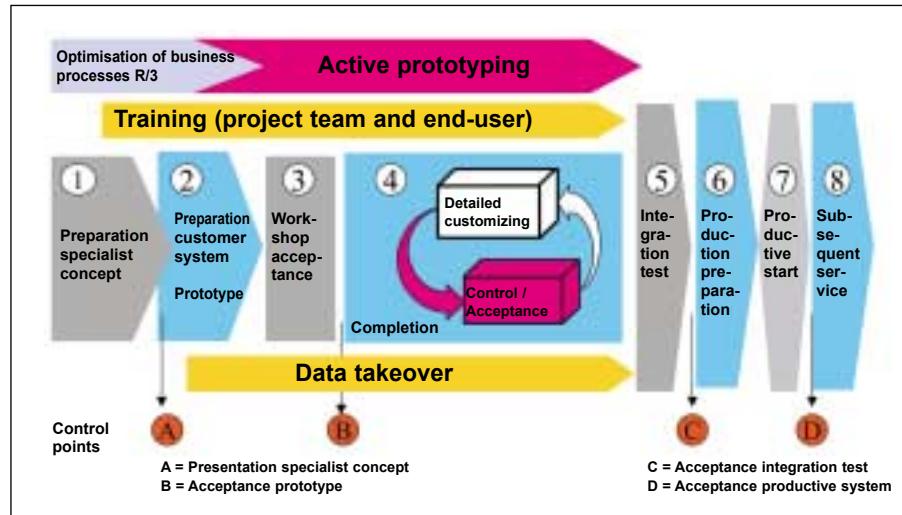
Kurtz Group establishes SAP R/3 in its production companies

1. The point of departure

It was only a few years ago that social, legal and organisational factors allowed the Kurtz Group to start installing a unified electronic data-processing system. Until then each firm in the Kurtz Group had a system established by its own management, and the general EDP scenario in each firm was simply based on the structures that had grown up there. About five years ago a working party was formed with EDP specialists from each of the Group's member firms. This working party came to the conclusion that it would be a good idea to put all the data-processing activities together and to collaborate on looking for an integrated solution for the whole Group. From this point on, projects - a sales information system, a graphical control station, or the integration of admission control and personnel, to name just a few - were put on ice and approval was only given for investments which were going to pay for themselves by January 1st, 2001. This decision put the team under enormous pressure to lose no time whatsoever in pushing on with their grand project with all due urgency. It was nevertheless decided that each of the companies would have to continue with its particular system beyond the year 2000 and that if the changeover to a new system could not take place before the impending switch to the Euro, then the Euro would have to be incorporated into the old system.

2. Making a choice

The relevant departments in all the group companies were invited to list their wishes with regard to a new, up-to-date and group-integrated EDP system, and their answers were summarised in a specifications book about



50 pages long. The EDP team selected a number of specifications which, if they were not met, would mean that the respective programme system and the firm offering it would be dropped out of the running. The imperative conditions for the system were:

- It must be possible to utilise the system internationally.
- The partner offering it must be active internationally;
- must have sound financial standing, as must the software producer;
- must be able to satisfy the specialist requirements in every possible respect;
- and must have good references.



The fact that the Kurtz Group operates machine factories, foundries, sales and servicing firms, property and property administration firms, metal-processing enterprises - in short, a multiplicity of businesses - meant that our partner would be faced with a great challenge in providing and installing

a unified system for the Group as a whole.

