

## The power of Innovation

Erik is one of many experts who plays a role in the Eltek story. Open up to learn who we are, what we do and where we are going

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#### **EXPERIENCE THE POWER.**

The world needs more energy, greener and safer, that can be used more efficiently. Eltek's contribution is to develop first-class power systems for industrial purposes.

For more than four decades, we have been committed to pushing the technological frontiers of power conversion forward, to reduce the cost and environmental footprint of energy usage, and to reduce the cost of ownership of power equipment.





## A few examples of what we do:



#### **Mind-blowing** power in the wind

Offshore wind parks are part of tomorrow's energy infrastructure. The environment is harsh with strong winds and rough weather conditions. For Siemens and the Hywind Scotland Park project we deliver a modular 6kVA UPS solution, based on the Rectiverter 3-port power conversion module. It is placed in the wind turbine, powering telecom equipment, emergency lights and other critical DC and AC loads.

#### **Power Utilities**



#### **Remote Power for VDSL Broadband**

Since 2014, more than 1,200 Central Offices and 17,000 DSLAMs have been equipped with Eltek equipment in the roll-out of VDSL broadband in Western Europe. At the central office end, Flatpack2 DC/DC converter systems step up the 48 or 60Vdc central office voltage to a 400Vdc remote voltage. This 400Vdc is fed into ground cables in parallel to the fiber cables for the VDSL signal. At the DSLAM end, Eltek DC/DC converter systems regulate the 400Vdc remote voltage down to 48Vdc to feed the VDSL equipment - a solution that significantly reduces both OPEX and CAPEX for the customer.

#### Railway & Metro



#### Safer trains in **Australia**

Around the world, updating train-signaling systems is an essential element in improving train travel safety. In Australia, we worked with Queensland Rail on a project to replace 40-year-old Ferro resonant power technology at 20 sites, with a state-of-the-art UPS solution. This will significantly improve the reliability of the train signaling systems, across the 7,000 km track network. The Eltek UPS system is scalable and reduces energy loss by 80%, reducing the carbon footprint significantly.



#### The inventor of HE

Since changing the DC power market with the introduction of HE in 2008, more than 2.5 million HE modules have been installed in the field. Compared to the industry standard when launched, our modules have saved operators for more than 500 MUSD by reducing their electricity bills (as of Oct. 2016). In addition, we have contributed to a substantial reduction of carbon footprint.



#### **Reaping the benefit** of remote power

Central energy storage and backup, distribution to end equipment via 380Vdc. One operator uses this concept to power Remote Radio Units (RRU's) on 25 sites. making it possible to place antennas optimally, and thus reduce installation cost and service significantly.

#### Telecom

- Established market and technology



#### Solar power in the Arctic

In an installation in Svalbard, merely 1.300 km from the North Pole, a solar power solution saves expensive fuel runs with helicopter. In addition to lowering CO2 emissions from freight it also reduces the need for diesel running time in a particularly fragile environment.

#### Data Center

- Providing complete power solutions
- Introducing modular and creative

#### **Marine & Offshore**



#### **Taking marine power** to the next level

The Central Power System (CPS) is a new marine power concept. It provides higher reliability, better servicability and a significantly lower total cost of ownership. This is the future power architecture for smooth sailing under all conditions.



#### **3-in-1 functionality:** the Rectiverter

Introducing the world's first 3-port bidirectional power conversion module. The Rectiverter is a new concept in power conversion. It combines the functionality of a rectifier, an inverter and a static transfer switch in one bidirectional power module. This opens up for a new power flow architecture and a new way of designing power systems, meeting the needs for both AC and DC output, in one modular system. With the same dimensions and mechanical design as Eltek's other modules, the Rectiverter is the main building block in scalable systems for a wide range of applications.



#### Offgrid power for small African village

Electricity is crucial to human well-being and to a country's economic development; and yet globally over 1.3 billion people are without access to electricity. Deep in the African rainforests, Eltek has delivered and installed power systems that provide off-grid energy to the remote village of Bokosso in Cameroon. With electricity in place, Bokosso became part of the global community.

