



## Janus Door Retrofit

Increase hygiene, food safety, and energy efficiency and on your conveyor dryer

### The Janus retrofit doors are specially designed to increase dryer performance and hygiene

Dryer enclosures can degrade over time, resulting in an increase in energy usage and threat of bacterial growth, as well as a reduction in personnel safety. The new Janus doors address all three issues with a clean, innovative design.

#### New levels of hygiene

Dryer doors and panels are the biggest source of inaccessible contamination in dryers. Continuous use and thousands of thermal cycles, variable maintenance, and aggressive cleaning can often breach the panels. The new Janus doors eliminate the threat of bacteria growing inside the doors with a fully welded design and no penetrations for hardware. The doors are also equipped with a micro check valve to eliminate expansion and contraction of doors during thermal cycling. This eliminates distorted flexing and prevents entry of even minor amounts of water vapor or liquids that can contaminate the interior.

Janus doors are fully gasketed with a food grade polymer. The engineered profile ensures a wide contact when compressed, offering a complete seal. The solid cross section eliminates the key failure points of a gasket joint, including a tear, or crimp of a traditional hollow shape.

Constructed completely from stainless steel, the Janus doors are not only food safe, they make cleaning easier, quicker and more effective. With standoff latches and hinges, they reduce areas where build up can form, keeping the entire drying process cleaner.

#### Better energy efficiency

Janus doors feature 25% more mineral wool insulation than most other legacy doors and panels. With a full 100mm of insulation, they reduce the amount of heat lost to the room, as well as provide a safer operating environment

#### Benefits

- Fully welded doors with no penetrations provide greater hygiene, making the drying process cleaner with a reduced threat of contaminations that lead to recalls
- Faster cleaning times are possible with unique design that reduces areas for product fines and other materials to collect
- Better use of energy with thicker insulation

# Janus Door Retrofit.

Increase energy efficiency, safety, and hygiene on your conveyor dryer.



Standoff hinge system helps to keep the dryer clean and minimizes hidden surfaces.



Standoff latch system features optional locks, improving personnel safety.



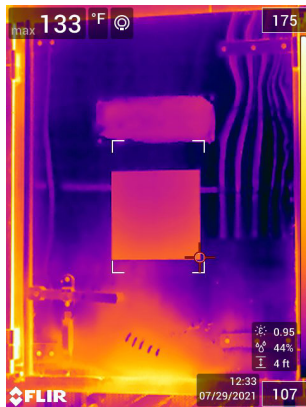
Fully welded, fully gasketed doors feature 100mm of insulation.



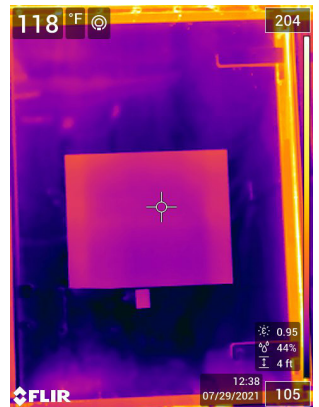
A one-way check valve eliminates distortion due to thermal cycles.



Thermal imaging of a legacy design door shows 133° F basic surface temperature. This represents heat lost to the room as well as a personnel safety issue. The image also shows a hot spot where water has caused the insulation to fail and cause heat loss.



The Janus door, with its 100mm of mineral wool insulation, shows a significant drop in the surface temperature, representing a savings in energy and an improvement in safety.



## Summary

The Janus door retrofit can be performed on an entire dryer, or section by section. Bühler technicians will fully manage the conversion, starting with an initial survey to confirm door sizes and function on your existing machinery. Special requirements, such as dampers, piping or instrument mounting, windows or even variable size doors can be provided. Inconsistency or bent dryer frames from decades of production will also be accommodated by our installation teams, who will use construction frames to precisely position the doors and mating hinges and field weld the whole assembly to the dryer.

Reduced improved hygiene, food safety, and energy usage, as well as reduced CO<sub>2</sub> emissions and personnel safety - these are the benefits of the Janus door retrofit. Contact us today to schedule your dryer survey.