# Complete product traceability.

DANEC, in Ecuador, has obtained the BASC certification - which, among other requirements, demands video surveillance to cover all phases from production through final packaging.



# Organization: DANEC

#### Location:

**Ecuador** 

## **Industry segment:**

Industrial

#### Application:

Security and process optimization

#### Axis partners:

FullData, ISS

### Mission

DANEC Industrial, the first Ecuadorian company to make products from African palm oil, lacked a video surveillance system to ensure security and provide oversight of its operations. This had resulted in unauthorized personnel access and a lack of control over its operations. As part of a certification requiring compliance with high quality standards, the company needed to demonstrate rigorous, comprehensive control over all processes in the production, packaging, shipping and transport of its products, including oversight of its plantations and extraction processing operations located throughout the country – as well as in the operations of its distribution partners.

#### Solution

FullData, an Axis partner, was the integrator responsible for the entire project implementation. They developed a comprehensive solution using Axis cameras to meet all security requirements at six locations.

The plan established a comprehensive, centralized monitoring system through the use of the SecurOS platform from Intelligent Security Systems (ISS), another Axis partner. The project consisted of the installation of 84 cameras, as well as the use of video analytics for oversight of the raw materials entering into its processing plants.

#### Result

DANEC's technology division did such a careful job that it enabled the company to receive the Business Alliance for Secure Commerce (BASC) certification. This means a high standard of security and meticulous oversight of its products' raw materials during all phases of production until final packaging, which prevents any tampering or removal by unauthorized personnel. Just by resolving the issue of controlling weighing scales alone, the entire installation paid for itself.



"As a result of this installation we have achieved complete product traceability, preventing excessive manipulation of information and thus minimizing inventory errors."

Héctor Iván Ananganó, Network and Communications Administrator, DANEC.

#### Supervised plantations

Total project implementation required six months to complete and employed 84 cameras consisting of 15 different types. For example, for perimeter areas some of the models chosen were AXIS P1344, offering excellent video quality as well as day and night vision capabilities; and AXIS P1354, which additionally incorporates Lightfinder technology that provides exceptional light sensitivity for sharp images even in low-light environments – such as in plantation areas at night – allowing for complete oversight of the company's cane palm flowers, source of the main ingredient in its products.

Compact models were chosen for interior spaces including AXIS M5014, AXIS P3344 and AXIS P3346, which are fixed dome network cameras providing widearea coverage with tamper-resistant casings.

Additionally, the facility located in Sangolquí is used as a monitoring center, allowing personnel to oversee all six of the company's sites from a single point.

#### **Operations analytics**

Leveraging the infrastructure developed for this project, DANEC Industrial also decided to implement video analytics to achieve access control over vehicles carrying loads of raw materials that enter into its plant in Quito as well as the company's various extraction facilities.

In order to achieve this, two AXIS P1344 Network Cameras were installed in the weighing scale area, supported by SecurOS software from ISS. As a result, as soon as trucks carrying raw materials enter the facility and position themselves on the scales, through the use of this technology the weight, date and time of entry into the facility – and additionally a photo of a vehicle and its license plate – are all obtained in a single image. This has allowed for the compilation of statistics regarding productivity as well as other data through the use of video analytics.

Because this solution minimizes the amount of data entry required by scale operators, errors are prevented. It is now more difficult to alter the actual total weight of the received load and impact payments the company remits to its suppliers.

This solution has created substantial savings for DANEC Industrial and considerably streamlined its operations. "Just by resolving the issue of control over the weighing scales alone, the project has fully paid for itself," confirms Fernando Yánez, sales manager at FullData, who notes that the success of this implementation has opened the door for applying analytics on future production oversight, to avoid waste and automate more processes – through the use of technology by Axis and ISS.













