

trailer world

The customer magazine of BPW

Issue Two 2007



Fresh wind

Success from innovative technology
and responsible action. **Page 6**



Dear reader,

Can you feel it? There's a fresh wind blowing. And not only because autumn has arrived. The economy is buzzing, the transport industry is booming, and production at BPW is running flat out to try to meet the demand for running gear systems.

In this case even the fresh wind blown into the factory workshops by our newly developed products in time for the 1st September launch, did not generate a cooling effect. New production technology, reprogramming of the machines, training of the workforce, briefing of the suppliers ... Thanks to meticulous preparation we were able switch production overnight to the second generation of ECO Plus without any problems.

And that is just one example of the investment in the future that BPW is undertaking. We are working ambitiously to make our products even better, particularly with regard to service life, maintenance costs and fuel consumption. The basis for this is the expansion of our test centre, so that we can really thoroughly test and optimise all new developments.

The initial expansion measures in terms of production capacity will have been completed by the end of the year. From the start of next year we will be increasing our daily capacity once again, and we have set ourselves the target for 2008 of cracking the half-million units mark in axle production. In the next two years BPW will be continuing to invest tens of millions at the plants in Wiehl and Szombathely/Hungary. All in all, this means that we will be ideally placed to meet the needs of the market in the short and medium term.

We already gave trailer world a makeover in June, and now you will also find this second issue of our customer magazine online at www.bpw.de/aktuell/. Please let us know what you think of the current issue.

We hope you enjoy your reading!

Dr. Bert Brauers
Mitglied der Geschäftsleitung / Vertrieb

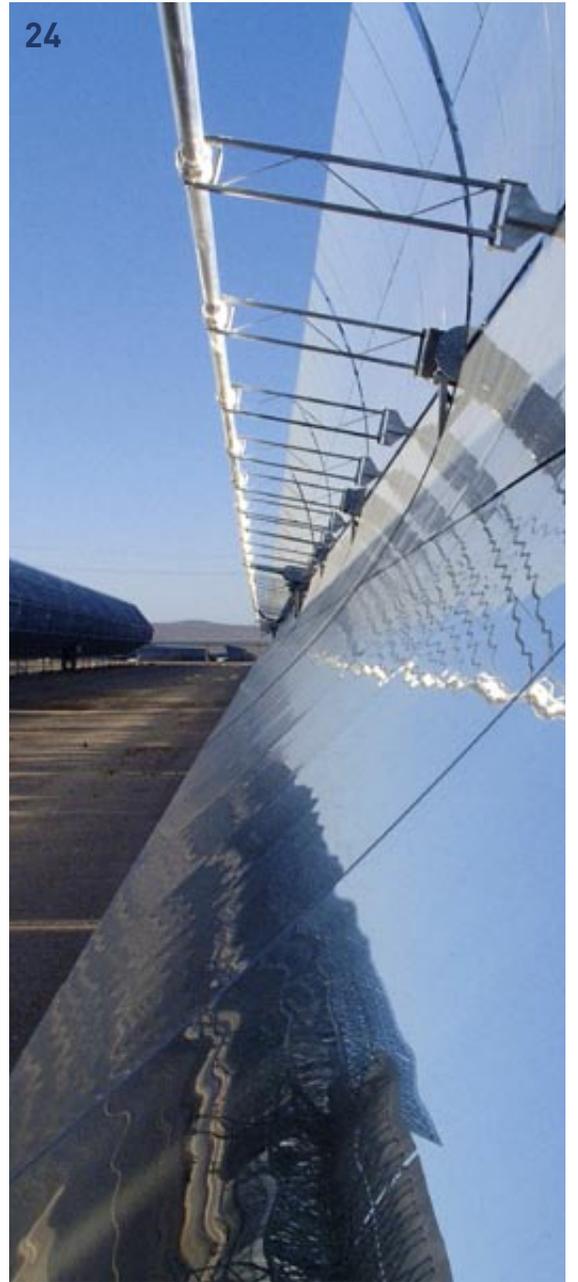
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Photos: Ivo Rovira/Alinghi, Hahn, Solar Millennium AG, BPW Cover: Th.Martinez/Alinghi



We help people

■ On 21st October the Humanitarian Aid Association of Overath set off for the 28th time with an aid convoy in the direction of the Balkans. With seven semi-trailer units, Günter Hecke (56) and his colleagues took relief supplies to the people in the Croatian town of Gospić, where there is still a lack of the essentials in the aftermath of the civil war. In this way the volunteer helpers transported bicycles, tinned food and cleaning materials to the hospital and the children's home, just under 250 kilometres to the south of Zagreb. "We want the relief supplies to get to where they are really needed," says Hecke, who was himself a long-distance driver for many years and who now works as a gatekeeper at BPW. His original intention was actually just

to stand in briefly for a sick colleague five years ago. Today Hecke is Deputy Chairman of the Association.

It takes six months to prepare a convoy, for which not only helpers but also EUR 30,000 for vehicles, diesel and food have to be organised. "When I see the gratitude in the eyes of the children," says Hecke, "then I know that all the work has again been worth it!"

www.humanitaere-hilfe-overath.de



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Photos: Hecke, BPW, Reflexite

Choosing tyres



■ Formula 1 fans know that tyres can decide the result of a race. It is no different in everyday road transport.

It is well known that tyres account for about three percent of the running costs of a 40-tonne semi-trailer unit. Less well known is the extent of the influence of rolling resistance on fuel consumption and operating costs. Every third tankfull of fuel is accounted for by rolling resistance, according to French

tyre manufacturer Michelin.

In a test, two identical semi-trailer units, one equipped with long-distance tyres and the other with tyres for regional transport, each drove for 120 kilometres at a speed of 85 km/h. The long-distance tyres with low rolling resistance saved 1.7 litres of fuel per 100 km.

And it gets even better. Recutting not only extends the life of the tyres by between 25 and 30% but also lowers fuel consumption even further. The reason for this is that towards the end of its life the tyre operates with reduced rolling resistance.

Protecting the environment

■ Against the background of the climate debate, companies are looking for opportunities

to improve their eco-balance. For example, the paper processing company Papstar has told its drivers to adhere strictly to speed limits. The result is that the vehicles consume a good six litres less diesel per 100 kilometres than semi-trailer units from comparable vehicle fleets.

Managing logistics

■ In public private partnership (PPP) with the Kühne foundation, a new university facility is being created at the University of Applied Sciences, Hamburg-Harburg (TUHH), namely the

Kühne School of Logistics and Management (KSL). Benefactor Klaus-Michael Kühne announced at a reception on the occasion of his 70th birthday that he would be funding the establishment of the new university facility to the extent of EUR 30 million. Courses in "Logistics, Infrastructure and Mobility" and "International Industrial Engineering" will be offered at KSL from the winter semester onwards. In this way the Kühne Foundation is reacting to the continuously rising demand for qualified new recruits and managers.

»Mobility and climate protection: Thomas Hailer, GF Deutsches Verkehrsforum
 Both must be promoted.«

Attending a trade fair



BPW made its first appearance at transport logistic in June.

■ BPW takes stock after its first appearance at the leading international trade fair of the transport and logistics industry, and draws some positive conclusions. “transport logistic 2007 was extremely effective for us. Virtually 90% of the visitors to our stand were direct customers,” says Rupert Habersatter, Head of BPW Corporate Communications.

One of the focal points of the trade fair was the topic of “Mobility, Ecology and Climate”. In his inaugural address, Federal Minister of Transport Wolfgang Tiefensee posed the question of how on the one hand to maintain people’s quality of life and yet despite that, to guarantee transport.

The 11th edition of this international trade fair for logistics, telematics and transport was attended by 47,000 trade visitors from 113 countries between 12th and 15th June. This is an increase of 18 percent.

