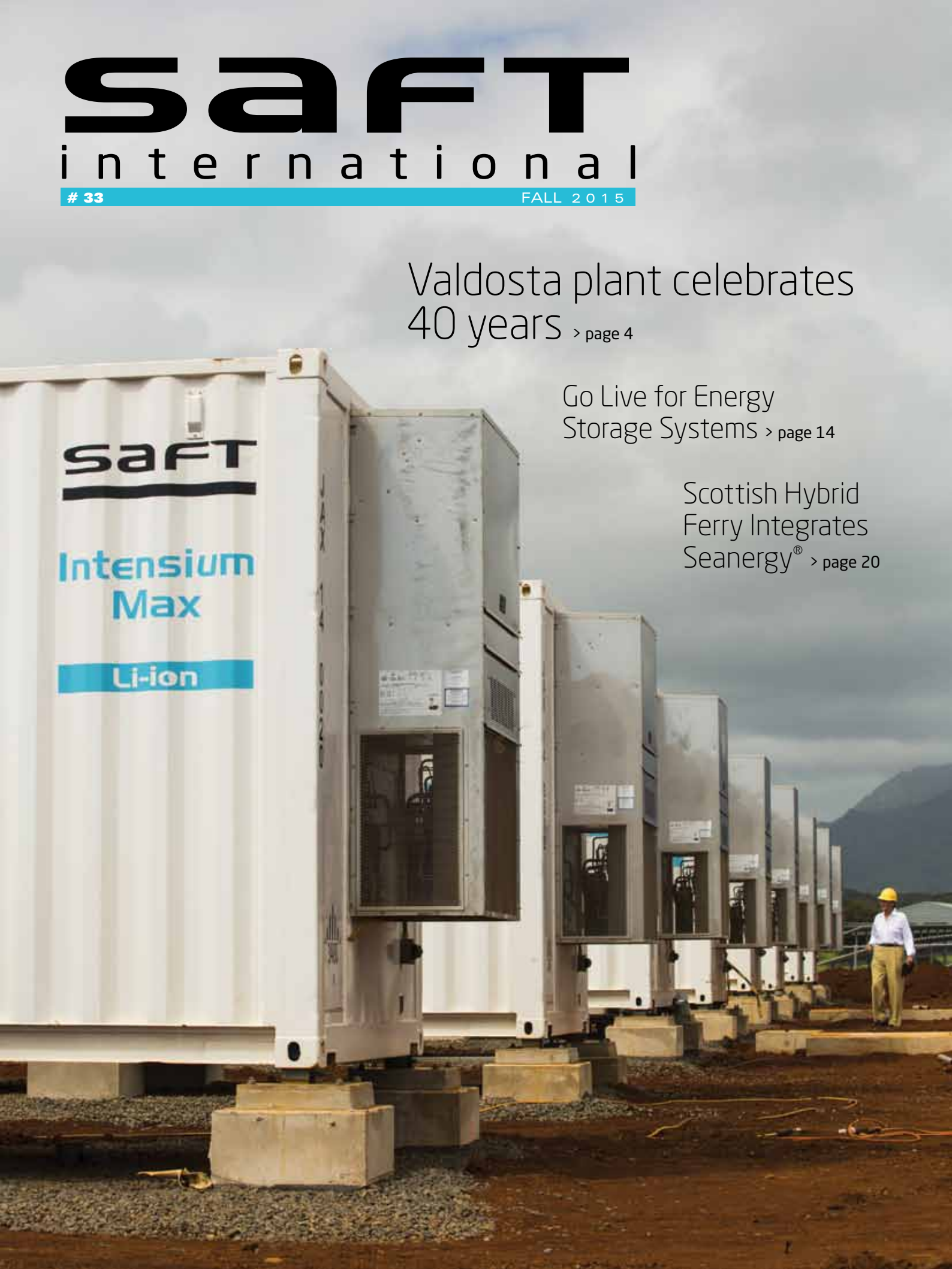
saft international

33 FALL 2015



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Ghislain Lescuyer
Chairman of the
Management Board
Saft Groupe SA

After my first six months with Saft, I am pleased to be able to share with you some of the market successes where our technologies are continuing to prove that high-performance, long-life battery systems contribute to the success of our customers' infrastructure projects around the world.

This summer, we were awarded over €20 million in additional orders from Reliance Jio for lithium-ion battery systems for telecommunication networks across India where they have to perform reliably in difficult climatic conditions. This technology brings many benefits to customers who need light-weight, powerful battery systems.

An exciting and innovative project that Saft has just won is the Brightsource Energy project. Small Saft lithium-ion batteries power heliostats and optical concentrating devices for the new technology Ashalim solar-thermal power station in the Israeli desert.

Long-term customer relationships remain a key factor in our Group's success, as the recent renewal of our long term agreement with the Boeing company illustrates. This second 5-year agreement enables Saft to continue to provide Li-ion satellite batteries specifically designed and engineered to meet the rigorous demands of the space environment.

A market which has contributed to Saft's success for many decades is the stationary back-up power market, where demanding and sometimes hostile environments require long-life and robust battery systems to protect critical installations and investment. Saft has had several major successes with nickel battery solutions in this field this year, including high-profile projects such as Zadco's Abu Dhabi off-shore oil field and the off-grid solar powered systems for Qatar's Dukhan oil field.

Saft's international footprint and impressive customer base, the worldwide recognition for our know-how, quality and technologies, and our strong market positions have given us the market leadership we have today. Our objective is to continuously improve in order to maintain our position, as well as anticipating the future needs of our customers through our investment in innovation and in our people. I look forward to meeting more and more of you in the coming months as I continue to visit Saft's customers and partners.

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40 years of success at

On April 20th, 2015, employees at Saft America's facility in Valdosta, Georgia, USA, celebrated 40 years of battery production at the site. The site is home to production lines for nickel-based batteries for rail, aviation, telecom and industrial standby applications, as well as production of supercapacitors and a dedicated building to assemble Li-ion battery systems.

Major customers that are served from Valdosta include AT&T, Verizon, Aviall, Satair, Gulfstream, Bombardier and the US Government.

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Nersac celebrates milestone

Nersac manufactures Li-ion batteries for electric & hybrid vehicles as well as energy storage.

