

# HIGH SHEAR MIXER GRANULATOR



## **APPLICATION:**

GM Series high shear mixer granulator is used in pharmaceutical solid dosage area for mixing and granulation application. It's the major processing equipment in solid dosage production line. The equipment is PLC automation controlled and well satisfies the current GMP and Pharmacy Code regulation.

## **FEATURES:**

- 1.Cylinder & conical material container structure, Z shaped mixing impeller, together forms the perfect mixing and granulation performance with qualified wet granules.
- 2. Modular designed platform and on-line wet cone mill option satisfies with various process and facility conditions.

- 3. Pressured spray, manual or other requested binder loading sys option satisfies with various product & granulation requests.
- 4.Designed with granulation end-point detection function, satisfies with the process reproducibility request.
- 5.Designed with self-vent vacuum loading sys for raw material, reduce the labor and avoids dust and cross contamination, satisfies with the current GMP clean production request.
- 6.Compound mechanical & air sealing structure avoid any material leakage and cross contamination, satisfies with the current GMP clean production request.
- 7. Variable impeller & chopper speed controlled by VFD and setup from HMI, satisfies with various product mixing & granulation requests.

## **WORKING PRINCIPLE:**

The raw material is loaded into the container via self vent vacuum sys(in case this option selected), or other loading sys as requested; and mechanically fluidized inside the container under the impeller force, which realizes the perfect mixing performance. Loading the binder into the container and starts the chopper; The material coheres together by the binder which forms the binder bridge for form the core granules. Under the mechanical energy conversion, the qualified granule grows up and formed.

### **MAIN TECHNICAL DATA:**

Model	Container Volume	Working Volume	Mixing Power	Mixing rpm	Chopper Power	Chopper rpm	Wet Mill Power	Mill rpm	Compress Air Cons.	Machine Overall Dimension	Total Weight
	L	L	kW	rpm	kW	rpm	kW	rpm	M3/min	LXHXD /m	Kg
GL10	10	4~8	1.1	10~600	0.75	1000- 2800	_		0.03	1.3X1.35X0.7	300
GL25	25	10~20	2.2	5 <b>~</b> 420	1.1	1000- 2800	0.75	300- 1400	0.05	1.8X1.6X0.8	400
GM50	50	20~40	5.5	5 <b>~</b> 355	1.5	1000- 2800	0.75	300- 1400	0.05	1.95X1.7X0.8	800
GM100	100	40~80	11	5~287	3	1000- 2800	0.75	300- 1400	0.1	2.0X1.95X1.1	1100
GM150	150	60~120	15	5 <b>~</b> 240	3	1000- 2500	1.5	300- 1400	0.1	2.5X3.1X2.0	1600
GM200	200	80~160	18.5	5~223	4	1000- 2500	3.0	300- 960	0.2	3.0X3.25X23	2500
GM300	300	100~240	22	5~200	5.5	1000- 2500	3.0	300- 960	0.2	2.4X3.2X2.8	2700
GM400	400	160~320	30	5 <b>~</b> 185	5.5	1000- 2500	3.0	300- 960	0.2	3.3X3.6X2.8	3000
GM500	500	200~400	37	3~172	7.5	1000- 2500	4.0	300- 960	0.3	3.5X3.7X3.1	4100
GM600	600	240~480	45	3~162	7.5	1000- 2500	4.0	300- 960	0.3	3.6X4.0X4.1	5300
GM800	800	320~640	55	3~148	11	1000- 2000	4.0	300- 960	0.3	3.6X4.9X3.5	5700
GM1000	1000	400~800	55	3~140	15	1000- 1500	5.5	300- 1400	0.3	3.7X5.3X3.5	6000
GM1200	1200	480~960	75	3~133	15	1000- 1500	5.5	300- 1400	0.3	3.7X5.6X3.7	6700