Exhibition Calendar 2007

Agritechnica
13.-17.11, D-Hannover

Trailer 2007
23.-27.11, B-Kortrijk

Detecting lorries

■ From October, all vehicle manufacturers obtaining type approval for their vehicles in line with ECE Reg. 48 in Germany are obliged to provide their vehicles with passive light sources in the form of contour markings. A research report issued by the Federal Transport Ministry identified typical risks of collision, which can be avoided by means of adequate markings, particularly in poor visibility.

Lorry owners should use high-quality foils, as lesser-quality material may lose its reflectivity after the first wash cycle.



Paying fines

■ It can cost companies up to EUR 15,000 if dispatchers draw up a transport schedule that does not take account of the drivers’ statutory breaks and rest periods. This ruling is contained in the Third Act to Amend the Law relating to Driving Personnel, which came into force on 6th July.

A particularly contentious fact: the Act also contains a provision that permits fines to be imposed for past infringements, even though penalties cannot be imposed for such past infringements according to the applicable Administrative Offences Act. This ruling is considered to be questionable in terms of constitutional law.

6,339,940

The number of trailers and caravans registered in Germany, according to the Federal Motor Transport Authority in 2007

Top up with serenity

■ The first self-styled feng-shui service area in Europe is located between Stuttgart and Ulm on the A8 motorway. As soon as you see it you recognise that the Gruibingen Süd service area is more than just a functional filling station and service area. Following the principles of feng-shui, the system stemming from China, the motorway service area with its curved roof fits

well into the hilly landscape of the Swabian Alb region.

According to press reports, several feng-shui advisers engaged especially for the purpose dealt with the details. They defined the precise angles for the entrance and rid the site of any supposed evil spirits.

But harmony cannot be had for nothing. In its test for motorway service areas the ADAC found fault with the high prices.



Safety for caravans

■ Side winds, ruts or sudden evasive manoeuvres are risks to be feared when towing. In Intelligent Drive Control (iDC), BPW’s engineers have developed an intelligent emergency system for single and tandem-axle trailers, which sets new standards in terms of safety and ride quality.

It is comparable with the ESP system for cars and gets the trailer immediately back on track in the event of critical lateral accelerations. Braking is controlled by the iDC unit, which is located immediately on the trailer’s overrun hitch. In this way the towing vehicle and trailer are completely automatically stabilised. The Intelligent Drive Control System can be retrofitted to any BPW chassis in conjunction with the overrun hitch (type ZAF-2).





The force of the wind

Sailing is more than sun, wind and waves. It is a passion which is addictive. And sailing is the America's Cup! The Formula 1 of sailing again cast a spell over millions all over the world this year.

White sails billowed out, oiled teak decks, turquoise water and attractive people who radiate a stylish composure with their elegant clothes and relaxed smiles on tanned faces. This image or a similar image is projected by sailing in large-format advertisements for, in the main, luxurious consumer goods such as jewellery, cars or watches. And sailing is still practised nowadays in this way or in a similar way in some traditional regattas, where the participants almost nostalgically recall the good old days, when sailing was still a more elitist pastime of the upper class. However, the reality is different: sailing has long been a leisure pursuit for everyone. Even people, who have never been in a sailing boat, admit to being interested in this sport.

However, the fascination of sailing also produces disbelieving head shaking. Why do people sacrifice their holiday and sail across the North Atlantic – in a boat which is no longer than an HGV, under thousands of metres of jet-black emptiness, far away from any civilisation and rapid assistance and without any comforts – when they could fly the same distance in just a few hours and without getting their feet wet? Not because they love managing without a hot shower for weeks on end. Not because frozen food is their favourite meal. Not even because wet clothes, the cold, a lack of sleep and seasickness are particularly attractive. →



America's Cup participants love light winds. The sensitive high-tech yachts reach their limits at winds of force 5 and above.

The enthusiasm for sailing is driven by sporting highlights such as Kieler Woche [Kiel Week] which attracts thousands of sailors and curious onlookers to the narrow coastal inlet every year. Or by spectacular races such as the Volvo Ocean Race Around the World and the Vendée Globe non-stop round-the-world single-handed yacht race: The breathtaking pictures of highly developed high-tech yachts, which sweep through the Antarctic Ocean at 40 knots between icebergs, cast a spell over even professed landlubbers.

However, the sailing crown is and remains the America's Cup. The battle for the oldest sports trophy in the world took place for the 32nd time in 2007 and produced an extra special spectacle.

It was as long ago as 1851 that the schooner "America", after which the cup was subsequently named, beat the competition from Great Britain in a sailing competition – a humiliation for the kingdom which considered itself the ruler of the seas. Just how much the defeat hurt is demonstrated by the fact that when Queen Victoria asked who had come second, she is supposed to have received the reply "There is no second". It took 132 years and 26 challenges until

»The few adventures left.«

"Australia II" managed to snatch the "bottomless ewer", as the cup is also referred to, away from the New York Yacht Club. This marked the end of the longest successful run in sporting history.

Then the incomprehensible happened in 2003: Switzerland, a country which is completely land-locked and which does not have any maritime history, beat the sailing nation, New Zealand, in the America's Cup final off Auckland – a shock for the sailing-mad Kiwis, who had to watch their team being outclassed 5:0 and the proud "Black Magic" drifting helplessly in the Hauraki Gulf following a broken mast. However, with its victory, the Swiss team "Alinghi" brought the cup back to Europe for the first time in 151 years and provoked a new sailing euphoria not only in the Alpine republic, but throughout the entire continent.

Eleven syndicates met again in Valencia in 2007, in order to snatch the crown away from the Swiss. However, it is now no longer just a question of fame, prestige and honour; it is a question of advertising and sponsoring contracts, media presence, marketing strategies – in brief: a great deal of money is at stake. The budget

Photos: 2007 Chris Cameron, Ivo Rovira/Alinghi

for an America's Cup campaign can be up to 150 millions Euros. Huge groups such as BMW, T-Systems, Allianz or Oracle push their teams with millions.

A great deal of money is at stake

The Emirates Team New Zealand was also again at the start in Spain. Their objective was to make up for the humiliation of 2003 and to win the cup for the third time.



The Emirates Team New Zealand had a tough neck-and-neck race in the final with the Swiss citizens of Alinghi.

At any rate, an entire nation was behind their team. Thousands of Kiwis embarked on the long journey to Spain, in order to spur on their team. Those left at home followed the event from the other end of the world. Television New Zealand reported live on every race in the middle of the night, hundreds of thousands were glued to their screens. It is even said that New Zealand's economic performance declined during this period, because people were not getting the



The enthusiasm of the travelling fans was simply magnificent.

required amount of sleep. The cover pages of the dailies were adorned with current results, analyses and stories, and fans wrote thousands of messages to "their team" in far-off Spain.

Thousands glued to their screens

The term "team" does not just mean the 17 highly paid professional sailors who steer the racing yacht over the regatta course. A campaign group is made of up to 150 members: designers, boat builders and engineers develop the extremely sensitive high-tech yachts under the strictest secrecy. Sail makers ponder over the optimum sail design. Meteorologists evaluate historic weather data, in order to predict the wind conditions as accurately as possible. Chefs, nutritional advisors, physiotherapists and fitness trainers →

look after the team's wellbeing. The shore crews keep the yachts in good shape. Marketing people and press officers show the campaign in a favourable light. Not forgetting the logistics people who ensure that everything is at the right place at the right time.

Huge amount of pressure

The 32nd America's Cup was a particular challenge for Ian Stewart, the "Logistics Manager" for the Emirates Team New Zealand. Two 26-metre racing yachts, three 20-tonne keel bombs, four 34-metre rigs, seven support boats, two mobile cranes and more than 20 containers of equipment had to be moved several times from one end of the world to the other. The construction and equipping of the support points, the trans-



The indispensable freight is packaged with kid gloves.

port and accommodation of the team and much more were also part of his duties. And Stewart was always under a huge amount of pressure.

