

OUR BUSINESS IS YOUR BUSINESS







## **Pet Food Solutions**

# From the Receiving Dock to the Loading Dock.

At HorizonPSI, we take an engineering-first approach to solving your challenges. That's why we design, manufacture, install and maintain every aspect of our systems from facilities right here in the USA.

Managing each step in your process is critical to your success, so designing customized solutions to make managing easier is what we do. Utilizing active and passive sanitation principles for equipment design, automated controls for ingredient tracking, and advanced storage and transfer technologies to protect your people and products is how we help you protect your bottom line. After all, our number one reason for existing is you. Our business is your business.



# Work smarter with the Intelligent Ingredient System.

Precision is the key ingredient to any good recipe. That's why we created the Intelligent Ingredient System (I<sup>2</sup>). Engineered and automated to fit the needs of your specific process or facility, this flexible solution can deliver the consistency you demand. The combination of automated recipe management, integrated weighing and feeding, and ingredient tracking protects your products from the receiving dock to the loading dock.

#### **Raw Material Receiving**

Recipe management and security as well as material mapping and bar codes are programmed prior to loading intermediate storage containers (IBC)

### **IBC and Fixed Bin Loading and Lot Tracking**

- Lot tracking begins
- · Platform scales at fill point for inventory verification
- Telescoping fill head with inflatable seals to eliminate dusting
- Empty pallets are eliminated from the process area

### **IBC and Fixed Bin Storage and Staging**

- Intermediate bulk containers are stackable two-high
- Ingredients are protected in a sealed container to eliminate possible contamination
- Lot integrity is preserved throughout the process
- Reduced exposure to humidity and other adverse environmental conditions

## **Ingredient Feeding and Weighing**

- Inventory is checked each time a new container is docked
- Pre-loaded containers reduce dusting in other areas of the facility
- Container frame and feeder may utilize load cells for recipe control
- Multiple feeders can simultaneously feed multiple ingredients based on recipe fill point



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# **Dilute or dense phase?** We're here to help.

Properly transferring ingredients can make all the difference in the quality and cost of the products you bring to market. From large particulates to fine powders, having the right transfer solution can reduce waste, improve consistency and control breakage.

If your process relies on volume, and your materials are not susceptible to degradation nor are they abrasive in nature, then dilute phase conveying will meet your needs. However, when crushing or impact degrades your product or creates fines, then a continuous dense phase transfer system like ConTran<sup>™</sup> is the most appropriate solution.

# TRANSFER

## **CONTRAN TECHNOLOGY**

- Modulated pressure, low velocity
- Pressure or vacuum
- High material-to-air ratio
- PD blower power source

• Suitable for a wide range

of materials

- Medium to long convey distance
- Medium to high convey rates
  - - Suitable for a wide range of materials, except abrasive or friable

## **ConTran product flow**

ConTran is the fourth generation of continuous dense phase transfer technology from HorizonPSI. This evolution in dense phase transfer gently handles your product at relatively low pressure and high convey rates, resulting in minimal breakage and fines – all while conveying with less energy consumption and lower maintenance costs compared to other pneumatic designs.

### **Air Controller**

Modifies the density of the air entering the blower to generate a low velocity air stream that gently delivers product to storage or packaging

## **Pressure Blower**

- The ConTran pressure blower system offers operating efficiency and cost savings compared to other pneumatic systems
- Control panel can be programmed to operate the system independently or expanded to work with other production functions depending on the capabilities of your PLC systems
- Pressure blower configuration includes a sound enclosure, reducing noise and protecting employees from moving parts



## **Product Flow** A "Full Bore" Plug Diverter Valve is used to add flexibility to system designs by allowing multisource production to a single destination or a single-source production to multiple storage or processing destinations

**ConTran Advantage** 

Minimal material degradation (actual degradation comparison)

## **Feed assembly**

The high tolerance valve provides repeatable/reliable air loss calculation for more accurate product feed and flow



**Dilute Phase** 

ConTran

Pet Food Kibble

- PD blower power source
  - Short to long convey distance

### **DILUTE PHASE**

## **BATCH DENSE PHASE**

- Low pressure, high velocity
- Pressure, vacuum or
- closed-loop conveying
- Low material-to-air ratio
- Low to medium convey rates
- Low/medium pressure, low velocity
- Pressure, vacuum or closed-loop conveying
- Medium/high material-to-air ratio
- Air compressor power source
- Short to medium convey distance
- Medium to high convey rates
- Suitable for a wide range of materials



#### Terminator

Reduces the product velocity as it exits the convey line, which protects the product from excessive breakage as it's delivered to the destination receiver or bin

## **Visual Inspection**

A Sight Glass may be added at inspection points to visually verify product flow without giving up system performance

## **Commonly Used Materials**



Seeds



Whole Grains



Grain Fractions



Suga

Nuts

## **Control and safety through** smart technology.

Protecting your consumers, employees and brand is job number one. As producers, you are faced with ever increasing pressures related to the safe handling and distribution of your product. Whether your focus is safety or production efficiency, intelligent ingredient management is the key to achieving your company's goals.

Our l<sup>2</sup> system takes a custom approach to controlling and storing ingredients within an efficient system, programmed to track ingredients and products from the receiving dock to the loading dock. The system checks inventory controls each time a stored ingredient is used, and provides the information needed to manage your ingredient process.



## A comprehensive approach to sanitation.

AUTOMATION

When thinking about sanitation, understanding Active, Passive and Preventative principles is important. Complying with the Food Safety Modernization Act (FSMA), and having a Hazard Analysis and Critical Control Points (HACCP) plan and Hazard Analysis and Risk-Based Preventive Controls (HARPC), are essential for doing business in today's world. Having a partner who understands your process, designs equipment for safe, easy cleaning and inspection, and integrates programming that manages your recipes and tracks ingredients and finished product, makes all the difference. After all, our business is your business.





Hazard analysis **Documented procedures Tracking and management** Training and program education



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