After taking into consideration all the feasible standard solutions, we were left with the following short list:

1. Baan 4
2. One World by JD Edwards
3. R/3 by SAP

We submitted our specifications book to a number of systems suppliers, but were surprised by the replies we received. The products of the Kurtz Group are admittedly hard - rather than software, but to begin with we had some difficulty coming to terms with the „culture“ with which business is done in the latter field. We were not just surprised by some firms' cleverly use of terminology to pull the wool over our eyes when talking about relatively simple and clear things - we were confronted with quite gross psychological tactics intended to take us to the cleaners in the most elegant way possible, and with quite shameless financial propositions which were either intended to frighten us off or to drive home the message to us that if we wanted our „millennium project“

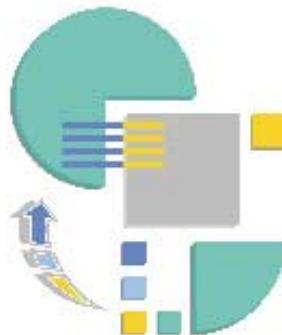
... Introduction of SAP R/3 ...

then we would have to pay for it handsomely.

We finally got the message that none of the systems suppliers was prepared even to read our specifications book without our paying a relatively large sum of money. It was not long after this painful realisation that we decided to get experts to subject the packages Baan 4 and SAP R/3 to comparative operational examination and to see how the standard software matched up to our requirements.

The heartache that the extra cost involved caused was nevertheless offset by the decided advantage that, without having to make a definite commitment to a supplier, we were given more detailed insight into the in's and out's of these mammoth software packages and were able to go about making a judgement as to their suitability for our purposes with greater confidence - all this also gave an extra edge to the motivation of the EDP team. It did however soon become clear that for our purposes all the systems were usable and that all had their particular advantages and disadvantages; what was frustrating was that we could only have one system left in our shopping trolley when we reckoned to check in and pay up, around the turn of the millennium. It was just at that time that the company Baan entered a crisis, with its shares plummeting after the news that they had made big losses. Drastic measures were taken on the personnel front at Baan and there seemed to be some question of the company being taken over. So it was that from one moment to the next one of two possible systems had put itself out of the running by losing its „sound financial standing“. The decision between the R/3 system by SAP and One World by JD Edwards was finally made according to what was for us an extremely important criterion, namely

Establishing of mySAP.com in the Kurtz Group



that the system should have the flexibility to allow the production of single models to one-off specifications. So it was that the R/3 system by SAP went into the lead on run in to the winning post.

3. The contract

So we had now decided to introduce SAP R/3 as standard software throughout the Kurtz Group, keeping to the lowest possible budget, endeavouring to make as few inroads as possible into our own resources, and aiming to fulfil as completely as possible the demands made in our specifications book. Our next job was to find the right partner to help us do this and to negotiate the right terms – and in August 2000 we made a contract with a partner for the introduction of SAP R/3 throughout our group of companies.

4. The changeover

On September 5th, 2000 altogether 35 key-users and 22 project team members received a communication by post which gave them information about their area of responsibility and duties during the introduction of the new software. A so-called kick-off meeting took place on September 21st,

2000, at which the project was presented in the presence of the whole team and the stages in which the system would be introduced in the various companies were explained. At the same time the 15 or so consultants from the system suppliers were personally introduced to us. Since that point we have been working in so-called project teams, at first based on modules such as sales, personnel, maintenance, accounts, production planning and control, stock buying, storage and warehouses, finance and billing, and financial control. First of all, the project team members and key-users were initiated into the system governing the standard software. At the same time the most important business procedures were selected and examined to see how they could be reproduced in the standard software. These work-phases resulted in specialist concepts in varying degrees of detail which were delivered to the project managers about four months after the start of the project. At the moment each firm in the Kurtz Group is having its own customer system produced, on which the business procedures customary in that firm are being incorporated and test run with the new software. Only „test run“, because for the moment only purely test data are being used. But parallel to this the preparations have begun for the takeover of data from the old systems. In fact, the first companies carried out the changeover in the areas of personnel and financial accounting in June 2001, so that the next salary statements and accounts will be done with genuine data. From this point on there is no month in which the changeover will not be taking place in one sector, or indeed in several sectors at the same time, and the entire changeover is to have taken place by the end of 2001.

... Introduction of SAP R/3 ...

