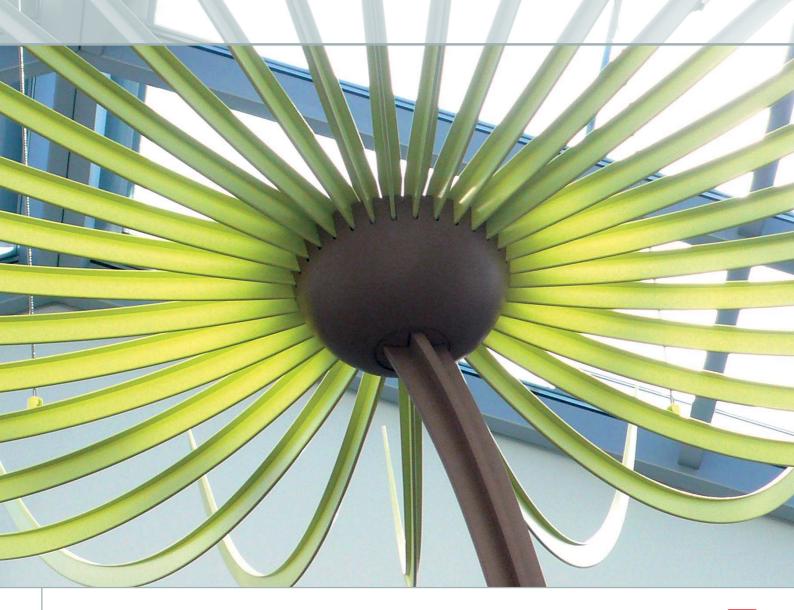


Forum 20 09/08 For clients, partners and friends of Arnold AG

Seed in metal and glass



Smarter seating in the airport High technology to fight packaging waste Signs, which create space





Editorial

After a furious start to the year under extreme pressure on deadlines to finish contracts, combined with investing time to develop new products, the situation then stabilised as we entered the summer. These last three months have given us the chance to take a deep, recuperative breath. As the tension relaxed we had the chance to put our house in order. All those small things, which in the initial stress were pushed further and further back, were attended to. The backlog was cleared and strategies planned. This all happened at an opportune time, just as we strengthened our executive with two experienced Engineers. Core to our business is the management of material and production, and these have become more professional in keeping with the standards of the international

competition. In two areas of our business, "Components for Industry" and "Design Parts", despite our long experience, they still both present us with continual technical challenges. But they also present us with new opportunities and open up new markets. For a company such as ours, which provides a total service, from development-to-installation, this guarantees to keep us busy for a long time to come. Good news, as the economic cycle appears to be entering another downturn. But our readers will know we do not allow such things to distract us. We are proceeding with the systematic reorganisation of our Friedrichsdorf facility, which will be increased by a further 4000 square meter Production and logistics capacity. This expansion will enable us to better service our clients. Our "Quick Service" production facility in Friedrichsdorf aims to become even more efficient.

We thank you for your support and trust, and we look forward with anticipation to the next fascinating assignment.

Yours, Uwe Arnold

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Imprint

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Print:

Druckerei Beckmann D-98587 Steinbach-Hallenberg druckerei-beckmann@t-online.de

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Scarce and expensive

No other branch of industry is so at the mercy of outrageous price fluctuations as those dictated by steel manufacturers and raw material speculators to the metal construction industry. Arnold AG has developed a far-sighted purchasing policy on a line of strategic partnerships with suppliers – not any easy line to follow in a market where even contractual obligations are ignored.



"Thanks to strong partnerships, our material supply is assured, however the prices climb steadily." Manfred Wüst, Purchasing Manager Arnold AG. Photo: Arnold

We have experienced the situation whereby an offer made to us on Friday, is out of date on Monday", despaired Manfred Wüst, Purchasing Manager Arnold AG. However, thanks to long term partnerships, which have been developed over the years, the supply of material has always been assured.

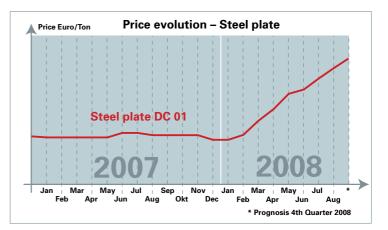
"More expensive steel creates crisis for contractors", read a "Handelsblatt" headline in the middle of the year. This German financial journal expanded, "Most of the steel and metalworking concerns in Germany

are family run and owned. In the second half of this year, they can expect a raw material price-increase in the general order of 50%. Steel producers are not shy of breaking contracts. "Steel is sold only under caveat", said Wüst. To refer back to contractual terms and conditions is pointless. The steel market has reacted to the dramatic world-wide increase in demand by becoming a pure sellers-market, with all the traits of a monopoly.

