

Best Practice: Electronic Turnstiles with Card Readers and Keypads



Category: Access Control

Location First

Observed: Port of Bombay,
Mumbai India

Date First

Observed: May, 2005

Description: The large facility has installed a bank of electronic turnstiles that require an electronic access card and code to open. Employees and contractors are required to use them when entering and exiting the facility.

Discussion: Employees and contractors entering the facility on foot are required to first enter a covered entrance portal and pass through metal detectors. Once they clear the metal detectors they must place an electronic access card on a smart card reader and punch a code into a digital keypad on an electronic turnstile. If their access card is valid and the code is correct, the turnstile will release and permit them to enter the port. This process is repeated when employees leave the port (there is a keypad on both sides of the turnstile), permitting continuous tracking of all employees and contractors entering and leaving the port on foot. Security guards stationed at the metal detectors also monitor the turnstiles to ensure that no one attempts to defeat or circumvent them. Tracking the exact date and time all personnel enter and exit the port can provide other employer benefits including validation of work hours or investigating crimes committed on the facility. This system was not set up to track short term visitors to the facility, which requires a different ID check system for checking short term visitors in and out of the facility.

Potential Down-side: Cost. This is an expensive system to install and maintain. Labor unions have complained that this data should be used only for security purposes, and not to monitor the work hours of employees.

Conclusion: For large facilities (more than 100 employees) an electronic turnstile system provides an effective means for controlling and tracking persons entering and/or exiting a facility.

Cost: Approximately \$5,000 USD per electronic turnstile including installation, plus database software for managing and storing access data.