



BÜFFELPOST

Banner THE POWER COMPANY

Banner SUSTAINABILITY:

DRIVING INNOVATION WITH BUFFALO POWER



CREATING IMPULSES

Protecting the environment
with start-stop batteries

SPENDING ON SUSTAINABILITY

Banner invests in resource
conservation

ALTERNATIVE DRIVES

E-mobility: tips for work-
shops & part retailers

EDITORIAL

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Dear partners,

Recent developments have shown clearly that now more than ever the power of a well-coordinated, strong team is of exceptional importance. The appropriate know-how, loyal partnerships and flexible solutions are required in innumerable situations and in the current market environment it was alone these factors that enabled us to achieve our sales targets for this year.

Equally, it is the buffalo-like strength of our team that permits us to retain our confidence with regard to the years to come. Many of its members have served our company with loyalty and competence in the hotly contested battery market for decades and are now helping us face the present challenges posed by the war in Ukraine and the associated increases in raw material prices and inflation. However, as yet the final consequences are unclear and the form of governmental energy subsidies remains to be seen.

In spite of all these uncertainties, Banner will not be slowed down. We are currently devoting our full buffalo power to an issue, which has been close to the company's heart ever since it was founded 85 years ago. The matter in question is sustainability and as an innovation driver, with our products we have already succeeded in making a significant contribution to the mobility of the future. Indeed, at a time of energy crisis the demand for everything from start-stop systems to alternative drive technologies is greater than ever before.

We know no standstill, neither in the further develop-

ment of our products nor our production. Indeed, our sustainability management is constantly implementing further measures to conserve resources. For example, a 3,000 m² photovoltaic system was recently installed at the Linz-Leonding plant, which now supplies Banner with almost half a million kilowatt hours of emission-free solar power per year. Moreover, we have already largely converted our vehicle fleet to e-drives and there are plans to significantly increase the number of photovoltaic systems at company headquarters during the next few years.

As a family-owned company with strong roots and an outstanding team, we remain at your service as a reliable partner even in challenging times. Consequently, we would like to take this opportunity to thank our employees for their tireless efforts, as well as our customers and partners, whose loyalty and trust help us to continue to look to the future with optimism as a driving force and source of innovation!



Andreas Bawart
Commercial CEO



Thomas Bawart
Technical CEO



FORECAST

THE BATTERY BUSINESS OUTLOOK? NOT SO BAD!

In the last two issues of "Buffalo Post" we reported on the dramatic rise in raw material and energy costs, and it would appear likely that we can expect further massive increases in the coming months. But what does this mean for battery business?



