



Elektro-Automatik

BATTERY RECYCLER CAMPAIGN

April 2021





TOPICS

Contents Outline

- **Introduction to the Marketing Team**

- **Global Marketing Approach**

 - Brief overview and Marketing improvements over past 1 year

- **New Battery Recycler Campaign Introduction**

 - Launch schedule and collateral for sales support

 - Sales presentation review

MARKETING EXPERTISE



Elektro-Automatik

■ Craig Frahm
Global Marketing Manager

- Craig was the Global Marketing Manager at a large US competitor for 14 years
- Craig is tasked with building out EA's global marketing strategy for increased worldwide sales

Phone: +1 (858) 886-6175

E-Mail: craig.frahm@elektroautomatik.com

■ Tanja Kutscheidt
Marketing Specialist

- Tanja was hired to assist with day-to-day marketing activities in EA HQ / Europe and to support Craig
- She is an experienced Marketing allrounder with over 20 years practical know-how in different international companies

Phone: [+492162 3785 840](tel:+4921623785840)

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E-Mail: T.Kutscheidt@elektroautomatik.com





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GLOBAL MARKETING

PLAN + SUCCESSES OVER PAST 1 YEAR

Marketing Meeting 4/8/21



GLOBAL MARKETING 2021



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■ Harmonized Global Marketing Plan

- Best practices, common messaging and key initiative campaigns employed globally

■ Create All English Content -> Translate

- All new collateral, movies, webinars, white papers, etc. will be English, then translated for localized marketing by regions

■ Prioritized Focus for Growth

- Utilizing budget for most progressive, effective digital marketing activities that are measurable



NEW WEBSITE

The Primary Address for All Marketing



Elektro-Automatik

Refreshed & Improved Website

- New website features Industry Application navigation
- Cleaner site and quicker access to product information
- Expanded technical support resources and downloads
- Better page and site content for SEO and SEM success
- Multiple languages available



Global site

Germany (Deutsch | English | Français)

Europe

Benelux (Nederlands | Français)
Italy (Italiano)
Russia (Русский | English)
Spain (Español)
United Kingdom (English)

America

Canada (English | Français)
Latin America (Español | English)
Mexico (Español | English)
United States (English)

Asia, Pacific

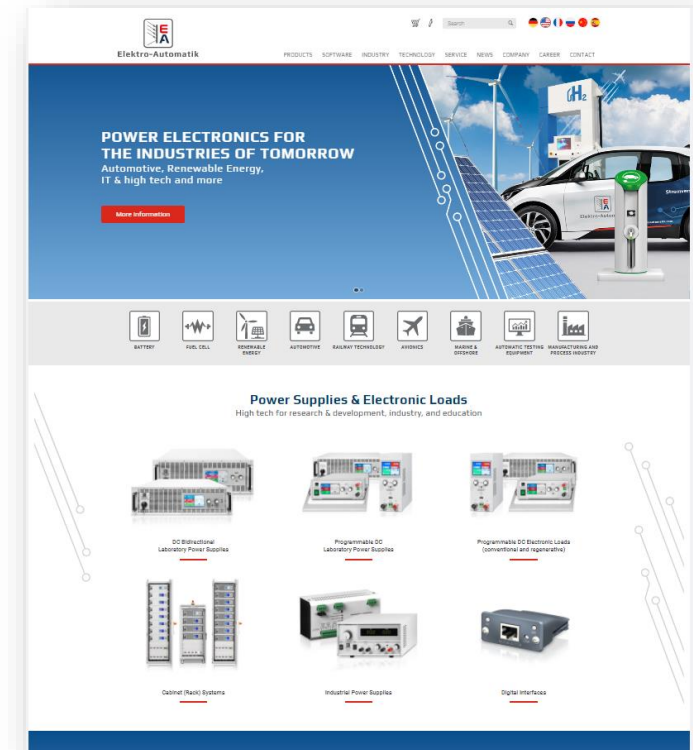
Asia Pacific (English)
China (简体中文)
India (English)

Where to buy

Get a quote

USA - English

Search



VIDEO MARKETING

Professional Videos– Brand Elevation



Elektro-Automatik

Prioritized Professional, Technical Video Creation – and will Continue

- Produced core product and technology video series, professionally narrated and animated
 - PSB, PSI, ELR, Rack Systems and Autoranging technology, so far
 - Videos effective on website, in social media, at trade shows, in email, etc.
- Professionally filmed and edited EA introduction for automotive e-mobility industry video
 - High level video to introduce EA and bidirectional product series ideally suited for e-mobility test challenges
- Customers today expect to learn through videos and Google wants to see video content offered



PSB Overview



E-mobility introduction

SOCIAL MEDIA MARKETING

Sharing Instead of Selling



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Improved EA's Social Media Presence and Content

- Regular content posting on LinkedIn, Twitter and Facebook
- Built out EA's Youtube channel with more content & playlists
- Regular content creation and sharing in social media is good for customer awareness and engagement – and great for Google ranking
- Looking for “Content Ambassadors” to help us post global content!




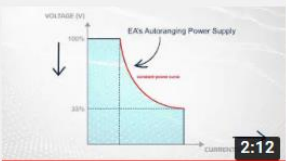















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SOCIAL MEDIA MARKETING

YouTube - youtube.com/c/EAElektroAutomatik

Building out Youtube channel & subscribers.