Saft's production facility in Nersac, France celebrated its 40th anniversary in 2014. After opening for business in 1974, it produced alkaline cells for many years (with a record of 110 million cells in one year) before taking on pack assembly in 2000.

A rapid series of changes saw the site transformed into an advanced manufacturing facility for Li-ion batteries for motive power in 2009. Around 90 people work at the site today, making electrodes for traditional cells and Li-ion batteries for electric and hybrid vehicles as well as energy storage.

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Valdosta

1975
the year Saft Valdosta opened

14 employees
have been working at Valdosta since 1975

257 employees
work at the facility today

25 years
Valdosta has been accepting spent batteries for recycling since 1990

Cockeysville steps up

The Cockeysville plant designs and manufactures both custom and standard off-the-shelf batteries for space and defense applications.

Saft's operational team at Cockeysville, Maryland, USA, has implemented a range of new measures to enhance efficiency and improve customer service. These include improving quality by eliminating small particles from production and upgrading testing facilities.

At the same time, engineers at the plant have been improving recent innovations. One example is pouch cells, which are usually used to trial new forms of electrode. Recent customer interest has led to greater focus on the design and production of the lithium-ion technology for new applications.

The team has also been working to further develop the Xcelion 6T™ battery system. Having already worked to industrialise the Xcelion 6T™, the team has now developed a 'universal specification' based on applications suggested by customers. The team is now working to increase production capabilities.

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Three awards for Saft

Customer service excellence

CSX Transportation, a major US rail operator, has recognised Saft in its annual awards. The awards were covered in Progressive Railroading magazine and recognised Saft for customer service excellence and partnership.

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Technology leadership

In May the Energy Storage Association (ESA) named Saft as winner of its Brad Roberts Outstanding Industry Achievement Award acknowledging the company's leading role in reliable and efficient energy storage.

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Top innovation

Spanish business magazine Actualidad Economica has named Saft Baterias as one of Spain's 100 most innovative companies for 2015 for the Intensium Home energy storage system.

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Tech 40 opportunity

Saft was selected to join Tech 40, a new European stock index launched in early May by Enternext, a subsidiary of the pan-European financing centre. Membership of the Tech40 demonstrates that a company is one of Europe's top listed companies operating in life sciences, eco-industries and TMT (Technology-Media-Telecom).

Bruno Dathis, Chief Financial Officer said: *"Being part of this European high-tech index and hub should enable us to increase the visibility of Saft and our innovative technologies."*

In June, Saft's CEO Ghislain Lescuyer attended the finals of the Volvo Ocean Race in Gothenburg, Sweden. Here he is with Volvo Bus President Håkan Agnevalls in front of Volvo's new electric bus.

UN Global Compact

Saft has reaffirmed its support for the UN Global Compact, in which it has participated since 2011. The Compact requires Saft to continually improve its performance against 10 principles in the areas of Human Rights, Labour, Environment and Anti-Corruption. Patrick de Metz, Saft's Environmental Affairs Director said:

"Participation in the UN Global Compact is a statement of our commitment to the highest standards of business practice".

Nicolas Hulot Foundation award

Saft customer Akuo Energy has gained international recognition when it was voted top in the Nicolas Hulot Foundation's "My Positive Impact" award in May 2015. The foundation, which promotes environmental sustainability, launched the awards this year to raise awareness of innovative solutions to combat climate change.

More than 75,000 members of the French public voted the Bardzour project as the top project. The "agri-energy" project integrates a 9 MWh Intensium® Max energy storage system from Saft with a 9 MWp photovoltaic installation on an agricultural site. The project also includes a social element as it is manned by prisoners who are introduced to beekeeping and farming.

Winning the award has helped both Akuo Energy and Saft build their reputations in the run up to the United Nations COP21 Conference on Climate Change, which will be held at the end of this year in Paris.

Eric Scotto, CEO of Akuo Energy said: "We are developing renewable energy plants in line with the development of the territory, environmentally, socially and economically. This can reduce the economic profitability in the short term. But in the long term, this way of conceiving the projects is more productive and creates more value for the community."

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Environmental partnership

Patrick de Metz, Saft's Corporate Environmental Affairs Director, tells Saft International about the steps Saft is taking to protect the environment in light of the upcoming COP21 to be held in Paris from Nov. 30-Dec. 11, 2015.

Why is environmental responsibility important to Saft?

Saft provides the widest range of industrial batteries on the market and supplies batteries and products for a broad range of applications. We have taken the responsibility to understand and minimise the environmental impact in every phase of our products' lifecycle. Not only is this the right thing to do but this approach also helps our customers reduce their own environmental footprint.

Our goal is to fully comply with — and even exceed — regulations, laws, directives and voluntary targets concerning health, safety, the environment and ethical standards.

How does Saft's environmental policy support its customers?

Our environmental policy helps our customers in all sectors develop innovative solutions that protect the environment. A recent example from the rail industry is the Li-ion batteries that we have introduced to capture, store and reuse braking energy on board trains.

In aviation, we have introduced a four-point plan to reduce the industry's carbon footprint through improved battery performance, extended lifetime, reduced weight and end of life recycling.

Another example is the Saft batteries in electricity meters that are replaced after 12 to 16 years of use, reducing the amount of waste generated. We are also proud to share the value of Saft energy storage systems that help harness solar and wind power and contribute to reducing CO2 emissions.

How does Saft deliver its policy?

I coordinate a dedicated team of professionals who monitor and minimise the environmental impact of our products throughout their life cycle. This team includes Environmental Managers at all our sites worldwide. They ensure a low environmental footprint at our facilities and compliance or exceedance with local regulations.

I also have overall responsibility for our Life Cycle Assessment (LCA) activity, whose goal is to measure and reduce the environmental footprint of our products.

Last but not least, I also implement the infrastructure to allow end users of our batteries to have an easy to use, environmentally sound end of life solution for our products when they have reached their end of life.

What happens at the end of a battery's life?

Since the 1990s we have been collecting and recycling spent industrial batteries through a network of "bring back" points spanning over 30 countries on five continents, and a few fully permitted battery recyclers with whom we have partnerships. Our end of life policy goes beyond the relevant European legislation. We ensure responsible recycling and reuse of as many components and materials as possible.

