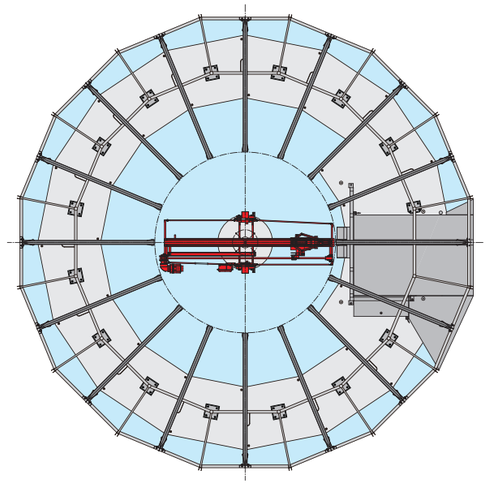
Specifications

[Plan]

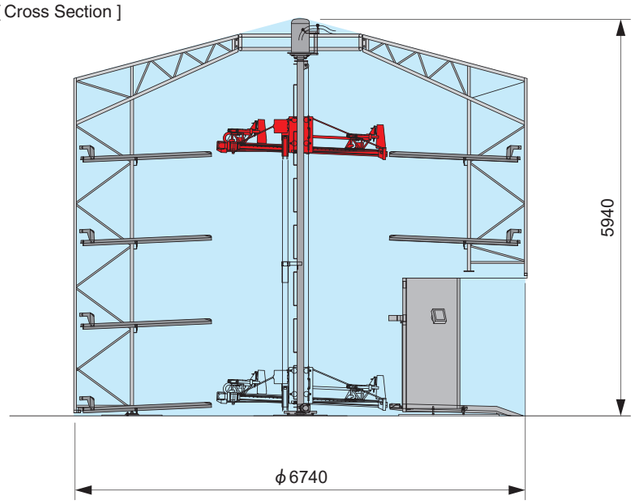


[Specifications] *1

Carrige Methodology		Elevator type (Swivel, bottom loading type)	
Storage capacity		58 bikes	13 bikes × 2 layers 16 bikes × 2 layers
Permitted bicycles *2	Tire size	24 - 28 inches	Electric-assist bikes Regular bicycles Road bicycles etc.
		Width	45 mm or less
Management system		Owner's bicycle storage system Rental cycle system Community bicycle system (Using the above together is also possible)	
Method of authentication		IC tag & Card-reader type (optional)	
		Password type (optional)	
Retrieval time*3		Avarage of 9.7 sec. (fastest time of 8.0 sec.)	
Total Mass		4.3 ton *4	
Projected area		35.7 m²	

*1 Please be aware that specifications can change without prior notice.
*2 There are some types of bicycles that cannot be stored.
*3 Retrieval time: from the start of mechanical operation to the delivery at the exit.
*4 Does not include the weight of stored bikes.

[Cross Section]



*Product specifications may change without notice.
*"Movile ECO Cycle" is a registered trademark of GIKEN LTD. in Japan.

GIKEN Construction Solutions Company

www.giken.com

CONTACT US

Ver 2.0EN01 / 27 Jun 2025

Movable Bicycle Parking System

GRIN Base™ MEC

GIKEN

GRIN Base™ MEC

Aiming to form a smart cycle community that allows the use of bicycles “anytime”, “anywhere” and “easily”

Currently, bicycles are gathering attention as a cutting-edge means of transportation regarding ecology, CO_2 reduction, clean energy, and healthy lifestyles.

A bicycle parking system that can maximise the convenience of bicycles is GRIN Base MEC.

The GRIN Base MEC is an innovative portable bicycle and parking system. It can quickly be constructed in small spaced areas and whenever and wherever you need it. In addition, it can be easily removed once the usage period is over.

Since our first launch of an earthquake-resistant underground bicycle parking using our original press-in technology, "GRIN Base," in 1998, we have accumulated a number of achievements as a pioneer of mechanical-type bicycle parking. Drawing on this experience, we have developed the GRIN Base MEC, which features easy operation, high-speed functionality, and advanced storage technology.

By combining the benefits of bicycle usage with the advantages of the GRIN Base MEC, we aim to create a smart cycling community – a cutting-edge clean transportation culture where bicycles can be used “anytime”, “anywhere” and “easily”.

