ShinMaywa

Municipal Refuse Transfer Station

Saimai Refuse Transfer Station, Bangkok



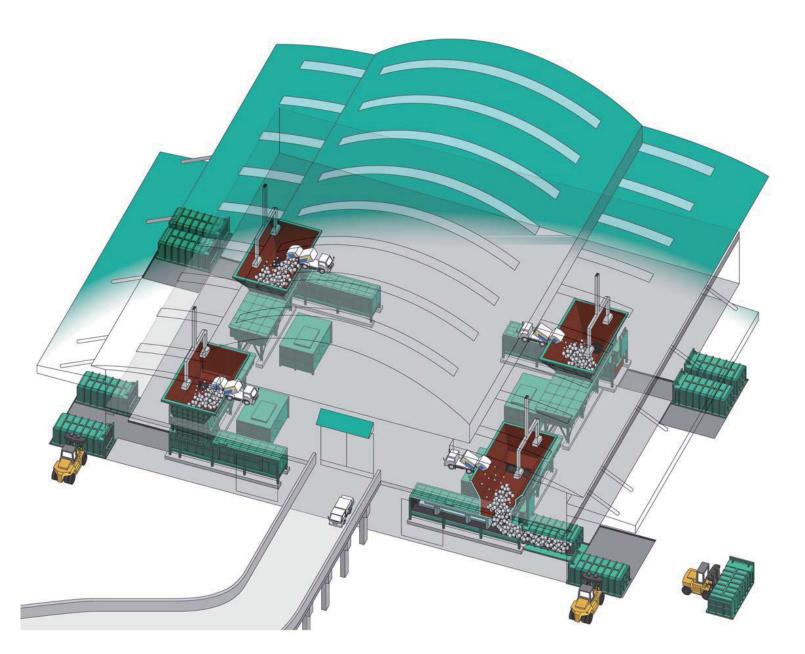




Separation of Refuse Collection and Transportation

The principal behind a refuse transfer station is to provide a central collection point for municipal refuse which are efficiently loaded onto large specialized refuse transfer containers for delivery to disposal facilities such as a landfill or incineration plant. And also the transfer station contribute to maximize the operational efficiency of the refuse collection vehicles. Consequently, frequency of transportation to and from the disposal facility is much reduced, which offering an effective solution to the present-day energy issues and environmental protection.

he transfer station layout must be designed to enable efficient collection of the refuse, short term storage and efficient and reliable of the transfer vehicles with good traffic flow for incoming and outgoing vehicular traffic. Refuse collection vehicles discharge the load into the hopper. Then, the feeder pushes the refuse into compactor filling chamber. The compactor loads the refuse into large-sized transfer container.



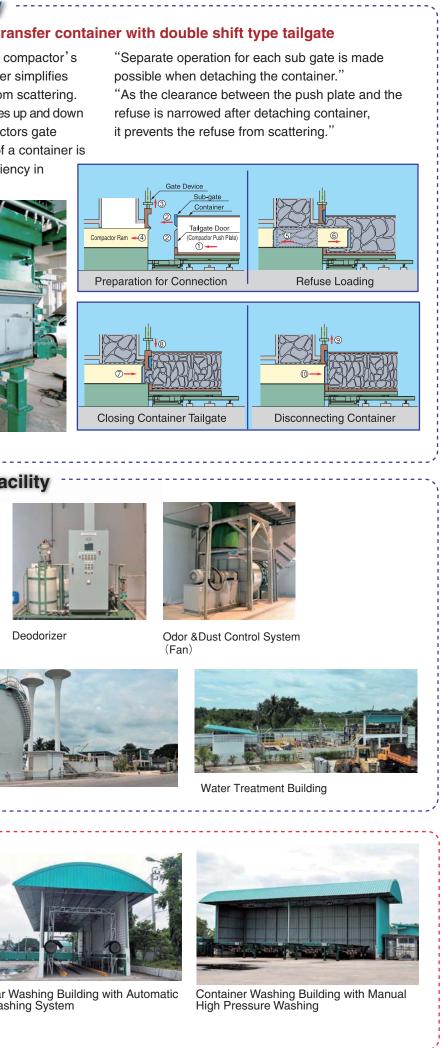
nce a tailgate door becomes a compactor's push plate, this type of container simplifies the handling and prevents refuse from scattering. s a sub gate of the container moves up and down synchronizing with the compactors gate equipment, "the throwing opening of a container is enlarged, resulting in improved efficiency in pressing refuse.'