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Delivered! 300,000th aviation battery

Saft has celebrated the 300,000th nickel-based battery that it has supplied to the aviation sector since it first provided an aircraft battery to the Aeropostale Company in 1932. Today Saft batteries are on board two thirds of civil and military aircraft.

Saft supplies batteries for more than 100 types of military aircraft, 100 different helicopters and 200 commercial, regional and business aircraft, including the Boeing 747, Airbus A320, F-16, Mirage and Rafale to name a few.

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Irkut MC-21

Ghislain Lescuyer, Saft's CEO, signs a contract with Bruno Vazzoler and Eric Cotelle from Zodiac Aerospace to supply batteries for Russia's Irkut MC21 aircraft.

2016
planned first flight of the Irkut MC-21

257
orders booked for the MC-21

8,000
likely number of batteries over 20 years

Saft took the opportunity at the Paris Air Show in June to sign a new contract with Zodiac Aero Electric for batteries that will be fitted onto Russian Irkut MC-21 passenger jets.

The MC-21 is a strategically important project for Russia and is a significant part in the country's aviation industry. Irkut is developing the medium-range jet to be best in class with high levels of fuel efficiency, low weight, low operating costs and passenger comfort.

Zodiac is delivering the aircraft's primary power distribution system and Saft will supply three of its ULM® (Ultra Low Maintenance) batteries per aircraft.

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Reducing maintenance for Bombardier Q400

A new model of ULM® (Ultra Low Maintenance) battery will reduce maintenance requirements on board Bombardier Q400 NextGen turboprop aircraft.

The previous battery on board the Q400 required maintenance every 200 hours and the new Saft 435CH6 ULM® battery has extended this to 1,800 hours. *"Through reducing the maintenance frequency, Saft is enabling OEMs to pass along significant cost savings to their customers worldwide."* said John Adeimy, Vice President of Sales and Marketing for the Industrial Battery Group in North America.

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Li-ion aviation training launched

A two-day training course has been launched for aircraft technicians responsible for the operation of Saft's new generation of Li-ion aviation batteries. The course provides the skills and knowledge to ensure the optimum performance, reliability and long life of the new generation of aviation batteries.

The first course was held in summer 2015 at Aerocampus Aquitaine, the centre of aviation operations and maintenance training in Bordeaux. Attendees included technicians from the launch airlines of the Airbus A350 XWB, which is fitted with four Saft 450VH1 Li-ion batteries.

"We are pleased to launch this new Saft course that will provide aviation technicians with the highest level of practical knowledge on Li-ion aviation technology" said Laurent Bressoud, Product & Support Manager for Saft's aviation batteries. *"Our aim is to help operators of the Airbus A350 XWB and other future aircraft equipped with Saft Li-ion battery systems to enjoy a lifetime of safer, reliable and trouble-free operations."*

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Is there life on Mars?

- **1,142 Wh** capacity of battery on ExoMars Rover
- **- 40°C to + 85°C** temperature fluctuation
- **2018** planned launch date

Saft is supplying a Li-ion battery system for the ExoMars Rover vehicle that will search for Martian life. The Rover is being developed by Airbus Defence and Space for the ExoMars Programme, run jointly by the European Space Agency (ESA) and Roscosmos, the Russian Federal Space Agency with Thales Alenia Italia Spa as the prime contractor.

Once on Mars, the Rover will work day and night to capture and analyse samples in its search for evidence of current or extinct bacteria. It will need power for movement, drilling into the surface and analysis. Power will be provided by solar panels twinned with Saft's battery.

The application is the first use for Saft's new MP 176065 Integration™ xtd cells. They are compact and lightweight and have the crucial advantage of high performance in spite of extreme temperature fluctuations.

"Saft pioneered the spaceflight application of Li-ion batteries and we are delighted to be working with Airbus Defence and Space Ltd as Li-ion technology takes the next step to planetary exploration that requires specific battery performances such as the temperature range capability," said Yannick Borthomieu, Satellite and Launcher Battery Product Manager.

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JSC ISS extends framework

Russia's largest commercial telecom satellite firm has extended its framework contract with Saft for five years. Under the contract Saft supplies VES 180 Li-ion battery systems for Express GEO (geostationary earth orbit) satellites that ensure uninterrupted service during the satellites' two annual eclipse periods per year over 18 years.

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Introducing the Xcelion 6T™

1 million *military vehicles in operation worldwide*

60 Ah *capacity of Xcelion 6T™*

2 times *the power of an equivalent lead-acid battery*

A new Li-ion battery launched in late April has huge potential for military vehicles. The Xcelion 6T™ is designed for starting, lighting and ignition (SLI) as well as silent watch.

This calls for a battery that can supply both a large surge of current as well as continuous steady discharge, even when vehicles are deployed in extremely cold climates.

The battery system is the result of a two-year development programme at Saft's facility in Cockeysville, Maryland, USA. The Xcelion 6T™ is a drop-in replacement for other 6T batteries for military vehicles.

The Xcelion 6T™ has many benefits over lead-acid, such as longer life, higher energy density and lower total cost of ownership. It will reduce logistical burdens to stow, transport and distribute replacement batteries. This translates to savings worth more than $200 million for a fleet of 20,000 vehicles over a 20 year life.

The battery has a NATO Stock Number and has completed all qualification tests, including the United Nations transportation certification.

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All aboard with lithium-ion

Saft launched the Ion-OnBoard® Regen battery system this year. The Li-ion system is targeted at a wide spectrum of hybrid and autonomous catenary-free traction projects that rely on the effective capture, storage and reuse of regenerative braking energy for efficient and reliable operation.

The Ion-OnBoard® Regen has been developed to meet the demand for energy storage capable of supporting regenerative traction systems. The modular battery system delivers high power and energy (in charge and discharge) combined with high cycling capability, and complies with major railway safety, electrical and mechanical standards.

"The autonomous on-board energy storage provided by our new Ion-OnBoard® concept opens up the potential for clean and efficient urban light rail systems to operate without overhead catenary lines. This preserves the city landscape, especially in historically important areas and reduces infrastructure costs. The effective reuse of regenerative braking energy contributes to further economic and environmental benefits. The solution helps busy cities to meet the challenges of urban life today and into the future", said François Linck, Saft's Marketing Manager for Rail.

