

TSM Multi-blend Package:

The Multi-blend Package is designed to serve several extruders or moulding machines simultaneously as they produce product from different blend recipes.

Multi-Blend Package Operating Principle:

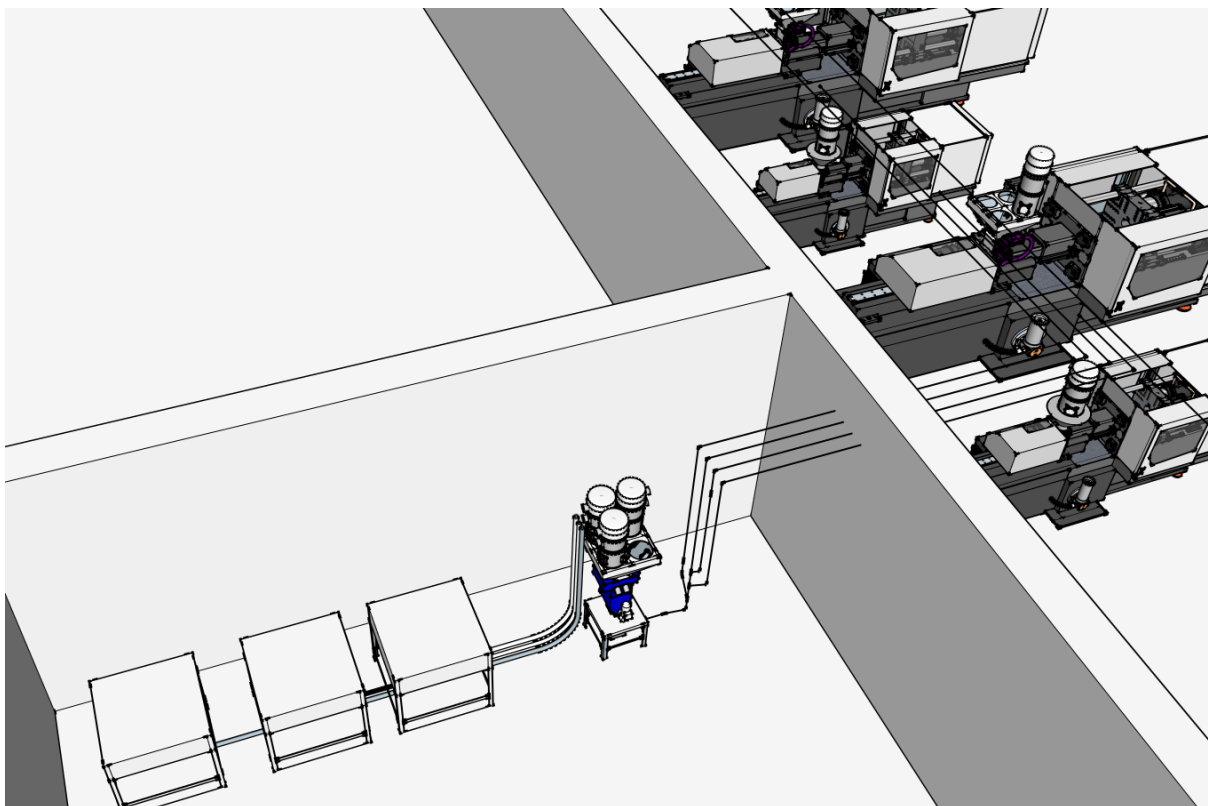
The blender receives a signal from the vacuum receiver on the processing machine that the Multi-blend software identifies which destination is calling for material based on which vacuum receiver is calling for material. This destination sets the recipe for that specific processing machine.

This blend is dosed, weighed and mixed before being dispensed into the vacuum takeaway box. The blend is then drawn by the central vacuum conveying system to the destination vacuum receiver before the next destination loader calls for material and the cycle starts again for the next recipe and blend.

The blender is supplied with automatic cleaning so that the mixing chamber is cleaned between each recipe cycle reducing the risk of cross contamination.