## experts make it happen

to pushing the boundaries of power conversion technology. As a senior R&D developer, he is around the world.

**Our power** Erik is one of them Erik Myhre has devoted his career one of our 2,000+ power experts

## Welcome to Eltek

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I am happy to invite you to a have look inside Eltek. I sincerely believe we are a special company, with a unique spirit that sets us apart.

At Eltek, we think and act like top athletes. We are desperately eager to win, and to stay at the top. We are on a journey to improve, innovate and be a leader in our field. This is fairly easy to say, harder to do. But our history is evidence we have done so for nearly half a century, and come every new day, we attempt to do even better what we did well the day before.

#### "WE ARE ON A JOURNEY TO IMPROVE, INNOVATE AND BE A LEADER IN OUR FIELD"

We are a global company, consisting of 2,000 individuals doing business in 100 countries. Still, we are noticeably and uniquely Eltek. More than anything, we are power experts and extremely ambitious when it comes to power conversion technology. We are competitive people, and see ourselves as mentors who are close to our customers. We are also very sensitive when it comes to operating a global business across very different markets and cultures.

We are all this - and much more. Turn the page and explore the power of innovation - the power of Eltek!

Colin Howe

Eltek President C. lac



**Our People - Watch the video** Scan the QR code or go to: www.eltek.com/OurPeople





- Established in 1971
- 2,000 employees
- Offices in 40 countries
- Business in more than 100 countries
- Part of the Delta Group
- Corporate headquarter in Drammen, Norway
- Regional headquarters Dallas, US and Singapore
- Series of technological breakthroughs
- Delivering industrial power solutions for Telecom, Data Center, Power Utilities, Railway & Metro and Marine & Offshore



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The Eltek

ELT



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#### TELECOM

#### DATA CENTER

#### **RAILWAY & METRO**

#### MARINE & OFFSHORE

#### POWER UTILITIES

## Crazy ideas, ambitions and a bold attitude

#### The power of innovation

"ELTEK WAS FOUNDED ON EXPERT KNOWLEDGE IN POWER CONVERSION, AND HAS BEEN FUELLED BY A STRONG AMBITION AND DETERMINATION TO BE AT THE FRONT EVER SINCE"

> Satvir Singh Parmar Eltek's Vice President Innovation



Satvir Singh Parmar, Eltek's Vice President Innovation, reflects on Eltek's company heritage, strategy and strength as an innovative technology leader.

"Eltek was founded on expert knowledge in power conversion, and has been fuelled by a strong ambition and determination to be at the front ever since", says Satvir.

It has been an exciting journey, from the modest beginning as a family business in a rented one-room workshop in the 1970s to the present 2,000 employee strong global company, part of the Delta Group.

In the early years, innovation was probably more governed by instinct than by plan, but these days we are strategic in our approach. Our innovation is systematic innovation, but with a flat and broad involvement of our employees.

"We made power flatter, denser, smaller and neater - we led the way for reducing energy waste, we put power online and we have made power do things power couldn't do before. But successful innovation takes place only when something invented in the lab finds a market and has impact there. We've been successful on both sides, and that is what has taken us from NOK 1 billion to 4.3 billion in 15 years," Satvir explains.

#### The power of innovation

What normally is denoted innovation in a mature industry is mere incremental improvement. Within power conversion, for instance, the quest for higher efficiency has been the dominant battleground the last decades. However, history tells us that every now and then something comes along that changes the game completely. These innovations usually have one thing in common: They make things redundant.

It changes the way we think and it changes our habits.

Rectiverter, the combined one-module rectifier, inverter and static switch, is an example of such a breakthrough. We made it possible to flow power bidirectionally - not only in the lab, but in commercial applications.

#### Innovation is a journey

At Eltek, innovation is not coincidental serendipities, just as little as it is planned to the smallest detail. "We consider innovation to be the company journey itself, and there is a tremendous amount of work behind the map we use to 'travel forward'."