To be fair, it must be said that the steel producers alone are not responsible for the price escalation. They are dependant upon the suppliers of raw-material such as BHP Billiton or Rio Tinto. In the event that the planned acquisition of Rio Tinto by BHP Billiton succeeds, the competition at this level will be significantly reduced and prices will escalate further.

In the Stainless Steel market, however, Wüst and Jörg Böckling report the situation as less critical. At least here, marketmechanics work, because the price explosion is directly attributable to the alloy surcharge for the component material Nickel. There is, though, a cheaper alternative (reported in FORUM edition number 10) that has had the effect of slowing price increases. Wüst: "We recommend the use of 1.4016 rather than 1.4301 wherever possible."

Normal steel is different. Böckling: "The various types of steel we use have specific attributes and have no practical alternative – and if they have, there is always a problem in the procurement." Besides alternative materials, there are considerations such as reducing the material thickness, changing the surface finish or construction design to balance the budget. Manfred Wüst: "We advise our clients in all of these areas, as an active contribution to the development of a contract."



For many months now steel prices have only escalated, with no end in sight.

Blast furnace 8, Thyssen-Krupp Steel in the process of producing pig iron, production is daily of about 5,600 tons of pig iron, much too little to keep pace with the increasing demand. Photo: Thyssenkrupp

Seed in Metal and Glass

Home Game for a great artist: Kazua Katase has lived for over three decades in Kassel. He has just completed a piece for the Diakonie Health Centre in Kassel entitled "Schöpfung 2006 – 08" ("Creation 2006-08") an over-size seed of a dandelion of glass, steel and aluminium.

The impression on the beholder below the glass roof of the evangelical hospital is magical. Kazuo Katase created the artwork "Schöpfung 2006 – 08" specially for the atrium suffused with light in the new extension to the Diakonie Health Centre in Kassel (DGK). Inspiration came from the flying seed of a dandelion. The existential question of being and time, which Katase also here engages, has influenced the Japanese artist since as early as he can remember.

The initial impetus for this artwork came from the Association of Friends and Patrons of the DGK. Sponsors and Patrons for the project were found. Benefit Events raised additional funds, and in the autumn of last year the assignment could be authorised.

The technical construction and manufacture was executed by Arnold AG. Kazuo Katase has held the capability of Arnold in high esteem now for almost two decades, as specialists in



the manufacture of large metal art. This respect led to the development of "Ring des Seyns" ("Seyn's Ring") in Ludwigshafen am Rhein, the cubic "Lichtgestalt" ("Light Figure") in Lyon and the sculpture "Tonus" in Freiburg.

"The artist came to us with the idea and we took charge of the development", recalled Arnold project manager Frank Brethauer. Initially, at the end of last year, the structural engineering requirements were calculated. Construction plans were drawn up and models in various options made in Glass, Metal and different colours. Katase's intent was to obtain an impression of lightness, in a selection of materials, which suggest authenticity. Ultimately the decision was for a combination of painted aluminium, steel and glass.

Four steel bracing petals and the central chalice form the basic structure. The remaining petals and the stem are of aluminium to reduce weight to a possible minimum", explained Brethauer. The combined weight is still almost half a ton. On their own, the vaulted glass parts attached to the underneath, weigh 150 kilograms. These parts are decorated with a photograph of the earth taken from the moon, a detail fabricated by the Derix Glass Studio in Taunusstein, which was also responsible for the famous Gerhard Richter window in Cologne's cathedral. Katase's piece has a diameter of 5.5 meters and a total height of 8.3 meters.

It required experts to install the work under the glass-domed roof. Together with the responsible Arnold team, who assembled the sculpture on the ground, the industrial climbing team of the Berlin based company, Akrobat, raised the work in less than two days. During this phase, the climbers literally hung upside-down in the sculpture, like acrobats. "They did a great job", lauded Frank Brethauer, who together with the Arnold construction team, is already brooding over the next artwork from Kazuo Katase.

Installation in only two days: The teams from Arnold and Akrobat build the sculpture part for part on the ground and raised it by degrees into the air, until it came to rest under the glass ceiling of the DGK.

Photos: Arnold





The industrial climbers of Akrobat: they live up to the name of their company as they literally hang upside down to install the Katase sculpture under the glass roof of the DGK.



The artwork "Schöpfung 2006 – 08" by Kazuo Katase in the atrium of the Diakonie Health Centre in Kassel: despite almost 400 kilograms the impression is of an effortless lightness.