 <p>208V and WR 342V-528V 3 phase AC grids</p> <p>PSI10000 AU</p> <p>2:14</p>	 <p>VOLTAGE (V)</p> <p>EA's Autoranging Power Supply</p> <p>2:12</p>	 <p>Elektro-Automatik</p> <p>6:53</p>	 <p>6:26</p>	 <p>FPGA-based function generator for complex load simulation, including non-linear devices</p> <p>1:03</p>
EA PSI Series Autoranging Programmable DC Power...	True Autoranging Benefits for DC Programmable Power...	EA Elektro-Automatik and the Automotive EV/HEV Industr...	How Power Supplies Handle Low Voltage Ride-Through...	EA ELR Series Regenerative Electronic Loads Benefits -...
226 views • 3 months ago	314 views • 3 months ago	321 views • 4 months ago	118 views • 5 months ago	240 views • 5 months ago
 <p>ENERGY RECOVERY</p> <p>95%</p> <p>2:09</p>	 <p>Elektro-Automatik</p> <p>5:50</p>	 <p>12.0V</p> <p>10.0V</p> <p>4:34</p>	 <p>Bidirectional operation provides seamless transitions between source and sink modes</p> <p>1:03</p>	 <p>ENERGY RECOVERY</p> <p>95%</p> <p>2:12</p>
EA ELR Series Regenerative Electronic Loads Overview - ...	Bidirectional Power Supply Continuous Source and Sin...	PSB Bidirectional Power Supply Source Sink Seamle...	Bidirectional Regenerative DC Power Supplies - PSB Serie...	PSB Series Bidirectional Programmable DC Power...
434 views • 5 months ago	239 views • 5 months ago	255 views • 7 months ago	15K views • 8 months ago	45K views • 8 months ago
 <p>Elektro-Automatik</p> <p>Introduction to EA Anybus Communications Modules</p> <p>2:22</p>	 <p>STATE OF THE ART</p> <p>PROGRAMMABLE</p> <p>POWER</p> <p>4:26</p>	 <p>BENEFITS OF AUTORANGING DC POWER SUPPLIES IN TEST APPLICATIONS</p> <p>15:56</p>	 <p>12.00V</p> <p>0.00A</p> <p>3W</p> <p>4:43</p>	 <p>4:44</p>
Anybus Swappable Communication Modules fo...	Paralleling Power Supplies and Electronic Loads from E...	Webinar - Benefits of Autoranging DC Power...	Setting Current Limit on a Voltage Source - EA Elektro...	Program Voltage Ramp with Power Supply - EA Elektro...
43 views • 8 months ago	222 views • 9 months ago	279 views • 10 months ago	440 views • 10 months ago	194 views • 10 months ago



Highest video views is 45,445 for PSB overview!

> 20 new videos since March 2020.

8 videos professionally created.

ADVERTS, BANNERS, NEWSLETTERS, PRESS



Elektro-Automatik

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1,92MW

SO VIEL LEISTUNG
WIE KEIN ANDERES
POWER RACK!

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SAVE TIME & MONEY
WITH FASTER BATTERY TESTS

Elektro-Automatik

**BRENNSTOFFZELLEN
SIMULATION FÜR SCHNELLE &
EXAKTE PRÜFVERFAHREN**

Geeignet für:

- EA-PSB 10000 30kW, bidirektional, Autoranging, 4HE
- EA-PSI 10000 30k

Bidirectional Power Supplies EA-PSB 10000 30kW

09.06.2022



The new product offers more performance in a small space. The energy feedback possibility can, dependent on application, significantly reduce operating costs.

"The requirements for programmable laboratory power supplies are continually increasing. Hence it is obligatory to react to new market situations. In order to support storage battery manufacturers in their development business has placed great value on maximum efficiency in the new EA-PSB 10000 30kW. "With the new device we are currently offering the highest performance concentration in the whole market."

In just 4 rack units the new power supply from EA generates 100 percent more power than the previous series with only a third more volume. In interconnected operation these space saving products can produce a lot. Manufacturers of power storage systems can thus profit significantly. With the generous 5" touch display users can make settings directly on the device.

Cost reduction thanks to energy feedback

More power does not mean a drastic increase in operating costs with the EA-PSB 10000 30kW. The bidirectional power supply offers a working efficiency of up to 96 percent both as a source and as a drain with energy source to drain with no delay. For example, charging and discharging an energy storage in various power ranges may be carried out with just one device. Energy in the motor testing recuperation phase can be collected

the main.

The efficiency of the device leads to a distinct reduction in heat generation in the EA-PSB 10000 30kW. Even so, these highly efficient devices display a performance loss under maximum load. Therefore EA offers water cooling as an option for its newest product with up to 1000W. Users profit not only through the heat reduction but also from the reduced and robust design of the new power supplies. Thus a trouble-free operation is possible in inhospitable environments, such as dusty or dirty conditions. The new fully digital core specific-PSD parameters which differ from the factory settings. This function avoids the return of the hardware to an EA agent to make new customer settings.

Distinctive usability thanks to control software

In order to fully utilize the exceptional performance concentration of the EA-PSB 10000 30kW for a multitude of test objects, EA offers the user an intuitive control software. With EA Power Control the user can operate up to 20 devices remotely, control additional functions such as "sequencing", and use a practical data collection. A further new feature is the battery simulation software. Thus the customer can use the EA-PSB 10000 to test their hardware under practically real conditions - "HIL hardware in the loop".

Ver la versión en línea

REVISTA COMULA DE electrónica

Fuentes, cargas electrónicas y fuentes de alimentación bidireccionales

Soluciones de última generación fabricadas en Alemania con un rendimiento excepcional.

WATCH NOW

EA-PSB 10000: 30kW de potencia bidireccional en el espacio más pequeño

Bidireccionalidad, True Autoranging, generador de funciones y recuperación de energía. La EA-PSB 10000 ofrece a los usuarios muchas ventajas. Esta potente solución no solo alcanza 30kW en 4U con la densidad de potencia más alta del mercado, sino que también gracias a la sencilla escalabilidad, puede alcanzar hasta 1.500W en racks. El control de la pantalla táctil y las rutinas de pruebas integradas completan las ventajas de rendimiento.

VER VIDEO AHORA

WATCH NOW

EA-PSI 10000: Última generación de fuentes de alimentación DC con Autoranging

Una potencia de 30kW en 4U y especificaciones preparadas para el futuro como el True Autoranging, caracterizan a la EA-PSI 10000. Esta solución permite la simulación de baterías y pilas de combustible que se pueden adaptar a las condiciones de funcionamiento cambiantes. Un software inteligente como EA-Power-Control y una pantalla táctil aumentan la facilidad de uso.