The world is going electric - and the future looks green and renewable. We know for sure that societies will not wait for someone to dramatically increase their power plant capacity and continue broadcasting power over distance and thereby waste a lot in the process. Power harvested from wind, sun and other renewable sources needs to be utilized. Power generation will decentralize and power needs to be stored. There has to be technology in place for managing things intelligently.

"Eltek will enable this transition. Because, the world needs flexible, efficient. compact and smart power conversion systems to make this happen," concludes Satvir Singh Parmar.



Meet Satvir in this 3 minutes documentary about Eltek and the creation of the Rectiverter

www.rectiverter.com

## Innovation is a journey

Since Eltek was founded in the early 1970s, the company can proudly look back on a number of technological achievements and breakthrough products.



-2016 Again setting new standards, Eltek introduced the Rectiverter, a 3-port bidirectional power converter This opens doors to new applications, and is a good indication of where innovation is going

FACTS

We started the green revolution in high efficiency power conversion in 2008. With the launch of the Rectiverter in 2016, we yet again brought an innovation to the market that stands out as a benchmark for the industry.

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#### 2002

In our efforts to reduce system size and to make rectifier modules more flexible, Eltek was the first to introduce fan cooling as standard for telecom power. This enabled us to mount the modules horizontal, or flat - leading to the first Flatpack family a trendsetter in the market.

#### 2005

The Flatpack2 was the first rectifier with the current form factor and an interchangeable front cover. Significant improvement in power density

#### 2008

HE - Eltek started the energy efficiency revolution with the introduction of the HE technology. Since then the market has followed our lead resulting in annual energy savings sufficient to power smaller countries. Eltek has now more than 2.5 million HE modules in the field all over the world.

# A tower of power in telecom

Power supply for the telecom network was how it all started in the early 1970s. Today, we are proud market leaders, serving global, regional and national operators and network builders around the world.

In the desert, in the Arctic, in cities, in the mountains, offshore on all continents - our solutions are installed everywhere securing reliable supply of power while minimizing CO2 footprint.

## Going down the road less traveled

During the course of a few decades, telecommunications has transformed the world.

The telecommunication infrastructure is the nerve system of our global, connected world. At Eltek, we have played a role in this transformation, as a prominent player at the forefront of telecom power. High quality power solutions are critical for reliable and continuously expanding telecommunications. We have grown with the telecom industry, and helped the industry expand.

We are a technology leader. With the Flatpack2 HE, one of several technological breakthroughs that redefined telecom power, we have helped our customers to significantly reduce energy waste, and thereby operating costs and environmental footprint. So far, we have sold more than 2.5 million HE modules, saving energy similar to the electricity consumption of a small country. Today we provide telecom power solutions to customers in more than 100 countries on all continents, and support them through our global organization of power experts.

We are committed to telecom, and continuously pushing forward to help our customers build a smarter infrastructure with better energy utilization and a reduced cost of ownership of their critical power solutions. We will secure optimized operation of existing applications in fixed and mobile, while using our power of innovation to bring new technology to market and create greater value for our customers.

#### Application examples

- Mobile base stations
- Small cells

TELECOM

- Central office
- Broadband



#### **Remote power**

**"OUR REMOTE POWER** CONCEPT IS THE BEST WAY TO POWER EXPANDING TELECOM NETWORKS"

• Remote power

MultiSite Monitor

Hybrid

#### Bjørn Håvard Stokke Global Product Manager, Eltek Norway

A remote power solution, with 380Vdc power transmitted from a central installation, through a dedicated power cable to remote DSLAMs or RRUs, reduces the amount of equipment and maintenance at the remote site.

#### **Rectifier on a pole**

Small cells are an essential component of 4G LTE networks. The "Chameleon" fits in anywhere.