Photo: Katase

Kazuo Katase and the Schöpfung

The artist Kazuo Katase was born in 1947 in Shizuoka in Japan. He has lived for three decades in Kassel, where he has his studio. Katase now enjoys an international reputation. In 1882 he participated in the 9th World-Art-Fair "documenta 9" in Kassel. In his own words, he describes his artwork, "Schöpfung 2006 – 08".

"I wanted to design a sculpture, which represents an effortless lightness and weightlessness. The configured form should expand into the space, catch light and reflect it. As I thought this, suddenly in that moment, before my very eyes I saw a picture of floating dandelion seeds flying on the air. These small parts containing the essence of life waft through sunlight in the slightest breeze. What swims past, here? The micro cosmos in the macro cosmos or is it the other way around? I saw the Earth as a seed, from the vantage point of the Moon. I looked into dark infinity, the un-ending depth of the universe, and I remembered a quotation from 1941 by Emil Nolde. " Out of nothing, everything is brought out, which wasn't there. An auspicious example of divine creation."

Chic seating for Airports

Advertising can look beautiful! Media Frankfurt GmbH specialises on advertising in Airports and regularly evolve new, innovative methods to bring their message across. In cooperation with Arnold AG they developed the seating arrangement, Branded Seating Areas. This has already won the DDC Designer Award and is nominated for the German Design Prize.





Branded Seating Areas from the FRAPORT advertising subsidiary Media Frankfurt with the designers Thomas Plettau and Dirk Einspänner. Photos: Media Frankfurt

n the competition "Gute Gestaltung 08" ("Good Form 08") organised by the "Deutschen Designer Clubs" ("German Designer Clubs") (DDC) the Branded Seating Areas has already swept the board. Seven specialist juries judged 568 entries in the categories Product, Space, Corporate, Print, Digital, Network and Future.

Media Frankfurt are now reaching for the stars. This exclusive furniture has been nominated for the Design Prize of Germany, the highest official German award for design. Nomination alone means something because the standard is that high. Products are only selected after they have already won a national or international prize, and furthermore they must be selected by a Local Financial Ministry or by the Central Government for Economics and Technology.

Download from the end of the seat

Since late summer 2007 the Branded Seating Areas adorn the Check-In halls and Departure Gates A and B in Frankfurt. The sitting area includes a back-lit advertising screen, which can be replaced by 3D advertising. The design is by design graduate Thomas Plettau: "The clear minimalist lines harmonise with the surrounding architecture." Top-quality materials such as stainless steel, oak and leather provide a stand-alone and representative environment for even the most discerning of advertising clients. Dirk Einspänner continued: "The advertising media offers here an interactive service, such as incorporating the facility to download audio data from mobile telephones via Bluetooth."

The seating is built by Arnold AG who are regularly required to complete high quality design products for Media Frankfurt. Project Manager Ingo Stemmer: "Based on designs by Media Frankfurt we developed the construction drawings, which are created in close consultation with the designers. For the high quality wooden details we recruited our regular partner, cabinet makers Hubl & Hubl."



Advertising always requires a fresh presentation

Development of new products for "High-End Medium" airport advertising is an important part of Media Frankfurt's concept, as Thomas Plettau explains: "The clear form of our advertising platforms, incorporating innovative technology, and the high standard of their construction underline the very special level of communication we achieve. The right space communicates the right message". Quality, Value and clearly belonging to an individual product family are the important aspects we consider in the development phase."



Media Frankfurt

Media Frankfurt GmbH, established in 1971, is now German market-leader in airport advertising. The company is owned by FRAPORT the operator of Frankfurt International Airport, by JCDecaux Group world market-leaders in airport advertising, and by one of the three largest advertising media companies in the world, Out-Of-Home-Media, and also the Ströer Group as market leaders in external advertising in Germany. Media Frankfurt work exclusively with Advertising in the airports of Frankfurt International and Hahn, although they do market the City Light Poster in Hannover Airport, too. JCDecaux Germany market the City Light Poster in Hamburg Airport and here there is an element of synergy. With over 2000 adverts each year, Media Frankfurt reach out to an annual 106 million passengers, from which over half are in Frankfurt International being the base of Lufthansa and therefore kern of the whole Star Alliance. As third largest airport in Europe Frankfurt has, with 55%, an above average percentage of business travellers. Media Frankfurt's portfolio extends from City Light Posters to banners and large screens, to individual solutions for specific requirements in the airport, and of course the Light Corridor, the longest back-lit advertising wall-screen in the world. Individually created networks, flexible time-configuration between one day and five years allow the implementation of practically every campaign.





