

SRMG-TABLE TOP-RAPID MIXER GRANULATOR – R&D Model



Bottom Drive High Shear Granulator System

The SHAKTI Pilot Scale High Shear Granulator and Mixer is designed for efficient and homogenous wet granulation of powders to form a medium to high density granule. It is mainly used in R&D or F&D facility for the wet mixing of the pilot batches. Basically it consists of a Bowl, Impeller & Chopper assembly.

Its GMP-compliant design allows for easy cleaning and maintenance, faster processing times, and total user safety.

CONSTRUCTION:

Basically it consists on main structure which is made from mild steel square tube and is covered from SS-304 guard. All main drive related assemblies are covered in to main structure.

THE COMPLETE RELIABILITY OF THE PROCESS TECHNOLOGY FOR THE STEPS

- Mixing
- Homogenizing
- Granulating

As the result on intensive up to date development.

SHAKTI RAPID MIXER GRANULATION PROVIDES

- High Shear Mixing Precision.
- Short Batch Time
- Trouble free Cleaning.

As the guarantee for optimum system available in strict compliance with the stipulation of cGMP.

THE PROCESS

The RMG performs dry mixing & wet granulating by basic design of the special four arm of the mixing impeller and sequences of the mixing process in the cylindrical mixing drum with rounded connection to the base plate, achieve another special effect. The mixing process runs without

varying pressure zone in the volume of mixing product. Separately driven multiple choppers can effectively intensify the mixing result in particular when liquid or paste components are added. During humidifying and granulating process of the products the chopper controls and regulates the granular spectrum and structure of the granules according to the product, chopper shape and time. The RMG system requires only small quantities of granulating liquid or pastes to obtain the required granulate structure. This reduces the amount of drying energy required.

SAFETY FEATURES:

- Total drive transmission system enclosed.
- Air pressure switch installed to ensure pressure is in limit.
- Safety switch fitted at Top Lid and the discharge flange to ensure closed.

SAFETY FEATURES:

- High Shear Mixing, Homogenizing, Humidifying and Granulating process.
- Offers reproducible mixing and granulation processes.
- Design as per stringent cGMP Model.
- Contact parts of Stainless Steel SS 316.
- Easy to install, operate, clean, convenient & user friendly.
- Compact Table Top design.
- Variable Speed Drive for main impeller motor.
- Complete automatic advanced PLC Controls with touch Screen (Optional if required)

Technical Specifications:

MODEL	SRMG - 5	SRMG- 1	SRMG – 0.5
-	5 Liters (4 Kg bowl)	1.5 Lit [1 kg]	1 Lit [0.5kg]
Max Working volume	3.5 Kg	800 grams	400 grams
Min Working	2 Kg	500 grams	300 grams
Main Motor with AC Drive	0.5 HP, Non-Flame Proof		
Chopper Motor with AC Drive	0.5 HP, 2800 RPM, Non-Flame Proof		
Granulation Blade RPM	15 RPM to 150 RPM		
Chopper Blade RPM	50 to 2800 RPM		
Pneumatic Cylinder	For Discharge Gate		
Air Purging system	For Main Impeller & Chopper blades		
Dimensions	1070 (L) x 525 (B) x 725 (H) mm		
Wooden Box Outer Dimensions	27" x 48" x 36" (inch)		
Power Supply	110v / 220v Single Phase or 220v / 415v / 3 ph		
Net Weight (Approx.)	102 Kg	101 kg	100 kg
Gross Wt.	162 Kg.	161 kg	160 kg