Distech Controls' New European Head Office



Designed for the employees' wellbeing, the building increases communication as the relevant departments have been grouped together to improve the flow of information.

Open space layouts with departmental focus, increased collaboration and communication amongst team members.

Furthermore, the workstations have been thought out ergonomically to increase employee comfort."

Distech Controls has chosen to build its new European Head Office in Brignais, France, given the town's strategic location. Situated directly on a major motorway, Brignais is easily accessible from Lyon's airport and train stations, providing easy accessibility for both Distech Controls' customers and employees.

The 2500sqm building is divided into two floors:

- The ground floor provides production, final assembly, and testing of Distech Controls' products as well as global logistics and shipping.
- The 1st floor consists of a central island where the meeting rooms are situated as well as the rest of the company's departments.

The use of skylights in the external architecture and glass partitions inside the building ensures the maximum amount of natural light is utilised.

The building also features multiple areas dedicated to employees, such as a bistro, lounge, cafeteria and a terrace. These facilities increase the employees' well-being and fulfillment, whilst also being an asset for future recruitment.

Distech Controls' building automation solutions have been installed throughout the building. HVAC, Lighting, Shades and Access control all feature providing a technological showcase for Distech Controls' energy efficient products and solutions.



The building reflects the image of Distech Controls: increasing employee's well-being and optimising energy efficiency.

To accomplish this energy performance, the use of sustainable equipment will lead to results 30% higher than the RT 2012 standard's expectations.

THE BUILDING

Since 2010, Distech Controls has grown from just 35 to 80 employees and develops an average of 20 new products per year. As the production site is integrated into Distech Controls' premises, it was necessary to build a new building, providing sufficient space to support the company's growth.

The head office has been designed to offer an efficient, comfortable, and pleasant work environment for the Distech Controls team and visiting clients. Indeed, the European head office is also a training center which welcomes more than 250 customers per year.

With a network of more than 300 system integrators throughout all of Europe, the new European Head Office will allow the company to meet the needs of and support its clients, by providing a technological showcase for its solutions.

The digital impact is everywhere and office buildings are now designed to offer a unique user experience. The challenge is to think and design tomorrow's building as a services supplier.

Complete with Distech Controls' ECLYPSE, Connected BACnet/IP and Wi-Fi HVAC Controller Series, this solution provides a unique opportunity to use the building as an open service platform. The building also includes Acuity Brands' lighting solutions reinforcing the collaboration with the group company.

Challenges

Distech Controls' innovative and cutting-edge building reflects all the new trends in the commercial property."



INTELLIGENCE & CONNECTIVITY

ECLYPSE opens the building to the Internet of Things and offers a wide range of possibilities to control the HVAC applications.

The ECLYPSE Connected BACnet/IP and Wi-Fi HVAC Controller Series includes:

- Connected system controller Controls the Air Handling Unit (AHU) and people counting in the building.
- Connected terminal unit controller

 Controls the fan coils and with the dedicated expansion modules it controls the sunblinds.
- Connected VAV controller Controls the variable air volume application with heating and cooling.
- Connected equipment controller Controls the weather station.

The ECLYPSE controller series utilises BACnet/IP and IT standards, delivering empowered IP connectivity and open integration with building management systems. It enables an IoT building that connects systems, technology and people throughout the building's lifecycle, bringing an innovative approach to Smart Buildings.



Distech Controls' Smart Room Control Solution is a unified system for the control of HVAC room terminal equipment, lighting, and sunblinds. This solution allows you to achieve the highest levels of comfort for occupants while increasing operating cost savings, from installation time and wiring/ material requirements to energy consumption.

Occupancy and light level

The EC-Multi-Sensor combines in a single and extra small device a motion sensor for occupancy management, and a luminosity sensor (Lux) for automatic control of the light level in a room.

Personalised comfort

A broad array of room devices suitable for a wide range of environments and applications enable occupants to adjust their own comfort parameters and preferences: communicating sensors Allure EC-Smart-Comfort and RS-Smart-Sense.



SUPERVISION

EC-Net 4 building automation system (BAS) multi-protocol, multi-function capabilities provide seamless and intelligent integration of HVAC, Lighting, Access Control, Energy Management, and other building systems.

Distech Controls has chosen to host ENVYSION, responsive, web-based design and visualisation interface on EC-Net 4 to facilitate the data exploitation.

ENVYSION provides additional benefits for the EC-Net 4 solution including powerful connectivity, and advanced control, monitoring and analysis for our Internet of Things building. It enables the development of graphical elements, using the HTML5 web interface, that enhance communications and information including dashboards, charts, tables, reports or dynamic pages.

Distech Controls designed its own interface with xpressENVYSION that includes floor layouts with heat/cool mapping, graphics with playback feature, the occupancy rate, temperature and lighting in real time.



OCCUPANTS SERVICES AND WELL-BEING

Occupants are looking for custom services and a tailormade environment that fits with their use and automatically meets their needs. Distech Controls' solutions create a more productive environment dynamically maintaining optimal comfort and environmental conditions.

Distech Controls has equipped its building in the same way the skyscrapers would be managed in Paris to demonstrate new and connected services.

