



# PAXWAY®

## Passenger Boarding Bridge

**ShinMaywa**

*Brighten Your Future*



**Happy flight with PAXWAY® !!**



Airports are the gateway to a journey in the sky. Many airport users have high expectations about the trip lying ahead. For anyone, the first step of a journey in the skies always leads through the tunnel connecting the airport to the aircraft. ShinMaywa passengers boarding bridges are known as "PAXWAY". Through more than 40 years of experience and the cutting edge technology to ensure safety and security, the "PAXWAY" has been striving to make passengers smile as one passes through this tunnel to have a fulfilling air trip.



# PAXWAY IN THE WORLD

PAXWAY®, an excellence recognized through the World. In Southeast Asia, PAXWAY® boasts the top share.

Our company has gone from equipping our first aircraft at Tokyo International Airport (now Haneda Airport) in 1969, to expanding to the point that we are now present in major Japanese domestic and international airports such as Narita International Airport, Osaka International Airport and Chubu International Airport, as well as in all the main international HUBS such as Singapore's Changi International Airport, and Thailand's Suvarnabhumi International Airport. To the present day, we have supplied over 1,000 PAXWAY® units, not only in southeast Asia, but also in Africa and South America, where their superior performance is recognized on a daily basis.



Narita International Airport (A380)



Osaka International Airport (Itami)



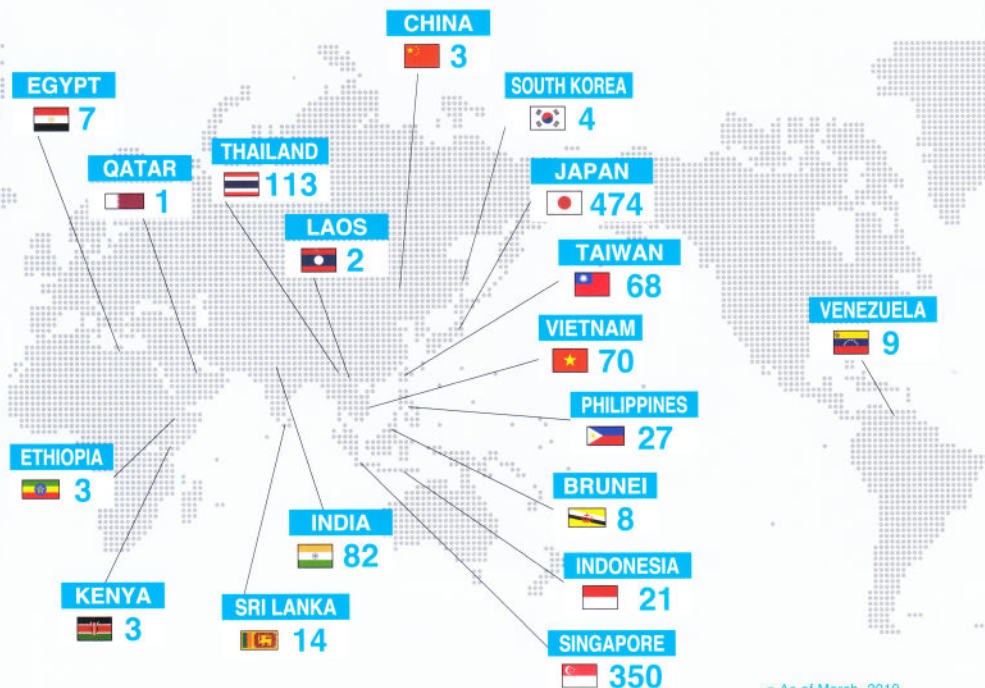
Chubu International Airport



Hanamaki Airport



New Chitose International Airport



\* As of March, 2019  
(Including under construction)



Changi International Airport  
(Singapore)



Bohol International Airport  
(Philippines)



Noi Bai International Airport T2  
(Vietnam)



Bandaranaike International  
Airport (Sri Lanka)



Indira Gandhi International  
Airport T3 (India)



Suvarnabhumi International  
Airport (Thailand)





## PAXWAY® LINE UP

PAXWAY® provides a wide variety of spaces adapted to order-made developments.

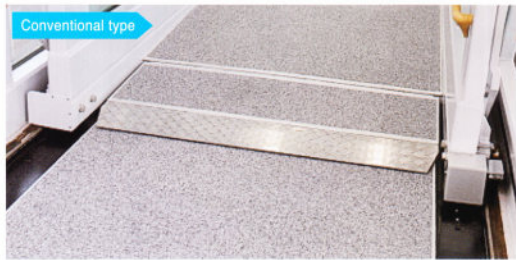
The PAXWAY® of ShinMaywa can dock to a wide variety of commercial aircrafts, regardless of their sizes.

There are roughly four types of PAXWAY® from which airports can choose the best-suited type for them.

Full Flat type



Conventional type



Fully Flat /  
Wheelchair Accessible Type

A universal design has been deployed to realize a fully flat floor with no steps inside the tunnel.

