



BÜFFELPOST

Banner TOP IN EUROPE

**SUPPLY CHAIN MANAGEMENT.
EVEN STRONGER.
EVEN BETTER.
EVEN MORE EFFICIENT.**



INNOVATION

**Banner EFB BATTERIES
ARE FIT FOR THE FUTURE**

INTERNATIONALISATION

**NEW WEBSITE AS A
SERVICE PLATFORM**

SHOWTIME

**SHEALTHY DEMAND
AT TRADE FAIRS**

EDITORIAL

Dear Partner,

Banner seeks to prepare for every situation in optimum fashion. But there is one thing that not even we can control and that is the weather. This time, the winter showed its coldest face, which confronted us with equally chilling demands regarding the supply of our products. We are pleased to say that this situation was mastered with maximum customer service as a result of ideal preparation work and perfect logistics. Our successful **Supply Chain Management Initiative** also made a sizeable contribution to the fact that stocks were distributed in optimum fashion amongst our branches in line with the changes in weather conditions.

Banner was founded in 1937 and even then a claim to high quality represented one of its basic principles for success. And while naturally enough the past **eighty years** have seen many changes and modernisation and cutting edge products provide the driving force behind bull power, the values of our company, which has always been family-owned, remain unaltered. From the outset, the famous buffalo trademark has symbolised the production of batteries that meet the **highest quality standards**. Furthermore, **sustainability** is an absolute corporate priority, which is why the battery plant

in Linz-Leonding numbers amongst the most environment-friendly in Europe. In addition, in truly bullish manner Banner constantly searches for product **improvements and innovations**. Research and development ensure that the resultant premium quality corresponds with the state of the art and above all there is a constant **focus on people**.

We also endeavour to think at least one step ahead and therefore our **production** is currently being **expanded** and as a result of increased productivity, we are now able to manufacture additional batteries at our existing location. Therefore, at this point we would like to thank both our employees and our customers, who through their long-term loyalty have contributed to this story of success. We look forward to many more shared years with full bull power.



Andreas Bawart
Commercial CEO



Thomas Bawart
Technical CEO



THE HIGH-TECH MULTI-TALENT**EFB BATTERIES ARE FIT FOR THE FUTURE**

Technical innovations have enabled the Banner EFB battery to emerge as a cost-efficient alternative to AGM technology.

Banner EFB batteries are making a significant contribution to a reduction in CO2 emissions from modern vehicles. This relates to the fact that virtually every new model is being fitted with start-stop functions and the resultant increase in the burdens on the electrical system and its energy supply. In turn, these place a heavy burden upon the battery, which must also offer a combination of chargeability (dynamic current intake), acid stratification prevention in tandem with simultaneous zero-maintenance retention, a prolongation of the useful life cycle and suitability for use in the engine compartment.