VER VIDEO AHORA

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DIE ALL-IN-ONE-LÖSUNG DER LEISTUNGSELEKTRONIK

- Bidirektional
- 30kW
- 4HE

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POWER ELECTRONICS FOR TOMORROW'S INDUSTRIES

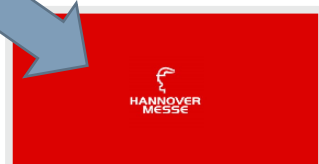


Elektro-Automatik

TRADE SHOWS - VIRTUAL

Few Shows in 2020 – Virtual Coming Up in 2021

Trade Fairs & Events



Meet us virtually
12.- 16. April 2021



Visit us
13.-15. April 2021, Moscow, Russia



Visit us
14.- 16. April 2021, Shanghai, China

pcim
EUROPE

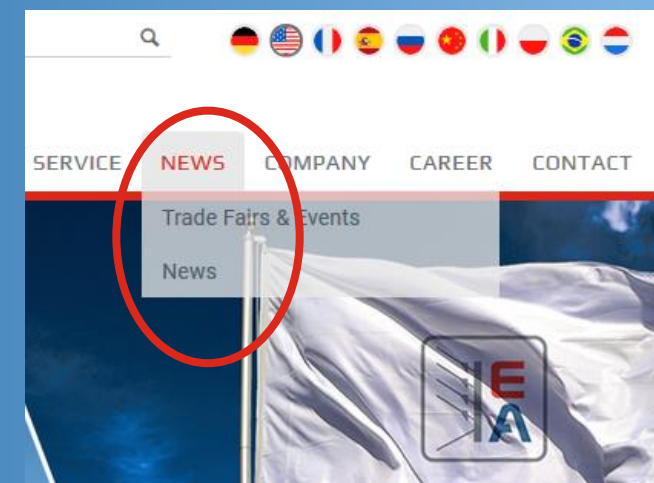
Visit us virtually
03. - 07. May 2021



Meet us virtually
18. -20. May 2021



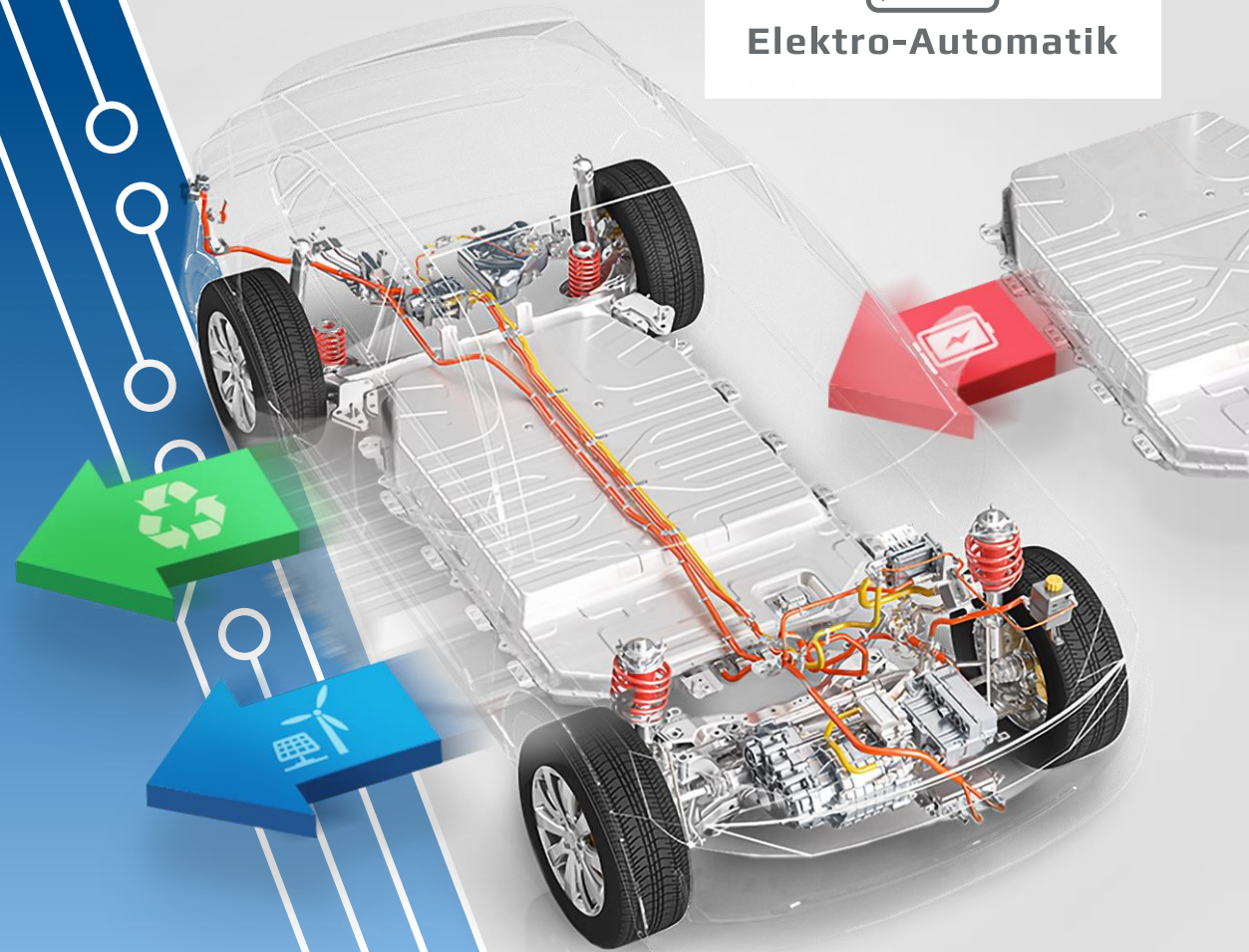
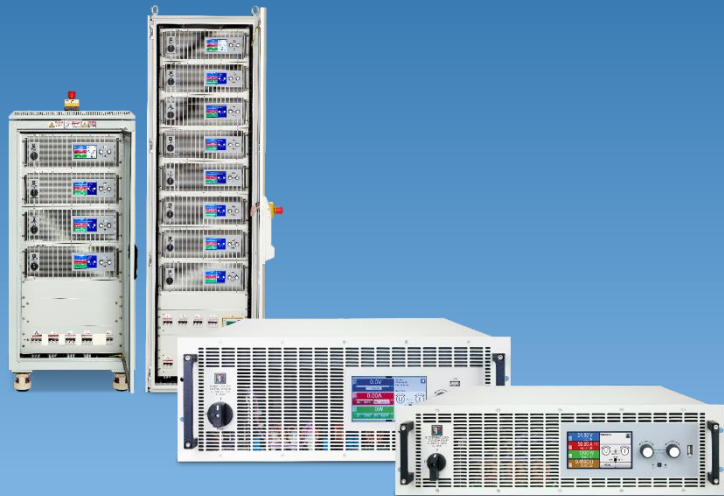
Visit us in hall H3, stand A320
25. - 27. May 2021, Guangzhou, China



