As a comprehensive environmental company that conceptualizes, designs, produces, installs, and maintains equipment, ShinMaywa contributes to the realization of "Zero-emission Society."
Building Vertical Waste Handling System

Hygienic, simple, and compact way to store and discharge waste efficiently

**Problems at Waste Storage**
- Waste Spilling from dust bin
- Occurrence of odor and foul water
- Inefficient waste collection
- Large space for waste room

**Solution**
1. Able to store large amount of waste
2. Space saving of waste storage room
3. Enclosed equipment
4. No leakage of odor and foul water
5. Automatic waste discharge
6. All-time waste disposing

**DUST DRUM (Drum Type)**

**Flow of waste**

1. **Storage condition 1**
   - The invention charger or person throws in waste.

2. **Storage condition 2**
   - The charging screw automatically rotates for a predetermined duration of time and forwards the rotator to the separation collector of the storage chamber.

3. **Storage condition 3 (Fully charged)**
   - The actions (2) is repeated several times until the storage becomes full.

4. **Discharge condition**
   - The rotating screw transfers waste into a refuse collector.

**DUST SCREW (Screw Type)**

**Flow of waste**

1. **Storage condition 1**
   - The invention charger throws in waste.

2. **Storage condition 2**
   - The rotation of the drum moves the waste towards the discharge outlet.

3. **Storage condition 3 (Fully charged)**
   - The charging of waste and drum rotation is repeated until the storage becomes full.

4. **Discharge condition**
   - Waste is transferred by drum rotation to a refuse collector.

Waste Storage and Handling Equipment

**Outline of system**
- Outline of system
- System control panel
- Unblocking device
- Sorting device
- Discharge gate
- Conveyor
- Traction controller
- Vacuum pump
- Descent controller
- Silentor
- Chute tube
- Return to sorting device
- System control panel
- Hand cart for conveyance
- Waste chute
- Outdoor post type throw-in hopper
- Recycling booth

**Waste Storage and Handling Equipment**
- Encourage material Recycle
- Automated separate collection & storage
- Space saving
- Convey large amount of waste at high speed
- Energy saving
- Using gravity and air resistance
- Hygienic
- Clean and odor-free by encapsulation

**Pneumatic Waste Collection and Transportation System**
An innovative waste collecting system with vacuum type waste collection vehicle originated by ShinMaywa. A desire that waste can be disposed of at any time and moreover the residential areas are thoroughly free from piles of refuse which are completely realized by ShinMaywa.

**High-Rised Building Waste Regulated Collection System**
- Encourage material Recycle
- Automated separate collection & storage
- Space saving
- Convey large amount of waste at high speed
- Energy saving
- Using gravity and air resistance
- Hygienic
- Clean and odor-free by encapsulation

**Automated separate collection & storage**
- Waste can be disposed by residents at any time through a waste chute or outdoor post type throw-in hopper regardless of collection date.
- The waste in an underground storage tank is pneumatically transferred to “TECHNOCUUM” vacuum type waste collection vehicle by vacuum power. Totally enclosed construction of the “TECHNOCUUM” satisfactorily prevents emission of foul odor.

**Automated separate collection & storage**
- “TECHNOCUUM” Pneumatic Waste Collection and Transporting System
- Waste can be disposed by residents at any time through a waste chute or outdoor post type throw-in hopper regardless of collection date.
- The waste in an underground storage tank is pneumatically transferred to “TECHNOCUUM” vacuum type waste collection vehicle by vacuum power. Totally enclosed construction of the “TECHNOCUUM” satisfactorily prevents emission of foul odor.
Waste Transfer Station

Waste is first collected by a number of collecting trucks and then compacted into a large-size container at waste transfer station for efficient transportation.

**Need for Transfer Station**

1. Efficient Collection and Transportation
2. Reduce Transportation & Collection cost
3. CO2 Reduction
4. Reduce traffic congestion

**System Flow**

**Transfer Methods**

The Compactor-Container Method

- Sequence of Operation (Transfer container with double shift door type tailgate)

**Transportation Methods**

- By Ship
- By Rail
- By Road
References of Waste Transfer Stations/Recycling Facilities

Growing number of Waste Transfer Stations and Recycling Facilities throughout Japan and overseas

Environmental Vehicles

Crushing and Compacting Type Refuse Collector

**G-PX TOWN PACK**

ShiMaywa's Town Pack is Japan's No.1 selling compression-type refuse truck. Integrating our DNA in performance, functions, and reliability, it projects the beautiful form full of elegance, equipped with abundant user-oriented new functions.

Detachable Container System

**ARM-ROLL**

“ARM-ROLL” we proudly present as No.1 sales product permits loading/ unloading and transporting several containers with a carrier (truck body).

Sewage Cleaning System

**“CLEAN CUUM”**

CLEAN CUUM has powerful vacuum pump with strong air flow which is very efficient for suction at deeper and long distance.
Specifications and dimensions are subject to change without notice.

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