Talent for improvising

"Following a warm-up regatta we had major problems removing our equipment from Sicily", so says the logistics manager. A general strike brought everything to a standstill. "A delayed shipment would have had fatal repercussions on our further testing and training programme." In a cloak-and-dagger operation, the rigs were loaded onto a 120-foot long super yacht and our own trucks organised. "We managed to circumvent the strike, but it was very demanding."

The logistics expert, who sailed twice around the world himself in the Whitbread Race (nowadays the Volvo Ocean Race) in the 1990s, was supported by numerous partners and subcontractors. Together with the Danish shipping company, Maersk Line, and the harbours, the shipments were planned down to the last detail. Preceding and following of the oversized freight had to be meticulously worked out with the HGV companies, special licences obtained and the local infrastructure inspected.

There were only rarely opportunities for Ian Stewart to have a breather. The best time was during the races. When the yacht was on the water, then he knew that he had done his job well. "Then I watched the race in peace." And the logistics manager seems to have done his job very well, since the cup



Even during crane operations, only the team's own equipment is trusted.

Photos: Chris Cameron/ETNZ, ETNZ

Emirates Team New Zealand

- Team manager: Grant Dalton
- Skipper and helmsman: Dean Barker
- Head designer: Andy Cloughton
- Budget: approx. 80 million Euros
- Team: 125 members from 8 countries
- Cup victories: 1995 and 2000
- Cup final: 1988, 1995, 2000, 2003, 2007
- Website: www.emiratesteamnz.com



»In the America's Cup time is everything.«

Ian Stewart, Logistikmanager Emirates Team New Zealand

was within reach this year: After the New Zealanders were able to eliminate the competition in the qualifying races, the team around the young helmsman, Dean Barker, was up against the title holders, "Alinghi", in the final.

And it was to prove to be a final like no other in the history of the America's Cup. With a margin of just one second the competitors passed the finish line in the seventh race. Time seemed to stand still, thousands held their breath in Public Viewing in the streets of Valencia, until the race management announced the winner of the photo finish, namely Alinghi, who beat the Kiwis by 5:2. And yet the honour of the New Zealand team had been restored, as there had never before been such a close, pulsating final. Cheered by their fans and with their heads raised, the Emirates Team New Zealand returned to their homeland.

Following the cup? Preparations for the next cup!

And one thing is clear: New Zealand will again be one of the challengers at the start of the 33rd America's Cup, in 2009. And Ian Stewart will definitely be there again. When asked what he would do after the end of the America's Cup, he answered: "Prepare and plan for the next one." (ak)



○ Precision work during loading in the bowels of an Antonov.

»If we can fly to the moon we can also use towing kites intelligently.«



Innovative transport solutions are increasingly growing in importance in the current climate-related discussion: The Hamburg company SkySails develops towing kites as an additional drive system for ships. One of its first customers is the Bremen shipping line Beluga Shipping. trailerworld discusses some unanswered questions about the SkySails system with the two managing directors of the companies, on the deck of the Hamburg museum ship “Rickmer Rickmers”.

When you look at the sky, could you use the SkySails system today?

Stolberg (thinking about it): We could not use them here, anyway. There’s not enough wind in the harbour for it. But we intend to use the kite on the open sea, after all – and it would be ideal there today with around force five winds on the North Sea.

Is it possible to explain the SkySails system in a couple of sentences?

Wrage: The principle is actually not new, but well known from kite-surfing.

We use large towing kites on ships, achieving fuel savings of between 10 and

35% depending on the wind. In this way we are returning to the origins of propulsion technology in commercial shipping, from sail through steam and diesel back to sail again.

Many ship owners and ship builders are still very sceptical about SkySails.

Wrage: There is no reason to be sceptical. Oil prices have risen tremendously, and innovations have to be generated, especially in the area of logistics in order to cope with the challenges of the future.

Stolberg (interrupts): ... we must also reduce the fuel consumption of ships, and hence the emissions too.

Wrage: At speeds of between of five and twelve knots, the research ship “Beaufort” achieved fuel savings amounting to 1,200 litres a day.

Wind strengths of between two and four on the Beaufort scale are necessary for that. From what wind strengths can the SkySails system be used?

Wrage: The SkySails system can be used in winds between force three and force eight.

Stolberg: If I may briefly correct that. The “Beluga SkySails” travels at an average speed of 15 knots. For that reason the SkySails system cannot in my opinion ideally be used in force-three winds from astern. For efficient application it requires winds of at least force four or five.

Wrage: By manoeuvring the kite, however, we can achieve powerful forward propulsion even in light winds. The kite is then electronically controlled and does not hang in one fixed position in the sky. Apart from



which there is more wind on the open sea at the height at which the kite flies, between 200 and 300 metres, around 30 to 40% more than at the surface of the water. When the wind strength doubles, the pulling power of the kite is quadrupled!

Yes but the wind does also have to be blowing from the right direction!

Wrage: The optimum wind direction for the system is from astern, in other words from behind. The system would still function even with the wind

from abeam, in other words from the side. But it is quite clear that we do not match the upwind performance of modern racing yachts, i.e. whenever the wind comes from further forward.

»We must reduce the fuel consumption of ships.«

What happens when the sea is rough?

Wrage: The SkySails system can also be used when there is a heavy swell, for example on the Atlantic.

You announced SkySails eight years ago – why has the launch taken so long?

Wrage: A high-tech system takes time to refine. We are extremely happy that the system can now finally be implemented in practice.

Surely the large sums that have been spent on the SkySails project can never be recovered.

Wrage (energetically): That's not correct! If we weren't all in agreement about that, the inves-

tors would not have given their financial support to the project in the way that they have. Only ten percent of expenditure is covered by public subsidies. The remainder is borne by investors, among whom are experts who

have been intensively involved with the system and are convinced of its merits.

Stolberg: We will be the first shipping line to use the system in commercial freight shipping on a multi-purpose heavy-cargo ship. Beluga has made no contribution to the development costs. This strict separation, combined with continuous, critical examination of the development stages, has in my opinion been very good for the entire project.

The "MS Beluga SkySails", the first cargo ship to be additionally powered by the innovative towing kite, will be delivered in November. Why do you believe in this innovation?

Stolberg (patting Wrage on the shoulders in a friendly manner): I got to know Mr Wrage four years ago, when we were sailing on the North Sea island of Spiekeroog, so we have both been involved with the wind since our early days – and for that reason too I am absolutely convinced by the concept.

But the introduction of innovations is also always associated with risk.

Stolberg: SkySails does not represent a risk for us. Fuel prices are currently around 370 dollars per tonne. I anticipate, in realistic terms, fuel savings amounting to between 10 and 15%. If the towing-kite →



Personal details

Niels Stolberg is Managing Partner of Beluga Shipping GmbH. Now 46 years old, he established the company in 1995. The Beluga Group, with its headquarters in Bremen, operates globally as specialists in project and heavy cargo loading.



Personal details

Stephan Wrage is a founder of SkySails and Chairman of the Board of Management. The 34-year-old graduate industrial engineer is an enthusiastic sailor and stunt-kite flier. Wrage has been working on the development and marketing of towing-kite propulsion since 2000.



»We can achieve powerful forward propulsion even in light winds.«



»You have to take them on board with you.«

system works, it will be our contribution for the environment. After the first year's testing we will introduce larger kites up to 600 sq m in area, which will then be able to return fuel savings of at least 20% and possibly 30%. The only risk might lie in the technical application.

What do you mean by that?

