



# CONTROLLING THE FORCES OF GRAVITY ONE PALLET FLOW LANE AT A TIME





## PALLET FLOW SPEED CONTROLLERS



## Is your pallet flow too fast or slow? Get it just right with Mallard speed controllers.

Pallet flow speed controllers help maintain a safe velocity and keep pallets centered in the lane as they flow. Keeping pallets on track prevents lane shutdowns and enables easier pallet extraction at the aisle face.

Speed controllers function similarly to automotive "shoe" brakes – as the pallet picks up speed, the internal gearing forces the brake pads against the inner surface of the brake hub to slow it. Typically, they are mounted at roughly a single pallet interval down the lane length, but it is best to test your lane design in our Testing Lab to ensure proper placement. We have several speed controller design styles to meet every pallet flow application.

## **Benefits:**

- Maintains safe flow speed
- Keeps pallets centered as they flow
- Improves warehouse safety
- Durable in all warehouse climates
- Tested to over 80,000 cycles
- Installs quickly

## **Product Types:**

- ABMA Replacement
- Direct Mount
- Drop-In
- Indirect Mount Speed Controller
- Drum Roller
- Ultra-Grip
- FIBA Field-Installed Brake Assembly

Contact your Mallard representative for product advice, a quote, or to schedule a pallet flow test before finalizing your order.

## ABMA SPEED CONTROLLERS



## Retrofit Your Pallet Flow & Control the Flow!

The ABMA is a drop-in speed controller used in retrofit applications. If your pallets flow too quickly or tend to shift in the lane, control the flow! Speed controllers will also prevent pallets from hitting the end of the lane with excessive force, compromising inventory and worker safety. ABMA controllers are uniquely designed to install easily into existing pallet flow lanes.

## **Advantages:**

- Retrofits existing pallet flow lanes
- Mounts in almost any position
- Can be relocated once installed
- Prevents pallets from hitting stops with excessive force
- Maintains consistent pallet speed
- Keeps pallet centered in the lane

## **Product Types:**

- Works with Magnum, IE, skate wheel
- Mounted as drop-in or direct
- Compatible with 2-rail systems for light loads
- Bolts into existing pallet flow rails
- Easily field installed
- Available in light, medium, and heavy-duty options

## DIRECT MOUNT SPEED CONTROLLERS



## Low-Profile Pallet Speed Safety

Direct-mount speed controllers are top-mounted, making direct contact with the pallet. They are used most often with floor-mounted and low-profile pallet flow rack systems. Direct-mount speed controllers are compatible with most wheel and roller track types: Magnum, skate wheel, and split roller pallet flow.

## **Advantages:**

- Controls pallet speed
- Improves pallet tracking
- Compatible with most pallet flow types and load capacities
- Ideal for freezer applications
- Durably constructed to last in harsh warehouse environments

## **Product Types:**

- Works with Magnum, IE, skate wheel & 4" wide (BF) rollers
- Mount between wheels or rollers for direct contact with pallets
- Available in light, medium, and heavy-duty
- Weight variance approx. 800 lbs.



## DROP-IN SPEED CONTROLLER



## Retrofit Your Pallet Flow & Control the Flow!

Our most commonly used speed controllers are the Drop-In controllers. They offer twice the surface area of the Direct Mount option and are quickly installed on-site with a simple bolt & nut assembly. Drop-In speed controllers are compatible with all our wheeled tracks and narrow roller applications.

## **Advantages:**

- Quick installation or replacement
- Safely slows pallets
- Improves pallet tracking
- Durable manufacturing
- Ideal for freezer applications
- Twice the surface area vs. direct mount

## **Specifications:**

- Compatible with Magnum, I.E., skate wheel & narrow rollers
- Mount between wheels or rollers for direct contact with pallets
- Available in light, medium & heavy-duty
- Weight variance approx. 1500 lbs.

## DRUM ROLLER SPEED CONTROLLER



## Safe Flowing for Non-Standard Pallets & Containers

Plastic pallets, large bins, extra-long pallets, drums, etc., must also flow safely --enter the Drum Roller speed controller. These 2.5" diameter rollers may look like standard rollers, but they are engineered to reverse flow and thus impact the speed and force of the pallets above. They are available in a range of widths to fit your split- or full-roller pallet flow lane.

