

## Spiroflow Discharges Fish Food Ingredients



Bulk bag being loaded into top section at floor level



Top section complete with bulk bag being returned to the discharger



Top section being lowered on to discharger base



Base in place

### Customer Requirements

**Skretting of Longridge**, Lancashire, UK, a fish food manufacturer, had an ingredients handling system installed over 8 years ago by a specialist contractor who had included a simple bulk bag unloading arrangement which feed ingredients into a 'Spiroflow' Aero-Mechanical Conveyor. The Aero-Mechanical Conveyor lifts ingredients up to a horizontal screw conveyor feeding storage bunkers on the floor above. It was the 'simple' bulk bag unloading arrangement that proved to be the bottleneck in the production process and the cause of constant frustration to operators. Comprising just a lidded hopper with a spigot, where the neck of the bulk bag was attached, the 'simple' bulk bag unloading arrangement required the a fork lift truck for the duration of discharge because there was no other means to support the bag. In addition, an operator had to be on standby to aid the flow of poor flowing or compacted products.

### Spiroflow Solution

The operators at Skretting think that their new 'Spiroflow' Bulk Bag Discharger is 'wicked' - which, roughly translated, means that they are thrilled with the way it performs! It used to take them 25 to 30 minutes to discharge each of the 11 ingredients used at Longridge. Now one ton bulk bags (FIBC's) are discharged in about 5 minutes. As Production Manager Bill Edmondson comments, "There is just no comparison with the previous system. Our new 'Spiroflow' Discharger has enabled us to increase productivity and we can use the fork lift for other work while the bulk bags are being emptied - not that that takes long!"

The 'Spiroflow' Bulk Bag Discharger supplied to Skretting is specifically designed for applications with restricted headroom. At

Skretting there is a mezzanine floor area above the location of the bulk bag discharger, which makes it almost impossible to lift full bags directly into the discharger.

Spiroflow's Model T5 discharger has two sections. The upper section, which holds the bags, is lifted off at its base and lowered to ground level. Full bags can be loaded onto the lifting frame by a fork lift where forks only have to be raised a little higher than the height of the bag and its extended lifting loops. Once the bag is safely in place, the top section is lifted via the fork channels at its base back on to the business section of the discharger - and locked into place. There is a dust-tight docking seal between the upper and lower sections. An access door in the discharger hopper allows the bag to be untied without emissions or spillage. Once the bag is untied, flow begins and the door is closed.

Pneumatically operated bag base massagers have been fitted to the lower half of the discharger. They deal with any poor flowing or compacted product. It's these base massagers that make it essential that the 2 sections of the discharger are locked together. The model T5 discharger boasts the same spring loaded side tension arms as all other models in the range. These raise the bulk bag as it empties, ensuring complete discharge on one hand while preventing the neck of the bag sagging into the conveyor below.

At their Longridge site, Skretting primarily produce varieties of feed for industrial trout farming but also for salmon too. Between them, 30 employees produce an annual output of 24,000 tons. That's about 100 tons per working day. No wonder they needed a more efficient bulk bag discharger!