







Design Resources > Design Responses > About Parking Facilities > Examples > Transport Interchange

# Musashi Koganei, Tokyo, (JP)

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# **Facility:**

This facility has been key in the improvement of bicycle security in the station area. It is an outdoor parking facility, but enclosed within solid metal fences giving the appearance of a bicycle cage. The site is equipped with electronic controlled bicycle tollgates that users operate with access control cards or daily tickets purchased directly from the machine. The facility includes ticket and pass vending machines, CCTV cameras, and separate gate and exits for people. The whole design is meant to be guardian free.

### **Provider:**

Koganei Planning Office.

## **Designer/ Architect:**

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#### **Cost of Provision:**

Undisclosed Information.

## **General Description:**

Musashi Koganei is a residential area served by the JR Chou (central) line, Musashi Koganei is allocated between the Shinjuku residential west gate and Tachikawa (Tokyo's west end). Koganei ward is home to several universities such as Hosei University, Tokyo University of Agriculture and Technology, Tokyo Gakugei University and International Christian University, This suggests a sizeable student population, student housing, and increasing bicycle use. Koganei city is known for having an unsolved issue with bicycle parking, bicycle population and in general with illegal parking and occasionally bicycle theft. In an effort to provide secure bicycle parking in the most vulnerable areas of the ward (the back alley of Musashi Koganei station), the planning office commissioned a security consultant called Alsok to undertake the design, construction, maintenance and management of an outdoor bicycle parking facility. Alsok is one of the biggest suppliers of security products and services in Japan, including CCTV monitoring, security and valuables transport, home and bank security. The result is one of the most robust outdoor bicycle parking designs seen in Japan during this research.

# **Location of Facility**

North Exit, Musashi Koganei Station, West Tokyo, Japan

# Scale (capacity):

357 bikes

# Length of Stay:

24 hours







## Charges (cost to user):

Monthly subscription 1900 yen (£9.50), Monthly subscription 1500 yen (£7.50 students). Daily (24 hours) ticket 100 yen (£0.50)

#### Access:

The facility has separate tollgates to let in and out bicycles pushed by their owners, The metal bars open the gate once a valid ticket or card has been swiped and verified. There are also separate gates for people alone; these have narrow S shapes through which it is difficult to carry a bicycle (a Japanese shopper bicycle weights nearly 18 kilograms)

## Signage:

'Ways in' and 'way out' signage, written signage regarding monthly fees and procedures to apply for subscription and access control (AC) cards. Emergency numbers and Alsok monitoring centre number. There are floor markings with separate boxes for the 357 bicycles that comprise the capacity of the facility.

#### **Furniture:**

Alsok security gates, which include automatic tollgates which read not only AC cards but detect the two wheels of each bike that enters or leaves this facility; the system opens and closes stainless steel barriers. Alsok also serves the station CCTV cameras that monitor this facility. Inside the parking facility, there are floor-marking boxes enclosed by bent tube corridor dividers. They look like British Sheffield bicycle stands painted in white and red. Steel wire mesh fences enclose the whole area.

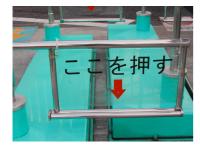
## **Technical Requirements:**

Subscription card-readers work with RFID electronic systems. They are designed to be low maintenance, since most electronic cases are carefully sealed. The materials and craftsmanship of this facility are of the highest standards and their finishes include rust proof coating, vandal proof paints and water resistant displays.

# **Security, Guardianship and Lighting:**

The station has no appointed guardians. Cycle theft is very low in the area and it is more likely to happen at street level rather than inside a parking area like this. The lighting that serves the facility comes from the street lamp posts and the station's lighting; however it is rather bright.







## **Maintenance and Servicing:**

Daily maintenance and cleaning is managed from within the station authority; Alsok serves the electronic and mechanical systems.

# Service Period (how long facility meant to last):

Unspecified, but outdoor facilities not only resist four season climate changes but typhoons and occasional earthquakes. The use of high standard materials suggests potential of 20-25 years.

# Strengths:

- The facility has achieved secure bicycle parking at street level, (outdoors), with very carefully controlled access
- Alsok is known as a very reliable security company in Japan, they not only guard the station with CCTV, but the department store across the street, pachinko (pinball) establishments and several banks and cash machines in the area. This means in the event of any incident involving the bicycle parking, it could be an advantage to track the criminals' movements
- The high quality materials represent a big initial investment, but this facility requires very low maintenance and has no wardens which greatly reduces running costs

#### Weaknesses:

- The highest expense of this facility is the access system, though they only serve 357 bicycles, which is insufficient for a station in an area with 10,000 inhabitants per square km²
- By using double level racks the designers could have optimised the parking floor area
- Users are aware of the technological advantages that this



sophisticated gate system has, though as a paid service some users would prefer to have some shelter for their bicycles, to protect them from rain and snow

## **Useful References:**

http://www.alsok.co.jp/