

The background of the entire page is a composite image. It features a woman's profile in a three-quarter view, looking upwards and to the left. Her face and hair are overlaid with a complex digital interface. This interface includes numerous small, semi-transparent rectangular windows, each containing a different image or graphic related to data centers, technology, or business. There are also streams of binary code (0s and 1s) and other digital patterns. The overall color palette is dominated by blues, greys, and reds. A large, solid red curved shape sweeps across the bottom of the image, starting from the left and ending on the right. Below this red shape is a grey curved shape, and at the very bottom is a white area.

AWARD SUBMISSION

DATA CENTRE FACILITIES

VENDOR OF THE YEAR 2022

CAUTION CONCERNING FORWARD-LOOKING STATEMENTS

EnerSys® is making this statement in order to satisfy the "Safe Harbor" provision contained in the Private Securities Litigation Reform Act of 1995. Any of the statements contained in this submission that are not statements of historical fact may include forward-looking statements that involve a number of risks and uncertainties.

A forward-looking statement predicts, projects, or uses future events as expectations or possibilities. Forward-looking statements may be based on expectations concerning future events and are subject to risks and uncertainties relating to operations and the economic environment, all of which are difficult to predict and many of which are beyond our control.

For a discussion of such risks and uncertainties that could cause actual results to differ materially from those matters expressed in or implied by forward-looking statements, please see our risk factors as disclosed in the "Risk Factors" section of our annual report on Form 10-K for the most recently ended fiscal year. The statements in this submission are made as of the date of this submission, even if subsequently made available by EnerSys® on its website or otherwise. EnerSys® does not undertake any obligation to update or revise these statements to reflect events or circumstances occurring after the date of this submission.

UPS back-up batteries are a vital part of any data centre operation, protecting it against issues that would otherwise be caused by power outages.

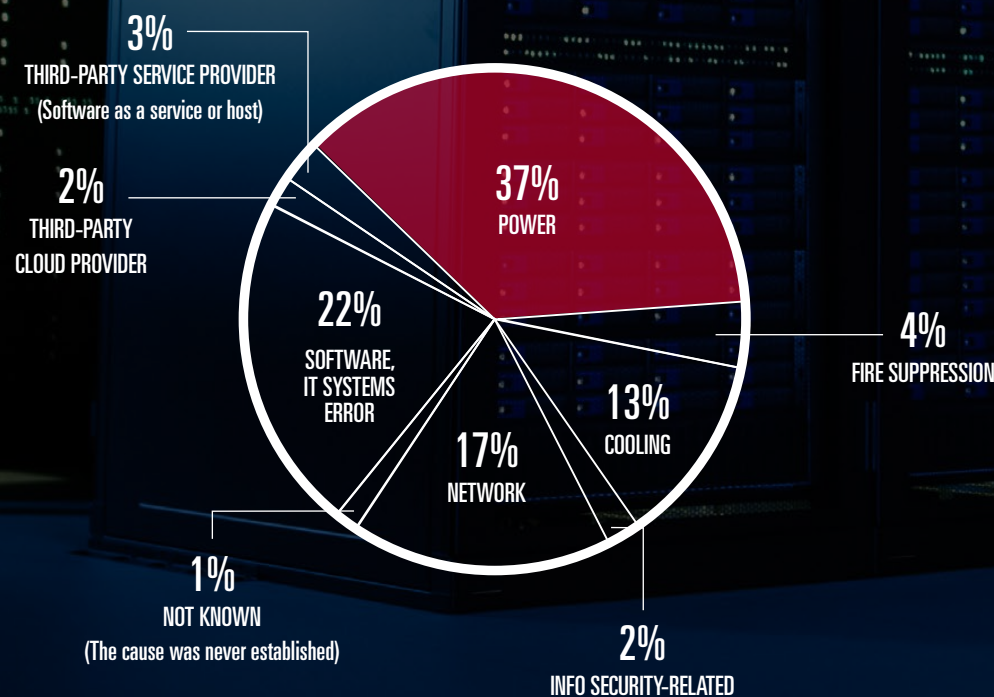
A report published by the Uptime Institute in 2020 identified power failures as the most common reason for operational outages - constituting 37% of the total^[1].