Franz Märzinger
Head of Sales and Marketing

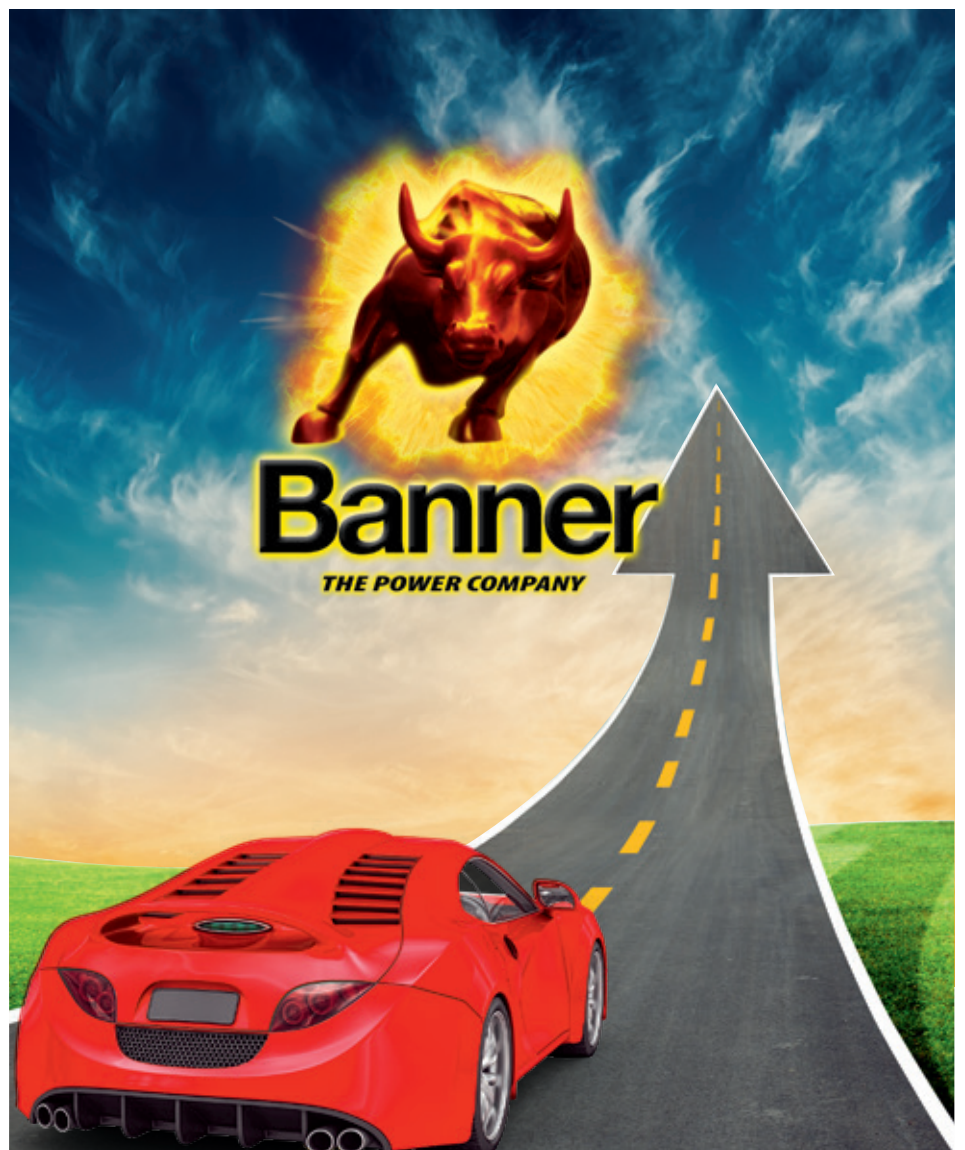
First of all, the good news is that the batteries in vehicles with combustion engines have proven to be extremely crisis-proof in recent years and decades. Furthermore, irrespective of the current economic situation and the prognoses for the near future, if starting problems occur and people wish to remain mobile, batteries must be replaced. Furthermore, mobility is a very important social commodity..

SALES INCREASE IN WINTER

As our trading partners, you can therefore assume that market volume will not suffer as a result of the predicted recession. On the contrary, we actually expect sales to increase in the coming months. This is because last year's winter was very mild with the result that many weaker batteries were not replaced. Consequently, these are likely to boost business this winter and moreover, owing to the sharp fall in new car registrations (in tandem with simultaneous growth in the overall size of the vehicle fleet), at present the average age of vehicles is currently rising throughout the European Union. Older vehicles also mean greater demand for car batteries in the replacement business segment.

LOOKING TO THE FUTURE WITH OPTIMISM

It goes without saying that in view of the current inflation rates, all car drivers now have to watch their wallets even closer than before. This means that the temptation to find cheaper alternatives will



increase. However, there is also positive news in this direction, as the percentual rise in the price of cheap products will be higher than that for quality batteries. As a

result the price gap will narrow rather than grow and thus in spite of all the current pitfalls, we are genuinely optimistic about our business prospects in the coming months.

ORIGINAL EQUIPMENT**START-STOP BATTERIES AT A TIME OF ENERGY CRISIS**

Following Covid, 2022 is also presenting us with fresh challenges. For example, constantly rising energy prices demand that we rethink our approach to driving.



Harald Fiebiger
OEM Manager



In particular, the ideal solution for passenger cars used for short trips is a start-stop battery from Banner, as for example the start-stop function helps to save fuel by switching off the engine during halts at traffic lights. In addition, several hundred thousand engine starts are possible with an AGM battery, which means that a long service life of around five to six years can be expected. Furthermore, even with EFB technology, which is a less expensive start-stop battery variant, a considerable number of start-stop operations are more than feasible.

**IMPULSES FOR INCREASED SUSTAINABILITY**

Banner has had both AGM and EFB technologies in its portfolio for many years and is thus making a major contribution to sustainability in the individual mobility field. These batteries are supplied as original equipment to major automotive manufacturers such as BMW, Volkswagen, Porsche, etc. Furthermore, we are also seeing a steady increase in aftermarket demand for these sustainable battery technologies, which conserve fuel and thus protect the environment.

