



## System introduction under high tension Inductron implements abas Business Software within 3 months

Inductron GmbH, a manufacturer of electronic components that in June 2003 emanated as a management buy-out from a former VAC production location, had to introduce a new ERP solution within three months by a fixed deadline. Thanks to abas Business Software they were able to do so. Since the first day the system was used, it supports all business processes and controls them effectively.

If on the ground, in trains and railway control centers or for testing electronic facilities, if in the sky in jets and satellites: Inductron GmbH with its products ensures the smooth and secure function of electronic components. The company, located in the Bavarian town Schrobenhausen, develops, produces and sells inductive wound components. The product range comprises pot core coils, high frequency coils, bridges (conductors), toroid core coils and inductors for SMD technology.

Since the production process is very complicated, there are many parts that have to be manufactured by hand. Moreover, the quantities are mostly so small that automated processes would not be profitable. A delicate affair that requires a lot of sensitivity is for example the coiling of metal, ceramics and plastic components, especially if the parts are only 2 x 2mm.

### Management buy-out required planning at an early stage

"We have many limited lot productions, with five or ten pieces, in bigger orders sometimes up to several 100 pieces," explains Gilbert Berger, CEO of Inductron GmbH. The company specializes in custom-made products and limited-lot productions which sometimes only contain one piece. Inductron GmbH came into existence in June 2003 as a management buy-out from the vacuum melting plant Schrobenhausen, a production facility of the Vacuumschmelze GmbH&Co KG (VAC) in Hanau.

The decision to close the facility in Schrobenhausen was made in the fall of 2002 – "even



though our order books were full," as Gilbert Berger points out. After a short period of consideration and "some sleepless nights" the manager decided to continue business on his own and with the established team.

### Inductron – the user

Today's Inductron – Inductive Electronic Components GmbH in Schrobenhausen/Bavaria, was originally founded in 1972 by Siemens, in order to produce high voltage and high frequency components. In 1980 the production of SMD- (small mounted device) components for radios and mobile appliances was started. In 1989 Vacuumschmelze (VAC) acquired the company. In June 2003 Inductron is founded by Gilbert Berger as management buy-out. Today, the company has 28 employees and operates internationally. More than 40 percent of production is going to foreign countries, among the customers are small and medium businesses, but also corporate groups, such as ABB, Alstom, EADS, Siemens or Tesat Spacecom. Inductron uses abas Business Software Version 2003 R2 with the modules production planning, materials management, logistics, purchasing, cost accounting, personnel time recording and financial accounting, based on a Linux server and Windows clients.

[www.inductron.de](http://www.inductron.de)



Berger says: "If it hadn't worked out, I would have had appliances and systems worth several million Euro in my garage." It was a high personal risk for Berger, but with the reassurance of his best employees to stay on board, the respective plans and preparations were made under high pressure and the new company founded by March 1, 2003.

"On the one hand we found many functions in abas ERP that were the same as in our former Siemens solution, but which R/3 could not carry out," remembers Berger. "On the other hand the price/performance ratio was excellent. Above all, Koldt ensured us that we could master the system implementation in the three months between March and May, e.g. the transitional period between the foundation of Inductron and the adoption of the business processes of the Vauumschmelze Schrobenhausen."

After examining the ledgers, the banks were also willing to give loans for the necessary new investments. Early on a special measuring tool for the components had to be ordered, up to now tests had been carried out at the parent company and the delivery time for the measuring tool was several months.

### ERP introduction during full occupancy load of production

At the end of March 2003 the order for ten licences, including hardware, was assigned to Koldt GmbH. Moreover, the order contained the adoption of the old data as well as form design, adjustments and supplementary programming. Christine Sedlmair, head of purchasing and accounting at Inductron praises: "Our requirements were recorded in detail, a respective quotation was made and the service was invoiced and rendered as agreed."

### Succeeding solution for leased lines was needed

Another worry was the tight connection on the ERP side to the parent company. SAP R/3 was implemented in the parent company in 2001, after having used an ERP solution, developed by Siemens, for almost 20 years. Via leased lines the computers were connected to the server system in Hanau, where VACs head office is located.

To achieve this in the remaining, short period of time the IT service provider Koldt had to make a great effort. An additional challenge was that many customers had ordered goods ahead in the precarious transitional situation and created deadline constraints, thus, production worked flat out.

Under technical aspects this constellation could have been used in the future. However, for financial reasons Berger did not even consider this. "Just the fee for the leading line was more expensive than the current abas license fees." Having planned the step to independence on May 31, 2003, the SAP connection was canceled for the same date.

CEO Berger: "This was a great achievement by Koldt and ourselves. We were producing at capacity limit and the new system was introduced at the same time." At first, the data was migrated into a demo system and subjected to random samples. If there were inconsistencies, the system was corrected by the system house from Munich. After Christine Sedlmair had given her "ok", the data was adopted into the real system.

At Systems 2002, Gilbert Berger, supported by an adviser, was looking for alternatives. A selection had already been made previously, the providers were thus directly sounded out with specific requirements on the fair. The decision was made quickly and unambiguously for the certified abas partner Koldt GmbH, located in Munich.

"We had to manage a huge amount of data in this short period of time," says Berger in retrospect. "The difficulty was to assign the SAP data correctly to abas ERP, since terms and functional descriptions partially differ. We didn't need some of the data anymore and some data had to be created again from scratch."