The full-width controllers mount in line with the standard rollers (vs. underneath or dropped-in) to provide full coverage and steady, safe pallet indexing.

## **Advantages:**

- Controls plastic and non-standard pallets
- Use fewer rollers & save money with wider 2.5" diam.
- Food grade washdown compliant
- Galvanized rust-resistant rollers & rails
- Lighter weight pallets
- Easy to retrofit in the field

### Specifications:

- Compatible with split- & full-roller designs
- Mounts between rollers for direct contact with pallets
- Pallets require sufficient bottom surface area
- When used with 1.9" diam rollers, will slightly raise the pallet above the surface
- Does not prevent pallet surfing

## ULTRA-GRIP SPEED CONTROLLER



## Get an Ultra-Grip on Your Pallet Speed

Ultra-Grip is not a comic book superhero but don't underestimate its ability to save. These texturized, rubber-coated, full-width rollers create friction with the bottom of the pallet as it flows to help control the speed and tracking down the lane. They are mounted in pairs of two and can be used alone or with FIBA speed controllers mounted underneath.

The rubber-coated surface is often the best solution to prevent plastic pallets from surfing over steel rollers in a split- or full-roller flow lane. The Ultra-Grip and FIBA pairing also is effective on non-standard GMA-style pallets with limited bottom surface area.

## Advantages:

- Prevents pallet surfing on galvanized rollers
- Helps maintain consistent pallet speed
- Tracks pallet properly down the lane
- Durably manufactured to last in harsh warehouse environments

## **Specifications:**

- Works with indirect mount speed controllers mounted on full roller pallet flow
- Ideal for plastic pallets & pallets with limited bottom surface area
- Pallet weights up to 2000 lbs.

## FIBA - FIELD-INSTALLED BRAKE ASSEMBLY



## Extra Control for Heavy & Slick-Surface Pallets

The FIBA mounting assembly is an optional add-on for Ultra-Grip applications with heavy and or slick-surface pallets. FIBA mounts directly underneath the pair of Ultra-grip rollers to add additional friction and slow the roller rotation.

The assembly consists of a metal bracket and a pre-positioned indirect-mount speed controller, ensuring accurate and fast installation between the Ultra-Grip rollers.

## Advantages:

- No tool installation quick & accurate
- Perfect, secure alignment between Ultra-Grip Rollers
- Includes mounting clips
- Durably designed & manufactured to last

## **Specifications:**

- Compatible with full roller pallet flow and roller gravity conveyor
- Available in light, medium, and heavy-duty
- Rated for all warehouse climates



## Think Outside the Lane With Gravity Flow Solutions







Gravity flow solutions are high-density systems that increase the number of SKU slots while maximizing warehouse space. The power of gravity flow is right in the name -- the systems are designed to flow inventory from a loading aisle to an opposite pick aisle using gravity and some sound engineering vs. powered and mechanical technology.

Gravity flow also reduces labor costs by minimizing the time to store and retrieve inventory. Mallard's signature product categories --pallet flow, carton flow, and gravity conveyor can accommodate just about any size product, palletized or not.

## **Gravity Flow Solutions**

- E-commerce fulfillment
- Intake & dock staging
- Item picking & packing
- Case picking

- Pallet building
- Manufacturing & assembly
- Raw materials storage
- Pick modules

## **Automation Compatible Pallet Flow Solutions**

Gravity works, but in deep-lane and case-pick applications, rear pallet pressures make it harder to extract empty front pallets. Pallet separators isolate the front pallet to remove back pressures and allow easier and safer extraction. Rear pallets flow forward automatically or can be triggered to flow depending on the application.

We offer eight uniquely designed separator products for case picking, deep lanes, lift tables, pallet building, layer picking, and clearing away empty pallets to customize your solution. Ask your Mallard representative for more information to improve the function and safety of your gravity flow solutions.



Your Mallard representative is available to answer product questions and provide application ideas to solve your warehouse challenges. No one does gravity solutions like the Mallard team.

Let us show you.

