



CIMA[®]
Industries Inc.
Pharmaceutical Equipment

ONE POT

Super Mixer / Granulator / Dryer



MIXING/GRANULATION/DRYING

APPLICATIONS

1. Pharmaceutical: antibiotic, contraceptive (birth-control pill), irritant ingredient, hormone medicine.
2. Chemical: Detergent, pesticide, pigment, polymer and ceramic powder.

MIXING AND GRANULATION

The main impeller mixes the powder into a fluidized vortex and forms agglomerates with the binder solution. Then the high-speed chopper breaks the agglomerates into granules by rolling action.

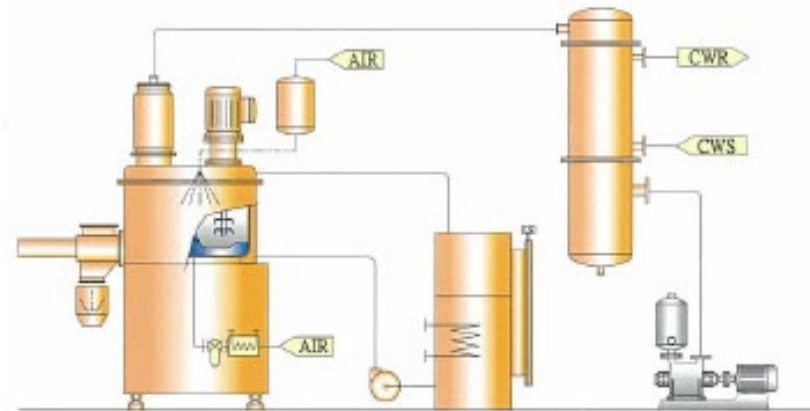
DRYING

(Use vacuum drying system)

The mixing Tank is heated by the hot water in jacket; the wet granules are rolling slowly and dehydrated by vacuum suction to reach to drying efficiency.

DESCRIPTION OF THE PROCESS

Powder vacuum loading – Drying mixing – Binder spraying – Wet granulation – Vacuum drying – Milling – Auto Section to bin.



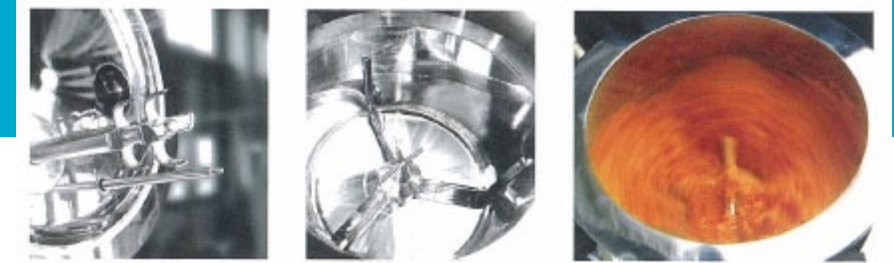
One Pot for Lab

FOUR IN ONE SINGLE BOWL

1. Multiple functions: mixing – granulation – drying – milling.
2. One line production only need an equipment (YC-SMGD) to finish the whole process that saves the space.
3. Four in one process to prevent the movement and contamination of the products.
4. Operation in closed type design to reduce the contamination.
5. Drying temperature: 50~80 °C
6. Drying time: organic solvent is around 1-2 hrs; water is around 2-4 hrs.
7. Variable speed to meet different process: mixing and granulation by High Speed; drying and discharging by Low Speed.