Chic seating: the "Branding Seating Areas", planned and distributed by Media Frankfurt, constructed and built by Arnold.

Defying Wind and Weather

Vehicles, which run on rails, are expected to stay in service for decades. It is therefore obvious that the inherent components must be reliable and robust. Bombardier is one of the largest Streetcar manufacturers and they have contracted with Arnold AG since 2003 to supply them with the housing for the electronic power converter.

The electronic power converters are mounted on top of the streetcars and the Bombadier factory in Mannheim, which manufacture these units, require that they withstand a great deal. It is expected that these units should bear up



Container built by Arnold: the housings for Bombardier are manufactured in Arnold's facility in Thuringia but they get pre-assembled, lacquered and delivered in Friedrichsdorf. Photo: Arnold

against not only wind and weather but also vibration over a period of at least three decades. The housing is made of steel or aluminium and are either pow-

der coated or sprayed. The cooperation between Bombardier and Arnold began five years ago, initially with 55 housings for the Mitrac TC500 range "Flexity Outlook" fleet in the city of Geneva. The challenge was, as Client Advisor Olaf Schmidt explained: "We had to rivet and weld 3mm thick aluminium sheeting, under C2 certification under a railway authority licence and this required us to install a specialist welding engineer. After an early positive experience, the housing design was mutually optimised. Robert Westerberger, Bombardier's Lead Buyer for welded components: "We wanted to raise the standard of reliability, to simplify the manufacturing process, and to better the quality. And in this process, reduce costs." Olaf Schmidt gave concrete examples: "We reduced the number of interfaces and adopted complex corner bends into the sheet metal design to save on welds."

Since the project "Marseille" began, Arnold deliver on a Kanban system basis (just-in-time triggered remotely). Manufacturing levels are set by adjusted forecasts. On set weekdays, Arnold send the requisite units direct into the Mannheim Electronic power converter from the Bombadier series Mitrac TC500: The housing is manufactured by Arnold AG to the Kanban system of just-in-time delivery to Mannheim. Photos: Bombardier

factory. "By now, we have achieved a winwin situation", enthused Robert Westerberger. Arnold can plan in the long term and organise larger batches for preproduction. Bombardier save on costly stock-piling because the housings are introduced directly into the manufacturing process.

The partnership between Bombardier and Arnold now extends to components in other projects such as under-floor housings for trams in Frankfurt am Main, and to a topical large contract for electronic power converter housings on trains in China. Westerberger: "An open collaboration and timely debates during the design-phase over solutions for the production process have proven mutually beneficial."

Trams in the Flexity outlook series for Marseille: Setting the electronic power converter on the roof allows the passengers to alight at almost ground level.

High-Tec fights Packaging Waste

A further development in the bottle bank deposit-return machines for Tectron RVT GmbH, in which Arnold AG have shares, collect not only bottles and tins, but also miscellaneous packaging materials.

'Wy e are technically able to accept all material normally destined for the yellow rubbish sacks. No other machine is able to do this", claimed Dieter Stemmer proudly. Dieter Stemmer, besides being on the board of Arnold AG, is CEO of Tectron RVT GmbH. Arnold are joint-shareholders in Tectron RVT, in conjunction with many other companies. With this development Tectron RVT already meet the increasing demand in the recycling market: Don't collect it, return it.

For the first time the system has been implemented in Holland, where the German system of yellow rubbish sacks does not exist. Tectron has installed automats in Overbetuwe and Venloh, which posses two input facilities. "One side accepts empty PET bottles. The other takes all sorts of plastic," said Stemmer, "and in Venray the machines have the further capability to accept tins."

The system of emptying the machines is innovative. The containers are not exchanged but are emptied using an overdimensioned vacuum cleaner. Simple and quick. The control technology is all buried in the base, freeing the maximum space for the flattened

waste material.

Flattened but not shredded because this allows the material to be later sorted. The better the various materials can be separated, the better the attainable price and therefore the better the machine pays for itself. The machines also incorporate back-lit advertising space to increase their financial yield.

A new development is a smaller version for supermarkets. The "Liftomat" copes with around 250 insertions per day. Dieter Stemmer: "The advantage is the same as with the large machines – an enormous collection space proportional to the volume of the machine, and ease of emptying." The

question of hygiene often raised in supermarkets, of

smell, noise or insect infestation is solved: "A below-floorlevel installation in the open air is the solution."



The new Liftomat by Tectron: Takes up less space as its big brother.

Photos: Arnold

Arrin deze VIP In petiesjes In drankblikjes in

A Tectron terminal in Dutch Overbetuwe: On one side the machine accepts bottles, on the other it takes all sorts of plastic. And the facility can be extended to incorporate other types of returnable packaging.