Stolberg: The crew members and shipping company employees will have to be very familiar with wind maps. We want to employ the system to best effect, for which reason we are using wind maps to determine where our routes will be. For example (Stolberg gestures at the sky as he sketches out the course): South of the Azores the route crosses the Atlantic with an easterly wind, then up the east coast of the USA to the north, and back across the Atlantic to Europe with a westerly wind. That will also be the route of the "MS Beluga SkySails",

which, incidentally, will be carrying wind turbines on its maiden voyage from Esbjerg in Denmark to Houston in the Gulf of Mexico. On this route we can expect sufficient winds from astern.

How do you convince your workforce of an innovation like SkySails?

Stolberg: You have to take them on board with you. Beluga employees, including three captains, two other ships' officers and three deck hands, were also deployed on the research ship "Beaufort". We believe in „learning by doing“. The employees are highly motivated to accept this new technology. Our crew receives 20% of the fuel cost savings as an incentive.

But that also means additional training for the workforce.

Stolberg: We have incorporated training with SkySails into our training programme. As soon as the "Maritime Campus" in Elsflath has been established we will be able to train our new recruits even more intensively there. The topic of SkySails will then also be integrated into the lectures at the maritime school in Elsflath.

A cargo ship that also has ancillary wind propulsion, known as the Flettner rotors, is currently being built. Vertically rotating tubes catch the wind, so providing forward propulsion. They would be in direct competition with SkySails, and they are intended to achieve fuel savings amounting to 50 %.

Wrage: The Flettner rotor is in my opinion not an alternative to SkySails. It has a number of technological disadvantages.

For example it can be used with wind from fewer angles and it takes up more deck surface area on board, which costs space. The Flettner rotor is only an attractive option in niche markets.

Do you believe there are any further viable innovations in the area of "wind propulsion for cargo ships"?

Stolberg: As far as Beluga is concerned, SkySails is currently the only commercially workable innovation in the area of wind propulsion for cargo ships that merits consideration.



»We need innovations in the area of logistics.«

Wrage: It is of tremendous significance that new technologies are finally being employed in maritime shipping.

But all the shipping lines will have to pull in the same direction!

Stolberg (looks at Wrage): Mr Wrage is already involved in discussions with other shipping companies that are interested in SkySails.

Wrage: 18 months ago, Mr Stolberg announced that Beluga ships would be equipped with the eco-friendly ancillary propulsion system, SkySails. That aroused a great deal of attention. In addition, the performance data have now been confirmed by the research project conducted by the University of Applied Sciences, Oldenburg/Ostfriesland/Wilhelmshaven (FH OOW). We are extremely proud of that. (sh) 



The SkySails system

■ The system is comprised of a fully automated towing-kite propulsion system and optimum wind-related route planning. It is installed as an ancillary drive system and used on the high seas to relieve the main engine when the wind conditions are suitable. SkySails technology differs from conventional mast-mounted sail systems in that the towing kite is only connected to the ship by means of a towline. The sail area and the ship are separated from one another. SkySails technology can be retrofitted to almost all cargo ships and super-yachts.

DISPLAYING

With the **successful changeover** of axle production to the “**ECO Plus 2**”-generation, BPW has demonstrated that you can make a good product even better. At the same time it again became clear to the company just how much **potential** there is in its employees, who were after all responsible for product development and implementation →

POTENTIAL

Because the **level of development is already extremely high**, BPW will have to expend a great deal of effort in order to remain **at the top** in terms of product development. The “Development Service” department repeatedly identifies new **potential** and opportunities for improvement during its testing, in some cases using test rigs developed in-house. →



Here, compare these," said Steffen Trapp. Two hubcaps; at first glance they appear identical: black, matt iron, both with the BPW logo and the inscription "ECO Plus". One weighs going on for two kilos. But the other one – it sits more lightly in the hand – weighs only half as much. The screw thread has been replaced by a new bayonet fitting in the case of the lighter hubcap. "It saves materials and hence also weight," explains Trapp, Procurement Process Manager and Project Manager for the series production launch project at BPW Bergische Achsen KG. "A clear advantage for customers in terms of payload." The hubcap with bayonet fitting is a component of the new BPW "ECO Plus 2" axle, presented here by the graduate engineer. "As market leaders we must lead the way, developing new ideas

The five-man BPW development team in the production shop (left to right): Thomas Borlinghaus, Edgar Bray, Hans-Josef Leidig, Steffen Trapp and Philip Uszkurat.

It is one of those special moments, when even an experienced engineer like Bernd Rhein cannot hide his fascination. The Head of BPW's Development Service stands in front of his new pride and joy, with visible satisfaction. The solid steel structure juts out of the floor like a jagged, grey rock. Here in the pristine new machine shop stands the dream of every running-gear developer: a 12-channel modular test rig, which is capable of simulating all operating loads on running-gear subassemblies without any road tests. "An absolute highlight," says Bernd Rhein, speaking about the multi-million-euro investment. None of the competitors has a comparable installation. "Compared with our competitors, we are by far the best equipped in the area of development and testing."

BPW continually reinvents itself. The BPW Development Service has been in existence since 2002, having emerged from the "Testing" department, to ensure that

THE AIM OF THE TESTS IS TO
**SHORTEN
 DEVELOPMENT
 TIMES**
 AND TO SATISFY BPW'S
**HIGH
 QUALITY
 STANDARDS**

this technical lead also pays off for the company in the form of innovative products. In the 3,000 sq m test facility in Wiehl, a dozen engineers and other employees ensure that BPW continually reinvents itself. "Our jobs include trialling components and systems, carrying out measurements of physical values and developing testing methods," explains Bernd Rhein. As ever, the devil is in the detail. Because the products are well-engineered as a result of the high level of development, advances are now often achieved by

»We have to earn our position as market leader again every day.«

Bernd Rhein



on our own initiative instead of just reacting to the competition,” says Trapp. In the last two years around 50 BPW specialists from all departments have been involved in the development of the new ECO Plus 2. But it was the five-man core team around Steffen Trapp that took responsibility for ensuring that the first ECO Plus 2 axle would leave the logistics centre of the Wiehl-based company on time on 1st September.

There are over 12,000 possible versions of the ECO Plus 2. Every axle that arrives freshly welded and assembled at the end of the production line is already configured for



Steffen Trapp demonstrates: A new bayonet fitting makes the hubcap of the ECO Plus 2 significantly lighter.

WITH THE INTRODUCTION OF ECO PLUS 2 WE HAVE DEMONSTRATED THE POTENTIAL INHERENT IN OUR TEAM

a particular order. Customers order them according to their individual dimensions and the required braking system. The production changeover was a considerable task: In addition to ECO Plus 2, BPW simultaneously launched the series production of a new generation of disc and drum brakes, as well as an improved air suspension system with the option of a bolt-on hanger bracket.

A challenge not faced every day by a medium-sized company like BPW. Accordingly, the workshops in Wiehl have been transformed, with old production lines dismantled and new machines with the latest production technology installed.

Silent changeover. reprogramming, briefing of employees and suppliers – all this had to be carried out alongside ongoing production, and achieved as smoothly as possible. It was a tightrope act, because customers have filled the company’s order books to maximum capacity. Around →



The heavyweight modular test rig simulates almost all possible loads and stresses. This is essential for improving BPW products still further, down to the smallest detail.

means of inconspicuous corrections. Rhein: “Improvements that may have a great effect are sometimes hardly visible when you look at the product from the outside.”