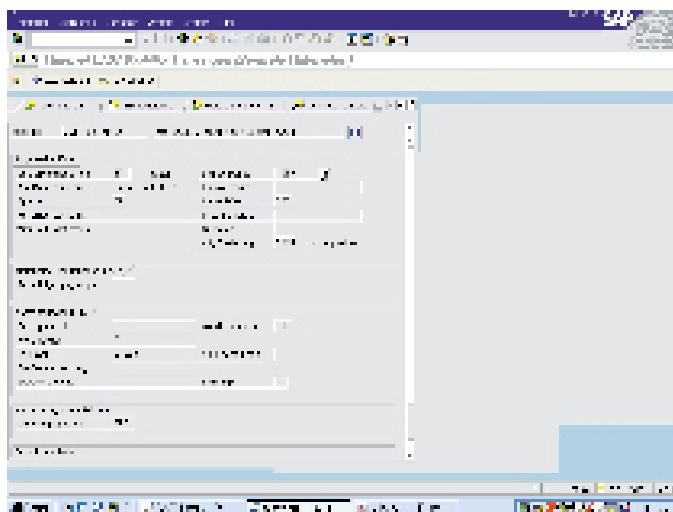
5. The risk

During the preparations for our own project we naturally heard of many instances in which firms were thrown into chaos when effecting a change-

over or indeed were plunged into difficulties which threatened their very existence. None of these firms brought these mishaps upon themselves deliberately and for the moment all that we can do is hope that we do not find

ourselves falling into the same traps. Our experience so far has been that the standard software that we have chosen is exceptionally complex and that tiny details can often have extremely time-consuming negative effects. But it must be

emphasized that whenever faults have appeared they have only in very rare cases turned out to be inherent in the system and almost always have been caused by incorrect data constellations on the part of the end-user. This means that the burden of responsibility on the shoulders of our colleagues involved in the changeover team is all the heavier. All those involved are currently working with a tremendous degree of commitment and with an unbowed determination to create an EDP system for the Kurtz Group which will stand the test of time. The date this magazine goes to print means that we still have to be extremely careful about making any value judgments concerning the decisions that have been made. So for the moment all we can promise is a continuation of this report at the next opportunity ...



The digital corner shop

Those were the days, when if you wanted to catch up on the local gossip and pick up a couple of chocolate éclairs and a bottle of pop (preferably cherry flavour) all you had to do was nip over to the corner shop. But times have changed – in Germany at least, the old corner shop is now called Aldi, Rewe or even Wall-Mart, and chocolate éclairs and bottles of pop can only be bought in quantity and vacuum-packed. In the future these consumer paradises will very likely only have names that begin with www. and end in url. Specialists agree that the only real sign of compe-

titiveness among global enterprises is their degree of digitalisation.

The Kurtz Group has opened itself up to this new technology and is now presenting its first @shop, a virtual emporium, offering publicity articles sporting our logo which can be ordered by staff members, representatives or guests. The @shop is almost a digital version of the good old corner shop – every product can be ordered in any quantity, and by using the link to the KURTZ or ERSA homepages, you can catch up on the companies' latest news.



Our shops' internet addresses are: <http://www.kurtzshop.de> and <http://www.ersashop.de>. The publicity articles on sale are of course also to be found in the Kurtz Group Intranet.

The shop's system is self-explanatory – staff members and reps require a special password in order to go on their virtual shopping spree.

A great variety of listings make it possible to acquire both interesting and useful articles such as baseball caps, ball-point pens, stationery folders and golf balls. Drop by sometime – it'll be worth your while!

Wanted - bright sparks

This was the motto for the Kurtz Group's continuation of the training campaign begun at the Tauber-Franken Exhibition in November 2000 in Bad Mergentheim (see Kurtz News No. 18). The group is constantly on the look-out for recruits from the younger generation both on the business side and in the field of skilled manual labour. The number of young people currently being trained for a variety of jobs simply at the Group's locations around Wertheim is more than 70.