Learn more about the benefits of the Chameleon in this video

www.eltek.com/chameleon







#### 380Vdc

"THE TRANSITION TO 380VDC IN TELECOM CENTRAL OFFICE ENVIRONMENTS IS WELL UNDERWAY. OUR SOLUTIONS HELP CUSTOMERS STAY FUTURE-PROOF"

Larry Lutz Strategic Application Engineer - Product Manager, Eltek USA

380Vdc is the answer to cable congestion and capacity problems in the central office power plant. The evolution of internet and telecom equipment requires higher power densities that in the long run cannot be supported by the 48V power architecture.

#### Rectiverter

"MIXED AC AND DC ENVIRONMENTS? A RECTIVERTER SOLUTION MAY BE THE ANSWER"

#### Terence Sim

Senior Business Development Manager, Telecom Sales, APAC

In Rectiverter-based systems, both AC and DC are available from one system, requiring a lot less space and providing a more reliable supply of power to the mission critical equipment. It will change the way you think about telecom power solutions.

#### Hybrid

"HYBRID POWER SOLUTIONS ARE USUALLY THE BEST ALTERNATIVE FOR ANY NETWORK, AND IN OFF-GRID RURAL AREAS. THE ONLY SOLUTION"

#### Gina Gonzales Regional Manager, Eltek Peru, Ecuador, Bolivia

All over the world, reducing the environmental footprint is a priority. Hybrid power solutions, utilizing solar power, is clearly part of a more sustainable future. In rural areas, with poor or no grid coverage, self-contained installations utilizing solar power or wind power, in combination with generators, are essential.



#### **MultiSite Monitor**

"SOPHISTICATED. YET SIMPLE. POWER MANAGEMENT IS KEY TO OPTIMIZED ENERGY USAGE AND **RELIABLE NETWORK OPERATIONS**"

#### ars Elstrøm Corporate R&D Director, Eltek Norway

Our MultiSite Monitor provides a full overview of the customer's entire network, and the ability to manage thousands of sites as one, from one terminal. This enables proactive management, less maintenance and reduced cost of ownership.

## **Tomorrow's** data centers are modular

Converged Power Solutions (CPS) offer a flexible infrastructure to meet all data center power requirements within IT, telecom, cloud and banking sectors. It provides an unprecedented power availability for telecom, IT and cooling equipment in a very power dense solution

#### New level of availability

In the unlikely event of a module failing, it can be replaced in minutes without affecting any loads. The result is a very reliable system providing an unsurpassed availability of power.

The modular design of a CPS provides full flexibility and scalability to match current and future demand.

You also have full flexibility when it comes to mixing VAC and VDC outputs.

The CPS is very compact and reduces the need for switchgear equipment, civil works, project management, installation time and transportation - all contributing to reduced cost. The result is a significantly reduced total cost of

ownership and a power system with an unmatched overall reliability.

The CPS deals with all the major VAC and VDC voltages and facilitates mixed environments. Regardless of where trends might go in the future, you can be sure that you are always on the right track.

#### PREFABRICATED MODULAR DATA CENTER



**Prefabricated Modular Data Center** Our prefabricated, complete data center takes modularity to a new level. Several container modules can be put together to form a larger data center.

**"OUR CONVERGED POWER** SOLUTION COMBINES THE ADVANTAGES OF MODERN. MODULAR POWER **TECHNOLOGY WHILE** MEETING ALL AC AND DC LOAD REQUIREMENTS"

Eltek expert Mat Heneghan comments on the way forward for data centers and their power systems.

#### Watch the video

Learn how the Eltek CPS enables TIER4+ availability in a minimum of space.



#### **CPS - ORIGINAL CONVERGED POWER SYSTEM**



**Mini CPS** 

end-of-row or modular

data centers. Providing

#### **Original CPS**

Providing convergence of AC and DC from one system, while making several other power components redundant.

#### A downscaled CPS for

Converging power room components into a modular and scalable power solution convergence of AC and DC for AC loads. supply in a smaller package.

AC CPS



# Powering green mobility

Railroad transportation has a key role to play in a 'green mobility' society, where people and goods can move efficiently and safely, with minimal environmental impact.