Heavyweight dynamics. There are 30 different test rigs available to Rhein’s department – the most important one is the new acquisition, with its pneumatically sprung foundations weighing 700 tonnes on their own. Six massive clamping frames made of welded steel plates hold the vehicle chassis in place on all sides, like a giant pair of pliers. In the middle of the clamping devices there are two H-shaped supports; these take the axle hubs and are each connected to six fully articulated aluminium or carbon fibre reinforced plastic rods. Hydraulic cylinders as thick as your thigh, into which hydraulic oil is pumped at a pressure of up to 280 bar, transmit the required movements to the rods. “We simulate all the vertical, lateral and longitudinal forces as well as the →

Innovation

1,000 axles leave the Wiehl plant every day, so production of the preceding product, ECO Plus, could not be interrupted for the changeover to the new-generation axles. And the changes affected a good 70 % of the production processes, but in Wiehl they wanted to deliver 100 % output right from the start in September.

A powerful team. “We all had to pull together”, says Steffen Trapp. “And that’s what we did.” The spirit of change can be detected



»ECO Plus 2 is easier and quicker to service.«

Thomas Borlinghaus

right down to the last bolt in the Wiehl production shops. And the workforce is right behind it: “If you want to survive in the global market you have to meet international requirements,” says Olaf Heil. The 45-year-old skilled motor mechanic has worked in production at BPW for over 17 years. He supervises the final assembly of the axles. Many of the procedures he was used to have changed; he has been directly involved in the “ECO Plus 2” project at least since production of the pilot series of the new axle. “Those were exciting moments. Are the machines running properly, is everything meshing correctly? But we coped well with all that,” says Olaf Heil with pride.

The two members of the project team who were responsible for design and development, Hans-Josef Leidig und Thomas Borlinghaus, searched primarily for opportunities to save on materials, and hence to cut down weight. With the aid of special calculation techniques, some of the parts

»We have completely redesigned the axle bolt«
Edgar Bray



have been replaced by smaller, lighter ones. For example, the hubcap with bayonet fitting: “It is lighter and you can easily undo it with a spanner, much more simply than the previous screw thread,” says Hans-Josef Leidig. “We have applied for a patent for this locking technology.”

Innovative components. In some cases even entire components have been completely redesigned. For example the axle bolt with integrated torque limiter, which

braking, steering and tilting moments than can have an effect on the running gear when in operation”, says Rhein. This is made possible by the high dynamics of the machine. Up to 40 movements a second can be transmitted to the item being tested.

Road tests provide the basis. Just a few metres away another innovative testing unit is being created in the same workshop. This is where the caravan chassis are to be thoroughly tested as of 2008. The plan is to simulate laden journeys with the aid of modern hydraulic pulse cylinders. Like its big brother, this test rig is also designed to reduce the number of recurrent long-distance road tests on test circuits worldwide. Apart from which it is also possible to simulate any particular loading situation as often as you like. This an incalculable advantage because variables such as the weather or traffic are what distort the measurement results of road tests. “That



In pursuit of quality: BPW has been testing its brakes and wheel bearings for over 60 years.

is produced at the BPW-Hungária production plant in Szombathely. “A new production line has been created there for the axle bolt,” says Edgar Bray, Project Manager, Industrial Engineering. Bray is responsible for the production changeover at BPW’s foreign production plants, in South Africa, China, Australia, Italy and Hungary. The axle bolt has been entirely redeveloped. Previously, the axle nut was screwed onto the thread of the axle stub. Now the thread is internal and the axle nut has changed to a bolt. Less material, lighter and shorter. Altogether the ECO Plus 2 is around 23 kilograms lighter per axle. And Hans-Josef Leidig continues his list: “Another feature that is ideal for the customer is the new grease cartridge that we have incorporated with ECO Plus 2. It automatically distributes the grease by means of centrifugal force as the vehicle moves along.” That means that the big outlay required for renewing the grease in the workshop is a thing of the past.



The new ECO Plus 2 axles have been running off the production line in Wiehl since September.

Easier maintenance. The outlay involved in the changeover was enormous, but so is the benefit to the customer: greater payload gains, shorter service times and lower costs. ECO Plus 2 is easier and quicker to service than its predecessor, more compact

and above all considerably lighter than ECO Plus. This is made possible by new bolted connections, the bundling of individual components and the more efficient application of the materials used.

New objectives. Along with the substantial product modifications much has also happened in terms of safety: A new computer system records every stage in the production of the axles, each tailored to the customer’s order. For example, faults occurring during assembly can be discovered straight away by means of photo technology, and the assembly process is also documented in this way. While the new generation of axles is now routinely coming off the production line in Wiehl, BPW’s developers are already working on new projects. “With the launch of ECO Plus 2 we have shown what BPW and its team are capable of achieving,” says Steffen Trapp. “We also intend to exploit this potential for new challenges.” (jg) ●

Photos: BPW, Stürtz

does not mean that we can do away with road tests,” says Rhein. The data acquired from road tests will continue to be used as evaluation parameters for the running gear and as a basis for tests on the test rigs and for computer simulation. BPW has been collaborating on this with internationally renowned research institutions such as the Fraunhofer Institute since 1958.

Special in-house developments. It is a remarkable fact that BPW has been exclusively testing its own brakes and wheel bearings for over 60 years. Many of the test rigs needed for this come from the company’s own tool-making department. And this is how the brake test works: A complete trailer axle is clamped in place above two rotating drums, each two metres in diameter. The tyres are in contact with the rollers. The drive rollers transmit kinetic energy to the wheels and accelerate them up to the required speed. When this has been



As of 2008 BPW will also be testing its caravan chassis under “laboratory” conditions, on special test rigs built by the Development Service.

reached, the brakes are applied and work against the rotation of the rollers. Rhein: “In this way we can investigate the effectiveness and response of the brakes.” The objective of the braking test, as is the case with all the other product tests at BPW, is to satisfy our high quality standards and also to shorten the development times for new products, as well as to achieve efficient series production monitoring. Importance is also placed on increased service life and longer service intervals, while at the same time reducing weight and manufacturing costs.

Bernd Rhein believes that the success of BPW and the maintenance of its globally leading position in the field of running gear systems for towed vehicles are closely linked with the work of the Development Service. “If we want to maintain our leading position we cannot do without tests using the latest test rigs and vehicles. We have to earn our position as market leader again every day.” (jr) ●



The big tidy-up

Autumn and springtime storms represent a mighty challenge for German forestry. The removal of damaged trees is extremely time-consuming and requires the use of a whole range of special machines.

The mood of the two men is not good. At the bottom of the slope, with their gaze directed towards the clearing in front of them, stand forestry engineer Dieter Feldkötter and his colleague Joachim Padberg, surveying the ruins of their labours. “You rarely see anything quite like this,” says Feldkötter in consternation as he views the area that has been swept clean, which was a fine forest of spruce just a few weeks before. With an outstretched arm Padberg indicates the direction from which the disaster came: “From the west, across the Paderborn Uplands. Then the hurricane struck Klusweide with full fury.”

Broken like matches

Nothing remained standing. Not a single tree. As if an enormous fist had completely demolished the 45 hectares of woodland in the Eggegebirge region, felling 22,500 cubic metres of wood. Even strong trees were snapped like matches. “Of the 24,000 hectares of the Paderborn state forest, at least 500 were destroyed. The affected areas are off the production schedule for 50 years,” fears Feldkötter. Other regions were affected even worse. Around 15 million trees fell victim to the winds in the area around Arnsberg.

In addition to the protracted measures to be taken for reforestation purposes, the main problems facing the forestry compa-

nies and foresters are the fall in prices and the removal of damaged trees. Before the storms raged, the price for a cubic metre of spruce was 85 euros. “Now the sawmills are working at full capacity and we are only getting around 50 to 60 euros,” says Feldkötter. As a logistics expert he is organising the processing of fallen trees in the state forest. Feldkötter: “It can’t be dealt with by hand; you need some heavy equipment.”

