Batte polymer melt pump is made up of two identical meshing gear, inside the pump rotate, the gear meshing area by the entrance (feed) side of the pump, two gear tooth and groove is in a state of continuous separation, release, feed the growing space. Extruder will be full of alveolar plastic melt into the feed zone. With the rotation of the gear, the tooth groove of the melt constantly moving to pump export (discharge). In the side of the gear meshing area close to the pump discharge, the two gear into a state of occlusion, the space narrowing of discharge area, the tooth groove in the melt was forced out.

The role of polymer melt pump on the production line

1. Linear extrusion characteristics, facilitate upstream or downstream equipment coordination. Due to the gear pump leakage flow rate is less, the transmission capacity of the pump and rotating speed and a linear relationship with basic gear pump speed change, its flow can exactly know, due to the upstream or downstream equipment can be determined with the work of gear pump synchronous speed, using the gear pump inlet and outlet to collect information such as pressure, temperature, realize the whole extrusion process on-line monitoring and feedback control.

2. To increase production, reduce energy consumption, low temperature extrusion, prolonging the life of the machine. Due to polymer melt pump extruder installed, put on the reducing function is transferred to the gear pump extruder, the extruding machine can work under low pressure low temperature condition, leakage flow rate reduce greatly, increase production.

3. Can realize the stable extrusion, improve the product dimensional accuracy, reduce rejection rate. In extrusion process, the material and capacity is uneven, machine barrel, and the nose temperature fluctuations, the screw rotation speed pulsation phenomenon is inevitable. Using melt gear pump can eliminate system error of feeding, can greatly abate the upstream volatility of technology transfer, quickly into the stable working status, improve the product dimensional accuracy, reduce scrap rate.