Latest overview always online:
www.elektroautomatik.com

WE MAKE BATTERY RECYCLING EASY & EFFICIENT

State-of-the-art capability with regenerative electronic loads and bidirectional power supplies from EA



Elektro-Automatik

MARKETING

Battery Recycler Campaign



Elektro-Automatik

Launch April 13
2021

Website pages



Advertisements





Elektro-Automatik

MARKETING

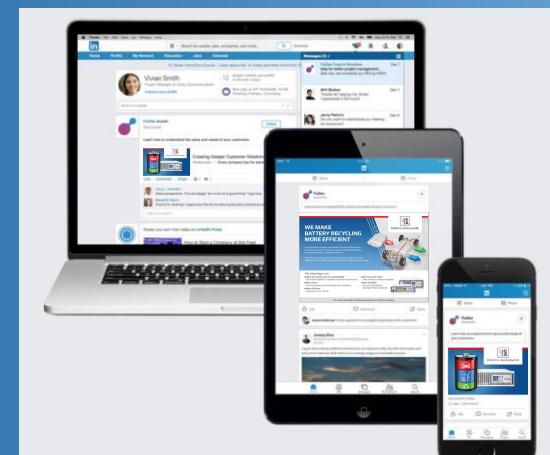
Battery Recycler Campaign

Launch April 13
2021

■ Google Adwords/ SEO

Batterie Recycling	2nd Life	Finales Recycling
Prüfung der Batterie-Kapazität Mehr aus Ihren Batterien holen Mit elektronischen Lasten Vollständige Entladung für nachhaltiges Batterie-Recycling. Lösungen für die Industrie. Mehr Effizienz durch Wiederaufbereitung von Batterien mit elektronischen Lasten von EA Batterie Recycling	30 Second-Life-Einsatz für Akkus 30 Regenerative Lasten für Tests 25 Hohe Effizienz & Flexibilität Sie wollen die Restleistung von Akkus prüfen? Wir haben Lösungen für die Industrie. 87 Die Laborstromversorgungen von EA sind flexibel & vielseitig einsetzbar. Hier informieren! 86 BatterieTest 9 2ndLife	28 Batterien vollständig entladen 29 Effizient, sicher & nachhaltig 29 Mit elektronischen Lasten Verhindern Sie gefährliche Situationen: Durch nicht vollständig entladene Batterien. 84 Verbleibende Energie mit elektronischen Lasten in den Stromkreislauf zurückführen. 90 Batterie 12 BatterieTest 7 Recycling
Batterie-Recycling optimieren Laborstromversorgungen von EA Industrielle Lösungen Effizientes Recycling von Lithium-Ionen-Akkus durch vollständige Entladung der Batterien. Mit den DC-Stromversorgungen von EA für mehr Nachhaltigkeit & Wirtschaftlichkeit sorgen BatterieTest Industrie	29 Bidirektionale Stromversorgung 29 Batterien Test & Entladung 21 Industrielle Lösungen Stromkosten reduzieren: Amortisation durch Netzzurückspeisung mit Stromversorgungen von EA. 89 BatterieTest 12 BatteriePrüfung 9 2ndLife	30 Batterie-Recycling optimieren 26 Laborstromversorgungen von EA 21 Industrielle Lösungen Recyceln Sie Batterien richtig, indem Sie Ihre Batterien vollständig entladen. Mehr Infos! 89 Verbleibende Energie wird in den Stromkreislauf zurückgeführt. 74 Elektronische Lasten ansehen 15 BatterieTest 10 Industrie
Rückgewinnung von Energie Regenerative Lasten von EA Batterie-Test in der Industrie Mit den regenerativen Lasten Batterie-Kapazität prüfen & Energie ins Stromnetz rückführen. Hier mehr über unsere Produkte erfahren & Kontakt zu unseren Fachberatern aufnehmen! BatteriePrüfung Stromversorgung	25 Laborstromversorgungen von EA 26 Second-Life Prüfung von Akkus 30 Produkte für die Industrie Hohe Effizienz beim Test von Akku-Kapazitäten. Gesamtleistungen von bis zu 1,92 Megawatt. 90 Hier mehr über unsere Produkte erfahren & Kontakt zu unseren Fachberatern aufnehmen! 84 BatterieTest 15 Stromversorgung	29 Rückgewinnung von Energie 29 Regenerative Lasten von EA 26 Produkte für die Industrie Recyceln Sie Batterien richtig, indem Sie Ihre Batterien vollständig entladen. 84 Regenerative Lasten nach Ihren Bedürfnissen: Einzelrack & als skalierbares Kabinensystem. 12 BatteriePrüfung 15 Stromversorgung

