# High Shear Mixer Granulator



Ideal for Pharmaceutical, Chemical, Cosmetic, Food, Plastic, General Mixing Industries.



#### **Process:**

The High Shear Mixer Granulator-HSMG is used for process of fast dry & wet mixing, homogenizing, and granulating of the powder in Pharmaceutical and Chemical Industries. As the name suggests this machines performs two operations mixing and granulating after mixing of dry powders/granules, subsequent wet granulation occurs.

The mixing is achieved by special three arm of the mixing impeller. The impeller blades are angled in a way that sets the entire mixture in a whirling-rising-tumbling motion ensuring a quick and even distribution of all dry products which leads to an even wetting of every granule. The mixing process runs without varying pressure zone in the volume of mixing product. Separately driven chopper 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 structure.



- cGMP model -with all product contact parts AISI
  316 & non contact parts AISI 304.
- High speed mixing & granulating with Short Batch Time.
- Unique design with three arm mixing impeller with blade angle to pushing product upward.
- 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.

### **Optional Features:**

- PLC Controls with HMI touch screen.
- Flame Proof Electricals.
- Inline Milling at discharge
- Variable speed drive for main impeller and chopper.
- Bowl Jacketing for heating/ cooling mixing process.
- Binder adding by spraying system.
- Material charging.

#### **Safety Features:**

 Fully enclosed drive transmission system, Interlocked top lid, interlocked air pressure & air purging and interlocked discharge gate.

## **Technical Specification:**

Model	DRMG 100	DRMG 150	DRMG 250	DRMG 450	DRMG 600	DRMG 1000	DRMG 1200
Over Flow capacity In Litre	100	150	300	400	600	1000	1200
Working capacity In Litre	80	120	200	350	480	800	950
Loading Capacity In Kg. Min/Max	20/40	30/60	50/120	100/200	150/300	200/400	250/500
Mixing Impeller Motor HP-Dual (750/1500 RPM)	7.5/10.0	10.0/15.0	20.0/30.0	30.0/40.0	40.0/50.0	63.0/85.0	80.0/100.0
Chopper Motor HP-Dual (1500/2800 RPM)	2.0/3.0		3.0/5.0	5.0/7.5		10.0/15.0	

#### **Dumra** MACHINES

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