



TWEST – Simple. Scalable.
Reliable. Built for energy
resilience.

[www.https://e2s-power.com](https://e2s-power.com)



Industrial expertise with ingenuity

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E2S Power was founded by senior professionals in steam and power generation. Based in Switzerland, the company combines industrial expertise with a clear focus on practical thermal energy storage solutions.

E2S Power brings together the technology, engineering mindset and execution logic required to turn thermal storage into a deployable solution for industry and power generation. With modules already working in India and Germany, and mass production available, the company is positioned to support the next phase of energy transition with solutions built for implementation, not just for theory.

Why E2S Power

- Founded by senior professionals in steam and power generation
- Independent private company based in Switzerland
- Power generation module working in India
- Industrial module working in Germany
- Mass production available

E2S Power stands for practical innovation with industrial credibility.



TWEST

One integrated solution. Multiple advantages.

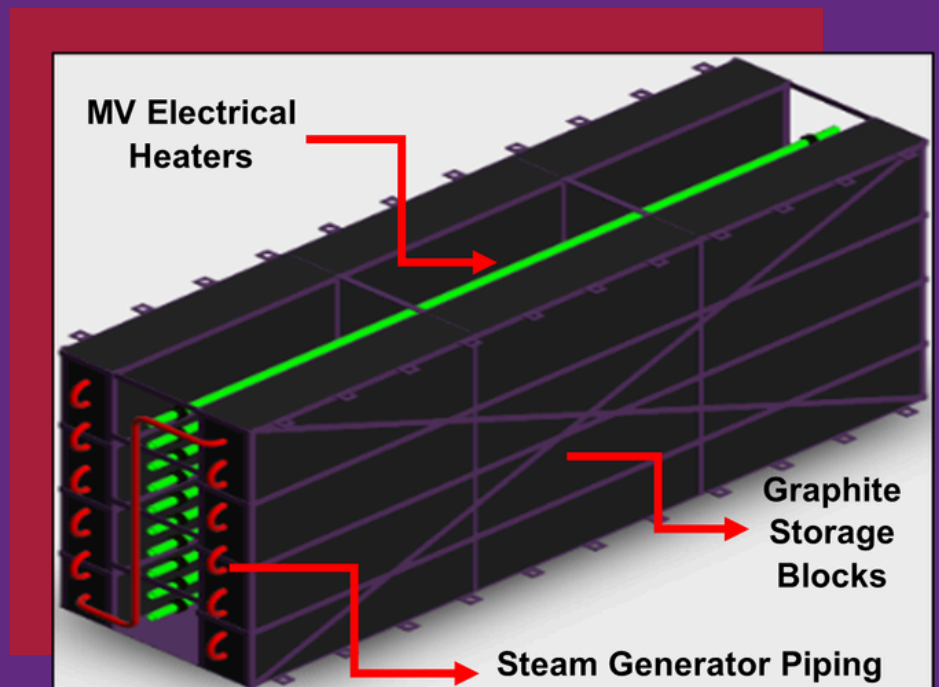
TWEST is a unique thermal long-duration energy storage solution combined with electric steam generation in one system. It is a compact, modular solution designed for efficient charging, flexible steam delivery and real-world deployment.

TWEST is built around three key elements:

- medium-voltage radiative heaters
- graphite storage blocks
- steam generator piping embedded in high-thermal-conductivity graphite blocks

This combination enables quick and efficient charging, thermal conduction during discharge and eliminates the need for an external heat exchanger.

The result is a system designed to be simple, smart and effective.