^[1] Uptime Institute - Annual Outage Analysis 2020
^[2] Uptime Institute - Annual Outage Analysis 2021

In a report subsequently compiled in 2021, it concluded that one in every six outages normally results in over \$1 million worth of costs to the operator^[2].

MAIN CAUSES OF DATA CENTRE OUTAGES

[Source: Uptime Institute's Annual Outage Analysis 2021]



Power outages have huge implications for data centre operators. Not only will they result in severe financial penalties, they can also do irrevocable damage to operators in terms of their reputation. That is why specifying the right UPS battery is paramount.

Phil Arrowsmith
Vice President of Sales EMEA, EnerSys®

WHAT ARE THE KEY PRIORITIES FOR TODAY'S DATA CENTRE OPERATORS?

With data centre operators simultaneously feeling the pressure from a number of different directions, they need to implement UPS technology allowing them to:

REDUCE BOTH THEIR CAPEX AND OPEX

KEEP THE FLOOR SPACE ALLOCATIONS FOR UPS BATTERIES TO A MINIMUM

SUPPORT THE SHORTEST POSSIBLE AUTONOMIES (from 20 minutes down to just 1 minute)

ALIGN WITH INTERNATIONAL ENVIRONMENTAL LEGISLATION

EnerSys® has a long and successful heritage. We are able to draw on over a century of serving the worldwide energy storage market. Today, as a multi-billion dollar global enterprise, we are an acknowledged leader in the supply of high density, high reliability stored energy solutions for mission-critical applications.

Through these solutions, we are able to ensure access to uninterrupted power for that essential infrastructure, helping keep data safe and avoiding issues caused by downtime.

EnerSys® batteries have been engineered to deliver maximum

energy efficiency, accelerated reaction times, faster recharging and continued operational longevity. They also contribute to customers achieving their sustainability goals and minimising their environmental footprint.

GAINING A TECHNOLOGICAL EDGE

What we can offer in terms of TCO, power density, charging time and assured reliability, even at high temperatures, makes our TPPL batteries a compelling choice for data centre operators.



Paul Willoughby
UK Sales Manager, EnerSys®



The advanced energy storage technology developed by EnerSys® is specified by operators across the whole spectrum of data centre activity. Our UPS battery solutions are incorporated into enterprise, co-location, hyperscale, modular and edge-based data centre sites - with the optimal battery model being recommended to address each particular set of customer criteria.

EnerSys® is differentiated from the competition through:

Leveraging proprietary technology so customers can minimise their total cost of ownership (TCO).

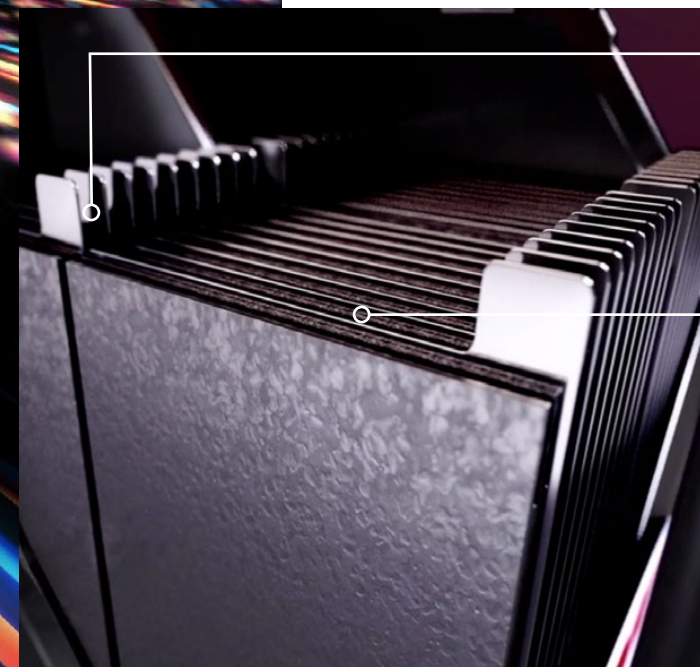
Providing high density batteries that enable reduced floor space allocation.