Tubing you can bank upon

Over 230 years family tradition, growing steadily over seven generations, and world-wide in demand: Butting in Knesebeck is in many ways an exceptional business. They supply Arnold with high quality tubing for many years.

> **D**ractically no other business in Europe can claim a comparable level of experience or diversity in the production of stainless steel as can H. Butting GmbH & Co. KG, Knesebeck. Established in 1777 by an ancestor of the current owner Hermann Butting, the firm began as a coppersmith. In 1945 the headquarters was moved to Knesebeck and the production of soldered, and later welded,

copper tubing, pipe-work and conduits begun. Βv

Tubing polished inside and out: a speciality of Butting's is the ability to achieve fine surface finishes

Photos: Butting

the end of the 50s stainless steel had replaced copper.

Today over 1300 employees work for the seven-generation-run family concern, turning over an annual 40.000 tons of stainless steel in various grades of product as high quality longitudinal seam welded tubing. Besides which, Butting manufactures stainless steel containers and tubing accessories. The total turnover of the business reached last year 430 million Euro.

Arnold is just one of Butting's numerous customers. Eckhard Diller, chief executive of Arnold's subsidiary in Thüringen, is especially impressed by their innovative style. Together they developed the polishing technique to attain the



Tubing ready to be shipped: 2500 tons of stainless steel in over 15 different grades of the material are usually available for immediate delivery.

maxim high-gloss surface finish.

The company's characteristic is a healthy continuous growth and entrepreneurial foresight. In 1991 Dr. Hannshermann Butting established a subsidiary company in Schwedt an der Oder, Butting Anlagebau, to produce accessories, which complement the principle products. In 2004 the company is represented in China, and since 2005 with a production facility. In the same year a further subsidiary was opened in Canada. Throughout this affiliated group of companies, they employ the most modern production facilities, constructed to be environmentally friendly in the manufacture of the highest quality product.

The Butting profil

- Long axis welded tubing
- Bonded tubing
- Accessories
- Preparation service
- Fittings
- Tubing technology
- Installation
- Surface finishing • General service and advice

Main areas of use are in the branches of industry where "clean" tubing is a requisite, such as in the chemical industry, aircraft and spacecraft industries, as well as energy, ecological and technology exposed to aggressive climates such as salt-air on shipping.



Oxide free laser using nitrogen monoxide as the gas envelope: the advantage is that the material is precisely formed without weldwaste build-up on the surface. Photo: M. Pyper

Versatile Laser

Today it is almost unthinkable to contemplate working sheet metal without laser. This relatively recent technology is a wonder of our modern world. Arnold has many different lasers for cutting material. The most recent addition is a manually controlled welding facility.

The new wonder machine in Arnold's subsidiary in Thüringen is the Almax and looks like a George Lucas creation from "Star Wars". The laser head works in 9 axis and to a height of over 2 meters. The laser arm from Alpha Laser GmbH in Puchheim was developed together with Egbert Wirthgen, shop floor manager responsible for Industrial Design manufacturing in Thüringen. The laser platform is a newly designed stabile base. "After positioning,

the motorised laser head is able to move freely on any axis, precisely and stably positioned, controlled remotely either by hand or computer", says Wirthgen. A serious advantage is the laser's mobility, thanks to an integrated cooling system in the base. Arnold developed this machine principally to manufacture stainless steel sculptures, whereby very long welds are required, extremely precisely. Anticipated usage is in the repair of machinery, medicine technology and aircraft industry. Wirthgen: "This machine pays for itself where repetitive fine welding is necessary, or where specific spot-welds are defined and which can be programmed geometrically into a computer."



Arnold AG using the Almax: The mobility of this machine allows long welds to be made very precisely up to two meters above floor level. Photo: Arnold

Photo: Alpha Laser

Clean cuts with nitrogen

Not only for joining material, but also to cut material – Arnold use laser on steel, stainless steel and aluminium sheeting to cut extremely precise, complicated forms very quickly. The laser is much more economical than a punch for the smallest of cuts.

Andelko Svarc is the manager of Arnold's machine shop and very experienced. He has worked with lasers for two decades and he understands that to get the most of this fascinating technology the machines must be finely adjusted to the optimal set-up.

For example, the use of either oxygen or nitrogen is possible as gas envelope. "Using nitrogen it is possible to cut almost anything", as Svarc knows. Which on the one hand is a great advantage, but on the other there are disadvantages. The nitrogen process uses a lot of power and is slow. "This can be worth while because the cuts are very clean and require little or no subsequent machining", says Thomas Roth responsible for the prefabrication department. "But where fine threaded holes are required in thick material, then this is only possible with oxygen." The various options have financial consequences which Roth can explain and advise clients on, to achieve the technical result at the best price.