And that is what the Paderborn forestry official has called in, from the south of Germany. In his knee-high wellingtons, Feldkötter climbs up a steep bank. Here in the midst of all the loose branches, the king of all forestry machines is hard at work: Hannibal Maximus (Hanimax). “This is the largest and most powerful harvester in the world,” says Xavier Leinsle, devel-

oper and driver of the machine, with some pride. The dimensions of his excavator-like wood-harvesting machine are impressive indeed. The length of the jib is 15 metres and the weight of the machine is a stupefying 55 tonnes. The colossus is powered by a roaring 240 hp diesel engine. In its cabin sits Swabian engineer Leinsle, like a dragon-rider on the back of the monster. The enormous weight of the vehicle is carried on modified, rubber-coated tank tracks.

First skin, then fillet

The open-mouthed mechanical unit at the end of the jib moves above the treetops as if it were the head of a long-necked dinosaur. It plunges down and grasps a twenty-metre long trunk as carefully as a →



Perfect multi-tasking: The unit on the harvester can grasp and saw.



Adaptability is everything: Depending on the length of the tree trunks, using a dolly the distance between tractor unit and trailer can be varied.

lioness would pick up her young cubs. Four fang-like steel claws inside the head now hold the wood firmly in position. To the right and left, metal conveyor belts the thickness of your thigh are applied with massive pressure to the tree trunk. Lein-
 sle can determine at will the direction in which the belts draw in the tree trunk with all its branches, and cause it to run through the metal claws. The tree is practically skinned, and then filleted, by means of a built-in power saw, into easily transportable pieces.

»It can't be dealt with by hand.«

“Every step in the harvesting process is computer-controlled,” explains Peter Hipp. He too is busy as a machine driver in

the damage zone. His harvester is a normal model, significantly smaller than the Hanimax, but at a lightweight 24 tonnes it is considerably more manoeuvrable. While Hipp’s massive fingers fly across the 30 knobs and four analogue levers of the 400,000-euro machine, with an ease verging on the casual, sensors in the unit convey to him on a screen the diameter and length of the timbers being processed. Depending on the dimensions required for transportation and the type of wood, the corresponding program is loaded and run. The cut wood then lands on different stacks: spruce here, beech there, larch over at the back. Large forwarders carry the stacks to the forest roads, where they are appropriately marked and collected by heavy transporters.

The Schmallenbach company, from Morsbach, has been transporting wood in this way for decades. Managing Director Friedhelm Schmallenbach is currently deploying his fleet of dolly trucks into the surrounding forests seven days a week. Dolly trucks are specially constructed 500 hp transporters. On the way to the job the tractor unit carries a smaller trailer piggyback-style. On arriving at his destination the driver can lower the trailer, or dolly, to the ground with a crane and determine how far it is to be from the truck by means of a supply cable as thick as your arm. “The timber semi-trailer unit adjusts individually to the length of the timber being transported,” explains Schmallenbach.

Employee Bernd Neuhof first heaves the tree trunks by means of a crane from the edge of the track onto the trailer, and then



The moisture in the wet storage facility keeps the bark beetles.

»Driving a heavyweight timber truck over forest tracks is no simple undertaking.«

Friedhelm Schmallenbach



onto the load bed of the truck. Within just a few minutes Neuhof has loaded 30 cubic metres of wood. The dolly truck now has a total weight of more than 40 tonnes. The destination of the shipment is the “Steg” wet storage facility. The time pressure is immense. Because wood lying around on the ground is an ideal nesting place for the bark beetle, the valuable commodity has to be moistened as quickly as possible. Adequate moisture is the only thing that stops the tenacious insects from destroy-

ing the wood. The route to “Steg” takes you over hill and dale. “Driving a heavyweight timber truck over forest tracks is no simple undertaking,” says Schmallenbach.

Test for brakes and axles

Rutted by the weight of heavy machinery, the twisting tracks full of potholes are a continuous endurance test for brakes, axles and suspension. “The materials are exposed to tremendous forces,” says the entrepreneur. For that reason, his company sees it as a basic requirement when acquiring a vehicle that it is equipped with components from the Wiehl-based axle producer, BPW. “It’s true that they are a little more expensive to buy, but on the other hand they are considerably sturdier and longer-lasting than other axles.”

At the wet storage facility, a muddy area the size of a football pitch just off the country road, Bernd Neuhof gets rid of his load in a delicate manner. The young man uses the crane to place the tree trunks one by one in a layer on the eight-metre

high stack of timber that faces us. Meanwhile several sprinkler systems provide the necessary moisture in the storage location. There are 30,000 cubic metres of wood here, waiting to be taken on to the sawmills. The majority of it will end up as construction or industrial timber, in roofs or pallets, and any that is of the required quality will be turned into paper. Schmallenbach: “In 2007 we will be transporting around 120,000 cubic metres of wood in total.”

There’s still a lot to be done

Nor will there be a shortage of orders in the next few years. The demand for transport capacity has risen greatly, and companies experienced in the transfer of timber are hotly sought after. Experts anticipate that the removal of damaged trees in North Rhine-Westphalia and the Rhineland Palatinate will last far into 2008. So Schmallenbach and his men can expect a lot more work and Hannibal’s mission is still far from finished. (jr) 

Transporting timber by ship

■ In January 2007, hurricane “Kyrill” brought down 25 million cubic metres of timber in North Rhine-Westphalia alone. A large proportion of this wood is now being shipped from Cologne harbour via the Rhine to France. By March 2008 around 100,000 tonnes of storm-damaged timber will have been shipped to Strasbourg and delivered to a sawmill there.



Hot Spot

Spain is currently one of the most popular locations to generate electricity from solar energy. The world's biggest solar power plants are being built there in Andalusia. Three parabolic trough solar power plants are to supply electricity to up to 200,000 people.

From Granada, the capital city of the Spanish province of the same name, you drive in a north-easterly direction. The landscape becomes more deserted, rougher, stonier. The air shimmers in the heat. Just over half an hour later you reach the high plain of Guadix and what is currently probably one of Europe's most interesting construction projects: "Andasol", comprising three solar thermal power plants. These are the first installations of this type in Europe, and when they have been completed they will be the largest in the world, each with a collector area of more than 510,000 sq m and 50 megawatts of electrical power output per plant. The sunlight hits enormous areas of parabolic mirrors, which reflect it and concentrate it onto an absorber

pipe. The oil in this pipe is heated to 400 degrees Celsius, heat exchangers and steam turbines convert the heat into electrical energy – the same principle as in conventional steam power stations, which are driven by means of fossil fuels.

Ideal conditions

The Andalusian sun beats down mercilessly on the terrain at the foot of the massif of the Sierra Nevada, where Andasol 1 to 3 are being built. In the villages in the region they say, "The sun even shines at night here." That is what makes Spain so desirable as a location for solar thermal energy projects at the moment: the sun can produce 2,100 kilowatt-hours of electricity on average for each

square metre of parabolic mirror here. In Germany the equivalent figure would only be around 900 kilowatt-hours. The intention is for each of the three Andasol power plants to be able to supply up to 200,000 people, with an annual gross electricity output amounting to around 180 gigawatt-hours.

"The location offers three important advantages," says Marcello Formica, Managing Director of Milenio Solar, the Spanish subsidiary of Solar Millennium AG of Erlangen, which developed the Andasol projects. "It is one of the sunniest locations in Spain, it has direct access to a high-voltage power line to feed the generated electricity into the Spanish national grid, and the location is absolutely level – ideal for the construction of a solar power plant."

Photo and chart: Solar Millennium AG



The individual installations cost between 100 and 300 million euros and 100 permanent jobs will be created in total. During the construction phase there will be up to 500 additional workers employed.

A transformer station has also been erected at the same time as the power plant, which can feed the electricity into the local high-voltage network. "With the aid of thermal storage reservoirs we are also able to feed power into the network at night," says Christian Beltle, Managing Director of Solar Millennium AG. The reservoir is filled with salt, which is liquefied by means of the hot oil and then generates steam in a heat exchanger, which drives the turbine.

