

Pet food manufacturer streamlines maintenance & increases hygiene significantly with BFM® fitting

The challenge

A British pet food manufacturer has been specialising in delivering consistent, high quality dry food for 40 years. Their operations meet the British Retail Consortium Global Standards (BRCGS) and European pet food federation code of practice (FEDIAF) certification, ensuring the utmost safety and hygiene.

As part of the production process, dry pet food is pneumatically conveyed from the extruder to the dryer. A 1.5m flexible sleeve was required to connect the two pieces of equipment, due to the fact a dogleg configuration meant that using a solid run of pipework was impractical. Multiple flexible connectors were tested, yet failed to perform because of the negative pressure experienced. As such, the team settled on using a heavy-duty corrugated hose.

Although functional, the corrugated hose wasn't an ideal solution. It was difficult to handle, ill-fitting and prone to leaks.

The hose was clamped on the pipework with jubilee clips, but the corrugated properties of the hose and inflexible media made it difficult to obtain an effective seal. This led to frequent leaks. Product residue would then also accumulate in crevices between the clamps, increasing the risk of contamination.

As a result, the hose required monthly maintenance and housekeeping, taking up to 2 hours to complete. The connector was cumbersome and difficult to handle. This was exacerbated by the location, which was inaccessible without a mobile elevating work platform, at around 3m above ground-level.

A combination of the faulty hose & poorly aligned pipework also meant that product would sometimes hit internal edges of the pipe, causing deformation which may then result in a quality fail.

2 hours vs 15 minutes
spent maintaining the connector

Zero product leaks
between extruder & dryer with BFM® fitting



1.5m corrugated hose installed between the extruder & dryer

The solution and improvement

A member of the ProSpare BFM® team visited site and recommended that two BFM® fittings be installed at each end of a new section of modular pipework. For each of the respective BFM® flexible connectors, one BFM® spigot was welded to the existing pipework and the second, a lipped spigot, was attached via quick release clamp to the modular pipework. 300mm x 100mm Seeflex connectors were then snapped in place.

After installing BFM® fitting, the benefits were immediately felt and the Engineering Manager contacted us to provide an update.

Previously, the site was spending up to 2 hours per month removing, maintaining and re-connecting the hose. With BFM® fitting it now takes just 15 minutes, effectively reducing downtime by almost 90%. The Engineering Manager told us BFM® fitting *“is easier to remove and reinstall, streamlining maintenance tasks and reducing downtime.”*

Moreover, the previous connector suffered from frequent leaks. Now BFM® fitting is installed, they said it *“provides a tight, consistent seal, preventing product loss and ensuring a cleaner work environment. The new fitting eliminates crevices where product could accumulate, reducing the risk of contamination.”*

Also, the product deformation previously experienced is now a thing of the past. The cuff on a BFM® connector snaps perfectly into the corresponding ridges on BFM® spigots. Once snapped in, a smooth internal surface is created for product to flow over. The team commented *“with a better-fitting, leak-free design, the new system optimises airflow and transport efficiency, leading to smoother operations and improved throughput.”*

Their final comments were:

“With BFM® on the extract hood, is the best it has ever been.

The investment in a new system has significantly improved cleanliness, operational efficiency, and overall hygiene on site. By eliminating leakage points, accommodating the dogleg configuration, and reducing maintenance demands, the upgrade supports a safer and more efficient production environment, ensuring consistent product quality for pet food manufacturing.”



2x BFM® fittings integrated with modular pipework system



Standard Spigot (left) and Lipped Spigot (right)

 **BFM®fitting**