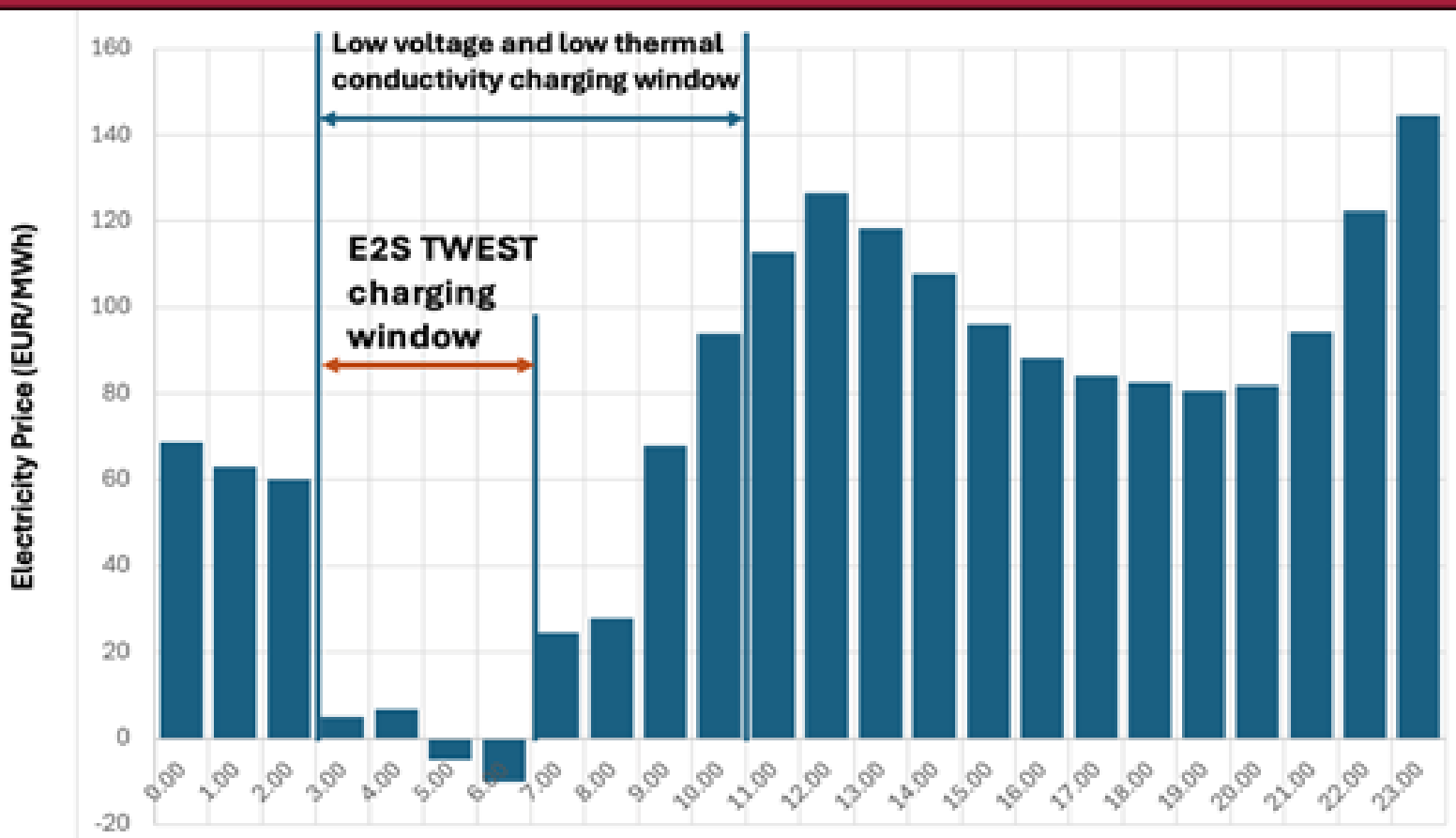
Why TWEST

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TWEST combines simplicity, efficiency and flexibility in one scalable thermal storage platform.

Optimized CapEx and easily scalable:

- Standard modules (5 MWh @ approx. 200°C steam)
- Small footprint with lower space and construction cost
- Easy integration from the first to the Nth module
- No step costs for adjacent systems when scaling
- No exotic materials, just a simple and smart combination of commodities
- Custom design for larger storage ≤ 1 GWh or specific requirements



Performance that creates value

TWEST is positioned for faster payback and lower OpEx than other decarbonized steam solutions. It offers very fast charging, high overall system efficiency, strong operational flexibility and 24/7 availability, including the ability to charge and discharge at the same time.

Built for long life

TWEST is designed for reliability and durability:

- no moving parts in the all-in-one storage and steam module
- minimal maintenance within short service windows
- useful life of at least 25 years and unlimited cycles

Steam flexibility

- High heat capacity with temperatures up to 700°C
- Steam temperature ranges from 100°C to 550°C
- Steam pressure from 10 to 200 bar
- Small daily loss of 3-5% in a standard container

Designed for a wide range of applications

TWEST is relevant across multiple industrial and power-generation use cases, including:

- Industrial steam demand in pharma, chemical, pulp and paper, food and beverage, and other industries
- District heating
- Combined heat and power and cogeneration
- Waste-to-energy and biomass applications
- Integration with gas turbine combined cycle
 - Faster startup and improved operational flexibility
 - Peak power without supplementary firing
 - Process steam provided independently from power production
- Integration with existing fossil-fuel plants, up to 600°C
 - Operation alongside a boiler for improved flexibility
 - Repurposing steam plants with thermal energy storage
 - Combination with heat pumps for highly efficient standalone storage

TWEST is designed for customers and investors looking for a storage solution that combines scalability, operational flexibility, compact design and strong industrial relevance. It is a system created to unlock more value from power and steam infrastructure while supporting a more resilient energy future.

Let's discuss how TWEST can support your next project!

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