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Siemens order for Qatar trams

In June 2015 Saft announced that it is supplying its Ion-OnBoard® Regen Li-ion battery systems to Siemens for the Doha Education City tram system in Qatar. Considered to be the world' most modern tram system, the system will use Saft Li-ion batteries on 10 of the 19 Avenio trams that Siemens is building for Qatar's capital city.

By combining rapid charging during the short stay at each tram stop with regenerative braking the trams will operate independently without a pantograph or overhead catenaries.

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11.5 km length of track

2016 Doha trams will enter service

€1 million value of replacement batteries on Alstom's Northern Line

Low temperature reliability for Alstom

Alstom has specified Saft MRX nickel-based backup batteries for 46 suburban commuter trains that will operate in Stockholm, Sweden. The new EMU (electric multiple unit) trains will be based on Alstom's Coradia Nordic X60 design. Reliability is particularly important for operator SL due to the high frequency of trains and Saft's batteries will supply reliable backup power even in Sweden's harsh winters, where temperatures can fall to -35°C.

While the conventional Coradia Nordic has two roof-mounted battery systems, the Stockholm trains will be fitted with three to support additional electrical loads on the modern service, including wifi and passenger sockets at every seat.

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Rail in the UK

The UK's railways are experiencing growing passenger numbers and in response the industry is gearing up to deliver new solutions. Saft exhibited at the Railtex exhibition in May to demonstrate its latest technologies and meet customers interested in trackside, on-board and Li-ion traction battery systems.

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Alstom orders like-for-like replacement

Saft's Colin Tremlett, Technical & Service Support Manager in Harlow, UK, with new batteries on board a Northern Line train.

Saft UK has won a contract worth more than €1 million to replace the time-served batteries on London's Northern Line metro trains. Under the contract Saft is replacing its own original batteries that have provided backup power for 106 trains since they entered service in 1998.

Matt Goff, Purchasing Manager for Alstom said: *"Alstom has a long term commitment to maintain the Northern Line rolling stock and awarded the contract to Saft because of its confidence in Saft's technology, competitive price, extended warranty and proven reliability."*

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Keeping tram-trains running in Sheffield, England

Vossloh Spain has turned to Saft to supply its MRX nickel-based batteries for a fleet of seven tram-trains for the city of Sheffield in England. The tram-trains will be dual voltage to run on routes for trams and trains that are supplied with 750 V DC and 25 kV AC respectively.

Saft Baterias in Spain supplied the batteries to Vossloh Spain's exact specifications in terms of performance, size and weight as well as compliance with rail standards.

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Venteea inaugurates ESS

In June, project partners Schneider Electric, ERDF and Saft inaugurated the largest battery system ever to be installed in mainland France.

2MW
power of Venteea's ESS

1.3 MWh
energy storage capacity at Venteea

The Intensium® Max is part of the Venteea project, which has the objective of supporting wind power generation and taking pressure off the grid. The project combines a Saft Intensium® Max battery system with Schneider's Energy Storage Box. The installation is on ERDF's distribution grid in the Aube region of Eastern France.

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Together they enable optimised communication with the grid and provision of multiple services depending on the actual situation and needs of grid operators, producers and users. For instance, the system can smooth variable wind generation, provide peak shaving in case of load or generation peaks or provide frequency and voltage regulation to ensure grid stability.

Alstom-Saft system goes live at EDF Concept Grid

An Alstom-Saft consortium has commissioned its smart battery energy storage system at EDF's Concept Grid Lab at Les Renardières near Paris. The system has been installed to enable EDF to move toward smarter grids by testing the battery's performance in the role of primary frequency regulation. Saft's Intensium® Max 20M has been installed alongside Alstom's MaxSine™ eStorage smart converter. Together they can deliver frequency regulation, which helps stabilize the grid and preventing blackouts. This is a more flexible and cost-effective solution than using power plants for frequency regulation.

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Mid-sized package for prosumers*

10 kWh
storage in Intensium® Home 10M

10 kW
power from Intensium® Home 10M

**Producers and consumers*

SolaireFlex drives competitiveness

Saft has joined forces with three other industry leaders to launch SolairefFlex innovation. The new platform aims to make solar photovoltaic (PV) energy cost competitive by giving electricity consumers the ability to store PV energy and sell it to the grid at times of peak demand.

Each of the four partners brings expertise that is combined in SolaireFlex innovation. Saft has combined its energy storage capabilities with demand response operator Energy Pool, renewable energy market operator Hydronext and control and electrical engineering from Schneider Electric.

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In June Saft announced the new Intensium® Home 10M energy storage system, which is designed for high-end residential and small commercial PV installations. It has been developed alongside KACO new energy GmbH, one of Germany's leading inverter brands.

Together the Intensium® Home 10M and KACO new energy's three-phase inverter create a package that is a perfect solution for home and commercial prosumers who want to increase their self-consumption.

Alternatively the package can operate as part of swarm-type schemes. Swarms offer the possibility of aggregating several decentralised energy storage installations to improve grid stability by helping balance supply and demand as well as ancillary services such as frequency control.

"Saft is a leader in Li-ion energy storage while KACO new energy is a top 10 inverter brand worldwide. Together we form a strong partnership that provides customers with a total package solution fully validated by testing in real homes. This approach smooths the way to delivering an effective, fast-track energy storage and management solution," said Volker Dietrich, Director of Energy Systems Technology Division, KACO new energy.

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Backing up Bangladeshi growth

A major extension of a power plant in the city of Khulna, Bangladesh, will feature backup batteries from Saft.

Contractor Shanghai Electric Group Company Ltd ordered the nickel-based batteries to ensure continuous, uninterrupted operation of critical safety and control systems. Saft has delivered two large systems, each built up from 175 individual SBLE700 cells.

The scheme is part of Bangladesh's 'electricity for all' drive to increase its national power generating capacity from 10.6 GW to 39 GW by 2030. The additional capacity will help underpin economic growth.

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Block battery range extended

In March Saft launched three new improvements to its market leading nickel-based Block battery range. The range is made up of the SBLE, SBM and SBH ranges with low, medium and high discharge rate characteristics for stationary backup applications.