This is a fully flat model with non-steps and non-gutter on the floor inside. A universal design was deployed to realize a fully flat floor in pursuit of greater safety and comfort for passengers. This ensures smooth boarding and disembarking for ordinary passengers, as well as wheeled carrying cases and people in wheelchairs. It is available as a glass tunnel model or a steel plated tunnel model.



### Glass wall tunnel model

The expertly crafted glass tunnel model gives passengers the whole view and a sense of perfect openness. It can also capture natural light, leading to substantial electrical lights savings.



### Steel wall tunnel model

Our standard model. Insulation material installed on the ceiling and side walls reduce temperature variations, maintaining a comfortable interior even in regions with harsh temperatures.



### Compatible with regional jets model

We developed cab floors compatible with airstairs, which enables attachment to regional jets. This, of course, enables to strengthen security at the airport and makes it possible to embark and disembark comfortably without being dependent on the weather. It also enables passengers on wheelchairs to embark and disembark directly from the terminal building.



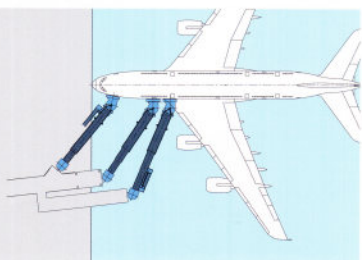
### Steel-wall tunnel model with windows

A steel-wall tunnel model with windows. Enjoying the view gives a sense of openness.



### A380 suitable model

Boarding bridges the super large aircraft A380. This model were installed by ShinMaywa for the first time in the world. We made it possible for our product to be attached to the doors on the second story, by making developments to improve fitting to the fuselage, and by extending the elevating and lowering limits between 4.3m to 8.2m.







## PAXWAY® TECHNOLOGY

PAXWAY®'s leadership rests on accurate technology making it possible to operate at a high level of quality and safety. A superior technology leading to smooth, accurate performances.

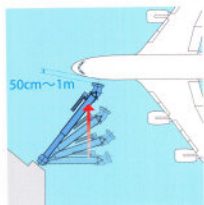


### Automated Docking System [AI Docking System] ※ Optinal Item

**AI technology used for the first time in the world to realize an automated docking system.**

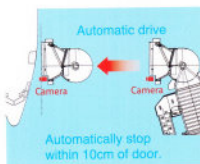
A camera installed inside the cab at the front of the boarding bridge detects and captures an image of the aircraft door to ascertain the target position for docking. An AI camera outside the cab identifies the position of the door. This only requires one-touch operation, allowing the bridge to be guided automatically to within 10cm of the aircraft door.

※The automated docking system is an optional function.



**Automated Docking Function**  
※standard

By pressing a button switch on the LCD touch panel of the control console, it is possible to select aircraft type and to automatically park the passenger boarding bridge within 50cm to 1m of the door position of the aircraft fuselage. It significantly reduces the operating time to attach the boarding bridge.







### Infrared sensors

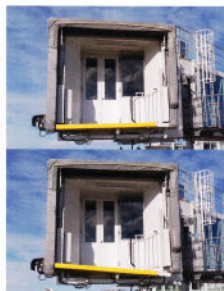
Sensors detect the distance set between boarding bridge and aircraft. These sensors allow boarding bridge to move from a set distance at low-speed to ensure safety.

### Anti-collision function

In the case of a gate with two bridges to be attached to the 2 doors of Aircraft, the two passenger boarding bridges can detect each other's distance at any length and angle to prevent collision.

### Cab touch

A detector installed on the bumper where the floor end of the boarding bridge comes to contact with aircraft. A safety device ensure that the boarding bridge does not approach with excessive pressure on the aircraft.



### Adjustable (cab) floor

By making the aircraft floor and the cab floor parallel, the resulting floor inclination of the tunnel allows customers to embark and disembark safely.



### Auto leveler

A device detecting the vertical motions of the aircraft caused by passenger embark and disembark and luggage loading and unloading, which automatically makes the necessary adjustments. Auto leveler unit is mounted externally, there is no risk of contact with the customers.



### CCTV Camera

A camera to check horizontal drive units at ground level. Ground personnel security is ensured by monitoring the periphery of the wheels in motion. In addition, an all-weather camera cover ensures excellent durability.



### Control console

An easy-to-operate LCD touch-panel to check the status of the boarding bridge on the screen, and which can save up to 6000 messages about operation history and malfunction history. It will prove helpful for the management of malfunctions and manipulation errors. (Acrylic covers optional)



### Cable carrier

Power, lighting, controls, and communication cables are all suspended in order to follow the movements of the boarding bridge. Troubleshooting and wiring replacement are significantly easier.



### Power distribution board

This panel installed under the rotunda column of the boarding bridge receives the power supply from the terminal building and provides power and lighting to the boarding bridge. The weather-proof power supply panel also ensures superior durability.