"Cutting in a nitrogen envelope gives very clean cuts which require little or no subsequent machining." Thomas Roth manager in Arnold's prefabrication shop. Photo: M. Pyper

A kitchen designed like a house



Individuality in the kitchen: Paxman-Design has moved away from the concept of standard sizes and offers bespoke creations that are only governed by structural, physical or building regulations.

Photos: Paxmann

Paxmann Design

Cornelius Paxmann began his company in 1990 in Bonn. Initially his team of designers and architects developed high-end office furniture concepts for board rooms in industry and politics. The 8.5 meter long Paxmann Drawing Board was developed for the state chancellery in Nordrein-Westfallen at which the ministers regularly have sessions.

sessions. Over time, however, it was kitchen design which predominated. Always in cooperation with the finest quality manufacturers. Physical examples are available in the Paxmann-Werkraum, Rheinwerkalle 6 (only with a scheduled appointment). Web site: www.paxmann.de The Bonn designer Cornelius Paxmann has specialised on high-end interior design. And especially on Kitchen design. They are designed, planned and built like expensive houses.

Mr. Paxmann, do you like cooking?

Actually, yes, for me personally kitchens are an enthralling topic. Hidden in them is a great technical challenge. The idea was to get away from the usual kitchen concept, with all its inherent limitations in standard sizes, and get made what is needed. At the time we began, the only parts that worked in this way were the ecological areas; high-end design was relatively new. Even today, very few companies offer this service.

What is the main difference between your work and the mass production?

In short: where the problems in mass production begin is where we start. Imagine a round room, in which a triangular kitchen is to be built, which, if at all possible, does not touch the floor. We get the parts made to measure, in whichever surface material we choose, from Solid Wood to Veneer to Man Made Materials to Lacquer. The choice of colours is as wide as in the automobile industry. Optically interesting is to use the work-surface material on the fronts also. This confers a monumental, almost sculptural, impression.

Do trends in fashion have an impact?

Absolutely! At the moment, the trend is towards light beige tones and lighter still. I am sure we will soon be seeing black again. A general trend is: "As natural as possible, but nevertheless hightec". We combine, for instance, stainless steel with raw solid woods, although the stainless steel is warm rolled raw stainless steel, which possess that archaic look. The material must tell a story. We work with a greywacke, which meets our high demands in quality and that to our knowledge is to be found in only one quarry, or with a burgundy lacustrine limestone that our stone mason procures personally.



"A general trend in bespoke kitchens is: As natural as possible, but nevertheless high-tec", Cornelius Paxmann, kitchen designer in Bonn.

The stainless steel part is where Arnold AG helps?

That's right. We sought a surface finish which suggests raw rolled sterling silver. After speaking to many companies, we encountered Arnold, who experimented with a variety of warm rolled stainless steels until we found what we wanted. I was personally in Friedrichsdorf and what impressed me most was that despite the size of the company, an individual service was offered. Many companies seem unable to offer this. At the end, the desired quality was achieved, with no cause for complaint or query – simply perfect.

Signs which create space

A difficult problem confronted Professor Theo Ballmer, internationally renowned expert on signing, together with Arnold AG in the Spital Center Biel SZB. Narrow gangways, a convoluted building on a slope and strict hygiene requirements had to be considered in the placement of signs in the new children's clinic.

It was awkward to establish a system of public signs, which worked consequently throughout the original, old building, into where it has been newly joined to a children's clinic", remembered project manager Roland Werkmann. Added to this, the Spital Center Biel SZB in the



The principal sign board in Spital Center Biel: situated in the main entrance hall to direct visitors through a convoluted building to the right destination.

Swiss canton of Solothurn is built on a cliff-face, and practically every department is split between many levels.

Initially, only the new children's clinic was to be sign-posted, but a survey

established that despite the children's clinic having its own entrance, most visitors used the main entrance to the Spital. Therefore the main entrance and one level of the original building needed to be incorporated into the planning. The narrow passages only allow space for wall-mounted signs, so that beds can still be moved through the corridors. Added to which is the general problem in hospitals, that there are necessarily continuous changes in the organisation, demanding a very flexible system of signing.

The perfect solution is the Arnosign 1 from Arnold AG. "In consideration of the constricted space, a system which had been developed for the Felix-Platter Spital in Basel was introduced of folding signs that attract visitors attention but do not impede the flow through the corridors", explained project manger Rainer Müller of Arnold AG. A special construction by Arnold hinges the signs on the left, right and in the middle. An added advantage is that floor cleaning machines are not impeded.