First, the range has been extended to a total of 181 capacity steps, meaning it's now easier to size a stationary battery more closely to the exact requirements. Second, changes to the design mean that topping-up operations are halved leading to lower maintenance costs.

And lastly, improved rechargeability has been introduced for faster recharge times. These three improvements deliver end users with higher levels of system reliability, continuity and value.

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US industrial first for Intensium® Flex

Backup battery system supplier Crim Sales & Engineering has placed an order with Saft on behalf of a major US utility. Saft has delivered nearly 30 Intensium® Flex systems that provide backup power to critical process controls at power stations in the southeastern United States.

The order is notable as it was Saft's first for Intensium® Flex for industrial standby in the US. The systems provide increased efficiency by decreasing installation, start-up and operating costs as well as minimizing maintenance.

"The agreement with Crim Sales & Engineering highlights a continued demand for Saft's Intensium® Flex technology as a reliable and efficient solution for utility customers. The Saft Intensium® Flex solution provides a system with 3X the energy density requiring 1/3 the space allowing the critical scrubbers to continue operating for longer periods than traditional battery technology," said John Adeimy, Vice President Sales & Marketing, Saft America, Inc.

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3 times
the energy in one third of the footprint

15 kWh
storage capacity of each system

30 *battery systems supplied*

Autonomy for mountain lodge in the Alps

Saft batteries have been installed at Hörnlihütte, one of the highest mountain lodges in the Swiss Alps.

The lodge, at the foot of the north-eastern ridge of the Matterhorn, has been popular with hikers and climbers since around 1880 and has been modernised to provide greater levels of comfort, safety, hygiene and sustainability.

Under a contract with system integrator Elektrizitätswerk Zermatt, Saft provided a Sunica.plus battery system that is now in operation as part of a hybrid smart grid, which integrates a diesel generator, photovoltaic panels and battery system. By integrating solar PV power and using the battery as an energy buffer, the lodge can reduce genset running time while operating at peak efficiency, minimizing fuel consumption and maintenance costs.

"This iconic installation highlights the capabilities of the Sunica.plus battery range to deliver reliable off-grid back-up power," said Holger Schuh, Managing Director, Saft Batterien GmbH. *"Our nickel-based batteries are able to operate reliably in extremely low temperatures, with erratic charging patterns."*

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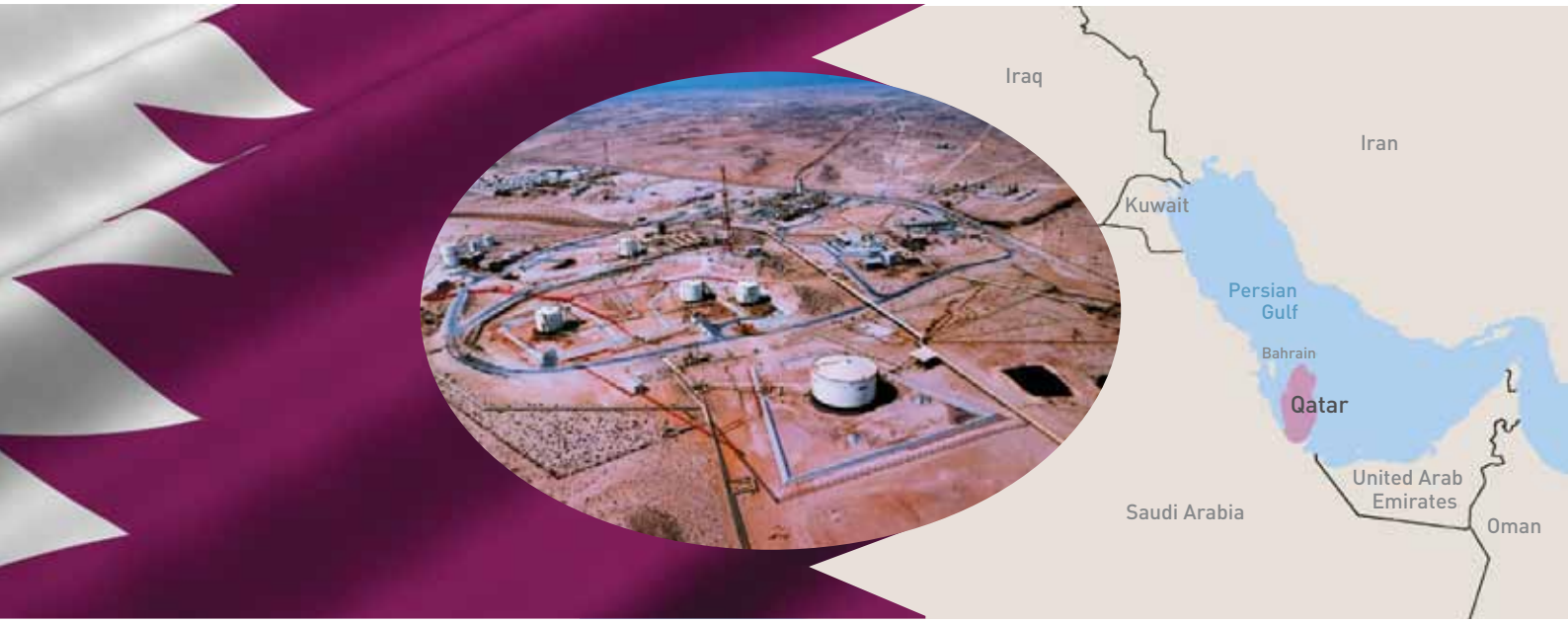
▲ 45 kW
Hörnlihütte's peak consumption

▲ 15-year
lifetime for Sunica.plus

▲ 5,490 Ah
total storage capacity of battery system

Integrating solar for Kentz in Qatar

Saft is fulfilling an order worth more than $10 million from Kentz, the global engineering solutions provider for its nickel-based Sunica plus batteries. The batteries will be deployed at oil wells across Qatar Petroleum's Dukhan oilfield.



Kentz, a member of the SNC-Lavalin Group, is delivering a $190 million contract to provide a dedicated Supervisory Control and Data Acquisition (SCADA) network infrastructure to monitor the 775 wellheads in the Dukhan Oilfield as well as prevent external corrosion damage to the oilfield's well casings by an impressed current cathodic protection (ICCP) system.