Using high temperature resilient batteries so that data centre operations can reduce cooling costs.

Fast charge rates that enable batteries to be ready for additional outage events in a shorter time frame compared to conventional lead-acid batteries.

Reduced electricity consumption, thanks to much lower floating current requirements than conventional lead-acid batteries.

Locally-based engineering support, giving greater customer confidence in our UPS systems - by providing assistance during the design and configuration stages, as well as being able to respond quickly to any technical issues.



EnerSys® thin plate pure lead (TPPL) technology is the foundation of our data centre battery line-up. Thinner plates deliver a major boost in performance compared to conventional lead-acid batteries. More of these plates can be stacked together - leading to heightened power densities.

The purity of lead used in the grid construction, with very fine grain structure that is more resistant to corrosion, means the operational lifespan of these batteries is greater than competing lead-acid solutions. They have an optimised design for fast recharge, higher temperature resilience and superior cyclic performance.

POWERING THE FUTURE

- everywhere for everyone

EnerSys® has EMEA manufacturing sites attending to specific needs of the region. These are situated in: France, Germany, Poland, UK and the Czech Republic. Our strong EMEA presence is of real value to customers for numerous reasons. It means that they can be certain of ongoing integrity of supply, with quicker responsiveness and shorter lead times. It also has advantages from a sustainability perspective, as battery production is closer to the customer base, so shipping has much less environmental impact.

In addition, it enables better customer engagement, so that fine tuning of designs at the system level can be done to meet exact requirements, as well as making superior pre-testing capabilities available. Synergies between the staff at different EnerSys® locations means that knowledge on certain specialist areas or particular expertise can be shared - making it a team effort.



Our presence across the EMEA region, and the technical support we can provide as a result of this, are both pivotal in enabling us to meet the expectations of the diverse international data centre customer base. Alongside this, we have an expansive battery solutions portfolio for customers to choose from, so individual needs can be matched to the most appropriate solution.



Fabio Cattarina
Director of Sales, South & Middle Europe, EnerSys®



ENERSYS® PRODUCTS

Our key EnerSys® battery brands and models for data centres:



DataSafe® XE Batteries - With a high discharge rate for ultra-short autonomy scenarios, plus high temperature resilience.



DataSafe® HX+ Batteries - A high density, low energy consumption solution for situations with standard runtimes.



PowerSafe® SBS and PowerSafe® V-FT Batteries - Which both support extended operational life with longer autonomies.



Genesis® XE and ODYSSEY® Batteries - Intended for applications needing strong cycle durability and temperature resilience.

CASE STUDY EXAMPLES

The proven track record of EnerSys® is illustrated in the following recent projects in which we have been involved:

In 2020, one of the UK's most celebrated and oldest universities decided to carry out a large-scale upgrade of its data centre operations. It looked at UPS batteries from various different vendors and using different chemistries (including lead-calcium and lithium-ion). Based on the more attractive TCO that could be achieved, the university selected EnerSys® DataSafe® XE batteries for the upgrade. Three UPS systems were installed (equating to a total of 380 batteries). The long service life that DataSafe® XE batteries would deliver was an important differentiator, with an extended warranty being offered alongside this. Another aspect was the high energy density of these units, which meant the upgrade could be done without expanding the overall space taken up in the battery rooms.

Ongoing work with one of the software industry's largest companies has led to EnerSys® supplying hundreds of thousands battery to this customer across multiple locations around the world. In this case, it has been the high levels of responsiveness (with short autonomy times), temperature resilience (as they are operating to keep thermal management costs) and extensive global support network that have set EnerSys® apart from the competition, plus the warranty advantages we are able to provide. In addition to new site deployments, EnerSys® batteries are being used to replace legacy batteries in existing sites.

