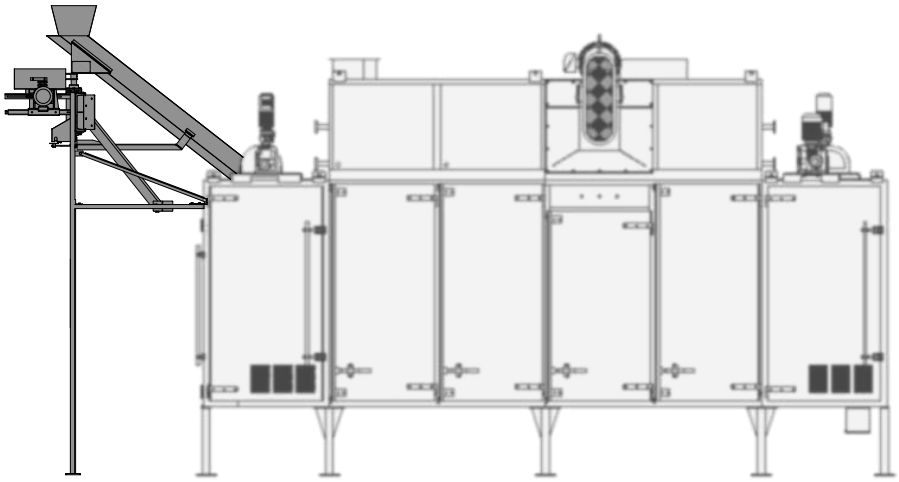
AeroFeed™ OSP/OBP Feeder Control Retrofit

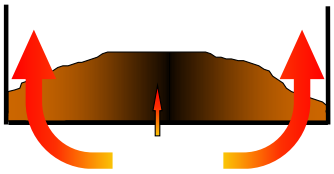
Upgrade your current AeroFeed oscillating feeder and get big productivity and profit gains.



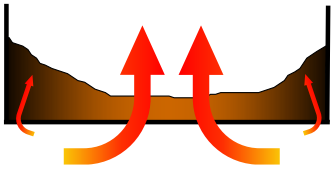
Improve bed depth consistency and increase saleable yield, product quality, energy efficiency, and dryer output by equipping your existing AeroFeed or AeroFlex oscillating spout or belt feeder with a new programmable control package.

The AeroFeed OSP/OBP retrofit package is designed to significantly improve product depth consistency across the dryer conveyor by providing greater control over the travel speed of the feeder spout or belt at crucial points in the feeder's cycle.

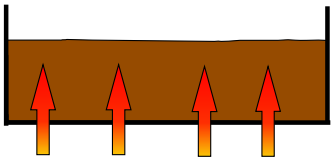
Consistent product depth is critical to controlling and achieving better moisture uniformity in the final product. Precise control of a product's moisture content has a considerable impact on the cost of producing a saleable unit of product, as over-drying lowers production and wastes energy. Precise bed loading facilitates uniform drying, reducing energy costs, increasing production, creating a more consistent level of product quality and improving the performance and reliability of upstream and downstream processing.



A product bed that is higher in the middle than at the sides will over-dry the sides in order for the center to reach the desired moisture content.



A product bed that is lower in the middle than at the sides will over-dry the center in order for the sides to reach the desired moisture content.



The AeroFeed OSP/OBP retrofit provides a consistent depth across the entire product bed, improving productivity and efficiency, and significantly increasing moisture content consistency.

Customer Benefits:

- Increase in dryer production
- Increase in energy efficiency
- Reduced moisture variation in the final product
- More profitable process (see example on back)

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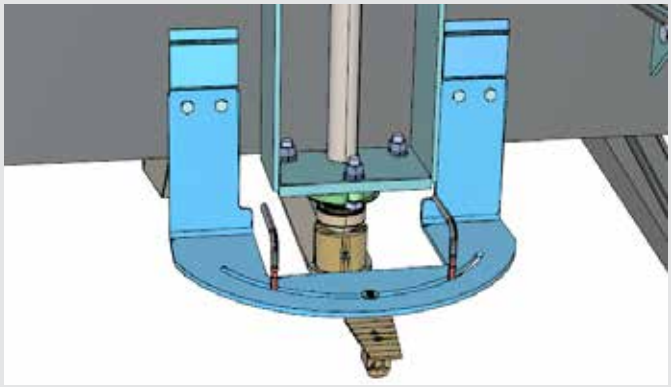
AeroFeed OSP/OBP Feeder Control Retrofit

Eliminate Over-Drying and Maximize Your Dryer's Potential

A consistent depth across the product bed is key to achieving uniform product moisture. If the product is not spread evenly across the bed, air follows the path of least resistance and dries the product unevenly. Therefore, feeding mechanisms are extremely important to drying performance.

Traditional feeder technologies are limited in complete speed adjustment across the entire oscillating cycle. Utilizing proximity sensing, the feeder oscillating stroke can be automatically speed adjusted at critical areas optimizing product bed depth. The result of this enhanced cycling system is a more uniform drying bed.

The AeroFeed OSP/OBP oscillating feeder retrofit package includes a mounting kit with cover, proximity sensing instrumentation, a pre-programmed drive mechanism, and potentiometer adjusters installed in a pre-assembled junction control box.



ROI Example - Typical payback calculator

Hourly feed rate at 25% moisture	5,867 kg
Hourly output at 12% moisture (A)	5,000 kg
Hourly output at 11% moisture (B)	4,944 kg
Difference in hourly production (A - B=C)	56 kg
Annual hours of dryer operation (D)	7,800
Annual lost production from over-drying (C x D = E)	**436,800 kg**
Annual cost of lost production (E/1000 x $500 US = F)*	**USD $218,400**
Energy expended per kg of water removal (G)	3,300 kj
Annual excess energy used in over-drying (E x G = H)	1,441 MM kj
Energy cost per kJ (I)	USD $0.0000035
Additional cost of excess energy consumption (H x I = J)	**USD $5,045**
Total annual cost of over-drying (F + J)	**USD $223,445**
Nominal cost of OSP/OBP retrofit	**USD $14,000**
Total payback in year 1	**USD $209,445**

*Assumes value of USD $500 per metric ton

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