

Hot-melt Extrusion Granulator

Applications:

The equipment is mainly used for one-step granulating of solid dispersion. It can be used for taste masking materials, solubility reagent, extended/control releasing and targeted releasing etc.

Features:

1. Precise multi-stage temperature control system with the variance of $\pm 1^{\circ}\text{C}$ ensures the accuracy and repeatability of the hot-melt process.
2. The heating temperature is controlled precisely via a dual cooling system (water-cooling and air-cooling).
3. The various screw structure designs help to achieve multi-functions in one machine, including mixing, pressing, hot-melting, extruding and cooling. API and excipients mix and fuse thoroughly.
4. Multiple options of heating system are available, including electronic heating, oil bath, and steaming.
5. Different shearing devices are chosen based on the different properties of materials, to prepare extremely uniform particles.
6. The equipment is compact and is easy to move.
7. The service life of screws is increased by using an unique real-time extrusion currents monitoring and feedback system.
8. GMP standard, three-level security authorization, parameters controlled by PLC, auto-save for all data which can be exported by USB devices.



Lab, Pilot and Production Models and Technical Data

Model	Mini-ME	ME-D16	ME-D27	ME-D50	ME-D80
Production Capability (kg/h)	0.02-0.5	0.5-2	1-5	10-30	20-50
Extruding Screw Dia. (mm)	φ10.6	φ15.6	φ29.6	φ49.6	φ79.6
Extruding Mesh Diameter(mm)	φ0.5-φ5	φ0.5-φ5	φ0.5-φ5	φ0.5-φ5	φ0.5-φ5
Air Supply (Mpa)	0.1-0.8Mpa				
Power (V)	220v 1 phase 3 wire	380v 3 phase 5 wire			
Total Power (kw)	1.5	5.5	7.5	15	28
Extruding Speed(rpm)	5-150rpm	5-150rpm	5-150rpm	5-150rpm	5-150rpm
Hot-melt Temp. (°C)	Room temp -200°C	Room temp -200°C	Room temp -200°C	Room temp -200°C	Room temp -200°C
Dimensions (mm)	900×500×400	1600×600×1200	1800×800×1200	2500×800×1300	3500×900×1500