

# SWEEPER SYSTEM

Remove manual intervention with smart unloading for gaylords & octabins.



**PRODUCT GUIDE** 

SWEEPER SHOWN WITH OPTIONAL GAYLORD COVER

# Maguire Sweeper Conveying Systems - Key Features

Maguire Sweeper conveying systems reduce labor intervention and make automatic unloading as efficient as possible. This translates to fast payback.



#### **Automatic Material Removal**

- Rotating action moves resin to a slotted pick up tube
- Vacuumed out of container
- No manual work required



#### **Energy Savings**

- Vacuum system only operates when pulling material
- No manual start-ups or stops required
- Jog button for manual rotation



#### **Simple Container Placement**

• Easy to insert & remove for fast changeovers



# Reduced Installation and Operation Costs

- Connect to conveying system
- Connects Sweeper to single phase power supply



#### **Reduced Waste**

Effective material removal reduces resin wastage



#### **User-friendly Operation**

- No heavy-duty hydraulics
- No pinch points
- Low torque and rotation speed for safer operation
- No guards required



## How does the Maguire Sweeper work?

Reduces human intervention by automatically removing material from material container.

System constantly flattens material pile, pushing material to the edge of the resin container and conveying directly.

System consistently flattens material pile, pushing material to edge of box and conveyed directly.

#### Sweeper Structure & Design

#### **Sturdy Steel Stand**

- Straddles the material container allowing easy front access
- Set of vertical rails carry a trolley up and down above material container

**Material Container** 

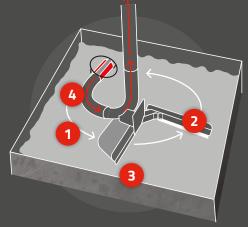
#### **Aluminum Material Conveying Tube**

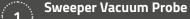
- Attached to trolley and coupled to a second, rotating tube below
- Standard 1.5" (38 mm), 2" (50 mm), 2.5" (63.5 mm)

#### **Vertical Rotating Tube**

- Driven by a slowly moving gear motor (about 2 RPM)
- 3 ft (1 m), flexible vacuum hose with a short-slotted pick up tube to vacuum up pallets

#### **Sweeper Operation**



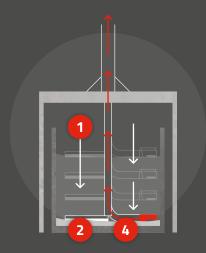


 Rotates on top of material pile in material container until material has been evacuated



#### **Hinged Cross Member Arm / Brush**

- Pellets in the center are evenly swept to the outside
- As vertical tube rotates, flexible portion is dragged across the top of the pellets, reaching into each corner



#### **Cross Member Arm Plate**

• Keeps pellets even and flat



#### Flexible Vacuum Hose

- Repeatedly vacuums pellets from the sides and corners
- Pellets are vacuumed up through the material conveying tube and carried to line
- No interruptions
- Less than 10 lb / 5 kg of pellets remain

## **Sweeper Build Options & Accessories**

Maguire offers a range of Sweeper build options and accessories. These range from single options and accessories to complete kit assemblies.



#### Full Stainless Steel Sweeper Assembly (Standard)

- In lieu of standard aluminum parts that are in contact with material
- Available sizes:1.5" / 2" / 2.5"
- Available for standard and tall Sweeper sizes

For abrasive materials or special applications (Example: Food or medical applications)



#### **Relocate Power Switch**

 Switch is normally located on back side away from forklift operator

Relocate controls box according to installation preferences (Example: Sweeper against a wall)



# Stainless Steel Sweep (Bolt-on)

Available sizes:
 1.5" / 2" / 2 .5"

For abrasive materials or special applications (Example: Food or medical applications)



#### Stainless Steel Brush Assembly

• In lieu of standard aluminum

For abrasive materials or special applications (Example: Food or medical applications)



#### Wider Material Bin Stand Top

Increases width of Sweeper stand assembly

Allows for more room to slide material bin under Sweeper assembly



#### **Wiper Blades**

- In lieu of brushes
- Made of FDA approved Nylon, direct replacement of two brush assembly

For use in food and medical grade applications where brushes cannot be used



#### **Motor Disconnect Switch**

 Automatically turns off gear motor as trolley is raised

To prevent motor from turning if assembly is lifted



#### Stainless Steel Sweeper Tines

In lieu of standard Lexan plate
 Good for poor flowing or sticky
 materials to assist with consistent
 material movement



#### **Dual Sweeper Controls**

- Interconnected controls for Dual Sweepers installations
- Available sizes:1.5" / 2" / 2 .5"
- Available for standard and tall Sweeper size

Automatic switchover from material container A to container B - allows for longer durations without manual intervention



Combine with GHL Loader Series for complete material container unloading package.



#### **Ceramic Coated Stainless Steel Sweep**

• In lieu of standard aluminum For highly abrasive materials conveying and special applications requiring a hardened surface finish (Example: Glass filled materials)



#### **Clear Lexan Material Bin Cover**

 Material container rigid fold-up cover

Clear rigid covers to allow easy view but stop foreign bodies entering material container



#### **Stand Leg Extensions**

- 4 steel legs included
- Raises the Sweeper frame 4" above ground floor

Additional height spacers to provide additional height for different sized material containers





#### **Sweeper Gaylord Blades**

 Options available are fabricated in Nylon, stainless steel or thick Lexan blade

Used to allow the Sweeper to slide along the top of the material and not bury itself (Example: Food or medical grade materials)



#### **Low Level Alarm**

- Installed on Sweeper unit
- Audible and visual alarms via control box

To signal low level of material when material container is almost empty



#### **Cloth Material Bin Cover**

 Stretched over material container

Fabric container covers with clear viewing panels placed on material container - allows easy view but stop foreign bodies entering material container



#### Wheel Stand Kit

 Set of wheels attached to Sweeper stand

Mobilizes the Sweeper stand to allow for local repositioning around material containers and increase accessibility

#### **Technical Specification**

MODEL NUMBER	VERTICAL CLEARANCE		DIAMETER OF THE TUBE	
	US	METRIC	US	METRIC
SW-4815	48"	1.2 m	1.5"	38.0 mm
SW-4820	48"	1.2 m	2"	51.0 mm
SW-4825	48"	1.2 m	2.5"	63.5 mm
SW-8415	84"	2.1 m	1.5"	38.0 mm
SW-8420	84"	2.1 m	2"	51.0 mm
SW-8425	84"	2.1 m	2.5"	63.5 mm

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