



# Drying Technology. **Built on a History of Innovation.**

The production of companion foods today carries all of the requirements of yesterday, like moisture uniformity, energy efficiency, and manufacturing reliability. Then, there is the added need for process flexibility, and the growing need to adhere to strict government requirements on food safety. Profitability remains a critical requirement. When it comes to choosing a technology partner to help navigate this more complex landscape, the choice becomes clear.

Since 1963, Bühler has built their unequaled expertise in pet food drying by understanding the science of drying. This includes pioneering innovations like dual plenum airflow design, the standard for all quality pet food dryers to-day—automation products that optimize the drying process—and a keen focus on hygienic design.

Superior process knowledge, drying know-how, and demonstrable commitment to pet food safety sets Bühler solutions apart from others. Bühler provides processors with a competitive edge through increased efficiency, profitability, and flexibility in today's lean manufacturing environments.

#### **Cleaner Process, Safer Product**

Addressing the increased focus on food safety regulations and requirements, the Solis takes advantage of state-of-the-art hygienic design at every opportunity. The dryer is constructed from stainless steel, providing a food safe environment throughout the drying process. An open channel frame, sloped surfaces, and a floor reduce the ability for fines to collect and harbor bacterial growth. This minimizes cleaning downtime and maximizes production. The cooler has been separated from the dryer to guard against the bacterial problems associated with condensation and fines build up.

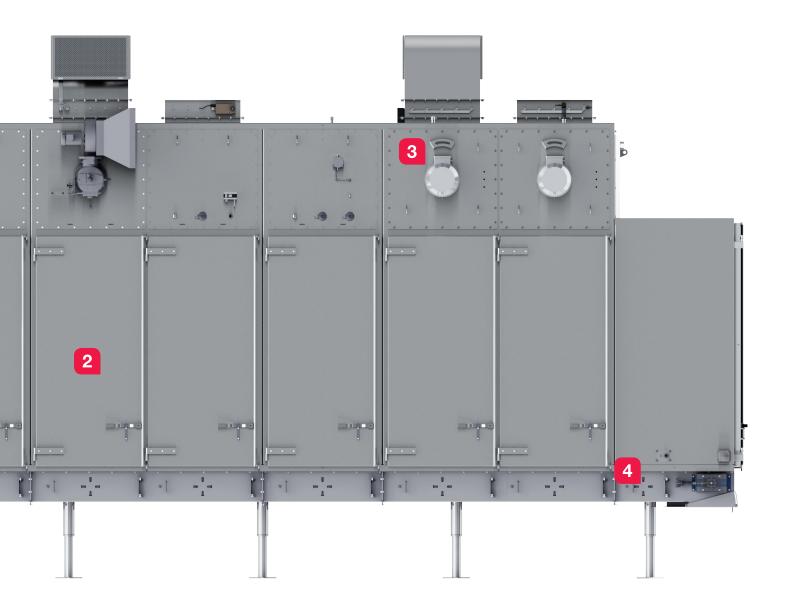
#### **Sanitation and Easy Maintenance**

Each Solis machine has full access to the dryer interior, which allows for easy maintenance and cleaning. The machine's fully welded frame features minimal horizontal surface areas, preventing buildup and minimizing the chance for cross-contamination between product types. Continuous fines management reduces downtime and makes for a cleaner production process.

#### **Maximized Production**

The Solis features a dual plenum airflow that ensures a uniform moisture content at the dryer exit. The multi-pass design reduces floor space requirements, and gentle treatment throughout the drying process means a higher quality product and a higher yield at the discharge end.





1

# Food Safe Design.

Hygienic design from top to bottom provides a cleaner process.

2

# **Superior Air Management.**

A unique dual plenum airflow design provides a more uniform product.

3

# Efficient Operation.

Direct drive fans and efficient drive motors make optimal use of energy.



## **Durable Construction.**

Heavy duty construction and high quality components ensure steady production.





### **Fines Management**

The Solis combines proven fines management technology with new innovations to provide a more effective, efficient, and hygienic solution. The product conveyor features a traditional fines drag, while the plenum sections feature an all-new continuous fines removal system. The result is a cleaner drying process, significantly reducing fines outside the dryer, and shorter cleaning times.

### **User Friendly, Efficient Controls**

Solis offers straightforward, intuitive controls that optimize the performance and efficiency of the pet food drying operation. Standard controls feature easy startups, shut downs, temperature controls, fan controls, conveyor controls, and more. Adding AeroPro Advanced Controls provides even greater handling, efficiency, and productivity with modules for Moisture, Evaporation, Humidity, Energy Monitoring, and Product Tracking. These advanced controls can significantly increase profitability, and have a short ROI.

#### **Increased Access**

Downtime for cleaning can eat into valuable production time. The Solis has been designed to shorten the cleaning cycle as much as possible while still providing a food safe drying process. The innovations in this area include an increase in the distance between the lower conveyor and the dryer floor, which provides greater access; large inner and outer doors that make for quick, easy, and effective cleaning; and a unique support structure that puts fewer feet to the factory floor, making cleaning beneath the dryer much easier.





An uneven product bed will result in either under drying, or over drying, which can result in profitability losses or out of spec product. An even load on the conveyor is critical to getting the most uniform moisture content. The hygienically designed advanced AeroFeed programmable oscillating feeder allows uniform drying by spreading product evenly across the conveyor bed. Fine tuning adjustments to the feeder can be programmed via the control panel while the dryer is operating, without interrupting production.



#### **Complete Pet Food Production**

Bühler offers the most complete end-to-end pet food production solution in the industry today. From raw material handling through grinding, mixing, extrusion, drying, and coating, Bühler's innovative machine and systems provide a level of precision, flexibility, and efficiency that's unrivaled in the pet food industry.

### **Process Knowledge and Support**

More than seven decades of experience has resulted in unequaled knowledge in thermal processing. Bühler's advanced pilot testing facilities and expert process engineer support help develop your products and processes, and ensure systems are designed to exact specifications. An experienced field engineering staff can provide an overall process survey and recommendations to increase efficiency or productivity.

### **Global Presence, Local Support**

Bühler has sales and service stations in more than 140 countries around the world. This extensive network provides our customers with the quick and professional support that only a global technology partner like Bühler can provide. The full breadth of customer service is available to Bühler customers no matter where they are, including technical support, spare parts, and emergency services, along with process evaluations, energy audits, and training.

For more information on Bühler's thermal processing equipment, or to contact a Bühler representative, visit us online at **www.buhlergroup.com/drying.** 

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