Earthquake-resistant underground bicycle parking
GRIN Base (Minato-ku, Tokyo)

Potential of bicycle use

Ecology
Economy
Healthy
Fashionable

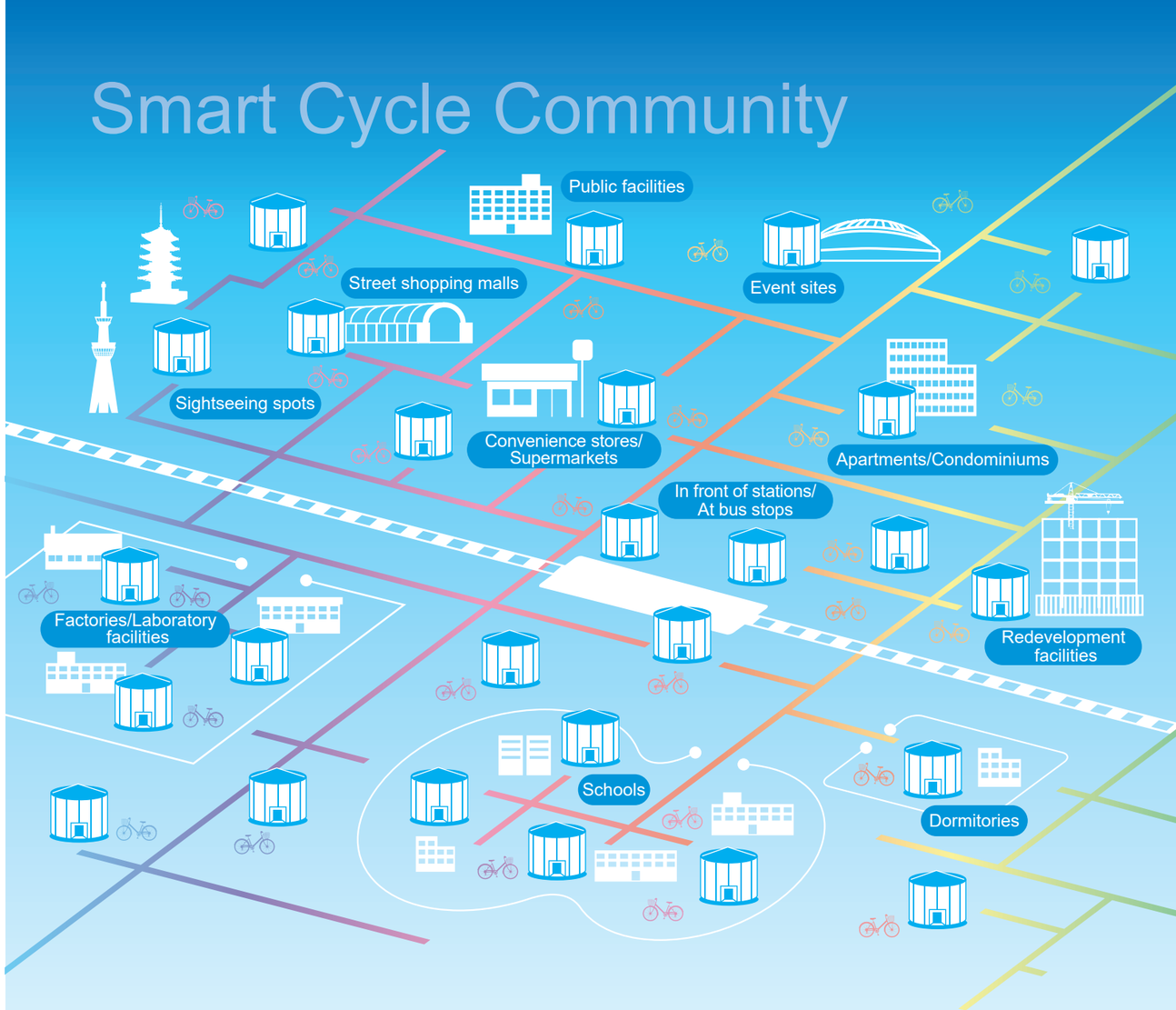
+

Advantages of GRIN Base MEC

Space saving
Quick setup
Easy/comfortable operation
High-speed

A cutting-edge and clean transporation culture

Formation of a smart cycle community



You can watch a video of the GRIN Base.

