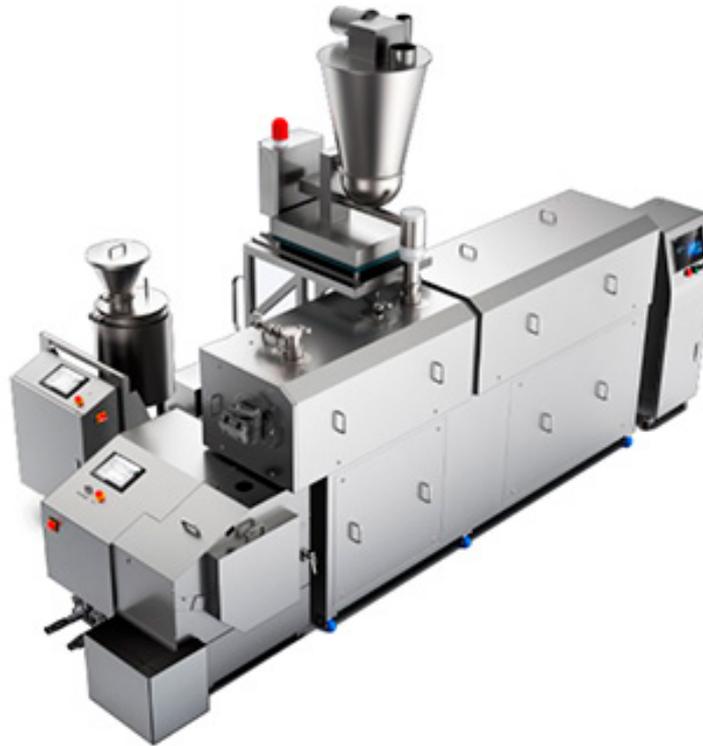


JR Series Hot Melt Extrusion Line



Hot-melt Extrusion (HME) is a new drug preparation technology that uses extrusion mixing technology to evenly mix the active pharmaceutical ingredient (API) in a polymer-based carrier. It is mainly used to improve the solubility of poorly soluble drugs and prepare sustained-release preparations.

Features

The production line consists of a Hot-melt Extrusion, a feeder, a slurry feeder, and a pulverizer. The active ingredient (API) and excipients of the drug can be transported to the Hot-melt Extrusion through the slurry feeder and the feeder. During the hot melt extrusion process, the input material is added to the barrel with stage-by-stage temperature control. The barrel is provided with a threaded element, which performs different unit operations from the feeding part to the die head in sequence. The material moves forward under the conveying action of the threaded element and melts or softens in the melting section. The melt is evenly mixed under the action of the mixing element, and finally extruded from the die at a certain pressure, speed and shape. The pulverizer completes the continuous cooling, solidification and pulverization of the hot melt extrudate.

Advantages

1. Continuous process, high efficiency
2. Fewer process steps
3. High repeat-ability
4. Solvent-free
5. Online monitoring of process parameters
6. Low fixed investment
7. Meet GMP/cGMP/FDA/CE requirements

Parameters

Model	JR8	JR16		JR18		
Aspect Ratio	20	20	30	20	30	40
Screw Diameter	8	16	16	18	18	18
Maximum Speed	300	600	600	600	600	600
Torque	6	15	15	32	32	32
Maximum Power	0.5	2	2	5	5	5
Productivity	0.005-0.05	0.02-2	0.02-2	0.05-5	0.05-5	0.05-5

Model	JR20	JR25			JR34
Aspect Ratio	27	20	30	40	40
Screw Diameter	20	25	25	25	33.4
Maximum Speed	600	1000	1000	1000	739
Torque	35.8	100	100	100	140
Maximum Power	6.5	25	25	25	37
Productivity	0.5-10	5-20	5-20	5-20	100-200