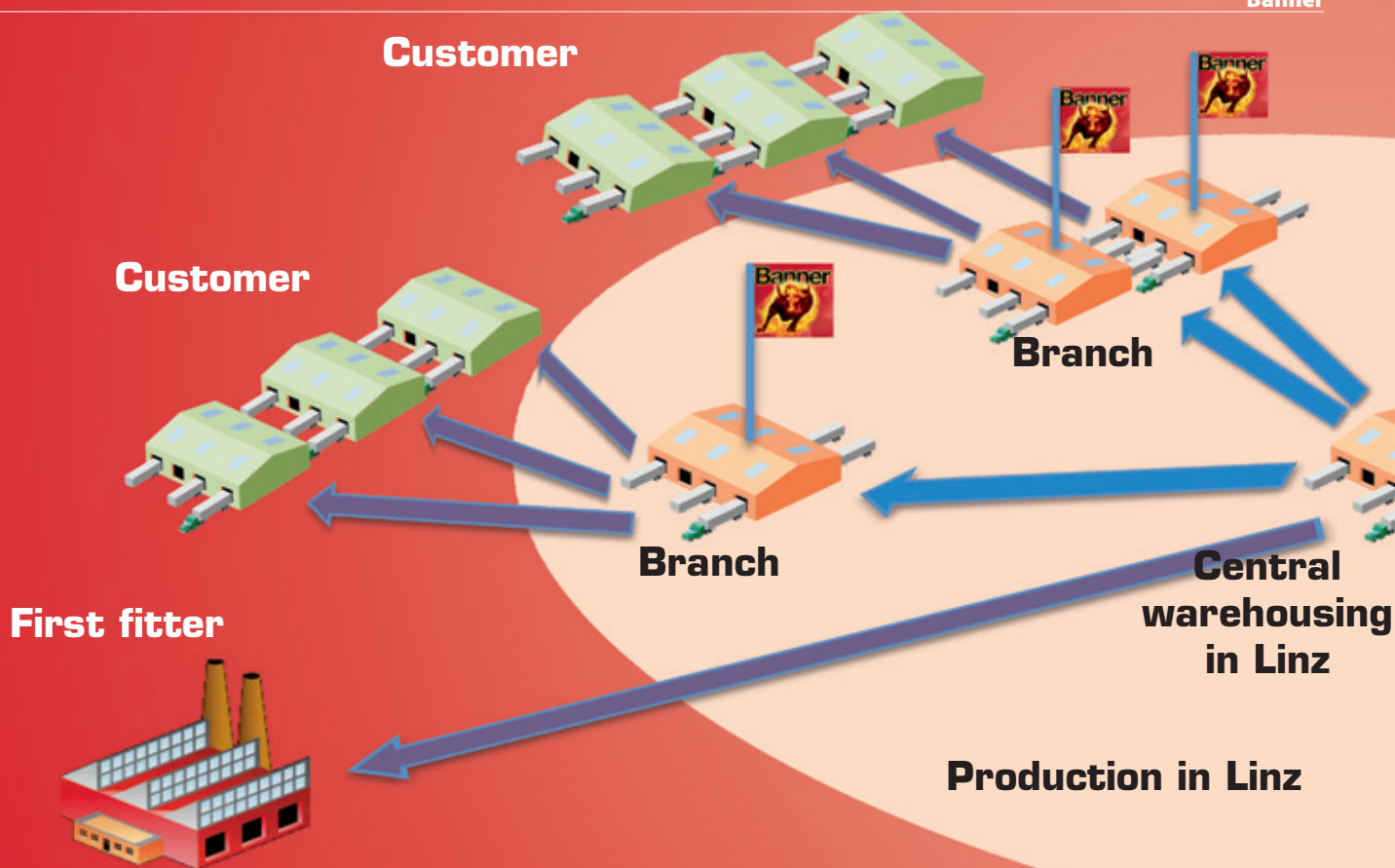
EFB BATTERIES ARE MULTI-TALENTED

As a result of innovations and systematic further development, Banner's EFB bat-

teries, which are part of the Running Bull family, are able to meet these customer requirements in optimum fashion. For example, special carbon additives, non-woven electrode covers, separators with minimum internal resistance and perfected, continuous cast mesh are all employed. And as Technical Development Manager, Helmut Diermaier, explains: "These advances are part of the reason why leading automotive manufacturers are turning to EFB technology rather than the more complex and cost-intensive AGM variation and regard Banner as a top address in this connection. With our Running Bull EFB we are ideally equipped to

offer our clientele an optimum solution in this rapidly expanding market."





THE Banner SUPPLY CHAIN

SUPPLY CHAIN MANAGEMENT

BULL POWER KNOWS NO STANDSTILLS

The results of the Supply Chain Management Initiative launched three years ago are more than worth a second glance because, at a maximum they add up to 100 per cent product availability for our customers!

The Banner name stands for quality and service at every level. And in order to be true to this claim, three years ago a Supply Chain Management Initiative was launched. The results speak for themselves, as since the start of the project Banner has been able to further raise the availability levels of its products by between 3 and 5 per cent. Moreover, in some months, virtually 100 per cent availability was achieved in spite of the fact that as opposed to the past, stocks have been markedly reduced. Consequently, apart from convenience, customers enjoy the added advantage derived for the fact that our batteries spend less time in storage and can therefore be delivered in a "fresher" condition.

BECOMING EVEN BETTER

As a reliable partner to automotive manufacturers and the retrofitting market (producers,

