



♠ / Products / Granulation Machine / High Speed Rapid Mixer Granulator Machine

## HIGH SPEED RAPID MIXER GRANULATOR MACHINE



# **APPLICATION:**

- MIXING BOWL AND COVER: in three section The mixing bowl is fabricated with S.S. 316. The bowl is specially design in three sections. The flat bottom, mid portion is cylindrical and the top portion is conical. This design helps the machine to move efficiently. The machine is provided with the counter balanced lid. The lid is provided with the vents, charging openings and view ports.
- THE MAIN IMPELLER AND DRIVE: The main impeller is consisting of dual speed 750/1500 synchronous dual HP

- TEFC motor, coupled through a belt drive to a worm reduction gearbox with chain coupling. The machine is consisting of specially designed bearing housing to drive the impellers. The impeller does the mixing at the bottom and at the centre of the bowl. The inside wash facility is been very helpful for quick change over. The bearing housing prevents the leakage of the powder from the bottom entry. This design leads to longer life of the gear box.
- ▶ CHOPPER: The dual HP dual speed (1440/2800 synchronous) TEFC MOTOR is given for the chopper. The motor shaft is made up of S.S. The chopper is consists of 4 blade S.S. impeller. The assembly mounted in the bowl horizontally in which the shaft is integral with the motor.
- DISCHARGE PORT: The discharge port has vertical downward opening and is mounted horizontally. The pneumatic cylinder is used to operate the opening.
- MOUNTING: At the bottom, the drive assembly is mounted by the channel frame. The sturdy channel frame is made of M.S. On the top, the bowl is mounted. The platform is provided by the S.S. staircase and railings. The S.S. dimpled plates cover the half of the platform. The area under the bowl is covered with S.S., for the easy and safe movement of the operator. The entire body of the machine is covered with the S.S. covers.
- CONTROL PANEL: The control panel is situated on the platform. The control panel is provided with
  - for the slow, fast, on, off functions the actuator
  - manual and auto controls
  - timer.
  - Ammeter/ voltmeter for the motors
  - Pressure gauge and indicator light
  - Air regulator and air filter
  - The PLC based control panel can be provided if required.
- MAIN PANEL: The main panel consists of MCCB, and the wires are given the numbers for the easy operation.

#### **୬ SPECIAL FEATURES:**

- The shaft is covered by the air purged shaft seal.
- In built cleaning system for the shaft seals.
- To reduce the vibration and for the better transmission, the fanner taper lock pulley is given.
- The oil seals and sleeves are provided to main bearing housing to prevent the leakages and cross contamination.
- To prevent the entry of the powder into the impellers and jamming the pressure switch control is provided.
- The chopper can not operate directly or independently due to the circuits, with interlock contactors.
- To regulate the discharge plunger the 3 position solenoid valves are given which helps to open and close at desired levels.
- The non return valve and water inlet/outlet connections are given with the pneumatic circuit for the washing of the main impeller assembly without dismantling.

## SAFETY FEATURES:

- Motor is provided with the locking system to eliminate the accidents.
- The moving parts are enclosed for the safety.
- ▶ PNEUMATIC SYSTEM: The pneumatic systems require the air pressure of 3 to 5 kgs/sq cm.
- To operate the discharge valve.
- The air filter pressure gauge

- 2 way solenoid valve.
- The pipes ferules and pneumatic fittings.

# TECHNICAL SPECIFICATION:

Model	Working Volume		Gear Box Ratio	Main Motor HP (1500/750 RPM)	Chopper Motor HP(1500/3000	Discharge ht.
	Ltrs	Kgs		<b>1</b>	RPM)	
APM-RMG 25	25	5-7.5	4"	3/5	1.5/2	600
APM-RMG 50	50	25	4"	3/5	1.5/2	600
APM-RMG 100	80	40	7.5:1	7.5/10	2/3	700
APM-RMG 150	120	60	7.5:1	10/15	3/5	780
APM-RMG 250	200	100	10:1	22.5/30	3/5	1055
APM-RMG 300	240	120	10:1	22.7/30	3/5	1200
APM-RMG 400	320	160	10:1	35/40	5/7.5	1200
APM-RMG 600	480	240	10:1	40/50	5/7.5	1200
APM-RMG 800	640	320	15:1	50/60	5/7.5	1200
APM-RMG 1000	800	400	15:1	63/85	10/15	1200
APM-RMG 1200	1000	500	15:1	80/100	10/15	1200

«Back