CASE STUDY

# Shanghai Banknote Printing Plant improves work efficiency of warehouse with Axis network cameras.

## Enabling wireless solutions for network video surveillance.

**Organization:**
Shanghai Banknote Printing Plant

**Location:**
Shanghai, China

**Industry segment:**
Industrial

**Application:**
Wireless network video surveillance improves efficiency of warehouse

**Industry segment:**
Industrial

### Mission

Shanghai Banknote Printing Plant (SBPP) was founded in 1941, a subsidiary of China Banknote Printing and Minting Corporation (CBPMC). The plant is a state-owned enterprise which owns advanced printing machines using modern technology, and engages more than 2,500 employees. SBPP produces advanced anti-forgery prints, such as RMB, VAT invoice (value added tax invoice), bank bill, marketable securities and stamps. It is also the only authorized enterprise which can produce national passports.

Due to the particularities of its business, SBPP is planning to technically rebuild its current automated three-dimensional warehouse in order to improve the level of efficiency and security in storage, in which network video surveillance plays a significant role.

### Solution

The product warehouse in SBPP is for the storage of products including printed banknotes; high-rise racks occupy the entire warehouse, with special stacker-loaders for product transportation and piling-up. The room for product access is very limited, and all operations are automated; therefore, if any product is not kept in its allocated space, it could be damaged by a stacker-loader moving along designated tracks, resulting in the suspension of the entire operation.

Such accidents can be avoided using Axis network video solutions, which enable users to monitor the entire site with video feeds, resulting in the improvement of work efficiency in the warehouse. In addition, wireless data transmission can be used in the IP-Surveillance solution, saving the trouble of arranging numerous cables in site as well as allowing a centralized management of video feeds.

### Result

Each stacker-loader is equipped with two AXIS 215 PTZ Network Cameras and a wireless networking device which transmits video from the cameras to a remote control room; the turning of camera cradle head and the camera focus are controlled by the workstation and joysticks.

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"Axis network cameras are the eyes of the stacker-loaders, providing us a clear picture of the actual work environment and improving the level of automated warehouse operation and work efficiency."

The Surveillance System Manager, Shanghai Banknote Printing Plant.

## Flexible, convenient system implementation

Because the cameras are used to monitor the entire warehouse in the banknote printing plant and are installed on constant-moving stacker-loaders, a traditional analog surveillance system would encounter enormous difficulties in cable arrangement. In contrast, the IP-based video surveillance solution makes the implementation of surveillance system an easy job.

Through setting up a wireless network, the connection between the stacker-loaders and the network is easily achieved; Axis network cameras can transmit video feeds wirelessly, which does not require the arrangement of dedicated video/control cables as in a traditional analog system.

"One of the greatest things about the Axis network video surveillance system is that it is a highly flexible system which allows different network structures to be built when the work environment varies. We have been suffering from cable arrangement until we established IP-Surveillance, which has made the system implementation a very easy job." Mr. Dong, Project Manager, Shanghai Branch of Shenzhen Strongjet Technology Co., Ltd.

## Greater centralized management

It is easy to centralize management of video feeds with the Axis network video surveillance solution. Infrared sensors are also installed on the stacker-loaders, which will send out alarm signals whenever any problem is detected. In such cases, corresponding video feeds can be immediately investigated by operators in the control room, who can remotely control the camera to obtain intuitive video images. This enables them to make a clear evaluation, so that proper counter-measures can be executed. Such a platform of central operation/ management allows the user to enable a fully automated warehouse operation, dramatically improve work efficiency and reduce the possibility of operation accidents.