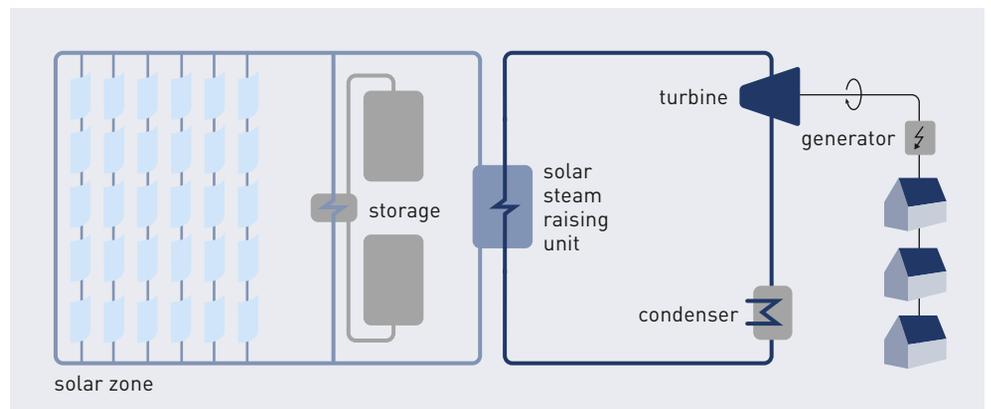
Logistic concepts are top secret

The project is primarily a logistics challenge. The most important components come from Northern and Central Europe. Siemens produced the turbine for the steam-powered generator. Schott AG from Mainz, a leading global manufacturer of special glass pipes, produces the absorber pipes. The Nuremberg-based glass finishing company Flabeg manufactures the

parabolic mirrors and has them delivered to Andalusia. How exactly the components are transported is something the logistics people are rather reluctant to discuss. Everything is top secret; Spain is currently quite simply a highly competitive market in the solar energy sector.

And there are an awful lot of materials that have to be delivered to Spain. For example, over 500,000 sq m of mirrors are needed for each power plant. That is equivalent to the area of 70 football pitches. The mirrors

are each about 1.70 by 1.60 metres in size and have the typical parabolic cross section reminiscent of rain gutters. The glass is between four and five millimetres thick and is particularly white in order to achieve high energy figures. The mirrors have to be packaged with extreme care in order to be able to survive the long and arduous journey to Spain. At the Flabeg factory in Furth am Wald they have developed special cardboard boxes for transporting them: Wooden strips and polystyrene blocks steady the →



The mirrors capture the solar energy and heat exchangers and steam turbines convert it into electricity. A major plus-point in the Andasol project: The power plants have special storage reservoirs and are directly connected to the Spanish high-voltage network.



Installing the easily breakable parabolic mirrors is quite a task: an area of 500,000 sq m has to be covered for each power plant.

mirrors and protect them against breakage, and 50 of them are put in one box. They are first taken by lorry to Hamburg, from where they are carried by container ship to Spain. 700 boxes fit into one container. It can get pretty rough at sea, and the occasional mirror gets broken. They are at sea for about a week before continuing their journey by road in Spain. There they battle through the fine, hot Spanish dust, through sand, ash and stones. All in all they are in transit for about two weeks. The turbine is also taken to Andalusia first by water and then overland. It is less delicate but its dimensions are impressive; six metres long, four metres wide, four and a half metres high and weighing 80 tonnes, it was not possible to take it overland to Spain. Bremen-based

hauliers Herbst collected it by ship at the end of September, also picking up the generator in Bremen on the way. That in itself is no easy-to-handle component either, measuring nine by four by four metres and weighing 115 tonnes. Together with the turbine it headed for a port in Southern Spain, where low-loaders took over the job.

Too bulky for the overland route

Parabolic trough technology delivers the highest power output in the solar thermal energy sector. Solar thermal electricity generation is a cost-effective and at the same time predictable method of generating electricity from solar radiation, because in contrast to electricity the solar heat generated in solar thermal power plants can be cost-effectively stored and used to generate electricity at night. Note: It is difficult to make a direct comparison with photovoltaics in terms of efficiency. Nor is the yield figure of 80% correct with regard to the entire electricity generation process, even if overall efficiency is significantly higher than in the case of photovoltaics. Indeed, there are often very different specifications for photovoltaic cells,



The mirrors container travels the final kilometres to the construction site by lorry.

as the power output of photovoltaic cells is usually tested under laboratory conditions (cooled, ideal sunlight conditions, etc.).

Parabolic trough technology is tried and tested, and has proven its worth. There have been parabolic trough installations in the Mojave Desert for 20 years, which can already supply electricity for about 500,000 people. Solar Millennium has also developed a new generation of collectors, which are another ten percent more efficient. The company set up a project company in Spain and acquired as its partner Spain's biggest construction and plant engineering combine, the ACS/Cobra Group.

Solar thermal power is an important keyword in the search for alternatives to fossil fuels, and is to date the most efficient and cost-effective option for converting solar energy into electricity. The Spanish government has passed a renewable energy purchase law, which guarantees the operators of solar thermal power plants at a fixed price per kilowatt-hour for the next 25 years. Spain will also remain a topic of conversation in future when it comes to the search for sites for the generation of environmentally friendly energy. (jg) ○

1st solar logistics symposium

On 28.11.2007 in Frankfurt/Oder, the ICOB is organising the first symposium on the particular requirements of the solar industry in terms of logistics. Information and registration at:

www.solar-logistik.de



Freedom in five letters

50 years ago, Erwin Hymer decided to produce caravans. From this idea the now 77-year-old has created an international group employing 3,000 people.

On 3rd November 1968 it was very nearly all over. A catastrophic fire destroyed the factory buildings of the Hymer company, then only eleven years old, in Bad Waldsee. But Erwin Hymer, 38 years old at the time, did not allow himself to be affected by this setback; with his workforce he rebuilt “Plant 1” that same year, and extended the production area to 4,000 sq m.

Great courage and inexhaustible energy were from the start among the essential success factors, by means of which Erwin Hymer has built up his company during the past 50 years. The company founder has also →

Photo: Hymer AG



1957
The first caravans are built at Hymer. Establishment of the sales company Eriba by Erwin Hymer and Erich Bachem. The original Troll is built. Prototypes of the Puck and Faun models.



1961
The first Hymer motorhome, the "Caravano", is built on a Borgward chassis. But Borgward goes bankrupt and, after the first three vehicles, Hymer concentrates for the time being on building caravans.



1966
After the touring series with the elevating roof, Hymer launches a further caravan series of a higher standard and with more space inside, namely the "Eriba Nova".



1971
10 years after building the "Caravano", Hymer presents the first Hymermobil on a Mercedes-Benz chassis at the Caravan Salon in Essen. 22 motorhomes come off the production line in the first year of production.

always had a "good eye" for choosing the right employees who can be relied upon to create a pleasant working atmosphere with team spirit and congeniality. This becomes clear when you consider the average length of time staff stay with the company – eleven years – with an average workforce age of just under 40. The motorhome pioneer has also always enjoyed experimenting, which has led to a large number of inventions. For example, in 1968 the entrepreneur already had a large number of patents for such items as the retractable awning rail or the crank-operated roof ventilator.

Back in the early days of his existence as an entrepreneur, Hymer adopted ideas from aircraft construction in his design plans. He laid the foundation stone for his enduring success with the practical „Troll“ caravan, which Hymer designed jointly with Erich Bachem in 1957. Incidentally, the "Eriba" brand name is also derived from the name of Erich Bachem. All Hymer caravans are still sold under that brand name to this day, with the current "Eriba Touring" being considered a worthy successor to the original Troll.