■ Social Media / LinkedIn Ads / Youtube Video



MARKETING

Battery Recycler Campaign

■ Press Release

■ Application Note



■ Sales Support Presentation





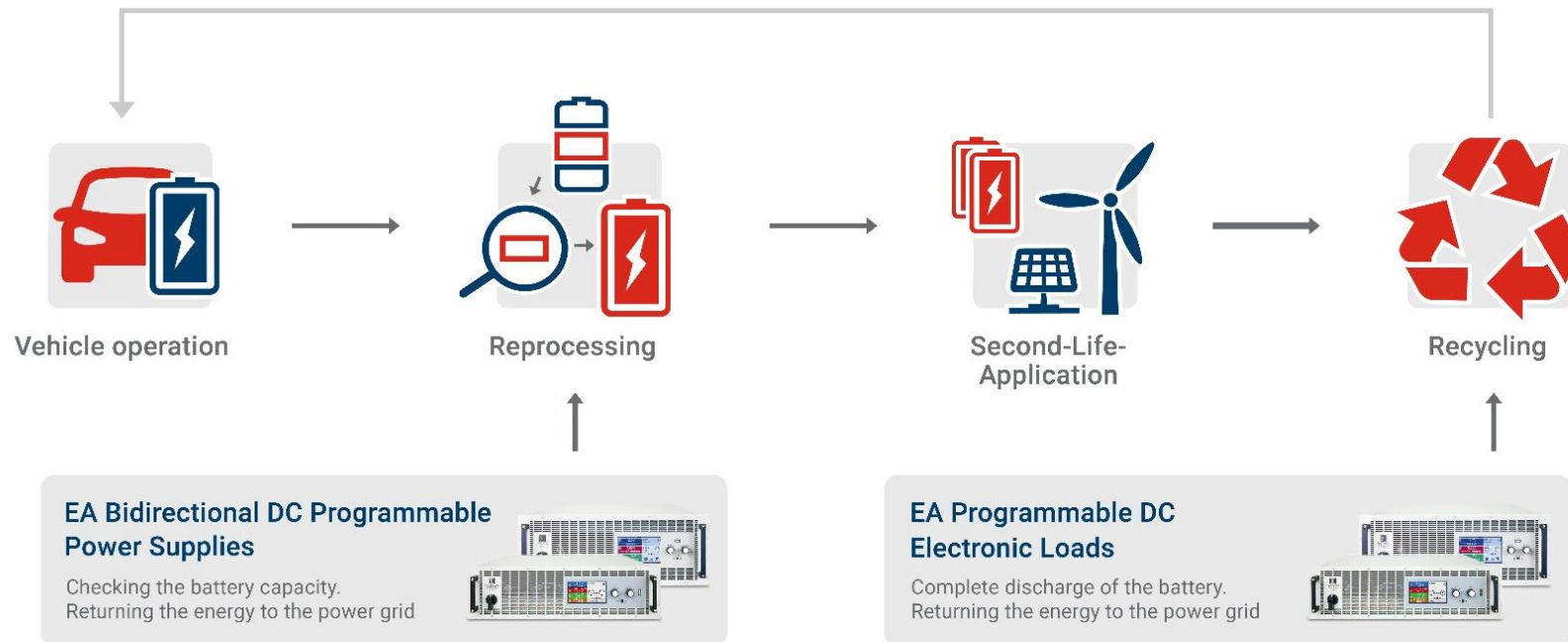
Elektro-Automatik

WE HELP YOU

Optimize Your Battery Recycling

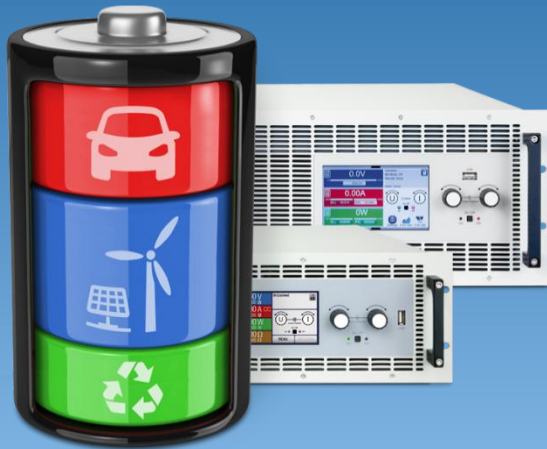
Regenerative Electronic loads and bidirectional programmable DC power supplies from EA Elektro-Automatik make your battery recycling:

- Efficient
- Flexible
- Economical
- Safer
- Sustainable



SECOND-LIFE USE FOR BATTERIES

Battery testing made easy with
bidirectional programmable DC power
supplies



Elektro-Automatik



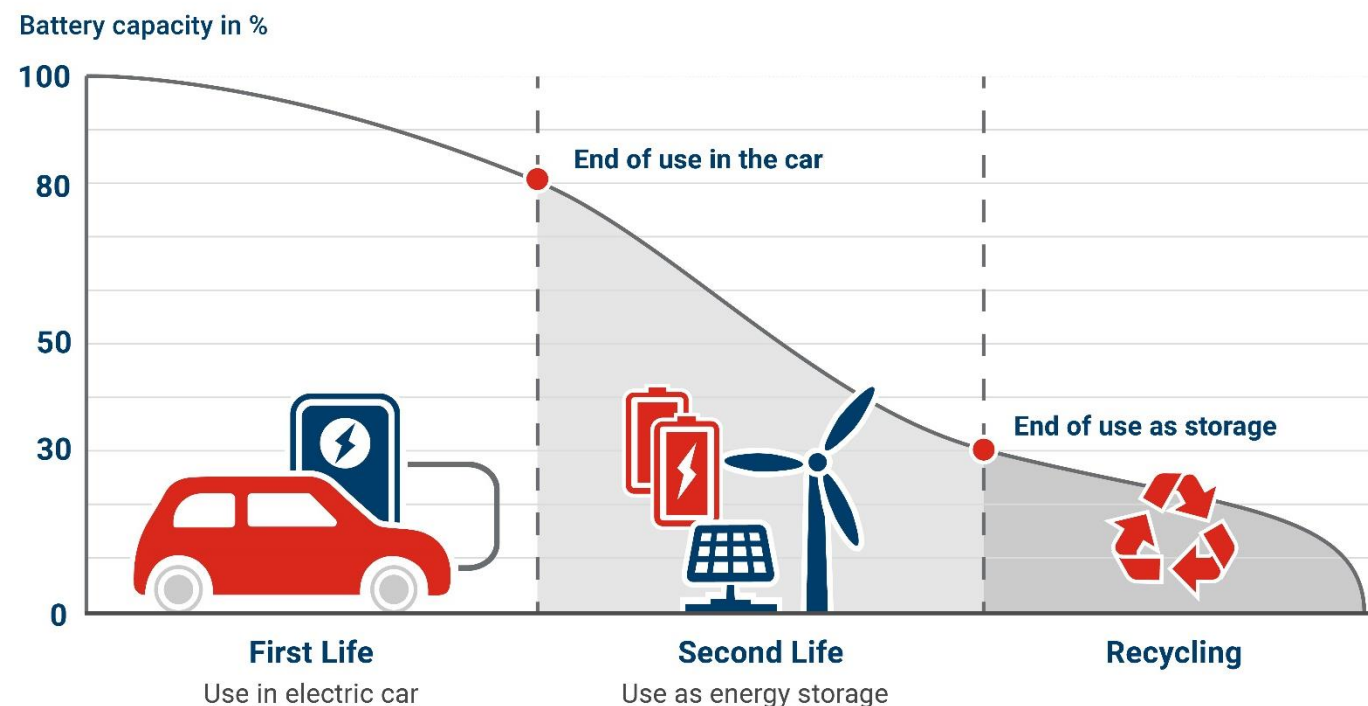
SECOND-LIFE USE FOR BATTERIES

Testing for Second-Life use

What is the remaining power of the battery?