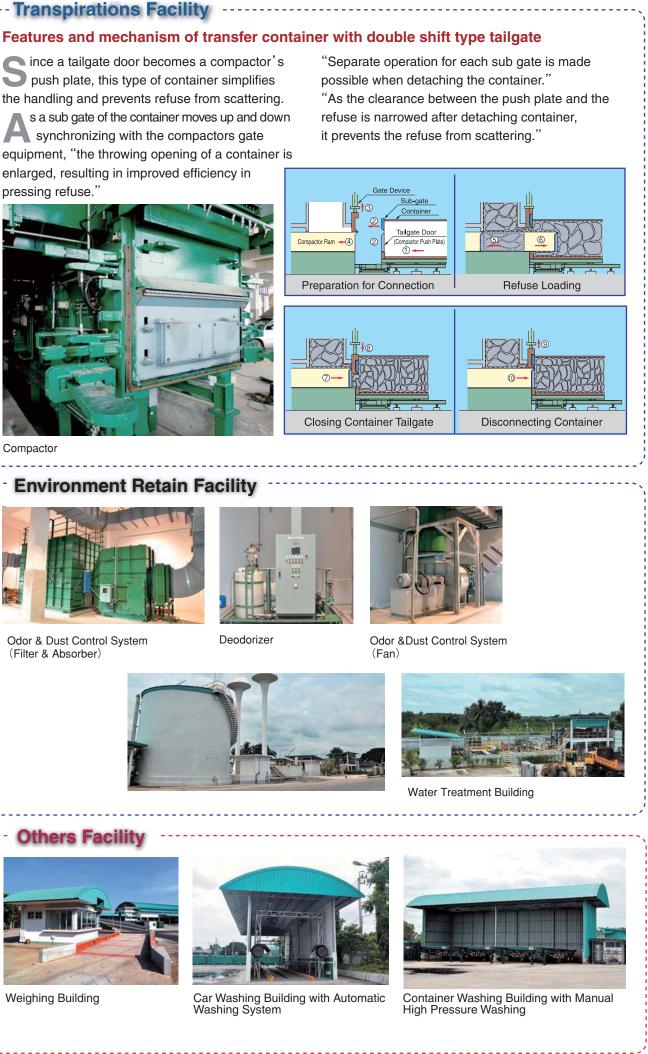


Environment Retain Facility



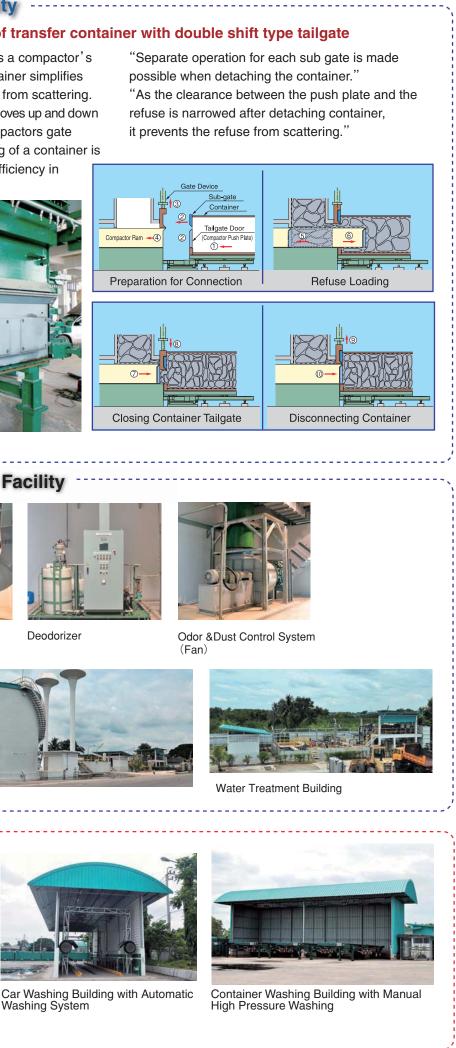


Odor & Dust Control System (Filter & Absorber)



Others Facility





Weighing Building

has produced an Epoch-making System.

Features of ShinMaywa Transfer Station System

Clean and hygienic, and free from scatter of refuse

Refuse dumped in the hopper is automatically and hygienically loaded into an enclosed a large-sized container with no emission of odor or scatter of refuse. And also employing the Post Loaded type compactor system, leachate generation in the transfer station can be minimized.

Highly efficient transportation

By the use of refuse compactor, a large-sized container carries much refuse of many small-sized refuse collecting vehicles at once.

Thoroughgoing environmental safeguards

Powerful dust collector and deodorizer are equipped in the transfer station system to completely protect the surrounding environment.

Automatic operation

All of the operation are fully automatic that includes container connection, shifting container tail gate to the compactor ram, refuse compaction, and container disconnection.