A further undertaking was the Kurtz presence on March 16th and 17th of this year at the information day held by the Berufsschulzentrum in Karlstadt, the technical college for the Landkreis Main-Spessart. Schoolboys and schoolgirls were joined by the Main-Spessart district's councillor-in-chief, Landrat Armin Grein, to pick up information on the whole range of training courses offered by Kurtz.

Finally, Kurtz had an information stand at the Berufsakademie Mosbach's Open Day on March 30th. School-leavers from the length and breadth of Germany showed great interest in this training college's highly practice-orientated programmes, and in the programme's links with the companies of the Kurtz Group. Another appearance is planned for October 20th this year, at the careers information day to be held jointly by the secondary schools in Wertheim-Bestenheid and Wertheim itself, and Wertheim's technical college. By way of backing this measure up, advertisements with



details of training possibilities will be put in the relevant school and college magazines.

The main aim of the Group in being present at these events (with a stand, it should be said, manufactured by MBW GmbH) is to initiate dialogue with potential trainees and students from the training colleges. Our younger members of staff, either still in training or just finished, are most familiar with the questions and problems of potential applicants and answer these best of all from their



own experience. Trainers and specialists from the Kurtz Group are of course also there to make presentations and answer questions.

The great advantage of a training in the Kurtz Group lies in the variety of products manufactured and marketed within the Group, and all the various production procedures involved. These

range from the design of machines for the processing of particle foam materials, foundry machines and soldering machines through handsoldering tools and inspection systems to a wide range of goods and services supplied by the Group, castings, machining and sheet metal technology. Training at Kurtz is always interesting and varied. And future professional prospects are improved greatly by the fact that the Kurtz training system involves change and mobility between and within all the Group's companies in the Wertheim area.

The Kurtz Group sees the training of the up-and-coming generation - right from their arrival as raw recruits - as a good way of counteracting the problem of the lack of trained personnel on the market. Kurtz is a firm that is rich in tradition and this way of thinking is written into the company philosophy: „Well-trained staff provide the basis for a competent enterprise. ... All staff are duty-bound to help trainees to find their feet in our business group.“