For this application, the use of bidirectional programmable power supplies is ideal to test whether batteries from dynamic applications, such as from electric vehicles with a defined capacity, can still be used in applications with predominantly static requirements, for example stationary energy storage.

Capacity (SOC) and state of aging (SOH) are considered.





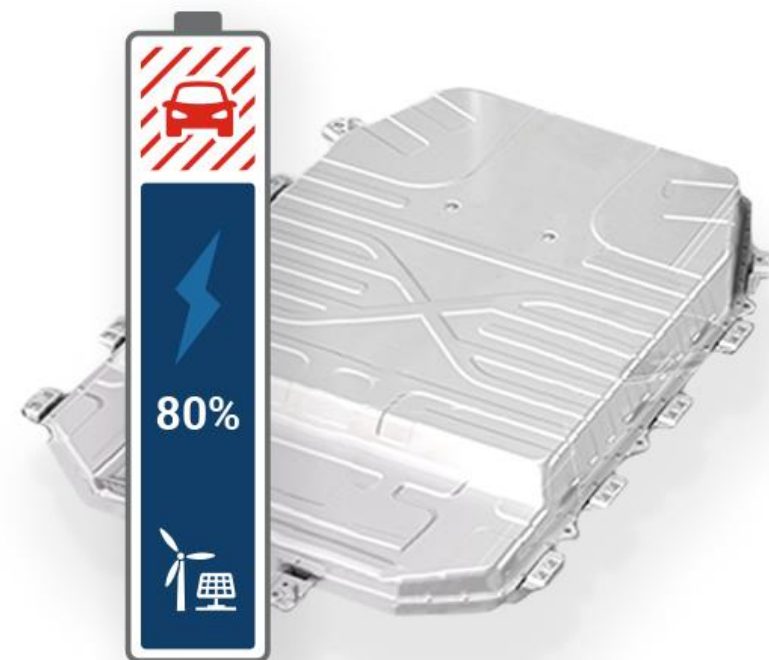
Elektro-Automatik

THE SOLUTION

Bidirectional Programmable DC Power Supplies

Capacity (SOC) and state of health (SOH) are determined. To characterize the battery, a bidirectional power supply is used to discharge it completely and then check its residual capacity. In the process, 96% of the available residual energy is fed back to the power grid.

The required EA product series are the EA-PSB 9000 (3U 15kW) and EA-PSB 10000 (4U 30kW).





Elektro-Automatik

YOUR ADVANTAGES

When Using Bidirectional Programmable DC Power Supplies From EA Elektro-Automatik

1

High efficiency and safety when testing the battery capacity

Bidirectional programmable DC power supplies from EA Elektro-Automatik guarantee you the maximum possible charge and discharge of the batteries. With precise tests, detailed data about the remaining capacity is provided for the DUT.

2

Amortization through 96% power regeneration

The bidirectional programmable DC power supply from EA Elektro-Automatik takes its energy from the connected battery during the discharge process and converts it into AC voltage with an efficiency of up to 96%. This is then fed back into the local power grid and reused, thus amortizing the purchase price by reducing electricity costs.

3

Further economic value due to time saving

The time saved during charging and discharging of the lithium-ion batteries due to the high input powers of up to 15kW in 3U enclosures or 30kW in 4U enclosures increases cost-effectiveness. In addition, the devices can be combined in high-performance control cabinet systems with total power ratings of up to 1.92MW.

4

High flexibility in voltage and current available for test

Versatile and flexible: Due to the true autoranging of the device series from EA Elektro-Automatik, battery storage units with different system voltages can be charged and discharged with only one bidirectional programmable DC power supply. For example, full power is available with one device for both a 400V and 800V system.



Elektro-Automatik

A SINGLE RACK OR CABINET SYSTEM

Bidirectional Programmable DC Power Supplies

Features

- TFT display with touchscreen
- Bidirectional (Charge & Discharge)
- Autoranging for In- and Output
- Integrated Interfaces: Ethernet, USB, Analog
- Plug'n play interface-slot for: CAN, CANopen, Ethercat, Profibus, Profinet, Modbus, RS232
- Intuitive operation on color HMI
- Battery & fuel cell simulation
- Integrated function generator
- Parallel switchable for systems with Master-Slave function
- EA Power Control user software
- EA-BS Battery Simulator software
- Air- and water-cooled versions

Technical Specifications

- **19" inch case 3U**
with up to 1500V and 15kW
- **19" inch case 4U**
with up to 2000V and 30kW
- **Cabinet systems**
with up to 1.92MW



BATTERY RECYCLING

Precise battery discharge through programmable DC electronic loads with mains recovery from EA Elektro-Automatik



