Company / implementer: Universidad Autónoma de Occidente
Sector: ISIC 8030 Higher education
Location: Cali, Valle del cauca- Colombia 3°21′14″ N 76°31′22″ O

Update: 01 Feb. 2018

Results
- Savings in energy from one technology to the other amount to approximately 50%, and in relation to the campus' total energy consumption, it amounts to 8%.
- Savings in energy after modernizing the cooling plant of the central building will be equivalent to 540'000Kwh/Year.

Other benefits
- Savings in relation to the system's energy consumption of approximately COP$215,000,000/year.
- Greater efficiency and comfort.
- Return on investment in eight years, but can be reduced to five with new AC automation projects.
- These pieces of equipment use less space in a more effective manner, 180 m² instead of 250 m².

Supplier References
Supplier: Calidaire, y Omega Ingenieros.
Contact Information: omegagainenieros.com
omegagainenieros@omegaingenieros.com -Tel: (+57-2) 8835779 - 8836438 – 6804945. Offices in Cali, Cartagena and Bogotá (Colombia)
Calidaire: (57) 2 6835330. Offices in Cali (Colombia)

Implementing Company
Company in charge of implementing the solution: Universidad Autónoma de Occidente
Contact Information: Carlos Alberto Borrero
E-mail: caborrero@uao.edu.co

Description
The project consisted of the modernization of the cooling plant of the central building by replacing the two condensed air chillers with two condensed water chillers, which are considered more energy efficient.

Investment and Operating Costs
Investment Costs: USD 500,000
Operating Costs: Human resources for the maintenance and operation of cooling systems.
Useful Life: 20 years

Recommendations and Limiting Factors
- Increase in noise levels, which was mitigated with the installation of modular acoustic panels on the ceiling and walls.
- The use of water for the operation of the condensed water chillers has increased by 8%. The water is treated by the University.

Cases of Application
N/A

References
Information provided by the University:
http://www.uao.edu.co/investigacion/inicio