Setting Image

FEATURES

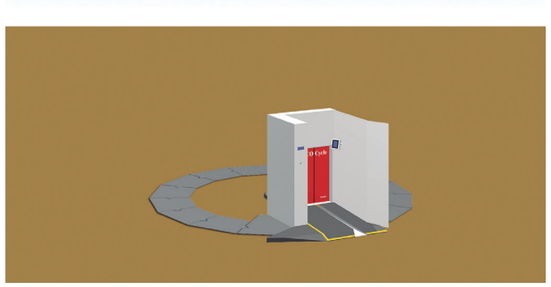
The innovative portable system provides quick and comfortable parking, while also boasting impressive capacity.

1 Portable system that is easy to setup/remove

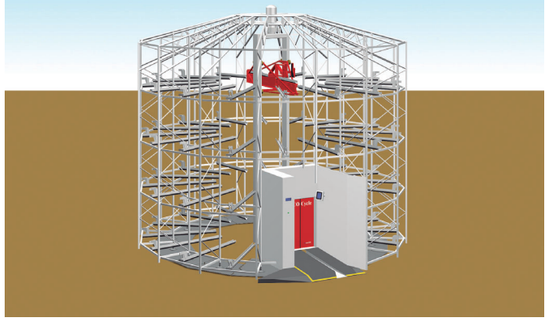
Simple procedures allow rapid installation and removal.

① Transport all parts.

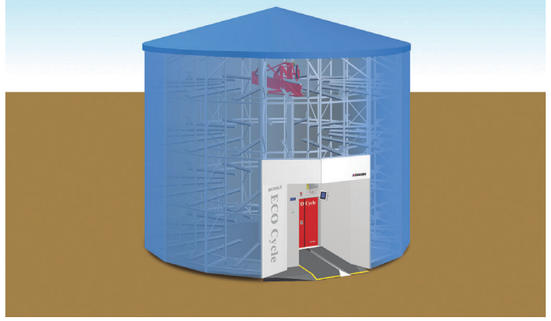
② Set up the base and parking/retrieval booth.



③ Assemble the frame parts, and install the machinery equipment.

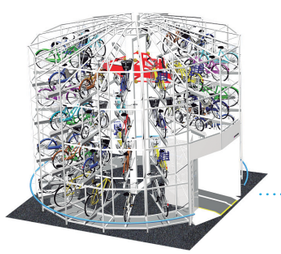


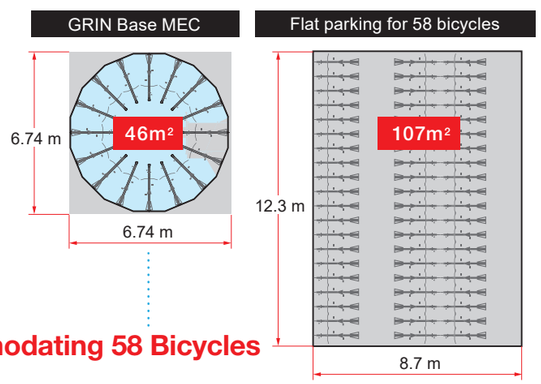
④ Mount the outer wall.



2 Space-saving and high-capacity

With GRIN Base™ MEC, a storage capacity for 58 bicycles is achievable within a property space of 46 m². This capacity efficiency is approximately 2.3 times greater than that of a typical flat parking lot.