Elektro-Automatik



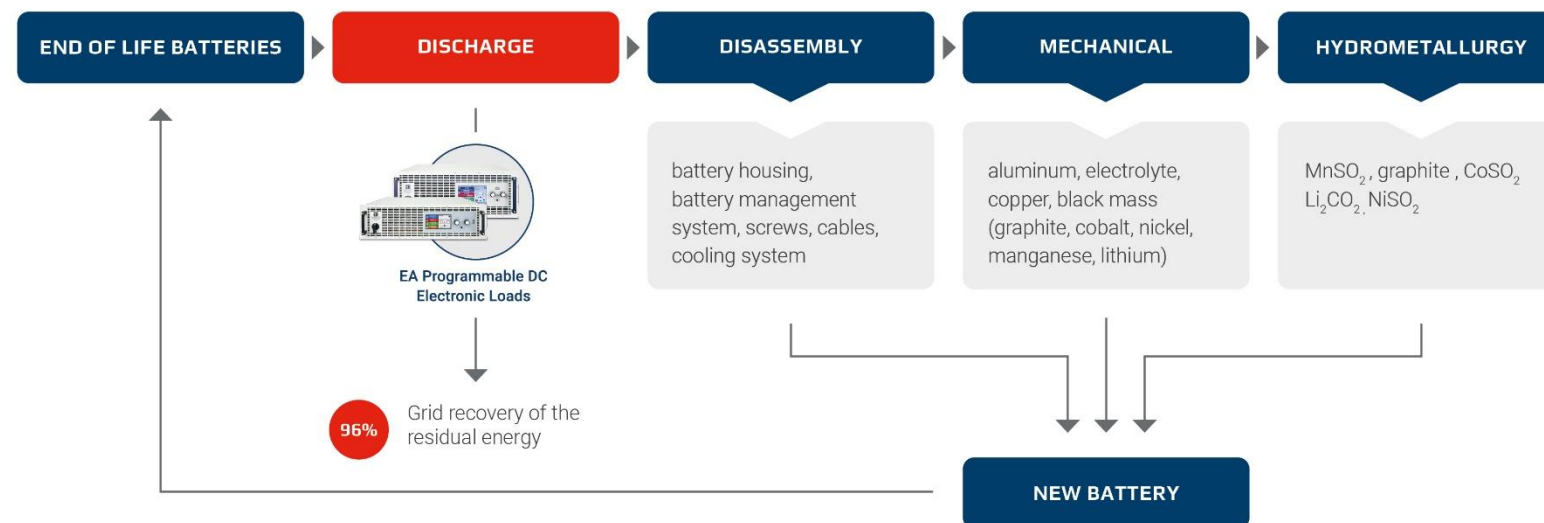
BATTERY RECYCLING

Precise battery discharge

Before the batteries are subjected to the actual recycling process, they must be fully discharged.

Disadvantages of conventional battery discharging

- The batteries or accumulators are not completely discharged in the process
- Batteries that are not fully discharged are dangerous (fire hazard)
- The residual energy is consumed needlessly instead of being returned to the power circuit
- The discharging process takes longer and is inefficient





Elektro-Automatik

THE SOLUTION

Electronic Loads with Electrical Mains Regeneration

Features

- TFT display with touchscreen
- Autoranging for In- and Output
- Integrated Interfaces: Ethernet, USB, Analog
- Plug'n play interface-slot for: CAN, CANopen, Ethercat, Profibus, Profinet, Modbus, RS232
- Intuitive operation on color HMI
- Battery & fuel cell simulation
- Integrated function generator
- Parallel switchable for systems with Master-Slave function
- EA Power Control user software
- EA-BS Battery Simulator software
- Air- and water-cooled variants

As single rack or scalable cabinet system

Technical Specifications:

- **19" inch case 3U**
with up to 1500V and 15kW
- **19" inch case 4U**
with up to 2000V and 30kW
- **Cabinet systems**
with up to 1.92MW





Elektro-Automatik

THE ADVANTAGES

of Electronic Loads with Electrical Mains Feedback

1

High efficiency and higher safety during discharge

The complete discharge of battery storage means more safety in the recycling process. EA Elektro-Automatik's electronic loads guarantee the complete discharge of batteries with a high discharge capacity.

2

Amortization through 96% power regeneration

EA Elektro-Automatik's regenerative electronic loads take the complete charge from the connected battery and convert it into AC voltage with an efficiency of up to 96% voltage. This is then fed back into the local power grid and reused, thus amortizing the purchase price via reduction of electricity costs.

3

Further economic value due to time saving

The time saved in discharging the energy storage units due to the high input power of up to 15kW in 3U enclosures or 30kW in 4U enclosures increases the cost effectiveness. In addition, the devices can be combined in high-performance control cabinet systems with total outputs of up to 1.92MW.

4

High flexibility in voltage and current available for test

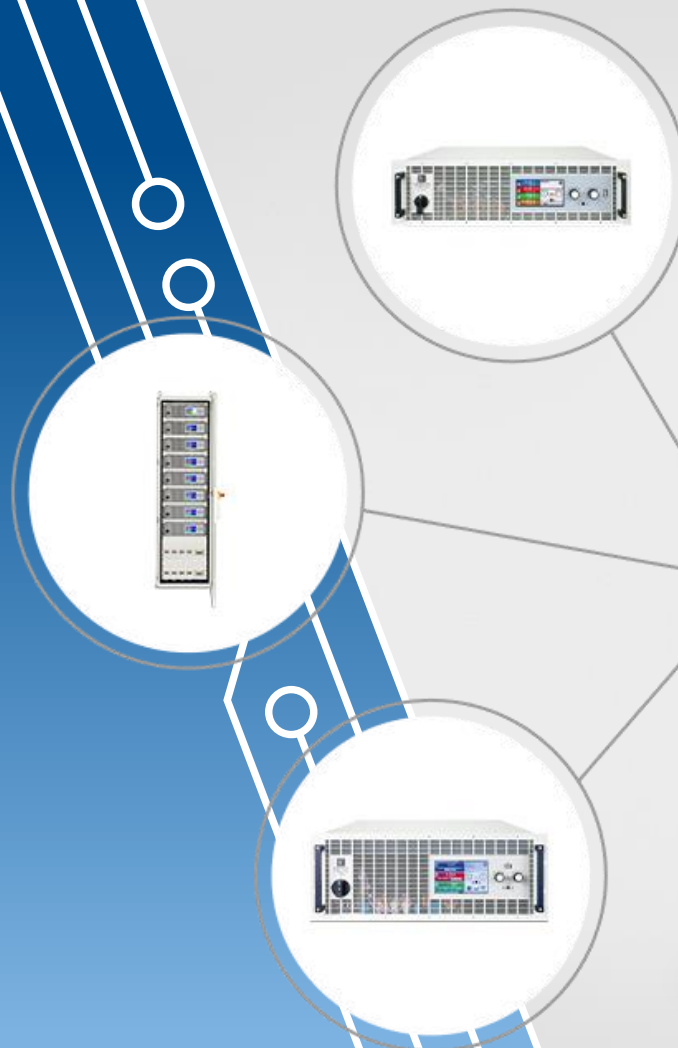
Versatile and flexible: Due to the true autoranging of the EA Elektro-Automatik device series, battery storage systems with different system voltages can be discharged with only one electronic load. For example, full power is available with one device for both a 400V and 800V system.