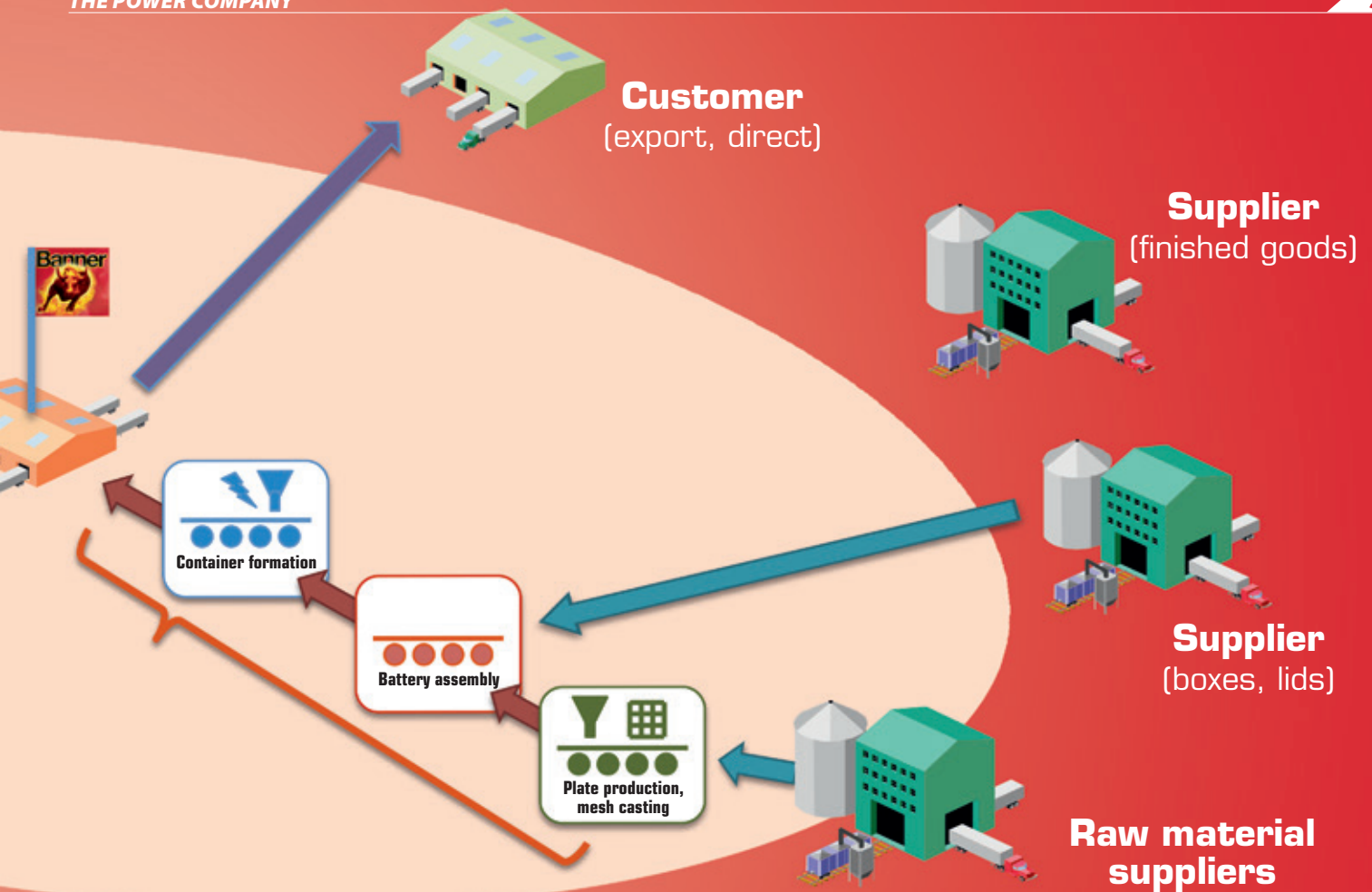
workshops), Banner constantly endeavours to improve. With this in view, the company's supply chain management (SCM) is focused on holistic perspectives and planning.

THE RESULT IS COMPRISED BY OBJECTIVES ON THREE LEVELS:

- An increase in availability through the demand-oriented control of stocks. For Banner it is important that every product is readily at hand, in order that customers can be supplied as quickly as possible.
- An enhanced delivery capability derived from regular comparisons between our production capacities and requirements, as well as the planning of pre-production. The aim is to be able to supply customers with sufficient quantities of batteries irrespective of when the winter actually begins.
- The avoidance of excessive stocks and

thus prolonged battery storage. In line with our claim to quality, we seek to ensure that excessive numbers of batteries are not warehoused, as these require re-charging after a relatively short time.

Automotive manufacturers appreciate optimum supply and Banner customers can rest assured that their output will not be interrupted due to bottlenecks. As a trustworthy partner, this delivery service extends further because owing to its regular checks on needs, production capacities and stocks, if necessary in problematic situations Banner is able to provide additional supplies. This was the case last summer, when the bankruptcy of a Korean shipping company led to an abrupt halt in battery deliveries to one of our OEM customers. Banner successfully compensated for the resultant supply shortfall and thus ensured unimpeded vehicle production.