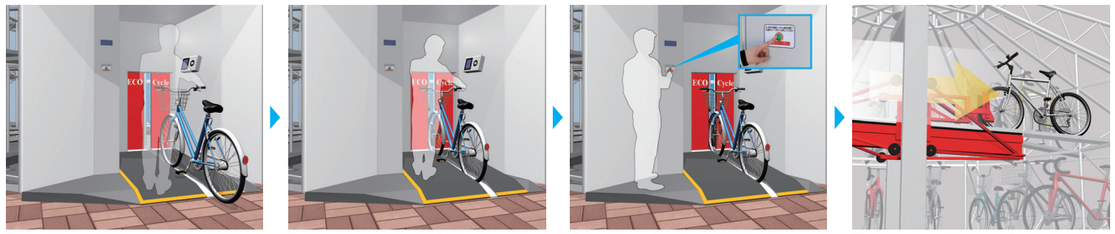


Accommodating 58 Bicycles

3 Simple and speedy parking/retrieval

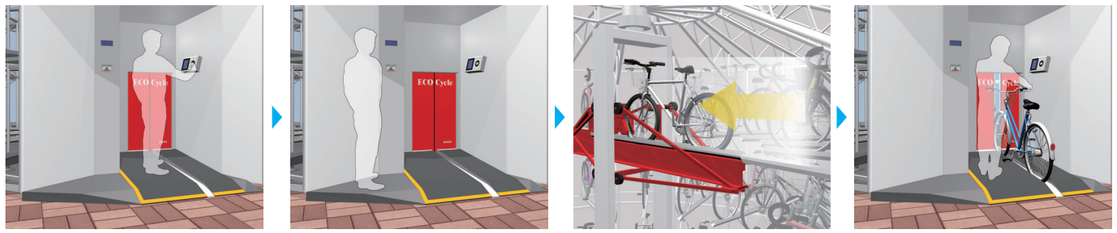
Parking/retrieval operation is simply done with an IC Tag and an IC Card. Users are not made to wait even when they are in rush hour as the average time to get a bicycle out is 9.7 seconds.

■ Parking



Set the bicycle along the guide rail. → Push your bicycle forward. → Step back from the mat and press the button. → The bicycle is pulled in and stored inside.

■ Retrieval



Swipe the IC card over the IC card reader. → Step back from the mat. → The carrier device fetches your bicycle. → The door opens and your bicycle pulled out.

4 Safe from being soaked by the rain or vandalised

Because bicycles are stored in a covered area, there is also no worry about getting wet from the rain or being vandalised.

5 Flexible Registration System

With the standard specification, users can register their bicycles using an IC Card and an IC Tag. This makes bicycle parking/retrieval and management simple and easy. Electric password access is also an available option.

6 Economical running cost

A fully automated storage system reduces the burden on caretakers and the maintenance work is also easy. The cost of electricity per parking/retrieval is about JPY 0.12, and running costs can be significantly reduced.

*Does not include standby power consumption and basic contract fees.

7 Exterior walls can be used culturally & commerically

It is possible to print any design on the wall, including ones that complement the local scenery. For example, as a new media to attract attention, it can also be used for corporate ads and as a tourism guide.

IMAGE OF INSTALLATION

Near Train Stations & Bus Stops

Bicycles can be placed in front of stations and around bus stops as a means of transport to link existing transport systems such as railways and buses. The wall can also be used for digital signage and as a new advertising media.

Under Elevated Railway or Road

The GRIN Base can be installed in space under elevated structures such as railways and motorways. In this way, dead space can be effectively utilised to provide convenient and safe bicycle parking facilities.

At Sightseeing Spots

Multiple units of GRIN Base located around each popular tourist destination allow tourists to use them as rental cycle ports. Also, sightseeing guide maps can be drawn on the walls.

At Event Venue

Short-term rental cycle service can be easily supplied for a travel mean inside the venue or to connect the venue from mass transportation stations. The exterior walls can be used as event advertising space.

IMAGE OF INSTALLATION

At Convenience Stores and Supermarkets

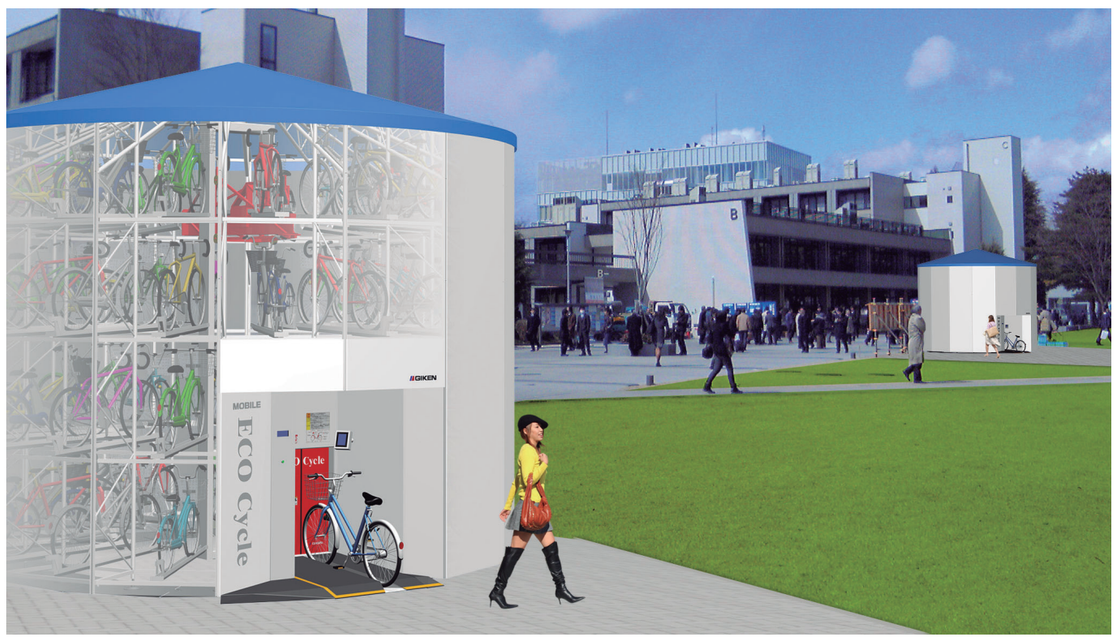
It can be installed in convenience stores and supermarkets to attract customers and create a synergistic effect of convenience. It can form an extensive community closely linked to daily life.