Banner ENERGY BULL**RELAUNCH AS A DUAL PURPOSE BATTERY**

You can look forward to the relaunch of the Energy Bull product series in summer 2023!



Günther Lemmerer
Starter Battery
Product Manager

For many years, Banner customers have valued the Energy Bull product line as a reliable and durable, long-term discharge battery for hobby and leisure applications. Indeed, thanks to their excellent cyclical stability, easy chargeability, convenient maintenance and operational dependability, Energy Bull batteries provide power for yachts and e-motor boats, motorhomes and caravans, and camping/caravanning. They are also employed for energy storage in signal systems and solar panels, agricultural applications and much more besides.

FULL BUFFALO POWER WITH THE RELAUNCH

Banner is currently working on a relaunch of this product series, which will be completed by summer 2023. The aim is to expand the fields of application for the Energy Bull types, improve their cold-start properties and reduce the maintenance requirement thereby cutting operational handling costs.

THE FOLLOWING IMPROVEMENTS WILL BE IMPLEMENTED

- Exclusive use of continuous, full calcium grid alloys with optimised cold start properties for the passenger car sizes H5/L2 to H8/L5 and partial calcium grid alloys for A/B/C class trucks.
- Thanks to reduced water consumption and self-discharge, the modified Energy Bull types will be maintenance-free for virtually every application. Nevertheless, the proven transparent housing with the MIN/MAX markings for ease of maintenance will be retained.
- The colour of the safety lids with 4K spill protection or surge protectors will be changed to black, in order to



- allow the use of sustainable materials.
- All Energy Bull types will possess cold start performance.
- Large top labels with revised application fields for the product series are to be employed.

Thanks to these upgraded starting characteristics and as before, owing to its cyclical stability, the new Energy Bull product range is thus suitable for so-called dual-purpose applications as both a starter battery and as an energy storage device for long-term discharge.

Banner SUSTAINABILITY

SUSTAINABILITY MANAGEMENT AT Banner

Banner is well aware of its social responsibilities and the need to conserve resources in order to leave coming generations a future worth living in.



Sabine Rath
Sustainability Manager



For this reason and in order to be able to meet future sustainability requirements in a timely and legally compliant manner, a sustainability management system has been established. Moreover, a 3,000 m² photovoltaic system installed recently at the Linz-Leonding location will supply Banner with almost half a million kilowatt hours of emission-free solar power per year and the electricity thus generated

will be used entirely in battery production. Modules with a total output of 485 kWp have been installed on the roofs and provide 485,000 kW hours of power annually, which is equivalent to the annual electricity consumption of 200 households.

FURTHER MEASURES

Part of the company's vehicle fleet is gradually being replaced by e-alternatives. In

addition there are plans to increase significantly the number of photovoltaic systems at the Linz location during the next few years. With the installation of modulating gas burners in prefabrication and battery assembly, we have also been able to achieve a tangible cut in production-related gas consumption. Emissions are also being steadily reduced by means of an automated control system.

SUPPLY CHAIN**SUPPLY CHAIN AVAILABILITY:
Banner AS A STABLE PARTNER**

Reinhard Bauer
Supply Chain Manager

The Banner name stands for a reliable partner that delivers on time and has a twin focus upon product quality and service.



A stable supply of primary and raw materials is a prerequisite for Banner's ability to maintain its standard delivery punctuality. However, as a result of the events of the past year, suppliers and supply chains, that until a few months ago were considered to be stable and reliable are now facing major problems.

FLEXIBILITY IS REQUIRED

During roughly the past two years, the predominant theme in the supply chain management field has been the sharp increase in demand for goods of all types. This has been accompanied by a shortage of raw materials, production and transport

capacities, which amongst suppliers and their subcontractors has led to significantly longer delivery times and even temporary delivery failures. As a result, Banner and its suppliers have been increasingly forced to employ special production and transportation for some raw materials and components and, where required, adapt at short notice their own manufacturing programmes in line with the availability situation.

**KNOW-HOW OF A
STRONG PARTNER**

Furthermore, in one product group, the conflict in Ukraine and the decision of the European Union to ban the import of cer-

tain Russian products as a response has necessitated a reorientation of the supply chain. This was due to the fact that our supplier was no longer able to obtain the primary material from the original source. Therefore, deliveries had to be switched to alternative overseas providers and a stable supply chain established.