OPTIMUM AVAILABILITY

For our retrofitting clientele on all retailing levels (battery wholesalers, retail/automotive parts, workshops) in more than sixty countries, it is important that local suppliers can guarantee battery

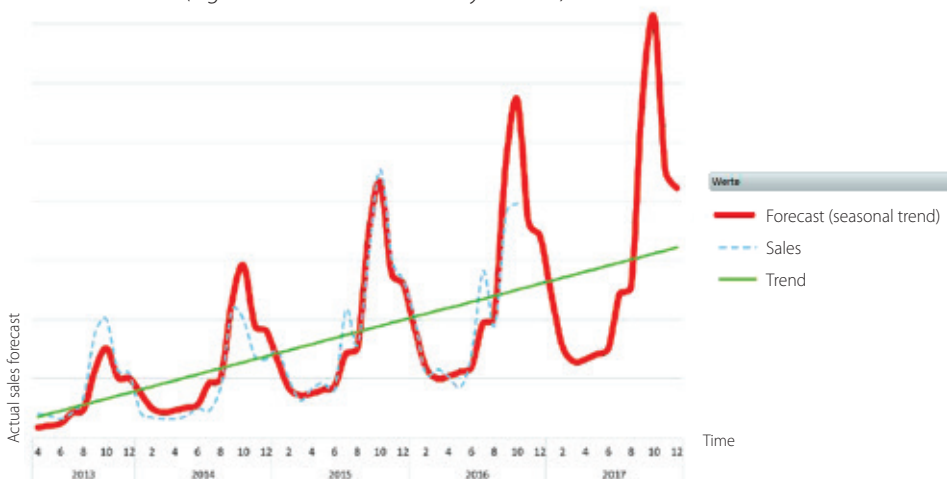
availability at all times. Banner achieves this through requirement-oriented stock controls on the basis of regularly updated sales forecasts at its 28 own branches in 14 countries.

LOGISTICS PRIZE COMPETITION ENTRY

The successes of the Supply Chain Management Initiative are so impressive that Banner has submitted them as an entry in a logistics prize competition. This is organised by the "Verein Netzwerk Logistik (VNL)" Austria's largest network of logistics and supply chain management experts, which has more than 2,000 members.

Banner is extremely optimistic that this specialist circle will come to the conclusion that the company delivers on time, offers production stability and above all, represents a reliable, long-term partner with a justifiable claim to top quality.

Statistical models and weather reports are employed as support during the determination of the sales forecast (e.g. Seasonal trend model by winters)



Reinhard Bauer, Supply Chain Manager

Banner WEBSITE

BULL POWER IN THE WORLDWIDE WEB

Fewer frills and instead more services and advantages. The new Banner website is online.

Under www.bannerbatterien.com our customers can now find an Internet website that represents an information and services platform, which does justice to the premium quality of our products. Optimum user advantages represent its basic credo and therefore the site has been given a modern layout and simple navigation in line with the very latest lean web design. In other words, cheap showmanship has been avoided entirely and instead both the visuals and the content focus on essentials. This is facilitated by short and punchy data, as well as an extended and practical full text search function. Moreover, as of now, searches for the desired product information can be carried out quickly and simply using the type or article number.

INTERNATIONALISATION IN FOCUS

Internationalisation constitutes another focal point of Banner's online strategy. Our products are in increasing demand worldwide and this is reflected by the new website, which is immediately available in 14 languages and twenty national variations.

AN EXTENSIVE INFORMATION DATABASE

At the moment, the Internet team is working at top speed on the creation of a comprehensive database, which will contain information that goes far beyond battery and retailer searches. With a selection consisting of a glossary/a lexicon of battery terms, a cross-reference list/comparative list, OEM/OES type numbers for the corresponding Banner battery, how-to videos, battery tips, information regarding new legal requirements and guidelines, a top-draw service platform will await our customers. A look at our website www.bannerbatterien.com is always worth a second glance and in future is certain to surprise!