Compaction Facility & Control System

<System interlude>

- · Hi-rate refuse transferring
- Hygienic system
- Keep Clean in Environment
 Automatic operation system
- Refuse transfer by container
- Automatic operation system

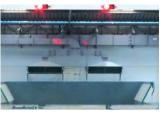




Un-Loading Area



Hydraulic Power Unit



Hopper & Ducting



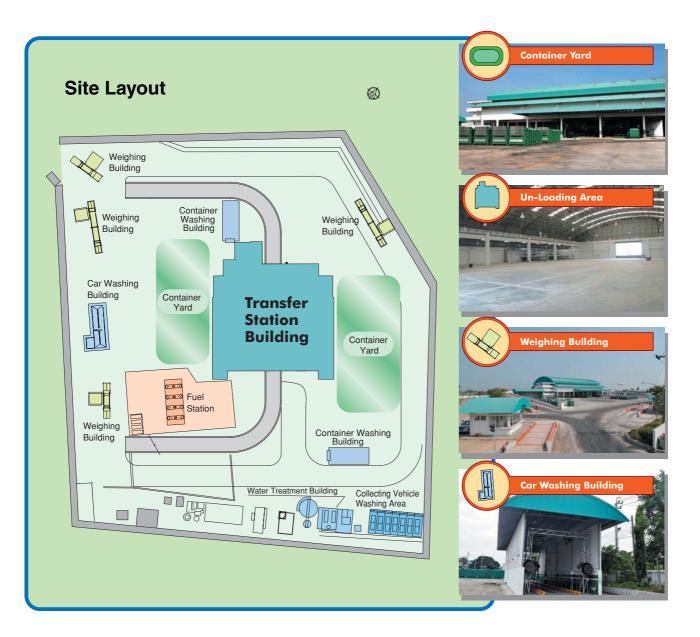
Central Control Room

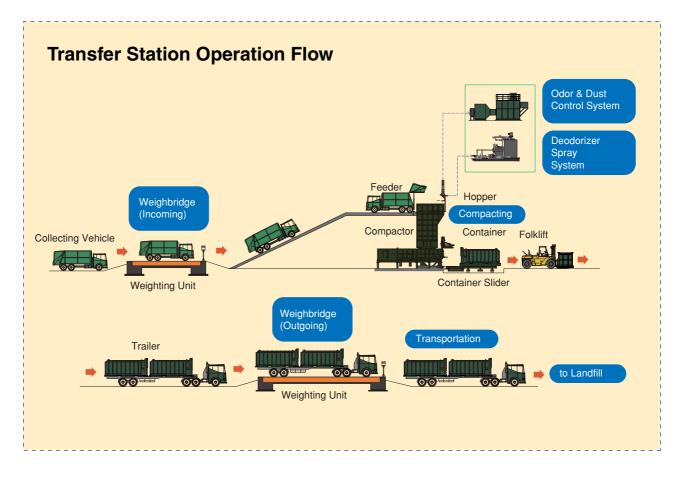
-- Transportation Facility





Container & Folklift





Outline of Transfer Station

| Capacity | 2,000 tons ⁄ day |
|---------------------------|------------------------------|
| Operation Hours | 14 hours ⁄ day |
| Numbers of Compactors | 4 lines |
| Environment Facility | Odor & Dust Control System |
| | Deodorizer Spray System |
| | Air Curtain |
| | Waste Water Treatment System |
| Site Area | 51,500m ² |
| Transfer Station Building | 3,350m ² |
| Construction Period | 2009-2011 |



References of Refuse Transfer Stations (Overseas and Japan)



Specifications and dimensions are subject to change without notice.

ShinMaywa Industries, Ltd.

Environmental Systems Dept. 5-16-5, Higashi-Ueno, Taito-ku, Tokyo 110-8620, Japan Telephone: +81-3-3842-6332 Facsimile: +81-3-3842-6335 e-mail:env.eigyo@shinmaywa.co.jp

ShinMaywa (Bangkok) Co., Ltd.

No.159/2 Serm-Mit Tower, Ground Floor, Unit G03/1, Sukhumvit 21(Asok) Road, North Klongtoey, Wattana, Bangkok 10110, Thailand Telephone : +66-2-259-4473 Facsimile : +66-2-259-4475 e-mail : bangkok@shinmaywa.co.jp

ShinMaywa (Asia) Pte. Ltd.

8 Burn Road, #14-10 Trivex Singapore 369977 Telephone : +65-6224-0728 Facsimile : +65-6224-9678 e-mail : asia.ad@shinmaywa.com.sg

Chongqing Endurance & ShinMaywa Industries, Ltd.

No.8 Shifolu, Jieshi, Banan District Chongqing 401346, China Telephone: +86-23-6196-3700 Facsimile : +86-23-6196-3710 e-mail:sales@naide-shinmaywa.com