Thermoelectric Plant "Las Flores"



Industry:

Utilities - Energy plant

End User:

The thermoelectric plant "Las Flores", in hearth of the northern part of Barranquilla, provides basic support for the city's new industrial developments and for improving the quality of life of its inhabitants. It generates 400 megawatts using the most modern combined-cycle technology, to guarantee an economic and continuous electricity supply from clean production processes that protect and respect the environment. The thermoelectric plant marked the dawn of a new era in public services in Barranquilla, one typified by efficiency, quality and meticulousness in administration and management conditions that allow Barranquilla to look optimistically towards the $21^{\rm st}$ century.

Objective:

Mainly, the idea was to solve the security problems due to the incomplete surveillance system that the plant had which did not cover the all the critical areas, the information storage was not secure and the quality of the information did not allowed forensic analysis. In addition, the objective was to secure all the process based on the previous study of risks.

Offered Solution:

At the moment of designing the project, aspects related to the topography, the atmospheric conditions, the weather and the interference by electromagnetic fields were took into account.

It was considered necessary the use of dome IP cameras to generate a perimeter cover and the supervision of the production processes. Also, an access control system was implemented in order to restrict the entrance to critical areas, supported by video verification and an intrusion system for protecting the perimeter and the strategic areas inside the plant. Additionally, a management system named Vidos was installed to achieve the localization in the alarm plans by intelligent video analysis and to develop a proactive surveillance through video with matrix visualization and monitors with punctual visualization of the events.

Finally, the BIS system (Building Integration System) allowed the video verification of the persons that need to penetrate in restricted areas, the complete monitoring of the key sites in the process of production and the automatic positioning of mobile cameras like domes in case of a perimeter alarm.



Obtained Results:

The project began in January 2009 and was finished by March of the same year. The initiative came from Colinversiones S.A., the company that owns the thermoelectric plant and the total investment was USD 400.000. According to the client, Bosch products were selected for their quality, integration, automation, warranty and support.

Now, it is possible to ensure processes, register information, control and generate measurements and statistics. In addition, it was achieved the visibility of all the critical areas, the operation sector and the construction of the new generator.

Installed by:

Millennium Systems

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