

# High Shear Mixer Granulator - RMG



The High Shear Mixer Granulator used for process of fast dry & wet mixing, homogenizing, humidifying and granulating of the powder in Pharmaceutical, Chemical, Cosmetic, Food, Plastic, General Mixing Industries.

High Shear Mixer Granulator series is characterized by the compact construction, modern design and the entire user and maintenance friendly attributes which form the ergonomics design aspects are essential for a wide range of application.

The High Shear Mixer Granulator 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 HSMG system requires only small quantities of granulating liquid or pastes to obtain the required granulate structure. This reduces the amount of drying energy required.

#### Salient Features:

- High speed mixing & granulating
- Design is cGMP Current Good Manufacturing Practices compliance
- All Product contact parts AISI 316 & non contact parts AISI 304.
- Automated maxing and granulating process in single bowl.

- High Precision mixing and granulation with Short Batch Time, Problem free Cleaning and Residue Free Discharge.
- Unique design with four arm mixing impeller with blade angle to pushing product radically outward.
- Chopper blade designed to cuts lumps and make granules.
- Dual speed mixing impeller for mixing and intensify chopper for granulating.
- Flush fitting discharge plug is electro pneumatically operated.
- Air pursing for seal for both shafts.

### **Optional Features:**

- PLC Controls with HMI touch screen,
- Inline Milling at discharge,
- Variable speed drive for main impeller and chopper.
- Product bowl Jacketing for heating/ cooling and vacuumized mixing process.
- Binder adding by spraying system with peristaltic pump.
- · Material charging by bin loader with IBC.
- Flame proof motor and electrical.

#### **Safety Features:**

- Total drive transmission system enclosed
- Limit switch installed in the top lid ensure lid is closed
- Air pressure switch installed to ensure pressure is in limit.
- Limit switch installed at discharge to ensure product container underneath of discharge.
- Overload relay Protection and Emergency stop button

## **Technical Specifications:**

Model	Gross Capacity In Liter	Working Capacity In Liter	Loading Capacity In Kg.	Mixing Impeller Motor HP- Dual	Mixing Impeller speed RPM-Dual	Chopper Motor HP-Dual	Chopper speed RPM-Dual
PRMG-50	50	40	20				
PRMG-100	100	80	40				
PRMG-150	150	120	60				
PRMG-300	300	240	120				
PRMG-400	400	320	160	Please contact us for more details.			
PRMG-600	600	500	250				
PRMG-750	750	600	300				
PRMG-1000	1000	800	400				
PRMG-1200	1200	1000	500				