

## Axis IP cameras: safety at its best.

50% reduction in larceny and vandalism cases at Vladivostok Sea Fishing Port with video surveillance system driven by Axis network cameras.



**Organization:**  
Vladivostok Sea Fishing Port, OJSC

**Location:**  
Vladivostok, Russia

**Industry segment:**  
Transportation

**Application:**  
Safety and security, cargo handling, remote monitoring

**Axis partners:**  
Navicom, ISS

### Mission

The Sea Fishing Port located at the coast of Gold Horn Bay at Vladivostok is a backbone enterprise of the city, which comprises more than 1200 employees. The port covers an area of 370,000m<sup>2</sup>, from which 120,000m<sup>2</sup> are dedicated for open storage spaces and more than 45,000m<sup>2</sup> are occupied with two indoor storage sites. Ten berths are spread along the coast for 2 kilometers. Cargo handling and cargo storage (mostly containers and large fish lots) make up the core business of the enterprise. Cranes, automatic and electric lift trucks, and other custom vehicles along with proprietary diesel locomotives are there to make things possible. The port is a mission critical site and therefore must involve a high-class security system combining video surveillance, alarm, and access control systems.

### Solution

As far back as 9 years ago, the port management launched the migration from analog to network video cameras. Among the solutions offered by domestic and foreign manufacturers, Axis cameras stood out for their highly detailed images, ease of use and service support.

AXIS 214 PTZ Network Cameras were purchased at the very beginning of the project and still ensure continuous and fail-safe operation. The number of IP cameras at the enterprise increased year after year and by 2016 this number exceeded 170 cameras. Today the core of the port video surveillance system is formed by AXIS M1114, AXIS M1031, AXIS M1104 and AXIS M1106 IP cameras mounted inside administrative buildings and warehouses, AXIS P5522 and AXIS Q1765 mounted outside, and thermal AXIS Q1921 cameras located along the perimeter.

### Result

Since the beginning of the project substituting analog cameras with IP cameras the number of larceny and vandalism cases at the port territory has been reduced by more than half. Moreover, in case of incidents, port security staff can ensure a quick response, define the precise cause and, if necessary submit high-quality video record to the police. Video analysis features make these cameras suitable for access control and monitoring of cargo handling operations.

**“We have been collaborating with Axis for more than 9 years and now completing the project to install IP cameras at the whole territory of the port. However, we still keep a small number of analog cameras and can clearly see the advantages of IP cameras when speaking of image clarity, functionality and ease of use.”**

Oleg Petrovich Popko, Vladivostok Sea Fishing Port.

### Application features

Axis cameras find a wide range of applications at Vladivostok Sea Fishing Port. The most challenging task was to mount cameras at the top of 50-meter high masts with difficult lighting conditions in the dark. Thus, AXIS Q1765-LE Network Cameras featuring quick focusing and very strong IR illumination.

Five AXIS Q1921 Thermal Network Cameras, equally good at capturing and recognizing objects in any environmental conditions and any time of the day, are connected to the alarm system and used to monitor the port perimeter. Thermal cameras detect or motion detectors capture moving objects and give information through alarm system to other Axis IP cameras to turn to the respective direction and provide visual verification. AXIS M1031-W, AXIS M1114-E, AXIS M1011 Network Cameras are mounted inside administrative buildings, warehouses as well as at the checkpoint and pass issuing office where audio recording is enabled. The cameras mounted at the port's administrative building feature Axis' Corridor Format – vertically oriented images that capture all essential objects and save bandwidth.

### Intelligent access control

Intelligent video capabilities of Axis cameras are used for access control at car entrances. When passing through the gates, the driver scans an individual bar code at the access card, the camera snapshots the license plate and the car itself and records a 10-second video of the car passing through while license plate recognition ISS software compares the acquired data with the database.

### Revealing causes of shortage

Video archives are of great use since Axis IP cameras offer perfect resolution and highly detailed images. Thus, some archive videos of discharging a vessel with fish help to reveal the cause of shortage. In this case, AXIS Camera Station software with its advanced functionality and intuitive, user-friendly interface is applicable. When investigating an incident, police also request these video records.

Moreover, Axis' proprietary solution, AXIS Camera Station software, pushes the application boundaries. Easy to install and use, this program features the whole range of video surveillance capabilities: video streaming and recording (also scheduled recording), manual operation of dome and PTZ cameras, intelligent search, alarm response, and more.

In the nearest future, video analysis capabilities offered by Axis IP cameras will find more extended application at the port. For example, monitoring of goods during handling operations for its subsequent recounting and verification as well as alarm sensor, built-in people counting and facial recognition capabilities.