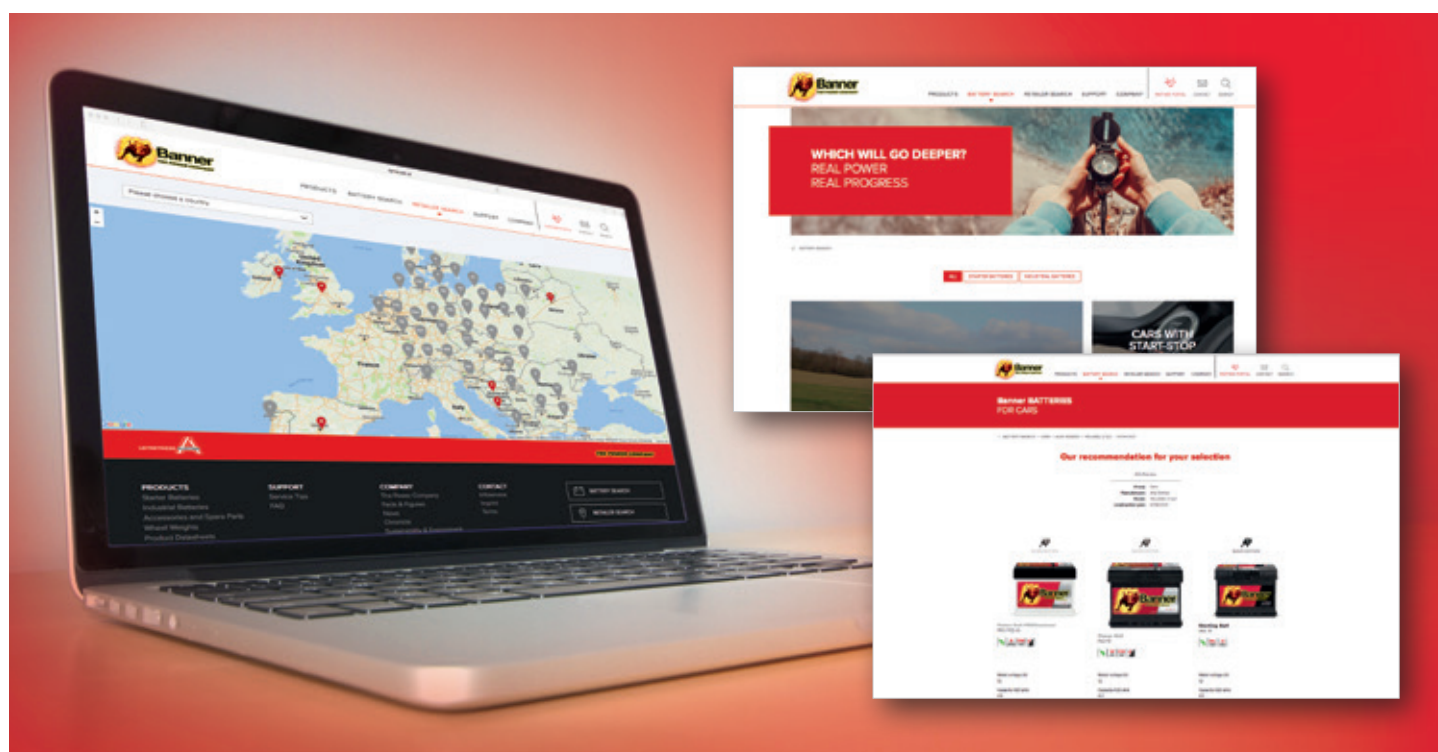
INFOBOX

DVSE TOPMOTIVE TECCAT ONLINE - THE PART INFORMATION SYSTEM FOR THE AUTOMOTIVE BRANCH.

As from 1 October 2017, which is right on time for the new battery season, you will find Banner batteries with up to the minute information in the electronic TecCat component catalogue.

DVSE TOPMOTIVE has emerged as Europe's market leader with regard to catalogues and information systems for part retailing, car dealerships/workshops and industry. Apart from straightforward, direct article searches, DVSE TOPMOTIVE offers the latest part classifications, type comparisons, work values, inspection data and much more besides.

With the direct article search, we offer our sales partners an additional service and therefore they should feel free to use this platform and its possibilities for online data retrieval, ordering and process optimisation. Further information is available under <http://www.topmotive.eu/de/produkte/werkstatt>.



SELF-HELP GUIDE

A FLYING START TO SUMMER

In the warmer months of the year, correct battery storage and checks are of enormous importance. Only thus can one be certain of getting off to a super start to summer with the usual bull power.

Correct starter battery handling is of major significance with regard to the avoidance of any loss of quality. Basically, batteries should only be stored when fully charged and special attention should be paid to adherence to a first-in, first-out (FIFO) system. This means that the batteries that have been in storage longest will be sold first and replaced by new ones. Such an approach prevents batteries being warehoused for lengthy periods without being delivered to customers.