Eltek's power solutions help drive this development, powering protection, control, communication and other mission critical equipment. They are based on cutting-edge power conversion technology, are highly efficient, reliable and safe. They are modular and scalable, and reduce complexity, environmental impact and total cost of ownership across the entire rail infrastructure.

Eltek is one of the pioneers in the international power conversion industry, with 45 years of experience as a supplier of power systems for applications in the most demanding environments. Our telecom heritage has been the foundation for our growing presence as a rail power supplier over the past two decades.

Power systems are an important enabler and crucial to the transformation of the railway infrastructure into a high capacity and low-emission infrastructure. Eltek's technology, solutions and products fit hand-in-glove with a desire to reduce complexity, cost and environmental impact, and increase overview and control. They are based on leading conversion technology with high efficiency compact modules, providing a scalability and controllability far beyond current solutions.



"ELTEK'S RAIL SOLUTIONS ADD UP TO LOWER TOTAL COST OF OWNERSHIP, SIMPLER OPERATION AND MAINTENANCE, AND A GREATER CONTRIBUTION TOWARDS A 'GREEN MOBILITY' SOCIETY"

Eltek power expert Mathias Lang explains the advantages of modern power solutions.



Meet Mathias Lang in this video Scan the QR code or go to: www.eltek.com/rail

> Traction substation:

crossing

#### Our modular solutions provide the power and reliability required for smooth sailing under all conditions.

There may be dozens - if not hundreds of systems on board a vessel. From absolutely essential navigation and propulsion systems with backup power, to convenient 'nice-to-haves', like onboard entertainment systems. Every one of these requires power, some AC and some DC, at different voltages, with or without backup. Typically, there are many different types of equipment, from different suppliers, and with varying product life time expectations.

#### **"FEWER COMPONENTS AND** LESS EQUIPMENT IS KEY TO IMPROVE PERFORMANCE AT A LOWER COST OF OWNERSHIP"

#### Making life simpler

There is an obvious case to be made for simplification. Fewer components and less equipment, the ability to oversee and manage several subsystems as one, shared backup batteries and one

common management interface these are things that will yield substantial benefits in terms of reliability and operational cost. This is exactly what our modular approach will provide. With just a few standard components, any size and form of system can easily be configured and set up - and be scaled up, or down - according to needs.

#### The Eltek experience

Eltek has decades of experience with modular power systems, and an equally long history as a supplier to the marine market. We have a wide range of products and solutions specifically developed or adapted for marine use, all with DNV GL and ABS certification. We are global, and serve our customers wherever they sail. We are confident that customers who embrace the modular approach will significantly reduce operating and maintenance cost, improved reliability and greater flexibility. At the end of the day, it all adds up to smoother sailing at a lower cost of ownership.

## Tough solutions for smooth sailing

#### Application examples

- Dynamic positioning
- Propulsion control
- Drilling systems • Public address and alarm • AC Substations

Navigation

- Ballast water treatment Automation
- Water tight doors
- Ship identification





#### "HIGHER PERFORMANCE AT A LOWER TOTAL COST OF OWNERSHIP"



**Meet Ingar Sørensen** in this documentary Scan the QR code or go to: www.eltek.com/marine

# Smarter power for a smarter grid

We provide the AC and DC powering solutions required for switch gear control, automation, data transmission, emergency and alarm systems, and more. These are solutions that will grow and form the foundation for tomorrow's smarter grids.

Electricity and the infrastructure that makes it available for consumption, are the heart and blood of modern society. Reliable and secure supply for everyone is a top priority. Tomorrow's smart grid technology is developing and will allow power to be generated, stored, supplied and managed optimally.

The power network is based upon a multitude of subsystems in nodes performing various tasks, and needing a variety of voltages to operate properly. They all require highly dependable supply of power, frequently with backup. We are capable of providing power to operate every subsystem according to its specific needs, based on one core technology.

