

# ESI Group deploys HPC Center in Paris with Minkels and Legrand

ESI Group, world-leading provider of Virtual Prototyping software and services for manufacturing industries, opened a brand new High Performance Computing (HPC) Center in Paris last December to support its European HPC projects. Minkels and Legrand were jointly responsible for delivering an end-to-end, integrated data centre infrastructure to meet demanding HPC requirements.



## About ESI Group

Founded over 40 years ago, ESI Group's software solutions help industrial manufacturers replace physical prototypes by virtually replicating the fabrication, assembly and testing of products in varying environments. This Virtual Prototyping enables manufacturers to evaluate the performance of their product early in the process, before any physical prototype is built. ESI's customer base spans nearly every industry sector. Headquartered in Paris, France, the company employs about 1,000 high-level specialists worldwide.

## Minkels Cold Corridor (aisle containment) integrating:

Minkels France and Legrand, in joint cooperation with Minkels' implementation partner, Cap Ingelec, delivered an integrated, modular and energy efficient HPC data centre to ESI Group. Data centre solutions incorporated include:

- Minkels varicon racks
- Minkels VariCondition H2O cooling
- Legrand S2S UPS
- Legrand main switch board with high power switchgear
- Legrand switchboard to distribute Power to PDU
- Minkels Power distribution unit (PDUs)
- Legrand, Minkels Cable Management
- Minkels LED lighting



The new European HPC Center for ESI Group is located at the Teratec Campus, an ideal data centre location for launching collaborative HPC projects because of its vicinity to Europe's largest HPC Center, the CEA's 'Très Grand Centre de Calcul.' The new HPC Center will act as the company's cloud-based software development and engineering platform serving all ESI offices across Europe. "The ability to build an intelligent HPC data

centre infrastructure able to easily adapt to ESI's evolving needs and computational loads was of decisive importance for selecting Minkels and Legrand," says Vincent Chaillou, COO of ESI Group. "The implementation was successfully completed on time and within budget. It now delivers a scalable, adaptable and reliable infrastructure, ready to anticipate the next big technological challenges, including Big Data evolutions and the Internet of Things."

## MINKELS LED LIGHTING

Minkels France and Legrand, in joint cooperation with Minkels' implementation partner for the French market, Cap Ingelec, provided ESI Group with an integrated and fully customised HPC-ready data centre solution. Modularity at construction detail level makes it a highly scalable and easy-to-customise solution. The small-scale data centre, housed in a re-used building has a high-density power capacity of 20kW per rack, while reinforced metal floor slabs under the racks are installed to fit high-density equipment floor loads.

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This new data centre benefits from the energy saving technologies delivered by Minkels and Legrand, reducing the ecological footprint of

ESI's activities. This suits ESI's corporate vision of developing sustainable and environment friendly products and services. The Minkels Cold Corridor aisle containment solution deployed has an airflow optimisation package included to make sure it's airtight and designed to offer maximum energy efficiency. The Legrand S2S UPS and Minkels VariCondition H2O water-cooling implemented also make an important contribution to this data centre's energy-efficient characteristics.

A nice add-on delivered to ESI, in line with the company's energy efficiency objectives, is the new Minkels LED Lighting solution. The LED tube is attached to the top of the racks and uses only 20 watts of energy while able to illuminate the room inside the Cold Corridors clearly. Each LED tube has a length of 1.20 metres. It's an easy-to-install solution through the use of magnetic systems and a central connection point for electricity supply.

"ESI is now equipped with a European cloud computing Point of Delivery (PoD) to run state-of-the-art calculations," adds Mr. Chaillou. "We're very happy with the results. It will largely contribute to our successes and

engineering studies in the field of Virtual Prototyping." ■



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