

# “Any Seasoning System Is Only as Good as Its Product Feed”

The most popular procedure for flavoring and seasoning is dry seasoning which is fed, either volumetrically or gravimetrically, manually or automatically, into the hopper of a single or twin screw (auger) feeding system. As for the taste itself, Asian flavors and the traditional sour cream and onion remain among consumers’ favorites.

By Dan Orehov

According to Trevor Howard, managing director of Fabcon Food Systems, the appropriately sized screw feeds the required amount of seasoning onto an electromagnetic vibratory scarf feeder, available in different lengths according to throughput and drum size, which feeds a regular curtain of powder onto the product in a flighted tumble drum. The variable speed of the drum rotation, along with the custom-designed drum flight profile, ensures homogenous coverage of the product.

## WHAT TO CHOOSE

Seasoning can either be of the ‘kitchen’ type or OMS (On Machine Seasoning). Fabcon’s representative says that a recent trend in snack seasoning has been the increase in OMS. The traditional kitchen seasoning, where products are seasoned together and then elevated up to the multi-head weighing and packaging stations, is gradually being taken over. Instead, with OMS, each weighing and packaging station has its own mini seasoning system which allows producers to handle different flavors on different machines at the same

time, increasing flexibility and drastically reducing down time for cleaning. This trend has been driven to a great extent by the hard discount retailers who often require short flavor runs at a moment’s notice, thereby necessitating fast response times and flexibility by the snack producers. “Fabcon also supplies a range of tumble drums in various sizes. The length and diameter in relation to throughput are important, as is the need for variable rotation speed and angle, thereby enabling flexibility in handling different throughputs, products or flavors with different characteristics. The importance of the number and design of flights cannot be underestimated, with the aim being to ensure homogenous application to the product of the carefully and accurately fed seasoning, while at the same time handling the product gently to avoid damage to, and breakage of, what are often fragile products,” Howard says.

## CONSUMER TRENDS

When it comes to what consumers want, healthy is the key word, as they are increasingly looking for healthy products. Even when it

comes to snacking, they want to snack healthy, so healthy snacks will be part of the future. “What we experience is that Europe is closer to U.S. than the Asian markets, in terms of preferences. We are more into meaty, cheesy profiles were Asia is more into fish profiles. Also, in Russia and Ukraine people like fish profiles a lot. There is a trend (not new) that consumers like Asian profiles more and more, talking about profiles like chicken teriyaki, wasabi, Asian fusion. People like to try new taste profiles but in the end the long-runners are the original taste profiles they liked and ate since childhood,” explains Dominique Maassen, sales director Europe, Fromatech Ingredients. Similarly, Fabcon’s representative says that the current trends which are gearing towards the exotic and natural, which is often high in fat content so hygroscopic, require careful handling. Gravimetric/loss in weight feeding increases the accuracy, which is extremely important not only in terms of final product quality, but also due to the need to avoid waste and over-seasoning as these seasonings can be very expensive. Also, gravimetric



Seasoning Equipment by Fabcon Food Systems

feeding of the screw feeder takes account of variations in seasoning bulk density. “There are a number of challenges such as accuracy, which is important for quality, cost and waste, complying with health guidelines, plus consistency of seasoning from chip to chip within the same pack - a vitally important consumer factor. Any seasoning system is only as good as its product feed and seasoning drum, and vice versa. A constant, regular product feed to the seasoning drum is vital to ensure homogenous coverage. However, it is equally important that the amount of seasoning applied matches the product flow, which in many cases can fluctuate for a variety of reasons,” Howard says. Fabcon’s Vibraweigh electromagnetic conveyor dynamically weighs the product being fed to the drum and proportionates the seasoning quantity accordingly. However, and importantly, while other machine manufacturers use a series of conveyors to feed and weigh the product and feed the drum, Fabcon has perfected the Vibraweigh, a single conveyor solution resulting in considerable space and cost savings. “On the subject of hygiene and cleaning, while our changing industry has seen a trend towards plastic seasoning drums in the last few years, particularly On Machine Seasoning (OMS), here at Fabcon we are seeing a growing reluctance by major retailers, particularly in the UK, to accept potato chips and snack products seasoned using plastic drums. This is due to abrasive products causing damage from scratching to the inside of the drum, leading to cleaning and bacterial issues. As a result of that, we are seeing much more demand for conventional stainless-steel drums. The final challenge relates to reducing airborne dust; our scarf feeder and drum flight design means that the seasoning adheres to the product and not to the drum or the atmosphere, reducing waste and airborne dust - which is all too common when using other application methods,” explains Howard.

## REDUCING SALT IN POTATO CHIPS

One of the main challenges pertaining to seasoning and flavoring remains the reduction of salt. The accepted maximum percentage has tended historically to be around 1.2%, but current health concerns and guidelines are continually pushing this figure down. Many of the above comments on seasoning apply equally to salt in terms of accuracy of metering and homogenous distribution on the chips. However, a screw designed for feeding the normal amounts of savory seasoning is not generally suitable for the low amounts of salt so companies like Fromatech supply separate screws for salt and seasoning. “There are always challenges, but because we supply our seasonings and flavors worldwide, we continuously need to take care of different climate situations. Also transport by sea is always very challenging to avoid issues with our products. But what we see is that we are doing a quite good job due to our experience we gained the last 24 years. In general, we see challenges as opportunities,” ends Fromatech’s representative. •



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