CORRECT STORAGE

Another vital point is provided by the storage conditions. Banner recommends that batteries be kept in a dry place and that close attention be paid to the cleanliness of their surfaces and terminals. Cleaning with a damp or antistatic cloth is also advisable in order to prevent electrostatic discharge. In addition, the batteries should not be subject to direct sunlight, as this can damage the labelling and the box.

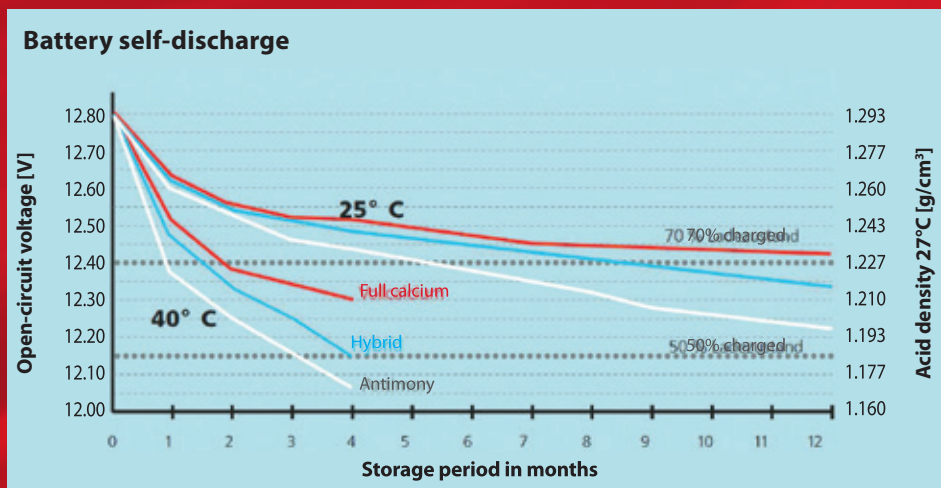
Chemical reactions take place faster in warm temperatures. Indeed, an increase of 10°C results in a doubling of the self-discharge rate. Therefore, the storage temperature should lie between 0°C and 25°C, which will keep self-discharge at a minimum and reduce the recharging requirement, which saves both time and money. Regular checks on the open-circuit voltage of the batteries are also essential, as this should not fall to below 12.5V. At the very latest, should this voltage be reached battery recharging must follow in order to avoid irreparable damage.

KEEP AN EYE ON SAFETY

Safety regulations must be observed during charging. Among other requirements, these stipulate the use of protective eyewear, sufficient room ventilation and the avoidance of ignition sources. In order to be able to fully charge batteries, both the charger and its parameters such as the charging voltage, current and duration must be matched to the battery technology and the charge status. During the charging process, the battery screws may not be opened and if the temperature battery rises to 55°C, charging must be interrupted for safety reasons. When a battery is sold on, it has to demonstrate open-circuit voltage of at least 12.6V.



Dominik Traxler
Starter Battery Sales Engineer



SPARE PART REQUIREMENTS

CHEAP CAN OFTEN BE EXPENSIVE

The demands made on starter batteries depend greatly upon climatic conditions and the needs of additional electrical and electronic equipment. When for reasons of age they require replacement, the prime consideration in our latitudes must be quality.

In Europe, starter batteries are especially challenged by hot summers and cold winters. Therefore, cheap batteries often turn out to be an expensive solution, as they can lead to starting problems in both seasons of the year. Under such circumstances, it is no coincidence that quality batteries from Banner have established themselves worldwide. This is because they combine maximum starting power with further enhanced cold start characteristics and long useful life.

Banner TIPS

Use the next strongest dimensioned battery for which sufficient space is available in your vehicle, as this provides additional power reserves. The price difference is extremely small and the dynamos are suitably designed for this purpose. The Banner online battery search at www.bannerbatterien.com provides information regarding the most powerful battery suitable for installation in your vehicle model.

CONGENIAL

TWO POWER PACKAGES IN DUET: Banner & MENZI MUCK

Banner batteries are characterised by their robustness even under extremely demanding conditions. The Menzi Muck walking excavator is also an innovative power pack and not least for this reason has opted for the Banner Running Bull AGM battery as a congenial partner.



Walking excavators are construction industry machines that are employed in terrain that is relatively inaccessible such as forests, steep mountainsides and ski slopes. Owing to the extremely high vibration levels, Banner Running Bull AGM batteries are used frequently for engine starts and the supply of the digger's electrical system.