Emergency systems

• Power plant operations

Today, our systems supply the power needed to operate the supervision and control systems, the switchgear, data transmission infrastructure, and other auxiliaries in power plants, substations, dispatch centers and so on, with outputs managed according to requirements. Utilities require specific features of electromagnetic compatibility, the highest quality of backup DC & AC power, and of course, reliability. Our technology provides all this, as well as scalability to take care of future extensions, low maintenance and cost of ownership throughout the lifetime of the equipment, having very high MTBF.

#### All set for the future

Looking ahead, optimized use of electric energy sourced from various traditional or renewable power plants, will require increased capacity and more flexibility for storage and retrieval. Our technology is ready to meet such requirements with bidirectional conversion modules.

#### Application examples

- Supervision
- Automation
- Data transmission
- Switchgear control



#### "MADE FOR TODAY'S AND TOMORROW'S GRID"

Eltek's Rafi Krikorian on power conversion technology and solutions that will advance the development of smarter grids.



#### Meet Rafi Krikorian in this documentary Scan the QR code or go to: www.eltek.com/utilities

#### SECURING CRITICAL GRID OPERATIONS



#### **Complete, future-proof systems** We provide complete AC and DC systems for applications in the grid. A smart basis for tomorrow's smart grids.



**Hot swap modules** Replacement of modules can be done without disturbing normal system operation.

## We believe that quality pays more than it costs

At Eltek, we invest in quality at all levels. It is part of our obligation to our customers and a strategy for continued technology leadership.

"FOR US, OUALITY IS A PHILOSOPHY AND A WAY OF THINKING, DERIVED FROM OUR CORE VALUES, AND NURTURED OVER MANY YEARS. IN ESSENCE, IT MEANS WE HAVE A QUALITY CULTURE. WE ARE FOCUSED ON CONTINUOUS IMPROVEMENT, AND OF COURSE, HAVE THE SYSTEMS IN PLACE TO SUPPORT OUALITY FROM A-Z"

Frode Vågen, Chief Quality Officer

Quality is truly more than meets the eye. It starts with quality-conscious people, it is made possible by a quality-focused organization with systems and procedures in place, and it ends up with satisfied customers that enjoy the benefits of quality solutions. On the following pages are some examples of how quality manifests itself at Eltek.

#### No chain is stronger than its weakest link

Eltek's global supply chain is designed to keep the global process running efficiently - so that customers all over the world get their quality solutions where and when they should. Our logistics chain is designed to ensure quality and efficiency from A-Z.

> **Raw material and** component suppliers

Manufacturing of power modules and controllers

Preparing for problem free production

Nothing is left to chance in a new product's journey from initial idea to an orderable product in volume production. Much of the perceived quality of a module or a system is realized during the process of preparing the product for the production line.

At Eltek, 'Industrialization' is the telling name of the team that functions as the bridge between R&D and Production during the New Product Implementation (NPI) process. This team plays an active role from the beginning, in the conceptual phase. They make sure the product is designed in a way that actually makes is possible to test later (testability), that the right components are chosen to reduce the risk of faults when we actually start the mass production (producibility), and that the right kind of test equipment is developed for each particular product in order to maintain the high quality we strive for.

**Distribution centers** 

and logistics network

In short; the purpose of the industrialization team is to make sure the product in question is optimally designed and tested for fault-free volume production. Not a light responsibility to take on. "The product or system has to pass an array of tests, all designed by Eltek's test and quality experts" says Director of R&D Industrialization, Mads Dahl.

"Our quality is documented and very high, but our focus is to improve always improve. A minor error adjusted early in the process may lead to significantly better quality further down

Local system assembly

the line. To succeed, we have broken down all silos and work truly integrated with all teams involved. Quality requires a 'we culture' where continuous improvement is second nature".

#### Global quality at a glance

WATS is a test data collection system that provides a real time view of all current running tests and their results, worldwide. The system was developed by Eltek back in 2003 as there was no system available at the time to meet our high quality standards. The WATS system was later acquired by a local IT company and made into a commercial product, sold worldwide. A better quality stamp is hard to get.