Despite the tense supply situation, thanks to the efforts of our employees and suppliers, in recent months stable supply chains have been maintained or re-established. This has enabled us to guarantee uninterrupted production and ensures our future ability to continue to meet all our supply obligations as usual.

Banner E-MOBILITY TIP

Parts trade & workshops: electric and hybrid cars are increasingly important!



Andreas Sperl
Battery Expert

In 2021, sales of e- and hybrid cars exceeded the 4.2 million mark for the first time.

This constitutes a doubling of the number of e-vehicles sold as compared to the previous year. In Europe, the market share of e-cars with regard to new registrations reached 9.8%, or 1.22 million units and in Norway, for example, the related figure for exclusively battery powered cars already amounts to around 65%.

WHERE IS THE JOURNEY HEADING?

Government programmes such as environmental bonuses, innovation and sales premiums, bans on vehicles with internal combustion engines in major metropolitan areas, or the EU clean air regulations are all contributing to the hype surrounding e-vehicles.

According to various automotive studies, by 2030 every third new car registered in Europe could be e-powered. Furthermore, although the outcome of the current, global economic situation is still far from clear, it is a fact that vehicles with alternative drive systems (electric, hybrid, hydrogen technology or synthetic fuels, etc.) are already part of everyday life on our roads.





In the automotive industry, the e-car is increasingly regarded as a nightmare because it is seen as requiring significantly less maintenance than vehicles with conventional combustion engines!

However, while it is true that battery electric vehicles (BEVs) can lead to a slight decline in sales in the workshop sector and parts trade, it should nevertheless be kept in mind that the best-selling models are often plug-in hybrids (PHEVs). These are also classified as e-cars, but actually require more maintenance, as two drives (combustion engine and electric motor) are used in parallel. The logical conclusion is that for the time being the repair market will not shrink and the diversity of automotive spare and wear parts will increase. Furthermore, in future new, value-added potential will emanate from connected cars equipped with Internet access and frequently also with WLAN. These systems are used for data exchanges with vehicles in the immediate vicinity and communications with infrastructure such as traffic lights, sensors in the road and tollbooths. It can therefore be said that the mobility turnaround will be a long-term process and consequently in the years to come there will still be plenty of business for both parts retailers and workshops!

Lead-acid batteries play a major role e-mobility and therefore e-vehicles also require repairs and servicing.

It is often overlooked that without exception every e-car and truck is also equipped with a 12V lead-acid, on-board battery. This is essential as no e-vehicle can function without this type of battery to support and supply the electrical network. Moreover, depending upon the au-

tomotive manufacturer, the backup battery must be replaced every two to three years during the annual service because it constitutes THE safety-relevant component.

For example, if at night on the highway the high-voltage system were to be switched off for safety reasons at 130 km/h, the back-up battery must continue to reliably supply the vehicle lighting with energy! At the latest when the error message "Check ELEC system" appears on the in-board computer display, often in combination with the red battery warning light, it is high time to think about changing the battery.



TERMS EXPLAINED IN BRIEF

A short explanation to avoid confusion regarding wording:

- The on-board power supply battery is also known colloquially as an auxiliary, back-up, support, additional or second battery.
- The lithium-ion traction battery is also referred to as a high-voltage battery (HV= high voltage).

Standard, industrial e-mobility acronyms in simple terms

Many of these terms are not that difficult to understand. For example, a hybrid is a compromise between an e-car and one with a combustion engine. E-mobility means that a vehicle is entirely or partially electrically powered. A high-voltage vehicle has systems and components that are operated at >60V DC (direct current) or >25V AC (alternating current).

Important to know!

In most countries, only cars that can be charged from the mains (e.g. battery electric vehicles (BEVs) or plug-in hybrids (PHEVs) are rated as e-cars and are therefore entitled to subsidies or benefits such as environmental premiums!



A high-powered warning for all e-car drivers!

Leave high-voltage components and cables alone (recognisable by their orange colour)! These are reserved for automotive specialists with the appropriate equipment and additional qualifications (high-voltage training). This applies irrespective of whether non-electro-technical, electro-technical work or electro-technical work under voltage (often with nominal voltages from 288 to over 800V) is involved!

Latest news!