GIGANTIC FORCES

In tracked excavators, the tipping edge is generally fixed, however in the case of the Menzi Muck this can be altered in line with the working operation by means of the adjustable wheel and claw supports. It is thus possible that lifting and breakout can be achieved, which are unobtainable with a standard tracked excavator. In fact, a 9.5 t Menzi Muck offers the same output as a 20 t tracked excavator. Accordingly, in the Banner Running Bull AGM battery with its reliable, beefy power, the "spider digger" has found the perfect partner.



FITNESS

POWERFUL START TO "SCHULE LÄUFT"

As an innovative supplier of quality, the furtherance of children and young people is very close to Banner's heart. Therefore, the company is supporting the "Schule läuft" (School Is Up and Running) project with top class running shirts.

Whenever performance is involved, Banner is always on the pace. This applies equally to investments in our future, as all top sportsmen and -women start young. Accordingly, our sponsoring of the "Schule läuft" project supplements to perfection our in-company Banner Fit health programme, with its annual focal points of nutrition, movement and sport. This school sport promotion has the aim of better communicating to students the pleasures of being on the move.

MOTIVATION

The students can participate free of charge in the Linz AG Quarter Marathon or the Asics Relay Team Marathon during the Junior Marathon held in the Linz Stadium. Furthermore, in a type of inter-school competition, every school with the fastest runners in the relay and quarter marathons will receive an extra prize. Banner is also motivating all school students to make a powerful start through the gift of top quality cotton running shirts. We wish all the competitors every success and hope that numerous "employees of tomorrow" are also up and running.



From l. to r. : City councillor Karin Hörzing, Monika Fortner-Danner (Banner), Thomas Ziegler (LIVA), Michael Harringer, Jonas Stroblmair (students), Mayor Klaus Luger, Linz Marathon coordinator Wolfgang Lehner

LogiMat

A TEST OF THE BEST

In mid-March, Banner attended the LogiMat in Stuttgart, Germany, which is the international trade fair for distribution, material and information flows. This presence was rewarded by enormous interest in our innovative products and solutions.

At the LogiMat everything revolves around in-company material flows and IT control that extends from sourcing to production and delivery. The largest, annual intra-logistics fair was held at Stuttgart Airport from 14 to 16 March and numerous decision-makers from industry, retailing and services companies visited the Banner stand and gathered information about the company's latest products. With our innovative approach we fit perfectly into the branch mix at the fair, which consists of sourcing, storage, production and distribution logistics.



AUTOMECHANIKA Dubai

STRONG DEMAND FOR Banner ENERGY PACKS

This year, saw Banner's third appearance at the AUTOMECHANIKA, which was held in Dubai in May. The company stand had a brand new design and stood out with optical highlights, a service orientation and fiery buffalo power.

As in the past, the energy packs from Austria were the object of considerable hype at the Dubai fair and Banner enjoys an excellent reputation in Arab markets. More than 30,000 specialist visitors from around 140 countries attend the annual AUTOMECHANIKA in order to gather information regarding the latest automotive industry trends and Banner was one of 2,000 exhibitors from 58 countries.



INNOVATION

THE Banner BIKE BULL IS NOW EVEN MORE POWERFUL!

2017 is certain to be a great year for our Bike Bull fans, as the quality and attractiveness of these popular motorcycle batteries have now been enhanced even further!

The team headed by Product Manager Silvio Steiner has upgraded all the models in the Bike Bull quality classes with a new, eye-catching design. This is in line with the starter batteries, the more than sixty types coming in classic black (1 helmet), AGM silver (2 helmets), GEL gold (3 helmets) and AGM Pro carbon (4 helmets). Moreover, as anyone familiar with Banner might expect, this optimisation process was not limited to design. In fact users can look forward to

enhanced performance, for as Silvio Steiner explains, Banner is constantly looking for innovations: "Even with market coverage of around 95 per cent and numerous areas of application for this powerful multi-talent, for us there can be no standing still. Therefore, we have further increased the cold start current (CCA) in order to extract maximum power for our customers."