And this is why we go on saying: „We are on the look-out for bright sparks.“



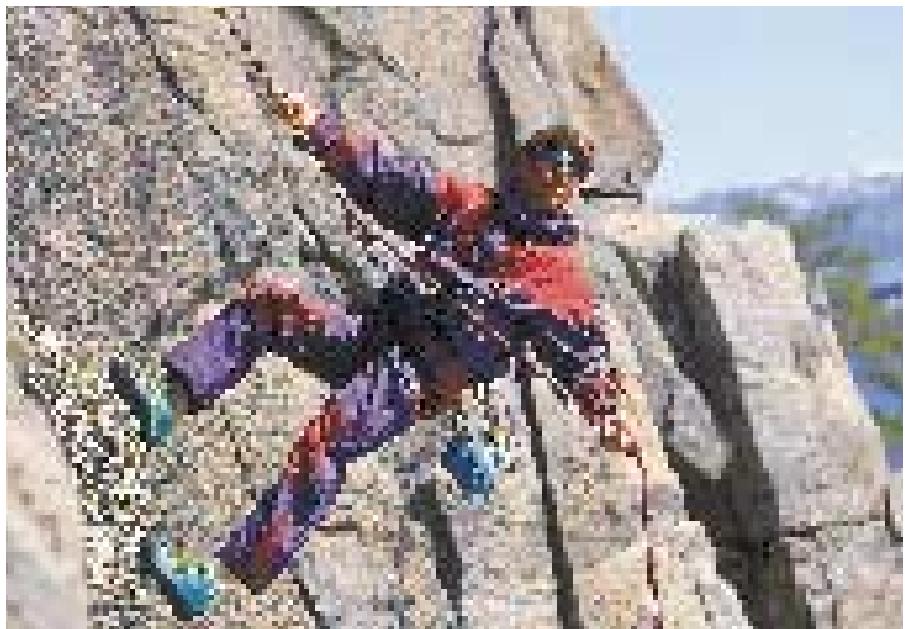
Climbing - no sport for loners

The outdoor climbing season begins with the first sunny days of spring. After the long months of indoor training on artificial walls and coloured holds, climbers are happy to feel real stone under their fingers again at last. This year the rainy weather meant that the „opening of the season“ only came shortly before Easter in mid-April - you do, after all, have to wait for the rock to be dry. And it is more fun if the sun is shining. So we set off for Hainstadt, our local climbing ground in the Odenwald. This former sandstone quarry is about 30 km from Aschaffenburg and offers a number of wonderful climbs from the 5th to the 10th grade of difficulty - something for all classes of climber.

Before I took up climbing I thought



that it could only be a sport for particularly hard-boiled and courageous adventurers. That was until I went on a climbing weekend with some friends in the Pfalz. My first attempts were naturally not unqualifiedly successful. But I soon found that a modicum of practice and stamina training enabled me to chalk up



some real successes in the 5th and 6th categories in no time at all.

One nice thing about climbing is that you are never on your own. Everyone climbs their own route, but always in co-operation with a climbing partner who secures the end of the rope. This partner is a very important person, and one you have to be able to rely on at every moment. Trust plays a very important part here, particularly if you are the one climbing ahead at a difficult key position, or when your strength is on the wane and there is greater danger of your coming unstuck on the rockface. That

is the time when it is very important that someone is down below at the end of the rope who is not only giving you advice and keeping your spirits up, but who - if the worst comes to the worst - is there to brake your fall.

I am very lucky with my climbing partner - the two of us make a great team. We are going to have a lot of fun this season as well, visiting new climbing areas and trying out interesting routes in the Franconian Jura and the Odenwald. We are just hoping that we will be blessed with good weather.

And you too! Yours, Angelika Uehlein

Training completed



Congratulations! On April 4th, five of our ERSA trainees received their IHK qualification certificates and the official go-ahead for their professional careers.

In the picture, from left to right: ERSA Personnel Manager Günther Bartschat, who presented all the graduate trainees with a book; Matthias Friedrich and Andreas Lausecker

(Industrial mechanics specialising in machine and systems engineering); Trainer Michael Burger; Alexander Gellfuß (Energy installations electrician, operational engineering); Office administrator Inge Mattern; Daniel Reinhard, (Energy installations electrician, operational engineering); Trainer Jürgen Schmidt and Rolf Prasse, Chairman of the Works Committee.

APEX International and ERSA Technology Forum

The APEX International show, held in San Diego, California from January 16-18th was a tremendous success for ERSA giving North America customers an opportunity to view the latest products from ERSA.

The 30 ft. x 50 ft. booth was located in the main hall and displayed a full range of products including the ERSASCOPE optical inspection system, hand soldering and rework stations as well as wave soldering and Hotflow reflow soldering machines and the Versaflow selective soldering systems.

The ERSA booth featured „Café ERSA“ that allowed visitors an opportunity to sit and enjoy a cappuccino or gourmet coffee in a relaxed atmosphere amid the hectic trade show.

The ERSA Technology Forum, held in San Antonio, Texas on May 10th and 11th, was also a success with over 135 people attending the two-day event.

According to attendees, the Technology Forum sponsored by ERSA offered them the chance to increase



their awareness of current and new technologies, and gave them a good overview of how these issues are being addressed.

World-recognized speakers covered a variety of topics consisting of 13 unique presentations.

Leading industry experts representing a cross section of well-known companies such as Plexus, Loctite, ViTechnology, Solectron and Circuits Assembly chaired these sessions and shared their real-world experience.

The Technology Forum was concluded with a panel discussion in which a panel of speakers openly discussed a complete range of topics in an unbiased dialogue with positive feedback from all attendees.



285 Mio DM turnover • 1000 employees

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