"THE PRODUCT OR SYSTEM HAS TO PASS AN ARRAY OF TESTS. ALL DESIGNED BY ELTEK'S TEST AND QUALITY EXPERTS"

Local sales offices

END CUSTOMER

## The heat is on...

- so we all can stay cool

While the Industrialization team focuses on production and manufacturing quality, the Product Certification and Validation department takes quality testing one step further. Our products are heated, frozen, shaken and stressed way beyond anything they will become subject to during normal operation.



"TOP QUALITY IS A BOLD PROMISE. WE GO TO EXTREMES TO MAKE SURE IT IS A PROMISE WE CAN STAND BEHIND"

#### **Compliance is essential**

Certification is all about making sure a product is well within minimum requirements when it comes to temperature limits, hazards to health, environment and safety, as well as mechanical design. Selection of each individual component and cooperation between developer and certification engineer is therefore very important during the entire design process. This requires a systematic approach, well designed and documented procedures, and annual audits by a third-party certification body.

#### Validation makes the difference

While certification is all about making things right, validation is all about making the right things. Where suppliers differ, is in their approach to testing and validation beyond the standard requirements. At the Certification and Validation labs in Eltek corporate headquarter in Norway, and at the assembly center in Slovakia, all kinds of stress is applied to the products, way beyond anything they will meet during their operational life. If products could speak, they would most probably call the validation lab 'the torture chamber

and Validation department"





As part of the Product Certification and Validation department, Kristin Thoresen is testing and validating whether system complies with its specifications.

### "No product is relased that does not pass the 'torture' of the Certification

Rolf Bårnes Certification Manager C&V



- High temperature and operating bias (HTOB): keeping a high ambient temperature while varying the voltage from high to low and turning the equipment on/off
- Highly accelerated life testing (HALT): varying temperature from very high to very low, with vibration
- Unpowered temperature cycling (UTC) Varying the temperature from very high to very low, while the product is unpowered
- Extreme power line disturbances

Janne Blaasvær

**Duyen Engebraten** Certification Engineer, Norway



High-flying pilot who likes seeing the world from a different vantage point

Jeffrey M. Kemper,

Kishore Kosuri,

Gunter Schmitt Chief Operating Officer, Germany

> Always on the look-out for new things - except a new job

Stephanie Hebestreit

Enrique Timor Sales Support Engineer, UK



tennis balls hard Khoa Nguyen Software Engineer, Vietnam



An excellent juggler of tasks **Cristina Casiple** Global Sourcing Manager, Dubai

**Vladimir Puchy** Product Manager, Slovakia

Svein-Erik Sund



Ahmed Diab ales manager in MEA, Dubai

> Knut Ramnæs VP Product Management, Norway

Our people are our true power

We have a well-defined organization, a strong supply chain, a cutting edge R&D team and we are one of the worlds most important players in the global power conversion market, doing business in more than 100 countries.

Our success relies on the performance of each individual that make up our teams and our global organization. Unique as each one of us is, with different perspectives, backgrounds and beliefs, we are united by one culture and a shared commitment to create value for our customers. What we have in Eltek is a power culture - Eltek people are extremely entrepreneurial and we celebrate and nurture intrapreneurship.

Every day, we attempt to make power magic happen for all our customers, all over the world.

> Dancing through the days with double roles Christine Chandler, Office Manager and Marketing Responsible, Australia



Khan Mansoor Khalid





Julien Parmenon Orange GAAM & System Coordinator, France





The spider in the intranet web, making sure we are always on and able to share our points

Sharepoint Application Manager, Norway



Knut Harald Skjennum

Lars Dousa EVP Industrial wadan



Margarita Korneliussen

System Engineer, Norway

A symbol of the power of positivity

Maya Duan, Global Sourcing Director

A software guy who hits the



**Gopinath Sundaramurthy** 



passion for people and power Dariusz Kowalczyk Global Design Engineer, Poland/Norway





Sherry Zhang oftware Engineer



A busy bee brimming with energy both in and out of office

Herdis Hvam Quality Manager, Global EMS, Norway

Thom Are Veisten Support & Innovation, Norway

highest level of professionalism

and the greatest sense of humor

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