

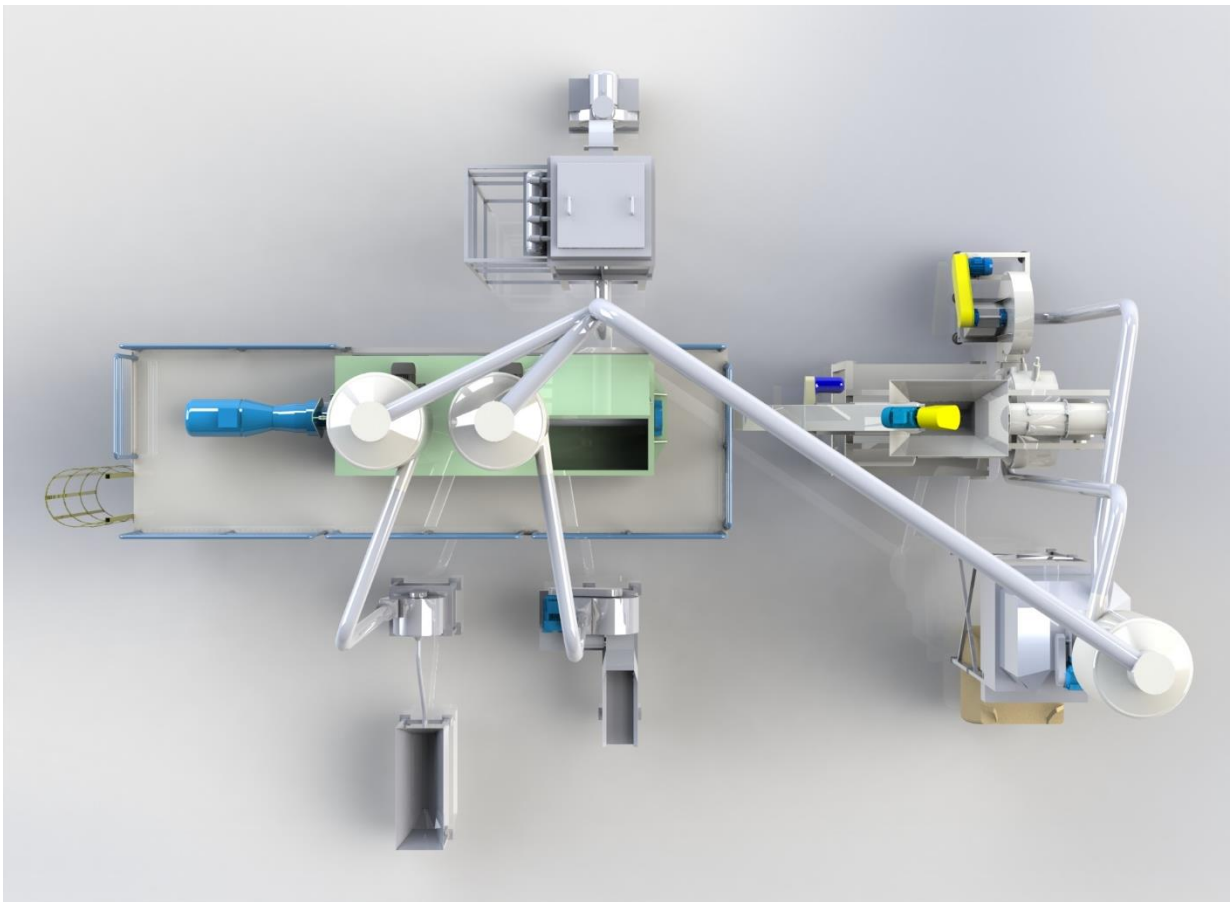