The systems will be powered by solar photovoltaic panels working in combination with the Sunica.plus batteries to provide the essential energy storage and backup power to ensure their total continuity of operation.

"Thousands of Saft Sunica.plus batteries are currently deployed at off-grid solar powered sites around the world, where they have demonstrated unrivalled performance and long-life. Kentz's decision to select them for this very prestigious project for Qatar Petroleum's Dukhan oilfield is further confirmation that Sunica.plus is the ideal choice for remote, hard to access installations where absolute reliability is essential and routine maintenance is time-consuming and expensive," said Xavier Delacroix, General Manager of Saft's Industrial Battery Group Division.

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-20°C to +50°C
operating temperature range of Sunica.plus

40,000
Sunica.plus batteries to serve Dukhan

775 wellheads
to benefitw

Reinforcing 4G/LTE in India

Building on a number of orders placed since 2013, Saft has won several additional orders for Li-ion battery systems from Reliance Jio, India's only national 4G/LTE (Long Term Evolution) network operator.

These new orders, worth over €20 million are for Evolion® Li-ion battery systems that will be installed at Base Transceiver Station (BTS) sites across India to support India's ongoing 4G/LTE roll-out programme. The new battery systems will increase the backup capacity of existing Reliance Jio sites in response to growth in telecom traffic.

Since 2013, Reliance Jio has awarded Saft several multi-million Euro orders for Li-ion telecom solutions. The Evolion® battery systems will provide backup power to ensure total continuity of the mobile network, with exceptional reliability and long service life even in extreme temperatures.

The Evolion® battery systems are manufactured at Saft's specialised Li-ion facility in Jacksonville, Florida, USA, and are supported by the Amco-Saft Ltd factory in Bangalore, India.

"These latest major orders for Reliance Jio confirm that our Evolion® Li-ion battery concept is now the technology of choice for demanding telecom backup in outdoor applications. They deliver a powerful combination of reliability and long life, minimal maintenance and ease of transportation, handling and installation that is proven to optimize the total cost of ownership of BTS infrastructure," said Xavier Delacroix, General Manager of Saft's Industrial Battery Group.

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16,000 sites
across India

-40°C to +75°C
Evolion's operating range

€20m
total value of latest orders

Seanergy® to power Scottish ferry

Two of Saft's Seanergy® systems will be at the heart of the power system on board the 'Hybrid III', a new diesel-electric hybrid RORO (Roll-On Roll-Off) ferry for Scotland's sea crossing routes around the Clyde estuary and Hebrides.

When it enters service in autumn 2016 it will be Scotland's third hybrid ferry and will have capacity for up to 150 passengers and 23 cars or two HGVs (Heavy Goods Vehicles). The new vessel is being funded by the Scottish Government to help meet targets for CO_2 emissions in the transport sector.

Saft is supplying the Li-ion battery systems to Imtech Marine, which is supplying the hybrid propulsion system. Batteries will be charged overnight in port and the vessel will be able to operate in battery mode and in hybrid mode in combination with a diesel generator.

"This contract for a very high profile ferry service in Scotland is further confirmation that Saft's Li-ion technology offers a reliable, high performance and fully commercialized solution for hybrid propulsion on even the largest sea-going vessels." said Jayesh Vir, Saft's Key Account Manager for the Marine Segment.

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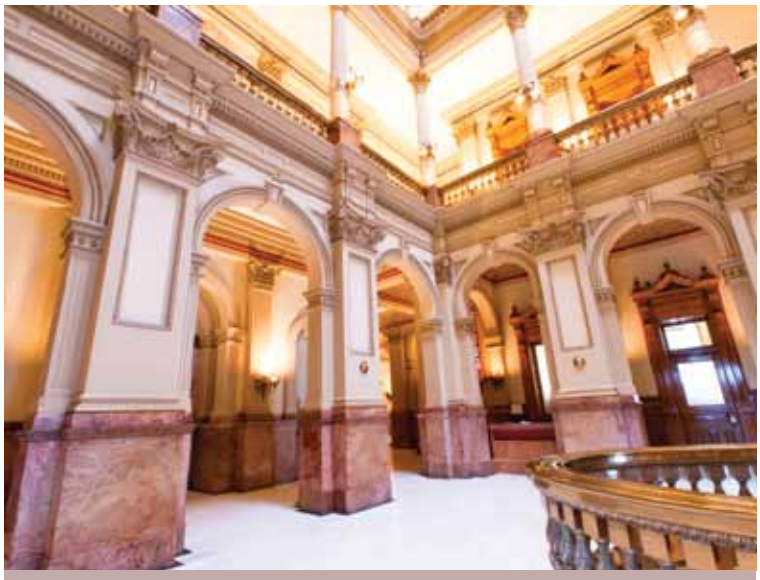
20% fuel and CO2 savings compared with a conventional vessel

800 kWh total energy storage capacity

9 knots – service speed of the Hybrid III

Long life for wireless fire sensors

Saft is supplying primary lithium batteries to Eurofyre, a UK specialist manufacturer of fire detection and alarm equipment. The lithium-thionyl chloride (Li-SOCl2) batteries will provide up to three years of reliable autonomous power for the company's 'Wi-Fyre' range of wireless detectors and sounders.



3 years	3.6	2.6 Ah
reliable life	voltage of LS cells	capacity of AA sized LS cell

The Wi-Fyre range enables wireless devices to co-exist seamlessly with hard-wired fire alarm systems, regardless of the type, age or technology of the existing system. This means that areas that are inaccessible or difficult to cable can be protected with minimal disruption and quick installation.

Hybrid systems with wireless and hard-wired sensors is especially useful when refurbishing or expanding premises, and in architecturally sensitive buildings that need to be treated sympathetically.

Eurofyre selected Saft as its sole supplier of primary lithium batteries because of their long life and high reliability. Saft is supplying cells from its LS range, which are designed for base currents of a few micro amps with periodic pulses of up to 150A.

"We are especially pleased to have been chosen by Eurofyre for its innovative wireless fire detection and alarm systems," said Thomas Alcide, General Manager of Saft's Specialty Battery Group. *"We see these kinds of applications for wireless sensor networks as a growth area, with huge potential."*

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Intrinsic safety for industrial monitoring

Saft is supplying explosion proof cells to radiation safety specialist Mirion Technologies, which manufactures devices to measure and monitor radiation in extreme industrial environments to ensure workforce safety.