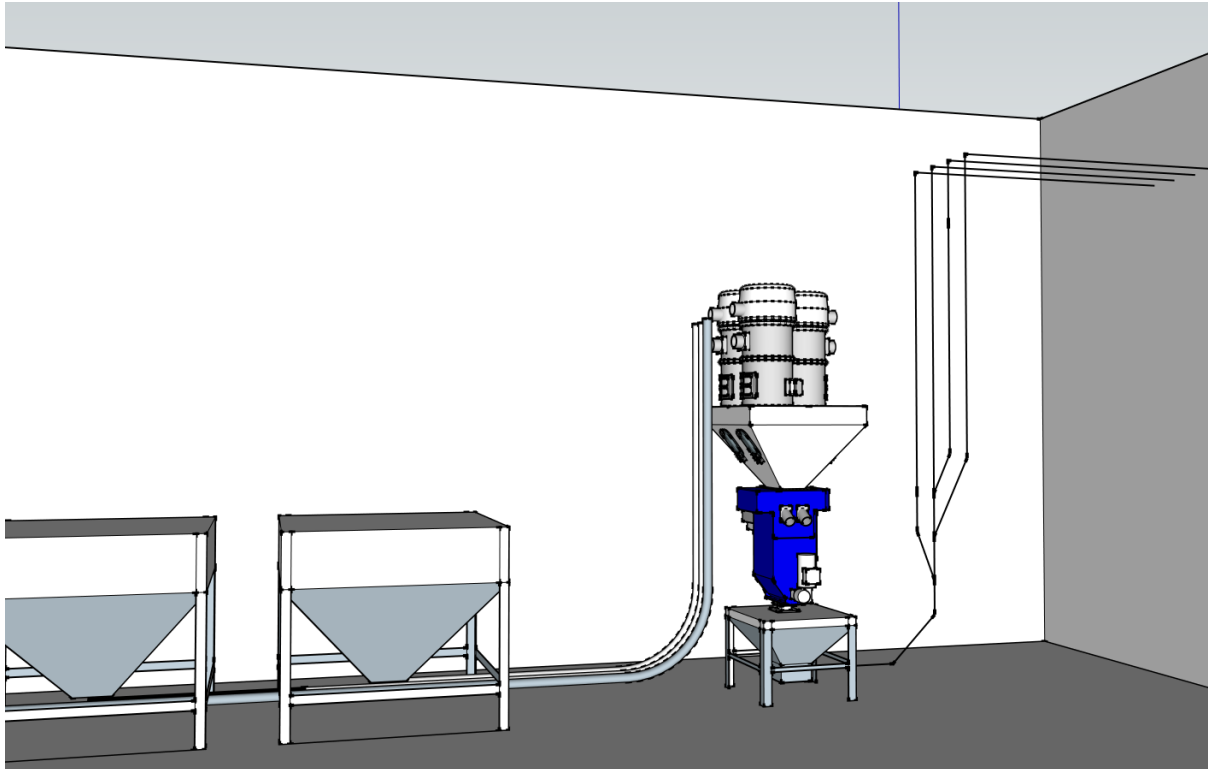
Application:

The Multi-Blend Package is ideal for injection moulding applications or smaller extrusion applications where multiple low throughput processing machines can be fed with one higher throughput blender. **Even when they are running different blends.**