FEATURES

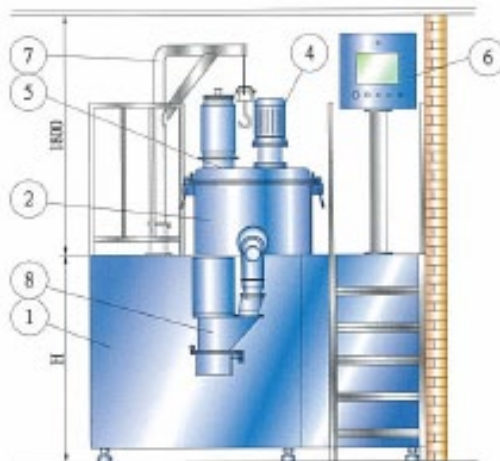
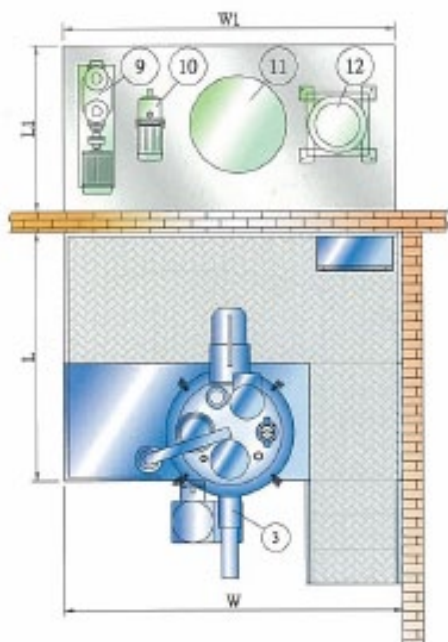
1. Follow the regulations of cGMP, PIC/S GMP, FDA.
2. WIP System is available.
3. Explosion Proof System is available: Suitable for organic solvent.
4. Multi-safety Interlock System:
 - a. Stop operation when the cover is not closed properly.
 - b. Stop operation when the air pressure is not sufficient for the seal.
5. Separated compressed air routes design to meet the good air quality: the compressed air for air seal will pass through an air filter. For the cylinder, the compressed air will pass through lubricating oil to ensure the air quality and lubrication.
6. Unique design of the air seal: This design can prevent powder access into the main seal and the chopper to prevent powder dropping.
7. The clearance between impeller and the bottom of mixing bowl is only about 0.5~0.8 mm; therefore, high mixing efficiency can be achieved.



SMGD 300



SMGD 600



1. Frame
2. Mixing Bowl
3. Discharge System
4. Granulating System
5. Cover
6. Control System
7. Impeller Lifting Device
8. Cone Mill
9. Vacuum Pump
10. Circulation Pump
11. Water Boiler
12. Cooler

Model		SMGD 20	SMGD 100	SMGD 150	SMGD 250	SMGD 300	SMGD 400	SMGD 600	SMGD 800	SMGD 1000	SMGD 2000
Full Capacity	L	20	100	150	250	300	400	600	800	1000	2000
Working Capacity	L	14	70	105	175	210	280	420	560	700	1400
Main Drive (60Hz)	kW	2.2	3.7/5.5	7.5/11.2	11.2/15	15/22.5	22.5/26.5	37	45	56	112
Main Drive	rmp	50-172	172/120	172/120	172/120	160/105	145/95	120	120	80	80
Chopper Drive	kw	0.75	1.5/2.2	2.2/3.7	3.7/5.5	3.7/5.5	5.5/7.3	11.2	15	18.5	22
Chopper Drive (60Hz)	rpm	300-3440	1720-3440	1720-3440	1720-3440	1720-3440	1720-3440	1720-3440	3440	3440	3440
Average Working batch (assuming) 0.5 g/c.c	Kg	4-5	25-35	35-50	60-85	75-105	100-150	150-200	200-260	260-350	500-700
Vacuum Pump	kw	2.2	3.7	3.7	5.5	5.5	7.5	11	15	19	37.5
Net Weight	Kg	500	1000	1200	1700	2100	2800	3400	3900	4200	5400
Dimensions (LxWxH)*	mm	1560x540 x1500	2100x700 x2000	2300x850 x2500	2470x900 x2500	2600x2700 x3000	3000x3000 x3000	3150x2800 x3500	3300x2800 x3500	3300x2800 x3500	4000x3400 x4500

*Specifications are subject to change without any noticing.



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