The MP Integration™ batteries provide power to Mirion Technologies' AtexP™ -Fibre. It is a handheld wireless probe for detection of radiological contamination in industrial environments

AtexP™ -Fibre has been fitted with Saft's intrinsically safe rechargeable Li-ion batteries, which will provide around 14 hours of continuous operation in harsh industrial applications. As part of a handheld device, the cells must be lightweight, shock resistant and deliver intrinsically safe and reliable high performance.

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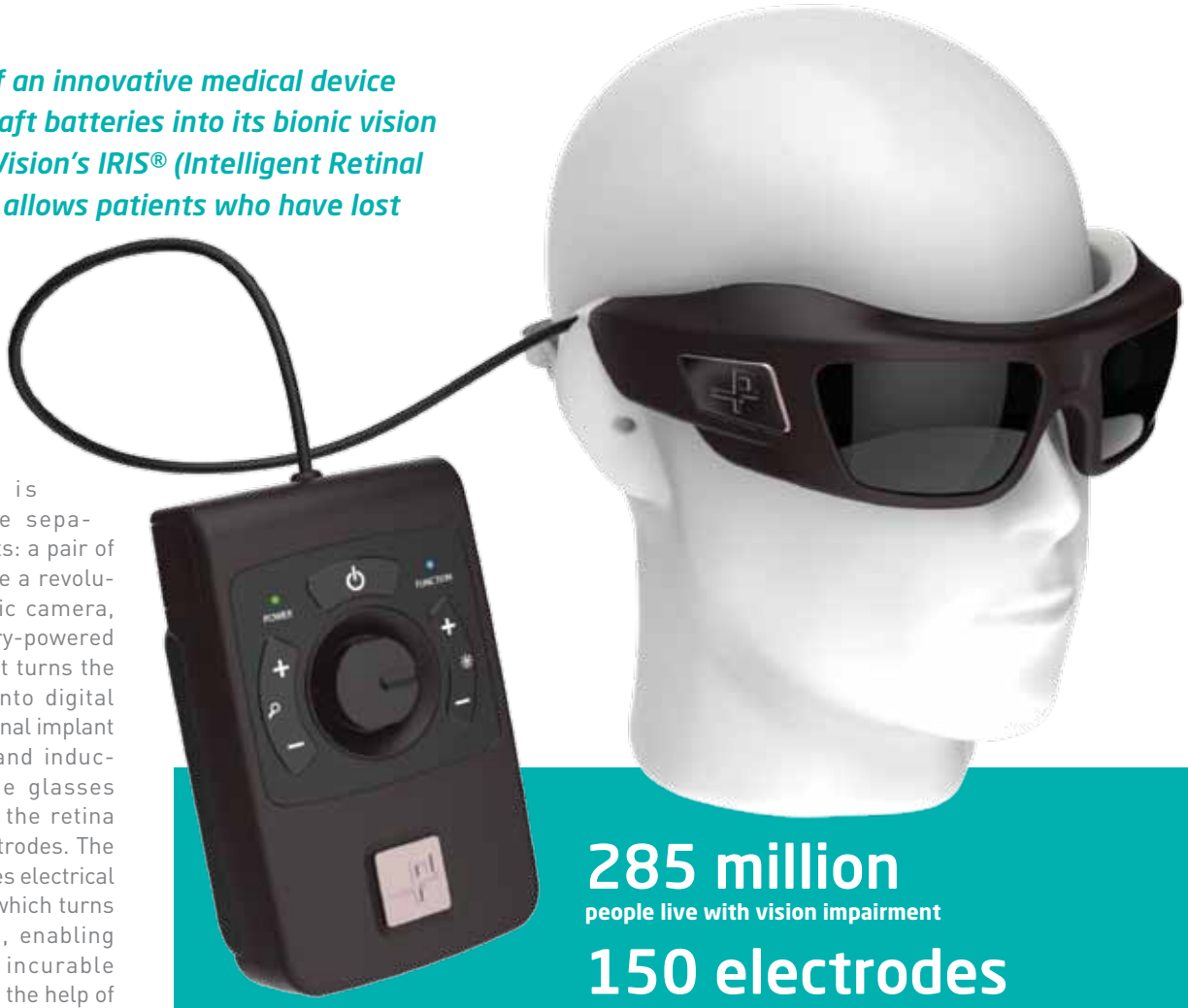
Bionic vision system

The developer of an innovative medical device has integrated Saft batteries into its bionic vision system. Pixium Vision's IRIS® (Intelligent Retinal Implant System) allows patients who have lost their sight to lead more independent lives.



285 million
people live with vision impairment

150 electrodes
in the IRIS® activate the retina

The system is made of three separate components: a pair of glasses that integrate a revolutionary neuromorphic camera, the Saft Li-ion battery-powered pocket computer that turns the camera's pictures into digital data signals and a retinal implant that receives data and inductive power from the glasses and which activates the retina through 150 tiny electrodes. The optic nerve then carries electrical signals to the brain, which turns them into an image, enabling people who suffer incurable vision loss to see with the help of the technology.

IRIS® is designed to help people overcome vision loss from retinitis pigmentosa, usher syndrome, cone-rod dystrophy and macular degeneration, all of which are characterised by the loss of light-sensitive retinal cells at the back of the eyeball.

Saft's contribution to IRIS® is its expertise in the design, development and industrialisation of complex, miniaturized Li-ion battery systems. As well as qualifying the single cell performance, Saft is assembling the battery systems by combining the individual cells with the complex electronics that are essential to achieve high levels of performance and reliability over a long life.

"The Li-ion battery system is critical to the success of IRIS, not only in providing reliable autonomous power, but also in helping to minimise the size and weight of the overall system to make it as easy and comfortable to use as possible," said Ben Helminem, Director of Marketing and Strategic Development at Saft's Specialty Battery Group.