At Street Shopping Malls

It helps to eliminate abandoned bicycles in shopping streets where there is little space for bicycle parking.

At Schools

It promotes cycle sharing for commuting and moving around a wide campus-area by installing GRIN Base beside classroom buildings on campus and student dormitories.



At Public Facilities

It can be used as a base for community bicycles at public facilities such as city hall, public libraries and museums. The walls can also be used as public service messages/advertising.

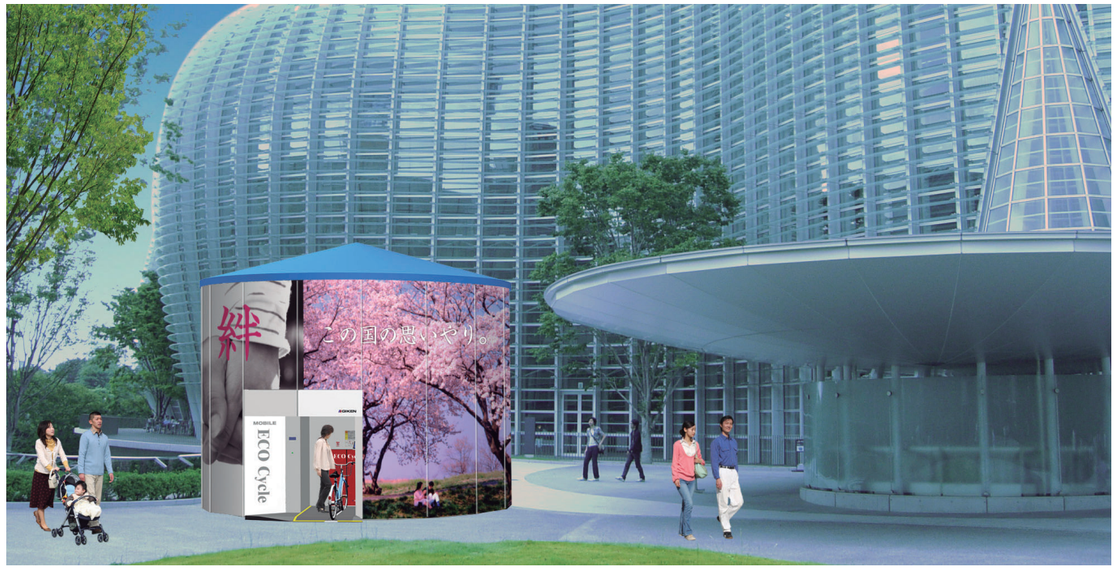


IMAGE OF INSTALLATION

At Apartments/Condominiums

Installing the GRIN Base, which can conveniently store trending bicycles such as electric power-assist, upscale and shared bicycles, in housing complexes can enhance their property values.

In Factory/Laboratory Facilities

A company can demonstrate that it promotes the use of bicycles for both getting around its large premises and for employees' commuting.

During Redevelopment Project

The GRIN Base is simple to install and remove, so it can be utilised as a temporary bike parking solution.

In preparation for disasters

In case of a major disaster that disables rail, car and other forms of transport, the GRIN Base can be deployed at each location so that people can use the bicycles to get home.