

# Basket Mill

## Modern Engineering Company Make Basket Mill

The basket mill is a submersible Grinding unit that will achieve partial size reduction without the use of hard-to-clean pumps, hoses, and tanks. The basket mill allows a large amount of product to pass through the Grinding chamber more open, resulting in a narrower particle size distribution and stronger pigment strength in a shorter amount of time.



The Modern Engineering Basket Mill is comprised of two shafts. One main shaft is the basket as well as media agitator shaft and the second shaft are for batch agitator. The Grinding media agitator shaft has a Vessel with several agitator pins. The pins agitate the Grinding media creating a rolling vortex within the basket. As the material falls into the basket through the opening in the top, it enters into the high-energy zone of the vortex. It is filled through the moving media in a radial flow. As the material passes through the Grinding media, it is ground by the slipping and rolling action of the Grinding media. The product then passes through the Wire screen that separates the media from the batch and washes against the cooling shroud. This helps remove heat build-up that was produced from the product passing through the mill chamber. The product then passes down the side of the cooling shroud and back into the batch, where it is mixed and sent back through the Grinding chamber. The batch agitator's function is to assist in keeping the batch from sealing and to put the material mixed while it is waiting for its next pass through the grinding chamber. The Modern make Agitators Basket mill is complete with controls for the agitator, comprising of a tachometer, ammeter, dial, and a jog push button with a start/stop/speed potentiometer dial for the batch agitator.

## Benefit Of Twin Shaft In Basket Mill

The Twin shaft design allows the operator greater flexible for a broadly range of viscosities and it's Vessel sizes. This is achieved by allowing the operator control the speed of the Basket mill independently from the batch Mixing. Simply set the speed for optimum Grinding and then set the Mixing agitator speed for desired batch movement.

Reduced Wear Parts – Since We can always operate the Basket mill at the proper speed to get the best production and do not need to over-speed it to get batch movement, you will have low wear on the Basket mill components.

Problematic Foot Bearing & Seal and Gland No More – The Twin shaft design has eliminated foot bearings and seals. That are required to run in abrasive environments in order to achieve batch movement on single shaft designs.

Low Heat – The Modern Basket mill offers a large heat-exchanging shroud around the Basket mill that eliminate heat at a Speedy rate. In many other cases a Vessel jacket is not required. Other Competitor have a hard time keeping the batch cool and have had to resort to expensive PLC systems to prevent the Basket mill from sucking too much heat during the batch. Unfortunately when you slow down the Basket mill to keep the heat back you also increase your production Process time.

Eliminate Hydraulic Packing – As most operators of Horizontal Pressurised Mills know, if you Feed your Material too fast through the Basket mill you will pack the media and prevent it from moving freely, which will have an adverse effect on the grind time. The same is true with the basket mill, but unfortunately a single shaft Basket mill requires the Product to be Feed through the Basket mill at a rate that is faster than the Basket mill can handle. In addition, force-feeding a mill with too much Product can also cause Grinding media to escape from the top opening.