

FlourApplicator

The next level in precision pre-dusting

TOWNSEND
FURTHER PROCESSING

marel



- Get an even flour coating for every size and shape of product
- Remove excess flour for an optimal end product
- Reduce dust emissions and recycle more flour



The best coatings start here

Experts know that the secret to a “crispy bite” lies in a good flour pre-dusting. Applying a fine coating of flour to products with a smooth surface creates a good adhesive layer that better absorbs batter and other coatings. That may sound simple, but working with the fine particles of flour is a science of its own. Townsend Further Processing understands that very well. We have been producing high precision coating machines that help the food industry create better end products for over 20 years.

Exactly the right amount

Getting your pre-dusting right is the key to the best results. Too much flour can make products chewy or cause problems in the next machine in the line. Too little flour can create bare spots that lower your yield or make your product less appetizing. Townsend Further Processing has the experience and know-how to apply just the right amount of flour to guarantee tastier and more appealing products all the way down the line.

The next level in precision and control

FlourApplicator offers the next level in precision and control for pre-dusting to meet the ever-changing demands of the food industry and the quality conscious consumer. Its high-power air knives remove excess flour with higher accuracy than ever, while its closed blower and dust exhaust systems work efficiently with flour and dust emissions.

- Get an even flour coating for every size and shape of product
- Remove excess flour for an optimal end product
- Reduce dust emissions and recycle more flour
- Adjust settings to handle a wide range of fish, chicken and meat products
- Clean the system efficiently and thoroughly.



Advanced flour and dust management



Blower with two adjustable air knives.

Remove more excess flour

FlourApplicator features a powerful, closed-system blower with two adjustable air knives. They are positioned at two different locations above and below the conveyor and produce a high-pressure blast of air that removes flour exactly where needed. The height of the air knives can be changed to handle different-sized products. The angle of the air knives can be set to reduce the amount of air pressure required and flour wastage. An air curtain at the exit blows dust back into the machine to keep the production environment cleaner.

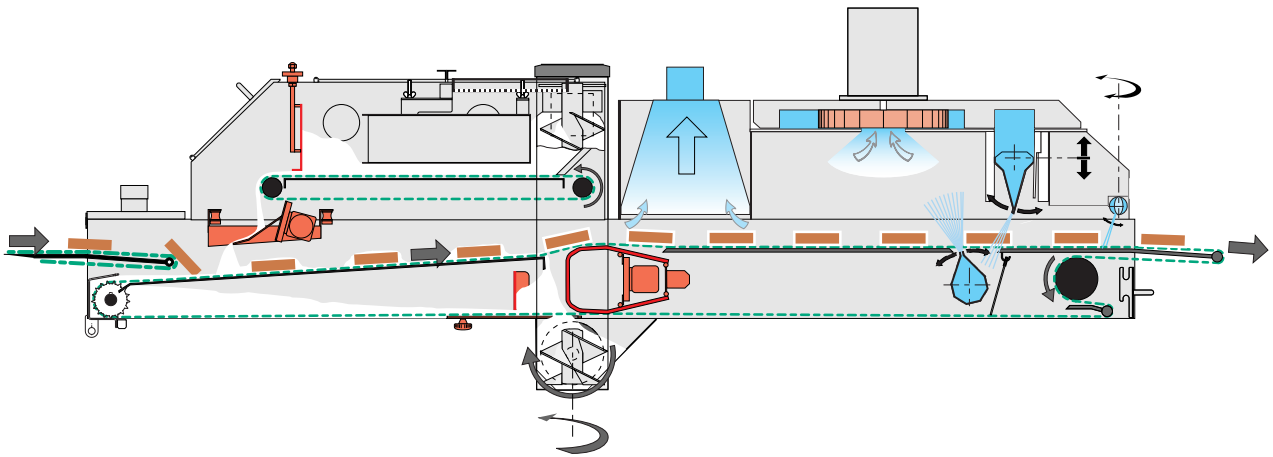
Keep dust in the machine and off the floor

Dry flour causes a great deal of dust when being used in a pre-dusting machine. Townsend Further Processing has developed a system which keeps as much dust as possible inside the machine during operation. It creates a vacuum inside the machine and collects and filters as much flour and dust as possible in a separate stainless steel cabinet. The flour settles down through the cyclone into a see-through drawer so you can easily see when it is time to empty it. This flour can be recycled in the machine. This keeps extra dust off the work floor to help you maintain a cleaner environment.



Cyclone with see-through drawer.

Fast and flexible process



High speed pre-dusting system

Flour is continuously circulated around the machine and efficiently reused at every possible step in the process:

1. The products are delivered on a flour bed that is made of a wire mesh conveyor belt covered with a layer of flour. The conveyor belt can be set to move at different speeds.
2. Flour is pushed out of the flour bunker onto a distribution plate with a vibrating strainer. It sprays a uniform layer of flour on top of the products. The amount of flour can be adjusted to different products and different thicknesses.
3. The wire mesh conveyor belt passes over a vibrating plate that causes the flour bed to drop through the belt. This flour is transported back to the flour bunker for reuse and to be laid down on the flour underbed.
4. The blow-off station gradually removes excess flour from the top of the products. It can be set to different air speeds.
5. The dust exhaust collects and filters flour and dust in a separate stainless steel cabinet.
6. A final air curtain blows dust back into the machine to keep it from escaping into the production environment.



Handles a variety of products

FlourApplicator is made to handle different sizes and shapes of products. Some of the most common products for which flour is used in the coating layer are:

- Chicken legs, wings, breast fillets, chicken pops and nuggets
- Fish sticks, fillets and cuttle fish
- Schnitzels.





Flexible placement

You can install FlourApplicator in different locations in a production line, depending on your set up. It can be placed in front of battering and tempura machines. If a multi-layer coating is applied, it can be placed in the middle of the line as a final coating. Processes can include:

- Forming / **Pre-dusting** / Battering / **Pre-dusting** / Battering / Breading
- Forming / **Pre-dusting** / Battering / Breading
- Forming / **Pre-dusting** / Cooking / **Pre-dusting** / Battering / Breading.

Easily clean and maintain the system

FlourApplicator has been designed so that it is easier to clean and maintain.

- The conveyor screw can be opened and set on the ground at a 180 degree angle so that you can easily access the interior parts
- The flour bunker can be opened to clean it
- The blower can be opened to allow access to the air knives.

Technical specifications and configurations

- Product length: 15 mm by 200 mm
- Product width: 15 mm by 200 mm
- Product height: 5 mm by 50 mm
- 400 mm conveyor with blower and optional TDE Cyclone dust collector
- 630 mm conveyor with high power blower and TDE Cyclone dust collector.

Contact details

Townsend Further Processing

Design, manufacture, worldwide sales and service of further processing systems for portioning, marinating, coating, heat treatment and sausage-making for poultry, red meat, and fish.

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