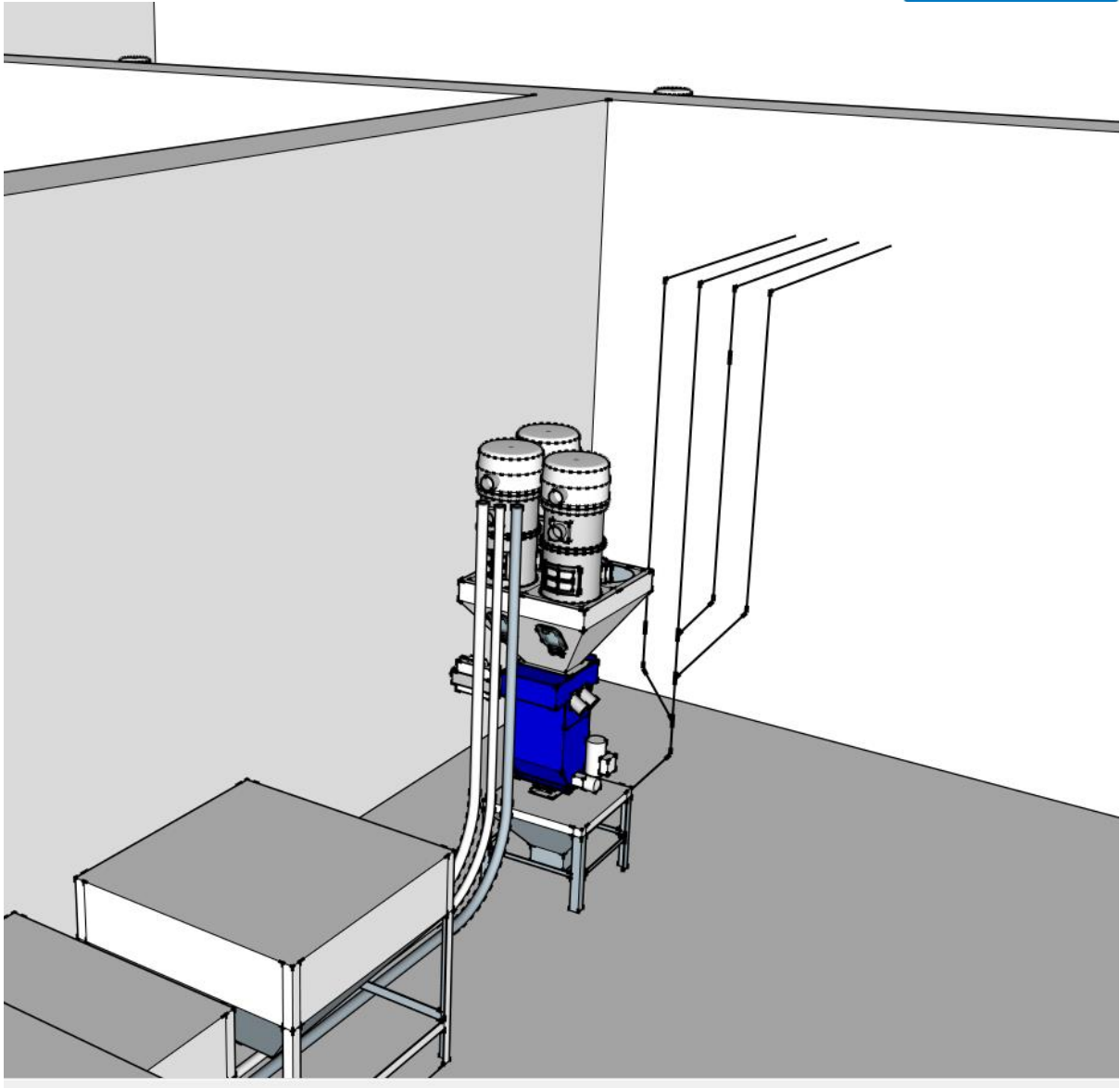


Multi-Blend Illustrations:

- As illustrated above one single blender can create the same recipe (or multiple different recipes) to feed to multiple processing machines from one central gravimetric blender.
- The package is ideally used for pellet only materials where cross contamination is not critical where similar end products are being made on multiple lines.



- The above illustrative drawing also shows a vertical manifold as part of Multi-blend package. This manifold combined with; automatic blender cleaning and automatic line clearance ensures no potential cross contamination.
- As all materials go through the blender – this ensure the package can also provide inventory management for the materials feeds also.
- Raw materials from day bins can be fed directly as a single component recipe through the blender.
- The direct connection on vertical manifold reduces workload and potential operator errors due to wrong pipe selection by having fixed piping connections.



The IMM machines will have individual dedicated fill pipes to each machine with each vacuum receiver all connected to a single vacuum line with a single vacuum pump in order to ensure control of the material conveying can be coordinated correctly as displayed below.