Additionally to 15 folding signs, Arnold manufactured 10 normal signs, 5 wall mounted signs and a principal sign board in the entrance hall. The script on



Arnosign 1 as folding system: With this gimmick Arnold were able to achieve a high visibility without impeding passage and retains the capability to allow the hospital floors to be thoroughly cleaned. Photos: Arnold

these sign boards is in a high-quality, robust screen printing process. Roland Werkmann: "The hospital is very pleased with this system, so much so that we are copying this into the original building, too.

Sirona wins again

You have to give it to them, The Sirona Dental Systems football team are the tops! They won the coveted Arnold Cup again, thereby reaffirming their accomplishment last year. An honourable second place was won by the Arnold team from their subsidiary in Thüringen. Bronze was taken by Smiths-Heimann. Ranks four to six were taken by Dipl.-Ing E. Rübsam temporary employment agency, the Arnold team from Friedrichsdorf, and the team from Bombardier Transportation. On the second day of the tournament in Steinbach-Hallenberg, the teams took an exciting journey through that part of the Merkers mine open to the public. A participant commented: "Better than any roller coaster!"



Photo: Arnold

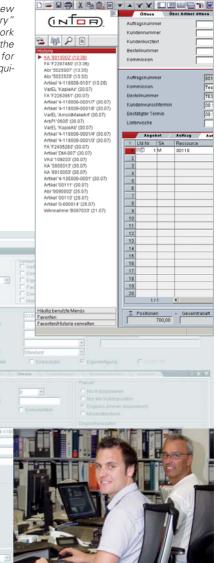
New Infor release

Infor AG, specialists in enterprise resource planning for medium sized businesses, released the new 7.1 amendment to their basic system ERP COM, which Arnold have been using for years and who intend to introduce the new release by December throughout their organisation.

Throughout the German speaking lands, Infor Global Solutions Deutschland AG, Friedrichsthal, now have more than 1500 clients using their ERP COM software, a software which is particularly popular amongst middle-sized manufacturers. This success has made Infor the number 3 supplier of business software, worldwide, and is due to the continuous development in their product, adjusting continuously to the requirements of their clients. The integrated system ERP COM combines many business functions into a flexible platform, which can be customised by the client, in many different languages. Over and above this, the system supports the business process from construction to finance.

The new developments incorporate functions of project and multi-site management, to optimise client service, and a comprehensive stock management system. This last is for Arnold the largest systematic improvement. Project manger Christoph Ebert, responsible in Arnold for organisation management: "Our requirements such as following expiration dates, asset auditing, or first-in-first-out recall, can all be accomplished and administered.

Many simplifications in the use of the program have the benefit of speeding up the manufacturing process. Anyone can set up their screen as they wish. "From our point of view, this offers the potential to simplify daily tasks, those most frequently repeated, which can be selected by the individuals themselves, and at the press of a button the recent history of a case can be reviewed", which IT staff member Thomas Eitelmann sees as being a new added advantage. "What more does the client need to know?" Infor 7.1 offers a new facility called "History" that recalls recent work with just one click of the mouse to enable, for instance, call-back enquiries to be dealt with.



Infor ERP COM 7.1

An overview of the most important improvements

- Greater flexibility with the support of Make-or-Buy and the process of awarding contracts
- Important industry specific options
- Provision of extensive warehouse functions, which can be customised.
- Ease of administration, using modern tools and data storage technology
- Includes the infrastructure to patch future anti cipated Open SOA components

In particular, the new warehouse management system in the 7.1 release offers significant advantages, believe both Christoph Ebert (left) and Thomas Eitelmann (responsible for the implementation of Infor ERP COM 7.1).

Photo: M. Pyper

Strengthening the Arnold team

Arnold AG has restructured the management to the requirements of their continuing growth. To improve efficiency, Dipl. Engineer Joachim Ricker is now responsible for Production and Stefan Link for material logistics. The business is based on the fine traditions of handcraft but to continually improve efficiency new structures must be integrated.

Joachim Ricker, 49, has 23 years experience in supply to the automotive industry. His engineering experience in large-scale production and individual tooling will bring strength to the precision sheet metal manufacturing methods of Arnold AG, because of the variety of fabrication requirements. "I am convinced that many ideas used in largescale production will be useful here", he purported.

Arnold sees his main responsibility as being to increase efficiency and quality. He must match the hand-made roots of this industry with the industrial requirements of the clients. Furthermore he is to fine-tune the structure for new projects, because "the costs accumulate early in the construction process".