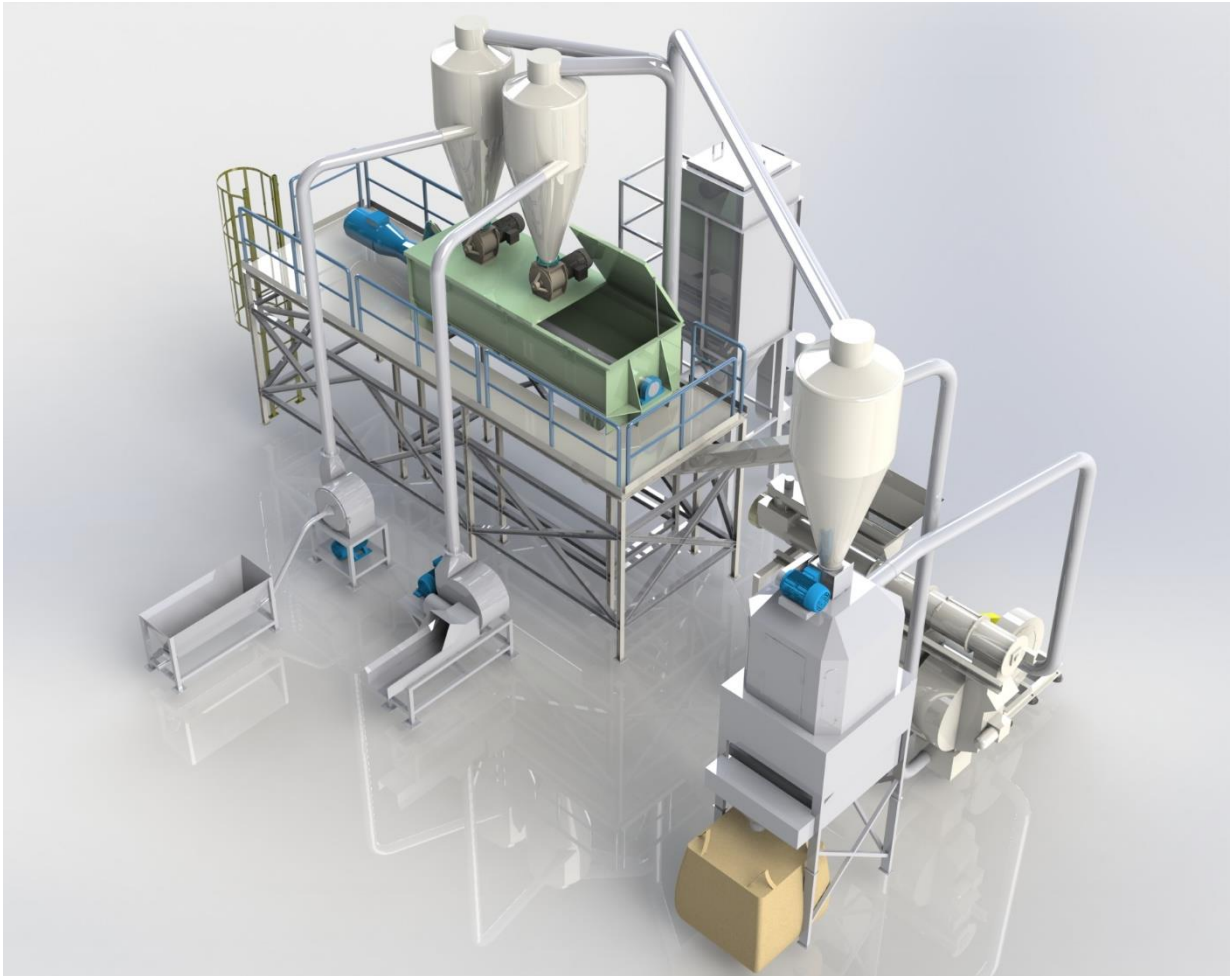


