



UAM Motor Drive, UGD Universal Gear and Y-Cone Mixer YM-4

Y-Cone Mixer, YM-4

The Y-Cone Mixer YM-4 operates by raising the product beyond the angle of repose such that successive layers of products are exposed to a constantly changing plane of shear and the sliding free surface. The unique geometry of the "Y" cone provides a simultaneous axial or cross flow of particles by the dividing and recombining of the mass as it flows into and from the two arms of the rotating blender.

In practice this produces a tumbling, rolling and folding action resulting in a highly efficient mix in a minimum of time. This action is particularly useful in products requiring the break down of agglomerates.

The high degree of dispersion provided by this process lends this mixer to applications where the

Page 1

40-01150_YM4_1.09E

physical properties of the materials used in the blend tend to cause segregation under tumbling conditions.

The stainless steel cone has a operating capacity of about 4 l, normal mixing time is about 5 to 10 minutes. The two access ports and one discharge port are sealed with a simple easy-release cap.

The efficiency of the mixing action is determined by the speed of the UAM Motor Drive operating at a range of 0-50 rpm due to the installed UGD Gear. The YM-4 is attached by the UGD Universal Gear to the UAM Motor Drive.

Technical Data YM-4

YM-4 total volume:	8 l
operating volume:	2 - 4 l



Universal Gear UGD

This gear is used to allow the adjustment of operating angles from 0° to about 90° and reduce the drive speed in a ratio of 1:10. Several attachments, such as Pelletisers, Cube Mixers or Coating Pans are attached via the UGD gear.

The UGD accessory has been so designed that the angle of operation can be accurately set against a scale in the instrument housing. This enables the same operational angle to be selected every time the accessory is removed and re-installed (e.g., for cleaning). Unlike some similar devices, our gear drive has been designed so that the operator can always view the on-going process as all accessories are mounted to the front of the gear drive. This allows easy viewing of the process at any time.

We reserve the right to make technical changes without any prior notice