Features and mechanism of transfer container with double shift type tailgate

- Waste discharged by Hydraulically Operated Horizontal Ejection Plate.
- Tailgate lock, Tailgate open/close, Ejection plate and Landing gear are operated by hydraulic cylinder. Hydraulic power to be supplied by Tractor Head.
- 1m³ of Drainage tank for Leachate is equipped.
- Double Shift Door type tailgate.

Tailgate door of the container serves as a compactor push plate too

- Efficiency is much increased without scatter of waste

Sub-gate of the container moves up and down synchronizing with the movement of compactor gate mechanism

- The Sub-gate provides bigger opening of the Container for efficient waste loading.
- Sub-gate fits tightly to the tailgate door after disconnection so that it fully prevents spill of waste.

Sequence Of Operation

1. Preparation For Connection
2. Gate Device
3. Sub-gate
4. Container
5. Tailgate Door
6. Compact (1/2/3/4/5)
7. Refuse Loading
8. Closing Container Tailgate
9. Disconnecting Container

1-9: Operation Order
Separation of Waste Collection and Transportation Has Produced an Epoch-making System

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

The transfer station layout must be designed to enable efficient collection of the waste, short-term storage and efficient and reliable loading of the transfer vehicles with good traffic flow for incoming and outgoing vehicle traffic. Waste collection vehicles discharge the load into the hopper, then the hopper pushes the waste into compactor filling chamber. The compactor loads the waste into large-sized transfer container.

Features of ShinMaywa Transfer Station System

- **Clean and hygienic, and free from scatter of waste**
  - Waste dumped in the hopper is automatically and hygienically loaded into an enclosed large-sized container with no emission of odor or scatter of waste.
  - 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 trash compactor, a large-sized container carries many small-sized waste collection 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, waste compaction, and container disconnection.

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**System Flow**

**Transfer Station Building**

- Odor and Dust Control System
- Weigh Bridge (for Incoming Vehicle)
- Weigh Bridge (for Outgoing Vehicle)
- Parking Space
- Tractor Head
- Landfill

**Facilities**

- Central Control Room
- Odor and Dust Control System
- Compactor System (Ground Floor)
- Container-Semi trailer with Tractor Head
- Container-Semi trailer with Prime Mover
- Unloading Area (2nd Floor)
### Outline of Transfer Station

<table>
<thead>
<tr>
<th>Capacity</th>
<th>1,700 tons/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Hour (Receiving) Capacity</td>
<td>270 tons/hour</td>
</tr>
<tr>
<td>Operating Hours</td>
<td>18 hours/day</td>
</tr>
<tr>
<td>Numbers of Compressors</td>
<td>4 Ines</td>
</tr>
<tr>
<td>Numbers of Container-Trailer</td>
<td>48 units</td>
</tr>
<tr>
<td>Numbers of Tractor-Head (On-road Vehicle)</td>
<td>31 units</td>
</tr>
<tr>
<td>Numbers of Prime Movers (In-plant Vehicle)</td>
<td>4 units</td>
</tr>
<tr>
<td>Environmental Facility</td>
<td>Odor and Dust Control System Deodorizer Spray System</td>
</tr>
<tr>
<td>Site Area</td>
<td>5.2 hectares (52,000m²)</td>
</tr>
<tr>
<td>Transfer Station Building</td>
<td>4,886 m²</td>
</tr>
<tr>
<td>Administration Building</td>
<td>612 m²</td>
</tr>
<tr>
<td>Construction Period</td>
<td>May 2000 ~ December 2001</td>
</tr>
</tbody>
</table>

### Transfer Station in Japan

- Kanagawa Waste Transfer Station, Yokohama
- Higashi Shinagawa Waste Transfer Station, Tokyo

### Project Reference (Japan) Year: 1979 ~ 2015

Specifications and dimensions are subject to change without notice.

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