"I am convinced that many ideas used in largescale production will be useful here". Joachim Ricker, Head of Production

His first large challenge is already established: During the next year, Arnold's headquarters is to be expanded by a further 4000 square meters. This requi-



"We have to drive developments actively forward". Stefan Link, Head of Materials Logistics Photos: M. Pyper

res a completely new workshop layout, which Ricker and his team must postulate.

His new colleague Stefan Link, 48, is manager of material administration, responsible for logistic, stock receipt, packing, shipment and storage. Arnold AG knew him "from the other side of the desk" as he worked as purchaser for Singulus AG, his previous employer. "A very good company with much potential", was his evaluation of Arnold.

He began as a mechanic but then completed a technical diploma before studying at the Friedberg production technical college. He worked his way up within the RBU from marketing into purchasing, and then spent the next 13 years helping build up Singulus AG. He continued with his further education as Supply Chain Manager at college in Nürnberg, where he learnt how to stimulate more modern material administration systems that he can now implement at Arnold. His credo is: "I want to actively progress development." Within this philosophy is a closer cooperation to suppliers, who Link wishes to, "involve more".



Photo: Arnold

Iron Arnolds do well afoot

In Juli over 73.000 people took part in the JP Morgan Chase Corporate Challenge 2008 in Frankfurt. It is not so much a sport event as a team event, communication, collegiality, fairness and health. Two teams of four participated from Arnold, who called themselves the Iron-Arnolds. Running the six kilometre distance were (from left) Olaf "Big Boy" Bürger, Marcel "Martial Marcel" Glapski, Manfred "The Invincible" Wüst, Christoph "Forrest" Ebert, Jörg "The Incredible" Klipper, Frank "Fracer" Brethauer, Isabell "Easy" Issing and Alexandra "Fire Dancer" Müller. Isabell Issing commented: "You just had to be there; carrying our flags across the finish line was a great experience."

50 years metal worker

Not many people are able to claim such a jubilee: Rüdiger Hess, master craftsman and departmental head at Arnold, celebrates 50 years as metal worker.

I ve thought about this only in the last few months. Age was never a problem for me." To see this wiry man is to believe he is top fit. The truth is not much different. At the age of 64 he still regularly referees football games up to A-Juniors, as he celebrates half a century in the steel industry. An unbelievable jubilee.



The sport keeps him fit. Since decades he does a great deal for the soccer as being a referee. Photo: privat

And this signals slowly the end of an interesting professional era. For many, many years Hess has been master craftsman and departmental head of manufacturing in steel, stainless steel and aluminium. Besides which, he has coached generations of trainees preparing themselves for this craft. He has been on the acceptance board of the IHK for almost 30 years. Now, in the coming March, he will be 65 and intends to retire, to the relief of his wife. Whatever that may mean to such an agile man, working metal will always be in his blood. He



Since 50 years metal worker: Ruediger Hess, departmental head in production and training manager at Arnold.

owns two old-timer cars, a VW Beetle and a Sirocco, which he is slowly rebuilding in stainless steel! Recently he added a motorbike to this collection, an almost 30 year old Honda.

Hess leaves with a heavy heart: "Many are happy to leave their firm, but not in my case. I have a close relationship with Uwe Arnold and his father, who employed me as master craftsman in 1987. Time and again they sit together over a cup of coffee and chew over the old times.

Do-It-Yourself Sewage Plant

Calogero Sciortino, 34, works for the last 18 in the installation team of Arnold and now he is an expert in waste disposal and can be said to be self-taught. He built together with his three neighbours their own sewage plant for a small housing development.

"The main problem with a venture like this is to get the authorities approval, because they lose the income of making the waste disposal themselves." But this was the only negative



Working 18 years at Arnold: Calogero Sciortino. He planned and built a small sewage plant for his small housing development.

Photo: M. Pyper

experience Calogero Sciortino made during the project. His house lies together with three other family houses outside the village of Rosbach-Rodheim in the middle of a water pollution controlled area. The price for the regular sanitation rose and rose.

Until Sciortino took action: "I had the idea to build a small disposal unit on my own grounds. I checked with my neighbours and they all agreed to the principle. "Some 12.000 Euro and a total of 800 man-hours were invested, but then it was finished". Today, only half a year after it was brought into service, we are all happy. The system works perfectly. Our running costs are an additional 40 to 50 Euros per year and the cleaned water we produce fulfils all requirements of a water pollution controlled area.



First the planning, then the work: Sciortino builds for himself and his neighbours a complete sewage plant which fulfils all ecological requirements. Photo: privat