The EU member states have decided that as from 2035 only emission-free and climate-neutral new cars may be sold in the European Union. By 2030, the greenhouse gas emissions of new passenger cars in the EU must be reduced by 55 per cent as compared to the current level. Following their discussions regarding a possible phase-out of internal combustion engines in Europe, the EU Council of Ministers adopted a common position for the current negotiations. This states that cars and light commercial vehicles with combustion engines will still be able to be registered after 2035 if they employ climate-friendly synthetic fuels (e-fuels).

We will keep you informed of developments!

ENERGY SOLUTIONS**EMERGENCY POWER SYSTEMS FOR HOSPITALS (BLACKOUT)**

Christian Raser
Sales Manager
Energy Solutions

In the event of a blackout, Banner Stand-by batteries perform the important task of providing an uninterrupted power supply until emergency generators are ready for use.

Should a power failure occur, diesel generators require some time to start and in the medical sector such a delay can be life-threatening, especially in intensive care and during surgery. Therefore, with our stand-by batteries, we ensure an uninterrupted power supply until the emergency generators become operative.

**Banner TEAM****FRESH POWER FOR SALES**

Our global, buffalo-strong team is becoming even more bullish! Genuine expertise, experience, service and team spirit are what set us apart and therefore we are delighted to welcome our new Country Manager:



Steve Jeanneret
Banner Switzerland
Country Manager

Age: 48 years

Family status: single / one daughter (18 years)

Hobbies: fitness, spinning and hiking

Favourite music: heavy metal, progressive trance

What I would never want to be without:

the ability to work in a team

Favourite reading: none in particular, a generally Kosmos books

I would never want to be without: a good mood when I get up in the morning

What I like about Banner: the daily challenges of a quality company

**Banner SWITZERLAND**

Year of foundation: 1971

Number of employees: 27

Sales structure:
distribution and service partner

Special features:
We are located in a predatory market with many private labels. However, Banner quality is highly appreciated and is gaining in importance in the market's premium segment.

SOCIAL COMMITMENT**Banner SUPPORTS THE VETERAN CAR FUNDRAISER OF THE "LEBENSILFHE" ORGANISATION.**

Social commitment has always played a major role in Banner's activities. This is why the respected starter battery specialist again took part in this year's vintage car donation drive of the Lebenshilfe Gießen e.V. charity organization and contributed its premium batteries and matching chargers for all the raffled treasures.

This year the Lebenshilfe Gießen e.V. vintage car donation drive for the benefit of persons with disabilities started up for the 27th time and once again Banner supported the charity fundraiser as a cooperation partner. The company supplied all the veteran cars with both the appropriate battery technology and chargers. As Steffen Dimer, the Starter Batteries Sales Manager at Banner Germany explains, "As always, it was a great pleasure to be involved with the Lebenshilfe Gießen classic car

donation drive because by supplying these cult vehicles with Banner energy by means of our premium batteries and suitable chargers, we were able to combine the useful with doing good." This year, a total of eleven top-class vintage and classic cars were handed over to their lucky winners at Motorworld Munich, the new event location for technology enthusiasts and classic car fans. Among the models were a 1987 Porsche 911 Carrera, a 1962 Mercedes-Benz 190 SL Cabriolet and a 1938 Ford Eifel Roadster.

PROJECTS WITH HEART AND A PURPOSE

Lebenshilfe Gießen e.V. helps more than 2,800 people with physical and mental disabilities to lead independent lives. Integrated under the umbrella of this non-profit organisation are children's and family centres, youth welfare facilities, schools, workshops, counselling centres and residential facilities. Without the support of the veteran car donation drive, the upkeep of these projects would be unthinkable, which is why Banner is totally committed to continuing its keen support of this fundraiser in years to come.

TRADE FAIR NEWS**AT LAST AN AUTOMECHANIKA!**

The fair was again held in Frankfurt and was visited by around 78,000 people from 175 countries. Apart from Banner, a total of 2,800 exhibitors were represented and although it was not possible to match the record visitor and exhibitor numbers of 2018, the Ban-

ner team did not see this as negative. This was because there was more space and time for personal discussions on the spot and hence a return to the genuine, standard atmosphere of the trade fair with high-quality conversations and contacts.

WINTERGRÜSSE**A REAL KICK-START!**

At the end of this issue, we would like to wish all of Banner's customers, partners and friends a great begin to the winter!

Banner *INSIDE*: BMW, VW, AUDI, PORSCHE, MERCEDES, SEAT, ASTON MARTIN, SUZUKI, ...



Banner

THE POWER COMPANY

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