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PEACE OF MIND WITH OIL FREE AND WHY BEST PRACTICE IS THE SMARTER CHOICE

By Hitachi Global Air Power

Food and beverage manufacturing is often taken for granted in everyday life – until global events like the COVID-19 pandemic – who remembers scenes of empty supermarket shelves? – and major tariff fluctuations bring it into focus. With the evolving economic landscape, companies behind the scenes are once again re-evaluating how they do business, particularly in areas like compliance and cross-border trade. For manufacturers, this includes renewed attention to product safety, tightening regulatory standards, and the equipment that supports those priorities, including compressed air systems.

Product safety has become more of a priority than ever. For those in food and beverage production, there's a sense of inevitably that changes will impact the use of oil injected compressors in food and beverage production.

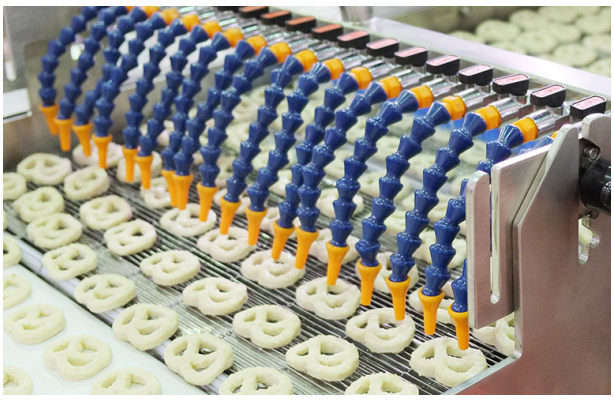
It has been a point of growing contention for some (especially for those exporting to heavily regulated overseas markets). Internationally, ingestible products are produced under strict regulations and must be manufactured using oil free machines. ISO 8573-1:2010 specifies, "Purity classes of compressed air with

respect to particles, water and oil independent of the location in the compressed air system at which the air is specified or measured[1].” In fact, this standard specifically provides a classification system for the main contaminants of a compressed air system[2]. In many countries, standards around oil free status are strictly enforced. Companies uniformly must provide evidence of being certified to this standard for their products to be legally allowed on the market, to cross borders from one country to another, and to be protected for the purposes of insurance, to name a few examples.

This kind of tight regulation protects manufacturers as much as consumers. Food contamination of any kind is not just a health and safety issue for consumers – the negative impact on a company’s reputation and its brand would be significant if consumers were alerted to a contaminant risk in their product. The concept behind standards and regulations is to minimize risk as much as possible. However, most risks can never be completely eliminated, but can be managed (and ideally mitigated) through comprehensive standards and regulations to ensure public safety.

Many food and beverage manufacturers currently operate in a grey zone of safety and contamination levels. Some manufacturers argue that the (compressed) air is not always in contact with the food, so the risk is removed. Others continue to use oil injected equipment but with filters to minimize (not eliminate) contamination. The use of well-filtered oil injected equipment still comes with the risk of contamination, as filters saturate over time and aren’t always replaced on time. However, in the majority of food production, compressed air does come into contact with food – for example air being blown into bags for food to be inserted, liquids being injected into cartons and filling deposited into cakes and pies – so the risk of oil contamination exists.

Sullair aims to always take on an advisory role on this subject. Supporting customers with insights into best practice, while assisting with choices around the best equipment for production needs is paramount. New food and beverage customers are advised to choose oil free compressed air for the reasons outlined above, while existing customers are supported to upgrade if and when they feel the need arises. Some food and beverage manufacturers are already taking the initiative to switch to oil free, even though regulations don’t yet demand it of them. This may seem overly cautious to some, but there is a sense that proactively making the change to oil free will build high levels of trust with consumers and reduce everyone’s risk by design.



Until national and mandatory regulations around compressed air quality in food manufacturing are implemented, food and beverage producers must take it upon themselves to follow best practice production processes by using oil free compressors. After all, the easiest way to avoid oil contamination risk is to remove oil from the process entirely.

[1] https://www.iso.org/standard/46418.html

[2] https://www.iso.org/obp/ui/#iso:std:iso:8573:-1:ed-3:v1:en