POWER PACKS

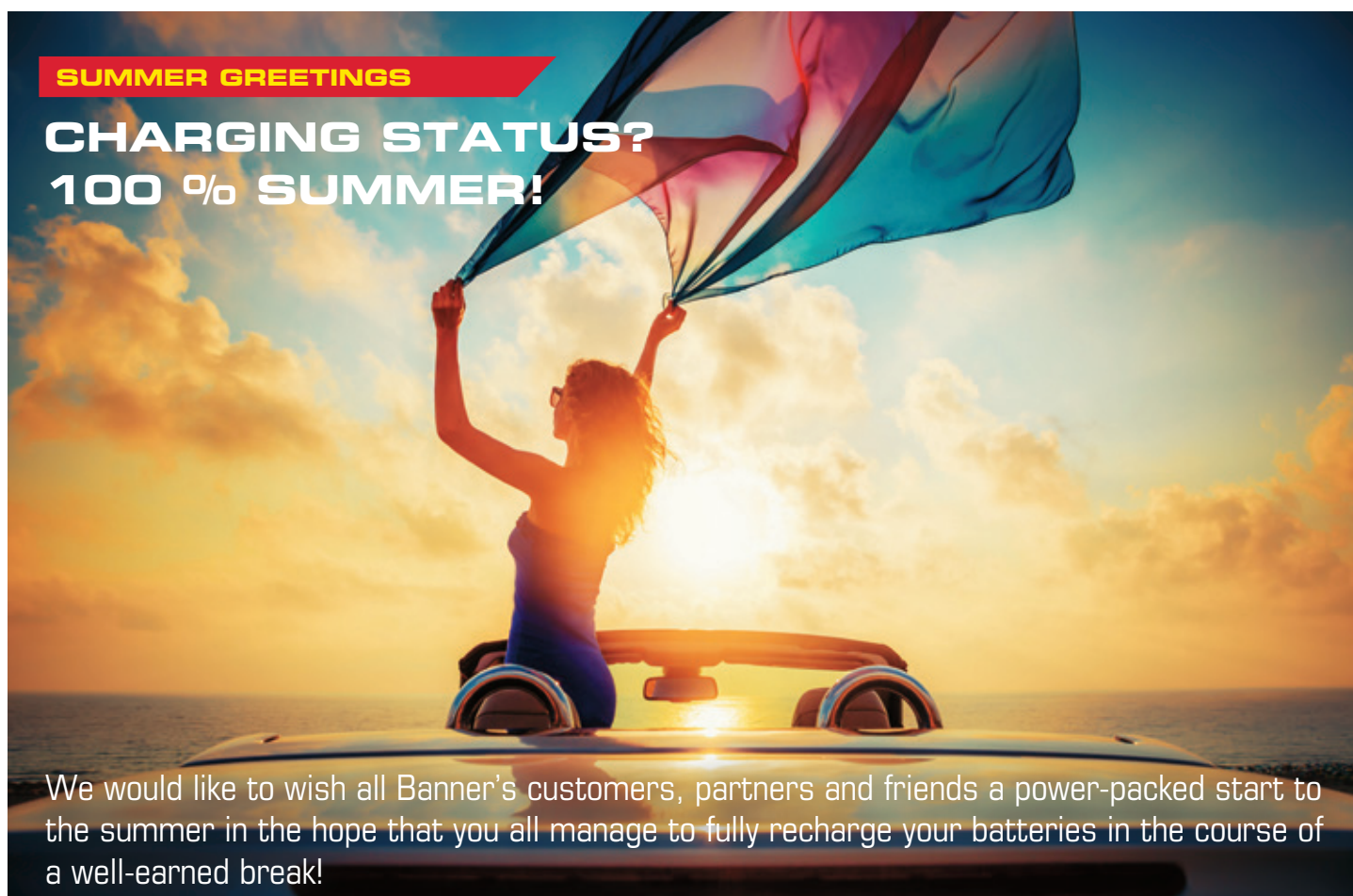
Owing to their durability and high starting

performance, depending on the category, the Bike Bull batteries are not only suitable for motorcycles, but also ATV/Quads, jetskis, Enduros, touring bikes and even heavy Harley Davidsons, BMW bikes and models fitted with ABS and extensive special features. Matching 2A or 3A Accuchargers are also available to keep the batteries in trim.



SUMMER GREETINGS

CHARGING STATUS? 100 % SUMMER!



We would like to wish all Banner's customers, partners and friends a power-packed start to the summer in the hope that you all manage to fully recharge your batteries in the course of a well-earned break!

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



Banner

THE POWER COMPANY

IMPRINT:

Media owner, publisher: Banner GmbH, 4021 Linz, Postfach 777, Salzburger Straße 298

Responsible for the contents: Banner GmbH, Andreas Bawart. . All rights reserved.

Reprints only allowed with written permission. Place of publication: Linz

bannerbatterien.com