For 14 days the master files were maintained in two systems, the warehouse stock was migrated on May 26. On May 31 the customer orders were entered into abas ERP and at night SAP was disconnected.

On June 1, the abas ERP system assumed the control and support of the business processes at Inductron. "Changing from SAP to ABAS took place without any problems," explains the purchasing manager, "from the first day we were able to normally produce, deliver and write invoices."

Previously the IT service provider Koldt had made some system adjustments in the batch area according to Inductron's requirements. If a production order is completed and placed in storage, this product will receive the same batch number as the number of the production lot. "Due to traceability this is very important for us," explains the CEO. "If there is a problem with the product we need to be able to retrace from which production lot the part came."

**Production plan data is stored at the touch of a button**

The system is now configured in a way that when posting a goods receipt, a window will automatically open to directly create the batch. Christine Sedlmair: "Now the colleagues can't forget the input anymore."



Another adjustment Koldt made at the request of Inductron, was the reactivation of the so called basic plan. Basic plan at Inductron means the description of permanently recurring, standardized operations. "Already years ago we have specified all routine operations, allocated them with times, assigned them to wage groups, etc. in this basic plan. In R/3 the basic plan didn't exist anymore, so we had to enter all the data," explains Berger. "At Systems we then rediscovered this principle in an ABAS module."

abas Business Software offers the possibility, to create the basic operations for a component group on a work plan level.

All the higher work plan levels for the various product variants are based on this basic work plan. Berger had to realize fast "that this possibility can be perfectly used for our intentions and thus we have revived our basic plan that had been lying idle for over two years."

If Christine Sedlmair today creates a new production plan, she only has to enter a number, similar to a product number, for each operation. In the work plan all necessary indications are immediately specified, such as work center, cost center, times, etc.

To record the working hours at Inductron, a personnel time recording system that is integrated into abas ERP and provided by Koldt is being used. It also informs employees about their flextime accounts. The data is recorded in the employee master files of the ERP system, so that personnel administration can always inform itself about each employee's overtime, absence time or vacation time.

The personnel time recording system is necessary at Inductron, in order to organize the multitude of working time and shift models. There are working time models from 20 to 40 hours a week. CEO Berger: "Just to manage these time models we would need one person for several hours a day. Moreover, the legal regulation that employees are not allowed to work more than 10 hours a day, plays an important role. We as employers have the duty to pay attention to that."

After the rollout of the abas solution the people in charge at Inductron wanted that at first the entire order lead time from receiving the customer order, ordering goods, scheduling via products to shipping was depicted correctly and that the system could be used. However, the people in Schrobhausen realized fast that the ERP solution contains numerous other, profitable functions.



The ERP solution plans the production and, for example, determines by means of the stock, if a purchase order can be produced for the date the customer favors, when production has to start at the latest or if material has to be ordered. "This is actually the essential part of an ERP system," underlines Christine Sedlmair, "it is able to deliberate if the process can be carried out without problems and if the customers can be supplied on time. And we can entirely rely on it."



If for example 500 pieces of one certain part are still in stock, 300 are required for a first order and a second order for the same amount of parts is added at short notice, then the system signals that an order of 100 pieces needs to be released immediately. Thus, due to the current system information, the people at Inductron are always able to tell the customer directly on the telephone, when the delivery will be made.

"Error evaluations in production or evaluating supplier satisfaction still has to be done by hand," explains Christine Sedlmair. The supplier codes are especially important, such as delivery reliability, quality or the rating as A-,B-, or C- supplier. A respective quality management module, which has not yet been integrated into the abas Business Software, can be provided by Koldt through a partner solution.

The sales information in sales and distribution has considerably improved due to abas Business Software. The ERP system offers the possibility to retrace which products which customer has ordered in which amounts and in which period and to derive sales forecasts. "At the push of a button I can even call up a graphic displaying with which customer we have made how much turnover," says Berger happily.

The abas solution contains a multitude of respective tools, in order to make all the necessary information about the business development available to the management. Berger: "We only have to find the time to enter the necessary data." Other tools offer the possibility to display product-, time-, price-, turnover-, or customer related information or a combination of these possibilities. "This is really helpful, if one is speaking to the customer on the phone and is doing price negotiations," says the CEO "or when preparing a customer call." Due to the easy handling of the ERP application, the employees were able to accept and learn it fast. "For a person like me, who doesn't use the system on a daily basis, it has proven itself to be very user-friendly," says Berger.

**Stability of the system also convinced skeptics**

The employees do not realize the fact that the abas system is based on a Linux platform. However, Koldt's suggestion to use the open source platform was not met with undivided enthusiasm at the very beginning. "We are no IT specialists," explains Christine Sedlmair, "we were only looking for a reliable, low-priced system that could meet our demands. We had never even thought about Linux until the contact with ABAS." CEO Berger adds: "We have not made the decision easy for us and made extensive enquiries with experts. But we only heard positive things." Today, even the managers at Inductron are convinced of the open source platform. The Linux solution is not only cheaper than a Microsoft platform, because there is no license fee, but the stability of the system is very impressive. "We have never had a problem with the server. I don't even know how to boot or shut down the computer," admits Christine Sedlmair. "We never had to do it, because the system has always been absolutely reliable."