MODULAR FEED PRODUCTION INSTALLATIONS

Grain Tech supplied economical modular feed processing installations for small scale requirements offer advantages of:

- Capacities up to 5 MTPH.
- Customized design planned-in to suit existing building layout.
- Single level installation for easy operation access and control.
- Adaptable for a wide range of feedstuff ingredient types.
- Incorporates standard equipment and component items to proven design pre-assembled before shipping to site.
- Low freight cost and reduced installation time on site by up to 70%.
- Complete with electrical and compressed air systems.
- Saving in civil and building costs.





Optimising Feed Mill Output

With the increasing trend towards larger scale livestock production from individual farms and satellite livestock units being supplied with feed from a centralised feed mill, it is common for the feed mill operation productivity to become the bottleneck to achieving higher levels of efficiency.

Generally smaller scale feed mills operations have three areas: milling, batching and mixing. If any of which do not meet the required quality or desired capacity, they instantly become an area of poor productivity. Once the bottleneck has been identified, practical and economic solutions are available that when implemented, can often significantly increase the overall production output for less hours of operation.

Milling

High efficiency type hammer mills provide the following features:

- Full screen design for optimum output per kW of power input.
- Uniform particle size distribution.
- Top feed and reversible symmetrical rotors for even hammer wear.
- Wide, easily removed access doors to both sides of the rotor for simple maintenance and screen changing.



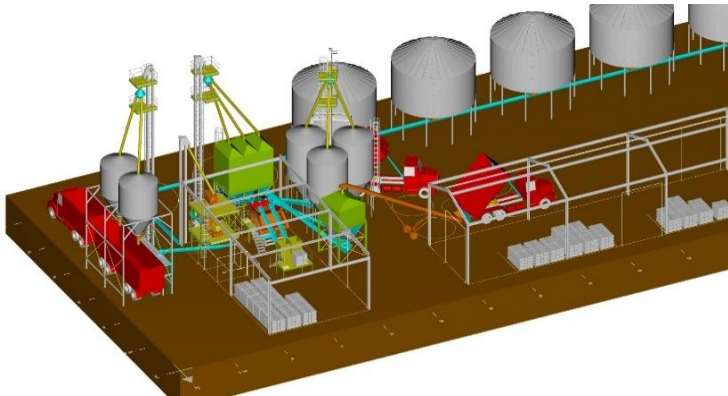
Batching

Batching applications require rapid discharge from the ingredient bins to a weigh hopper with high weight accuracy and formulation versatility. Whether a stand-alone batch hopper is utilised, or direct batching into the mixer is practiced, high-capacity metering feeders offer the following features:

- Consistent high-capacity delivery from the ingredient bins to the weigh hopper.
- Agitator assistance at the in-feed for difficult to handle ingredients.
- Heavy duty drive arrangement and components for long life and minimum maintenance.

Where the metering feeders are supplying a weigh hopper or mixer with load cells mounted, automatic blending and mixing can be achieved by incorporating a batching controller. Batch controllers are capable of the following:

- Controlling up to 20 separate ingredient feeders and micro ingredient additions.
- Enable up to 50 pre-programmed recipes that control feeders to achieve the required weight for each ingredient.
- Enable automatic supply of micro-ingredient and additives, as well as liquid ingredients.
- Ability to automate the mixing and discharge functions by integrating with the plant motor control centre (MCC).
- Provide a printout for each batch with alarm functions for irregularities.



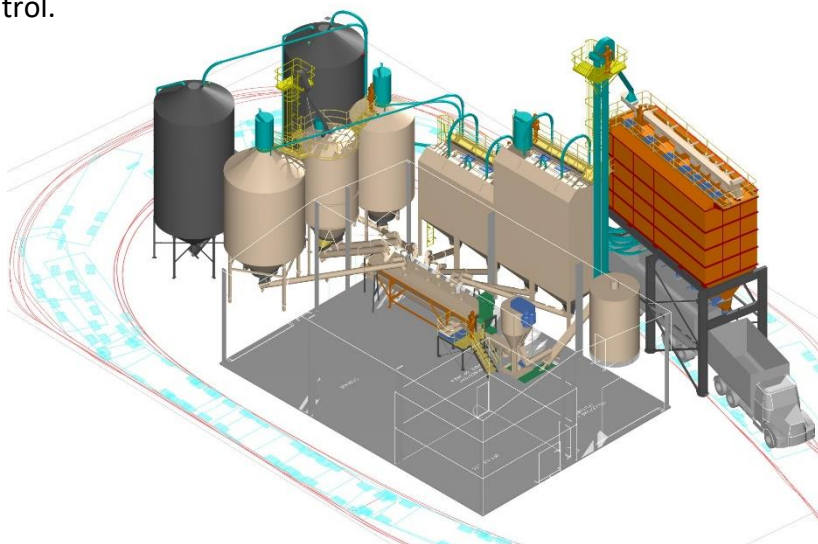
Mixing

High efficiency horizontal ribbon double shaft and single shaft paddle mixers, enable short mixing time to achieve a uniform mix without segregation. Features which aid in achieving greater production output rates include:

- “Bomb Discharge” type doors for rapid emptying and zero segregation.
- Sparge bar arrangement for the addition of water, fats, oil, or molasses.
- Heavy duty construction for low maintenance operation.
- Optimum mixing time of 30 – 120 seconds.
- Ability to handle volumes below the rated capacity without compromising quality.



Incorporating any number of the features listed above is an economical way to upgrade the capacity and automation of an existing feed mill. The result will be a plant that is more productive, efficient, and easier to control.



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