## PAXWAY® EXTERIOR DESIGN

The PAXWAY® look, no compromise on details.

Designs to match airport buildings are also possible. We welcome customers in a beautiful and high-performing design.







## PAXWAY® INTERIOR DESIGN

The interior design of the PAXWAY®, plenty of space for a comfortable experience.

Beautiful tunnels, easy to use and with ample space. Designed with people's comfort in mind.







## PAXWAY® COMFORT

PAXWAY®'s attention to comfort and satisfaction

The pure bliss of hospitality, and comfort that pay attention to every detail.

High-quality time based on universal design.



### Flashing and weather-proof joint

The design used does not convey the vibrations to the opening of the building when the boarding bridge is in motion, and careful consideration was given to prevent rainwater from entering through the gaps in order to provide comfortable embarkation and disembarkation in case of bad weather.





### Handrails

In conformation to barrier-free regulation, it is possible to install an interior handrail. Both of two section or three section tunnels types can be installed throughout the whole tunnel to ensure safe passage of the customers.



### Gap cover

By installing a cover to the revolving section of the tunnel movable section (CAB, Rotunda), we have resolved the problem of customers, especially for women, stumbling with their high heels get stuck in the gap.



### Exhaust fan

A ventilation fan is installed at tunnel roof to exhaust unpleasant hot and cold air from the tunnel and to draw in conditioned air from the terminal building.



### Air-conditioning systems

Various kinds of air conditioners can be installed to match the type of boarding bridges (ceiling embedded, ducting type and post-installation type). We can provide a more comfortable environment for the passengers by maintaining a constant temperature.





# PAXWAY® ECOLOGY

Ecology with Earth-friendly PAXWAY®

While improving the functions of the PAXWAY® of ShinMaywa, we also do not forget to be aware of the environment.



## Solid tires

By using Solid tires, no more worrying about punctured tires, air leaks or regular maintenance such as internal pressure checks. Their longer lifespan is also more economical than conventional air tires.



## Interior lighting

LED lighting was adopted in order to save energy. Lights in overlapping tunnel sections turn off automatically. It is also possible to set up a timer to program light extinction in order not to forget.



## Exterior lighting

LED lighting was adopted in order to save energy. Lights automatically turn off by setting a timer and through control of photoelectric sensor in order not to forget.



## Control panel

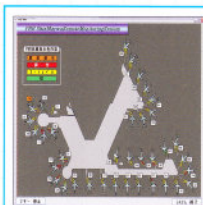
Better maintenance has been achieved by reducing wiring with a wire-saving system and reduced power consumption through inverter control.



# PAXWAY® ADDITIONAL EQUIPMENT

Excellent PAXWAY® equipment

Equipment to further improve convenience for safer extensive airport operations.



## Remote monitoring system

A system to monitor the situation of operations at boarding bridges from a remote location and to detect trouble early during anomalies. It also uses an internet connection to contact our company, which helps in shortening recovery time.



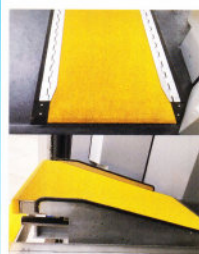
## Tire guards

A fixed guard rail system thoroughly protects the surrounding area of the tires and ensures safe operation. An auto-stop system detects obstacles, i.e. GSE vehicles and automatically stops operation in this eventuality.



## Countermeasures against typhoons outriggers

By installing a manual jack to both sides of the tires, it prevents the shaking of the boarding bridge in times of strong winds caused by typhoons for increased security.



## CAB floor Step-less device

A device used to eliminate the level difference caused by the rise of the CAB floor between the boarding bridge floor and the aircraft door sill. Customers in wheelchairs can embark and disembark smoothly.



## Safety shoe switch

A sensor separate from the auto leveler system that detects sudden lowering of the connected aircraft and forcibly lowers the boarding bridge.



## Interface with other equipments

Communicating with VDGS (docking guidance), FIDS (Flight Information) to further smoothen airport operations.



## PCA (Pre Conditioning Air unit)

Air conditioning in use for inside the aircraft. A system to provide comfortable air-conditioning once the engines have been cut off after landing.



## 400Hz-GPU (Ground Power Supply unit)

A device to supply electrical power to the aircraft. A system to provide electrical power once the engines have been cut off after landing.

# PAXWAY® TOTAL CARE

We at PAXWAY® ShinMaywa shall provide sufficient after-sale services  
and technical support after handing over to customer.

Contact us on following our home page URL or by phone for maintenance and assistance.



## ShinMaywa

Shinmaywa Industries, Ltd. Parking Systems Division

110-8620 Taito-ku, Tokyo Higashi Ueno 5-16-5

TEL:03-3843-3410 FAX:03-3843-3271

Shinmaywa(Asia)Pte.Ltd

8 Burn RD, #14-10 Trivex, Singapore 369977

TEL:+65-6224-0728 FAX:+65-6224-9678

<http://www.shinmaywa.co.jp/>

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