Eriba had originally been established as an independent sales company for Hymer caravans. Not until 1980 were Hymer and Eriba merged to form what was then Eriba-Hymer GmbH. Ten years later there followed the transformation into today's Hymer AG, which can look back this year on 50 years of company history.

Hymer's presence at this year's Caravan Salon was for that reason under the banner, "50 Years of Hymer – Experiencing the Future". It goes without saying that the original Troll from 1957 was also there among the exhibits which attracted a lot of attention. This nostalgic retrospective was a part of the anniversary appear-

ance on the Düsseldorf exhibition site. Hymer took up an entire hall for its wide product range, now including eight motorhome series and six caravan series with a total of 100 floor plans, and was once again the undisputed star of the event.

Directly beside the original Troll stood the equally legendary Caravano. This was the first Hymer motorhome on a Borgward chassis, which was produced in 1961 in a small production batch of just three vehicles. The sudden business failure of the Borgward works then put a premature, temporary stop to what was in those days the new idea of "holiday apartments with an engine and wheels".

This time it was to take ten years before Erwin Hymer implemented his plans for the revolutionary motorhome concept a second time – thus laying the basis for his greatest success. Instead of simply bolting a caravan onto a flatbed truck, he developed via intermediate stages the first fully integrated motorhome, which has borne his name ever since.

These "Hymermobils" were the first recreational vehicles that included the cab in the living area concept and often completely did away with the vehicle manufacturer's body. In doing so, Hymer set a trend that today determines the picture to be seen on campsites.

Hymer shaped the holiday habits of entire generations.

The HYMER Group

- The following brands belong either wholly or in part to the HYMER-Group: Hymer (motorhomes), Eriba (caravans), Bürstner (motorhomes and caravans), Niesmann+Bischoff (luxury motorhomes), LAIKA (Italy), Movera (camping accessories), CAPRON (joint venture with Dethleffs), EXPOCAMP (sales).



1979

The term "Hymermobil" has long since become part of everyday language. Hymer sets standards in the premium segment with the launch of the fully integrated S-class.



1981

Hymer builds the first motorhomes with alcoves, in the form of the "Eriba Camp". Floor plan 544 is set to become the most successful.



2005

The "Hymer Van", a new compact motorhome with car-like (ride) quality and comfort, is launched. In 2006 the „Tuning“ version appears, with special design features and multimedia equipment.



2007

Hymer celebrates its 50th anniversary and opens Europe's most modern production facility. The company also puts all its expertise into the Gold Edition of its most popular models.

Erwin Hymer had of course by this time long since achieved his original business objective, because when the motorhome pioneer set out in 1957, at the age of 27, he primarily wanted to work independently and in so doing to achieve annual sales of a million DM. In 1975 – three years after the start of series production of the Hymermobil – that had already turned into 60 million DM, which Hymer achieved with a workforce of 540 and 7,000 vehicles sold. These already included 440 motorhomes, which were enjoying enormous growth rates from year to year.

All-round service from Hymer

Despite the great success of the Hymermobils, the company based in Bad Waldsee has also continued to update its caravan models and is still taking the market by surprise with more innovations, including for example two years ago with the first lowered chassis. This subassembly, developed and supplied by BPW, has been available since that time on the Eriba Feeling model. The Eriba Feeling is a classic elevating-roof model, with which even inexperienced drivers immediately feel secure as a result of its low centre of gravity. In

the new model year, Hymer has primarily concentrated on extending the Eriba Nova range. This successful model series has triggered a genuine caravan boom at Hymer in recent years.

With all the enthusiasm for the technology, however, Erwin Hymer also recognised at an early stage the significance of services for generating customer loyalty, and over the years he has developed a network of useful service packages. In 1993, for example, Hymer was the first company in the caravan industry to issue a customer loyalty card, bearing the name „HymerCard“. Six years later, Hymer set up the rental organisation Hymer-rent.

But Erwin Hymer's success story is also closely linked with the urge for freedom and the desire for travel and adventure on the part of people throughout the world. In Germany alone there are currently around 610,000 caravans and about 980,000 motorhomes on the road, and the figures for Europe as a whole are 4.3 million caravans and over 1.1 million motorhomes.

Hymer continues to play a leading role in this market. Last year the company employing a workforce of 3,000 sold over 11,000 vehicles and turned over more than EUR 360 million – which represents a rise

of just under 10% compared with the previous year. And that was achieved even though the commercial trends at Hymer AG and throughout the entire caravaning industry were crucially affected by the virtually simultaneous model replacement or model update of the base vehicles from Fiat, Ford, Mercedes Benz and Renault. All the motorhome manufacturers were forced to develop an entirely new generation of motorhomes within a short period.

No worry about the future

The model changeover was not only a particular challenge for Hymer but also a further significant moment for setting the direction of the company's development. The objective was to satisfy future requirements in terms of automotive design and equipment, and to win over customers for the Hymer brand by means of innovations and visible product improvements.

Hymer AG achieved these aims in impressive style. Some models were already virtually sold out to the end of the current financial year by 31st August. Erwin Hymer does not need to worry about the future of his company. (hs)

Closer to you with new platform



Bastienne Rohsiepe, trailer world editorial staff

■ BPW has always been close to its customers, which is why our customer advisors and sales employees are always ready to listen to your special requests. Numerous development partnerships bear witness to this attitude. Our customer magazine, trailer world, is also part of this exchange with you. However, this exchange via the magazine only operates in one direction. We are now opening up the return path as well: BPW is establishing a dialogue platform regarding trailer world on the Internet.

This platform will allow you to find out more information about BPW and to contact the editorial staff of trailer world. You will be able to send us your readers' letters and your praise or criticism quite simply online. In addition, you will be able to have your details entered in our new distribution list for trailer world. Old editions can be seen and downloaded in trailer world's download area. And this is just the start. We will further extend the interactive reader dialogue step by step. Stay tuned!

Internet: www.bpw.de/aktuell/ **E-mail:** trailerworld@bpw.de



Questionnaire

This is now the second edition of the new-look trailer world. What do you think of the design?

very good good not so good not good

What do you think of the contents and texts of trailer world in this and the previous edition?

very good good not so good not good

Are there any articles which you have particularly liked?

What subjects do you think are missing in trailer world?

Company: _____

First name and surname: _____

Position: _____

Street, town and post code: _____

E-mail: _____

Telephone or fax: _____

If I win the prize draw I would like

the Montblanc fountain pen the Herpa BPW infomobile

Please send this coupon by post to BPW Bergische Achsen KG, P.O. Box 1280, D-51656 Wiehl or by Fax to +49 2262 78-1579.

Your opinions are sought!

■ This year has seen the publication of trailer world, BPW's customer magazine, with a new concept and new layout. This is already the second edition of the new-style magazine. By now you will no doubt have formed an opinion about it. We are very interested in your opinion as well, as are the publishers! What do you like, what can we do even better?

For this purpose, we have prepared a brief reader survey for you. You can either complete the questionnaire on the left on this page or visit BPW's website at www.bpw.de/aktuell/, where you will have an opportunity to complete the questionnaire as an online form.

We would like to thank you for your assistance. All of the entries received will be entered into a prize draw for a high-quality Montblanc "Classique" fountain pen or a Herpa "Scenix Edition" model of the BPW infomobile, complete with light and sound. And we will send a BPW ballpoint pen to all of the remaining unsuccessful entrants as a token of our thanks. The closing date for entries is the 31.12.2007. Thank you very much for your assistance and good luck!



Planned topics trailer world issue one 2008



All that shines

Steel is and remains one of the most important materials. trailer world takes a look behind the scenes at the production and logistics of a modern steel works.



Black gold

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Complex logistics world – People are the key factor

Focus on a market

The Wiehl forum devoted itself to people as the key factor in the world of logistics.

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