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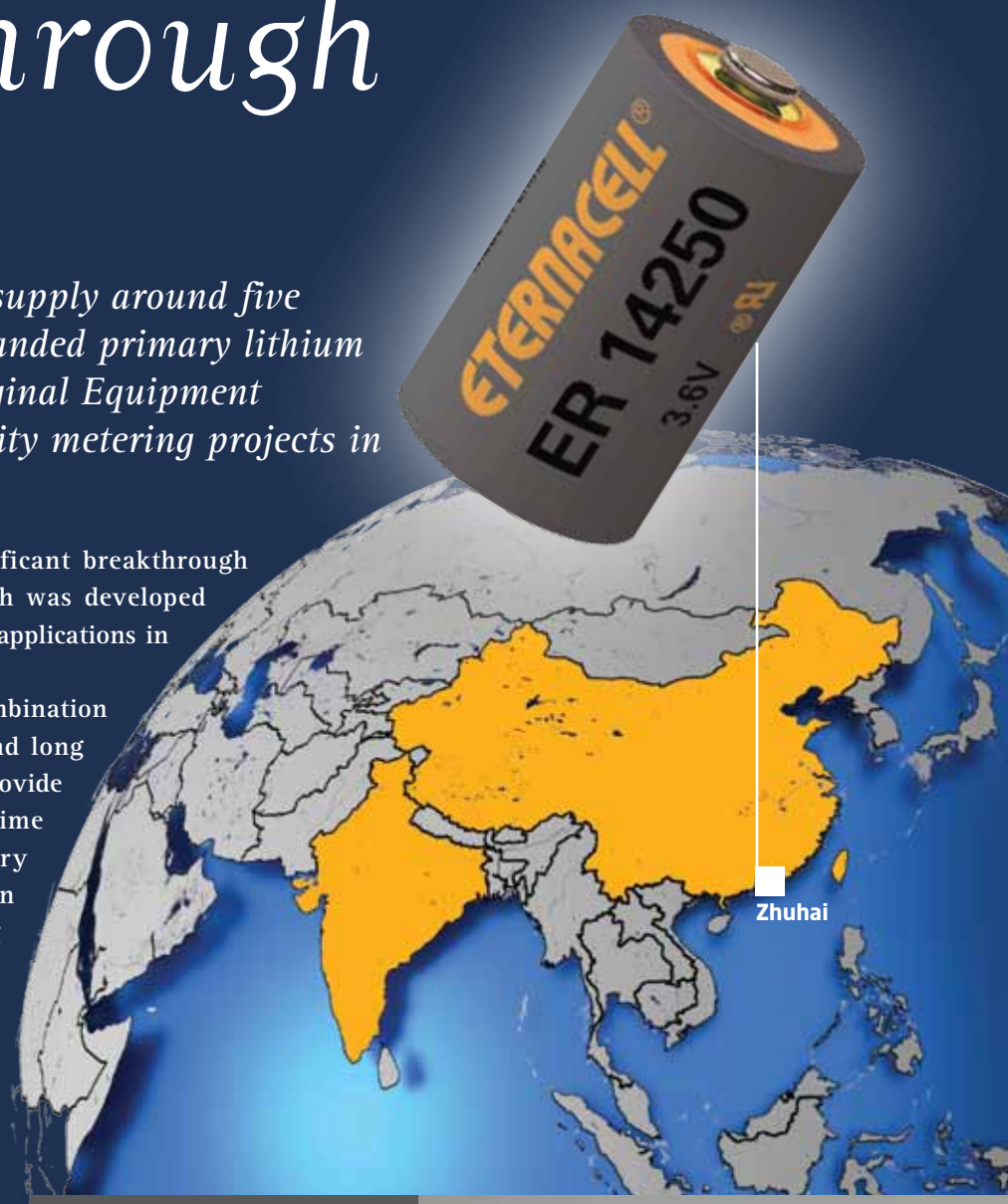
IRIS® helps people overcome vision loss

Breakthrough in Asia

Saft has won contracts to supply around five million of its Eternacell branded primary lithium cells to leading OEMs (Original Equipment Manufacturers) for electricity metering projects in China, India and Taiwan.



The contracts represent a significant breakthrough for the Eternacell brand, which was developed specifically for utility metering applications in emerging economies.

Eternacell cells offer a unique combination of value for money, performance and long life. Saft has optimised the cells to provide a life of 10+ years to power real-time microprocessor clock and memory backup functions for the new generation of electricity meters in emerging economies.

For these latest contracts, Saft is supplying Eternacell ER 14250 cells, a ½ AA format. The cells are manufactured at Saft's Zhuhai facility in China to exacting quality standards.

"We are delighted to have made this significant breakthrough for the Eternacell brand in Asia. These major contracts confirm the Eternacell design as the perfect choice for OEMs targeting the specific needs of emerging economies, thanks to competitive pricing allied to our emphasis on long life and reliable field performance that draws on Saft's extensive metering expertise" said Thomas Alcide, General Manager of Saft's Specialty Battery Group.

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5 million
Eternacell cells ordered

45%
Saft's market share for metering

10+ years
of power for electricity meters

2015-2016 events

Saft will be exhibiting at a wide range of exhibitions, conferences and trade shows. Here are just a few of the events where you can meet and discuss with our experts in the coming months.

1 MATELEC
Oct 23-26; Barcelona, Spain

2 Gas & Heating
Oct. 28-30; Zhenzhou, China

3 European Utility Week
Nov. 3-5; Vienna, Austria

4 Dubai Airshow
Nov. 08-12; Dubai, UAE

5 Rail Metro China
Nov. 10-12; Beijing, China

6 Negocios Nos Trilhos
Nov. 10-12; Sao Paulo, Brazil

7 MEDICA
Nov. 16-19; Dusseldorf, Germany

8 NBAA
Nov. 17-19; Las Vegas, NV

9 COP 21
Nov. 30-Dec 11, Paris, France

10 International Workboat
Dec. 1-3; New Orleans, NV

11 Power-Gen
Dec. 8-12; Las Vegas, NV

12 Electric Hybrid & Marine World Expo
Jan. 11-13; Ft. Lauderdale, FL

13 Elecrama
Feb. 13-17; Bangalore, India

14 GSMA
Feb. 22-25; Barcelona, Spain

15 Singapore Airshow
Feb. 16-21, Singapore

16 MEE
March 1-3; Dubai, UAE

17 Battery Japan
2-4 March 2016, Tokyo

SAFT