The UK offices of a major financial services organisation were in need of a best in-class UPS battery solution. These batteries would be used at its off-site data centre, for disaster recovery purposes, to complement the on-site facility in central London. The EnerSys® PowerSafe® SBS battery was the model chosen, and thousands of the batteries are now employed in the customer's locations across EMEA.

Another client specialising in containerised mobile data centres that can be installed in places where increased data handling capacity needs to be rapidly added to keep up with demand. The high energy density of the EnerSys® DataSafe® HX+ battery series was key to providing a solution with all the necessary compactness. Also, due to limited room for thermal management, the ability to cope with higher temperatures was another factor that had to be considered. DataSafe® HX+ batteries can support long service life running at elevated temperatures, meaning that normal switch-out times can still be kept to despite challenging operational conditions. The client's containerised installations are already being used at several EMEA locations, with others expected to be brought online soon - meaning tens of thousands of batteries will be called for. Once again, having expert support in place in many different countries has proved pivotal in securing this business.

KEY INITIATIVES

In addition to our innovative technology, at EnerSys® we have launched several initiatives to complement it. Among these are:

The Battery Sizing Program

Giving registered customers access to an intuitive online tool where they can work out what battery model is the best fit for their operational parameters (in relation temperature levels, space constraints, design margins, etc.).

The Battery Recycling Program

Through our battery recycling program, lead in disposed batteries can be brought back into the supply chain. It presents our data centre clients with a recycling service that will allow them to comply with the relevant legislative guidelines for their geographic location, while also unlocking the remaining value in batteries at the end of their working lifespan.

This has benefits for both a TCO and a sustainability standpoint.

The BCI's National Recycling Study (published December 2019) showed that 99% of the constituent material within lead batteries is recyclable.

FURTHER DATA CENTRE POSSIBILITIES

There are now opportunities emerging for data centre operators to make use of their UPS battery resources for other activities beyond backup power. There is the prospect of reducing OPEX by utilizing these batteries for 'peak shaving' - whereby data centre operators can charge their batteries at times of the day when utility companies' tariffs are low, then draw electricity from these batteries when tariffs are high for powering various functions throughout the site. Operators can also generate revenue to offset their running costs, by supplying electricity back to the grid. This will enable electricity consumers' demands to be met at times when they are particularly high - with the stored energy helping to maintain a balance between consumption levels and available generation capacity.

CONCLUSION

EnerSys® batteries featuring our TPPL technology are allowing data centre operators to enhance the performance of their UPS installations, while also making them more sustainable and environmentally friendly through the recycling of battery assets at the end of their working lifespan. On top of this, they are opening up possibilities for operators to use their backup batteries in ways that will either reduce the running costs of their sites or present them with new revenue streams.

About EnerSys®

EnerSys®, the global leader in stored energy solutions for industrial applications, manufactures and distributes energy systems solutions and motive power batteries, specialty batteries, battery chargers, power equipment, battery accessories and outdoor equipment enclosure solutions to customers worldwide. Energy Systems, which combine enclosures, power conversion, power distribution and energy storage, are used in the telecommunication, broadband and utility industries, uninterruptible power supplies, and numerous applications requiring stored energy solutions.

Motive power batteries and chargers are utilized in electric forklift trucks and other industrial electric powered vehicles. Specialty batteries are used in aerospace and defence applications, large over-the-road trucks, premium automotive, medical and security systems applications. EnerSys® also provides aftermarket and customer support services to its customers in over 100 countries through its sales and manufacturing locations around the world. With the NorthStar acquisition, EnerSys® has solidified its position as the market leader for premium TPPL batteries which are sold across all three lines of business.

Additional information can be found at:

<https://www.enersys.com/en-gb/industries/data-centre/datacentre>

Sustainability

Sustainability at EnerSys® is about more than just the benefits and impacts of our products. Our commitment to sustainability encompasses many important environmental, social and governance issues. Sustainability is a fundamental part of how we manage our own operations. Minimizing our environmental footprint is a priority. Sustainability is our commitment to our employees, our customers and the communities we serve.

Our products facilitate positive environmental, social and economic impacts around the world.

To learn more visit:

<https://www.enersys.com/en/about-us/sustainability>



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