The ECLYPSE product series adds more value to the building: a documented RESTful API allows the creation of custom mobile apps.

The new European head office benefits from a mobile application enabling occupants to easily set and control all room and comfort parameters and access many services such as room booking, public transport, weather forecast, etc.

The connected VAV controller series will adjust the fresh air in the meeting rooms depending on the occupancy rate and level of CO_2 , in real time. People who work in well-ventilated offices with below-average levels of indoor pollutants and carbon dioxide (CO_2) have significantly higher cognitive functioning scores.

The LED lighting inside the building creates a comfortable atmosphere: the tone of lighting will change automatically during the day depending on the natural lighting or temperature in the room

- Yellow LED lighting: heats the room
- White LED lighting: cools the room

ECLYPSE Connected BACnet/IP and Wi-Fi HVAC Controller Series, and ENVYSION responsive, web-based design and visualization interface, provide powerful connectivity, and advanced control, monitoring and analysis, for your Internet of Things building.

Beyond establishing an open network facilitating Building Managements Solutions, and distributing IP throughout the facility and rooms, the controllers' RESTful API allows for exchange of data.

Utilising data readily available from ECLYPSE IP controllers, RESTful API applications can be custom designed to best serve the needs of the occupants, for improved insight and service delivery."



SPACE MANAGEMENT

Mobility and nomadism reinforce the need of having flexible and adaptable spaces. Defining floorplan alterations and space configuration depending on occupant uses, or even allocating a location determined by occupation rate, this has become a major asset in the attractiveness of the building.

Distech Controls' flexible and scalable system means the building's layout can be adapted depending on the occupants' changing needs.

People counting is directly linked to the ECLYPSE Connected system controller which enables tenants to know in real time which rooms are occupied and by how many people.

After an extensive analysis of the occupancy rate through actual data, the building's structure or partition will be able to change to fit with the occupants needs. We could, for example, extend a meeting room if it is often overcrowded.



BUILDING PERFORMANCE

A truly open solution creates a sustainable foundation that supports and evolves with the building's life-cycle. The building's maintenance and operation is simplified with Distech Control's full-web analytic tools to optimise energy consumptions, anticipate maintenance and take corrective actions.

ENVYSION responsive, web-based design and visualisation interface transforms data into visual knowledge, graphs and reports, providing easy access to sustainability KPIs, facilitating reporting, meeting regulatory environmental requirements

Distech Controls installed its Smart Room Control solution, an end-to-end solution designed to deliver optimal energy savings, only possible with a synergistic approach, such as occupancy-based control strategies, daylight harvesting based on light level sensing, and natural light optimisation.

Secondly, this solution puts energy consumption decisions in the hands of the occupants, enhancing users experience and increasing energy efficiency.

THE INSTALLATION

- 40 electrical meters monitor the energy consumption by loads: lighting, HVAC and office equipment
- A reversible heat pump (air/water) allows for heat and cold production. Power meters on the heat pump control and manage its performance in real time
- A double flow Air Handling Unit (AHU) with heat recovery allows for fresh air management
- Immediate hot water production (no storage)

DISTECH CONTROLS' PRODUCTS

ECLYPSE[™], Connected BACnet/IP and Wi-Fi HVAC Controllers

- 2 ECLYPSE Connected System Controllers ECY-S1000
- 1 ECLYPSE Connected Equipment Controller ECY-303
- 26 ECLYPSE Connected VAV Controllers ECY-VAV
- 47 ECLYPSE Connected Terminal Unit Controllers ECY-PTU-208

Allure[™] Communicating Sensors and Discrete Analog Sensors

- 34 communicating room sensor Allure EC-Smart-Comfort-SOF
- 1 room sensor with a touch-sensitive color display Allure RS-Smart-Sense
- 1 discrete analog room temperature sensor Allure EC-Sensor

Lighting and Sunblinds Management

- 21 sunblind expansion modules ECx-Blind-4
- 174 multi-sensors combining a motion detector, a light sensor and a temperature sensor - EC-Multi-Sensor-MLT

Supervision

- EC-Net 4 web-based platform powered by Niagara Framework
- ENVYSION web-based graphic design and visualisation interface



About Distech Controls

An innovation leader in energy management solutions, Distech Controls provides unique building management technologies and services that optimise energy efficiency and comfort in buildings, while reducing operating costs. We deliver Innovative Solutions for Greener Buildings™ through our passion for innovation, quality, customer satisfaction, and sustainability.

The company serves multiple market segments through its worldwide business divisions, service offices and a superior network of Authorised Partners. Distech Controls, Inc. is a subsidiary of Acuity Brands Lighting, Inc.

www.distech-controls.com

For More Information

Mélanie Martinez - Marketing & Communication Manager mmartinez@distech-controls.com - +33 (0)4 78 45 01 23

Sarah-Jane Demolliere - Communication & PR Specialist sjdemolliere@distech-controls.com - +33 (0)4 78 45 94 58

Distech Controls is a trademark of Distech Controls Inc. All other trademarks are the property of their respective owners. O, Distech Controls Inc., 2017. All rights reserved.