EVERYTHING UNDER CONTROL

With the EA Power Control Software



Elektro-Automatik





Elektro-Automatik

EA POWER CONTROL SOFTWARE

Our Efficiency Continues with the Control of Our products

The EA Power Control operating software allows convenient and precise control of EA products via Windows PC. This allows you to remotely control and monitor our DC power supplies and electronic loads from the comfort of your PC. With the optional Multi Control you can manage the settings of up to 20 EA devices simultaneously.

Advantages

- Remote control of up to 20 devices
- Additional functions such as “Sequencing/Logging”
- Function generator
- Automated remote maintenance + updates



POWER ELECTRONICS MADE IN GERMANY

With High Vertical Integration and State-of-the-art Technology



Elektro-Automatik

EA Elektro-Automatik is one of the pioneers and innovators worldwide in the field of electronic loads with electrical mains feedback (energy recovery). Based on decades of development expertise, the device series set the international standard in terms of performance, ease of use, durability and safety.



Elektro-Automatik

WHAT'S NEXT

NEW TOOLS FOR SALES SUPPORT

Marketing Meeting 4/8/21



WEBSITE

New Marketing Tools Coming



Elektro-Automatik

Effective Website Enhancements from AMERICAS New Website

■ Product Selector

- Provide product search tool with customer selected filter options to narrow product
- Give Product Selector a “home page” button and top-level navigation link
- Always provide a result. Request for Quote or other “call to action” available on result

■ On-Site Calculators

- ROI payback calculator for PSB / ELR energy recovery back to electrical mains

■ Live Online Demo Scheduler

- Accuity scheduler for online demo meeting setting

RMA Request

Service Request

Online Demo Request

A screenshot of the 'Live Online Product Demo' scheduler interface. The header includes the Elektro-Automatik logo and the text 'Programmable DC Power Supplies and Electronic Loads' and 'Autoranging, Bidirectional & Regenerative'. The navigation bar has three tabs: 'Choose Appointment', 'Your Info', and 'Confirmation'. The main content area shows instructions for scheduling a demo, including a calendar for April 2021. The calendar is a 7x5 grid with days of the week (S, M, T, W, Th, F, S) and dates (1-30). The date 15 is highlighted. The interface also includes a dropdown menu for the month and a confirmation message: 'Your demo appointment will be confirmed and we will follow up with you to discuss the specifics of your demonstration.'



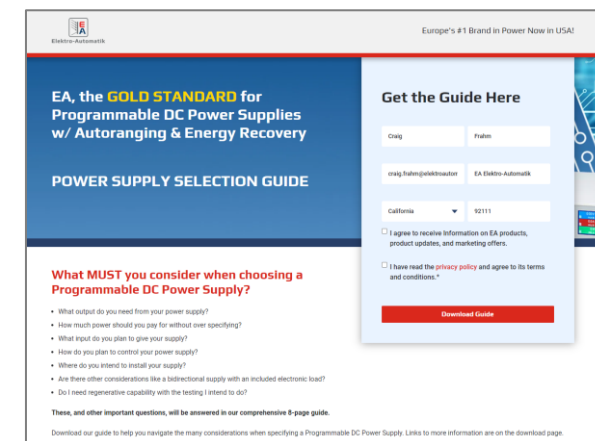
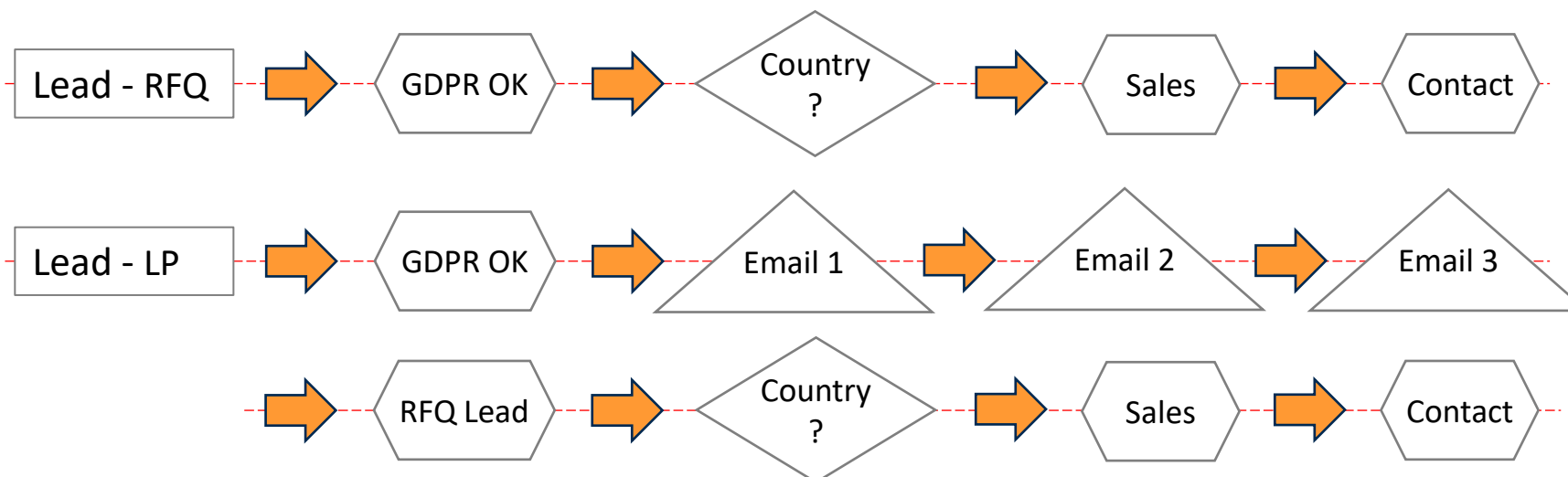
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LEAD MANAGEMENT

Hubspot Tool for Digital Marketing Management

Implementing Advanced Lead Generation & Nurturing Platform

- Hubspot is the #1 tool for automated digital marketing management
- Efficient automated lead routing through smart, configurable workflows



MARKETING – MORE TO COME

2021 Upcoming Projects and Support Materials



Elektro-Automatik

Next up:

- Corporate Style Guide – branding and design guidelines
- Updated and Improved Sales Presentations
- Fuel Cell marketing campaign
- Marketing and Sales collateral promoting New Products when available.
- Professional EA Elektro-Automatik Company Introduction movie
- ... and more!



Elektro-Automatik

THANK YOU

For your time and attention!

Q & A

